CH2M HILL
5701 Cleveland Street
Suite 200
Virginia Beach, VA 23462
Tel 757.518.9666
Fax 757.497.6885

September MM, 2014

458605.FI.TP

Mr. Matt Aufman
Inactive Hazardous Sites Branch – REC Program
NCDENR – Division of Waste Management
217 West Jones St.
Raleigh, North Carolina 27603

Subject: *Quarterly Remedial Action Progress Report – 3rd Quarter 2014*
IHSB Site Name: Towers Road Disposal Area
IHSB Site ID No.: NONCD0002893

Dear Mr. Aufman:

On behalf of Harvey Point Defense Testing Activity, CH2M HILL is pleased to submit the first Remedial Action Progress Report for the Towers Road Disposal Area in Hertford, North Carolina. The Remedial Action for excavation and offsite disposal of waste and impacted soil began in June 2014 and is ongoing. As described in the Progress Report, the work is progressing in a manner to achieve the mandatory work phase completion deadlines and continues on schedule to meet the time frame outlined in the REC Administrative Agreement.

Please contact me at 757-671-6231 if you have any questions or comments.

Sincerely,
CH2M HILL

Kim Henderson
Registered Site Manager

cc: Ms. Dawn Hayes/NAVFAC
Mr. Brian Lee/NAVFAC
Mr. Brian Murphy/HPDTA
Ms. Janna Staszak/CH2M HILL

REC PROGRAM DOCUMENT CERTIFICATION FORM - PAGE 1 OF 2

IHSB SITE NAME TOWERS ROAD DISPOSAL AREA

DATE & NAME OF DOCUMENT Quarterly Remedial Action Progress Report – 3rd Quarter 2014

TYPE OF SUBMITTAL (circle all that apply): Report Work plan, Work Phase Comp. Statement, Schedule Change

REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

PATRICK N. ROBERTSON, D/Admin HPDTA
Name of Remediating Party

Signature of Remediating Party

10 Sept 2014
Date

NOTARIZATION

NORTH CAROLINA (Enter State)

PERQUIMANS **COUNTY**

I, DEBORAH LYMAN, a Notary Public of said County and State, do hereby certify that PATRICK N. ROBERTSON did personally appear and sign before me this day, produced proper identification in the form of DRIVERS LICENSE, was duly sworn or affirmed, and declared that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 10 day of September, 2014.

Notary Public (signature)

My commission expires: 24 July 2015

(OFFICIAL SEAL)

DEBORAH O LYMAN NOTARY PUBLIC MY COMMISSION EXPIRES 24 July 2015 PERQUIMANS COUNTY, N.C.

Document Certification Form No. DC - I
(Revised 8/11)

REC PROGRAM DOCUMENT CERTIFICATION FORM - PAGE 2 OF 2
IHSB SITE NAME TOWERS ROAD DISPOSAL AREA
DATE & NAME OF DOCUMENT Quarterly Remedial Action Progress Report – 3rd Quarter 2014
TYPE OF SUBMITTAL (circle all that apply): Report Work plan, Work Phase Comp. Statement, Schedule Change

REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

KIM HENDERSON
Name of Registered Site Manager

Signature of Registered Site Manager — Date: 9·11·14

REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act N.C.G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

KIM HENDERSON
Name of Registered Site Manager

Signature of Registered Site Manager — Date: 9·11·14

NOTARIZATION

VIRGINIA (Enter State)

VIRGINIA BEACH **COUNTY**

I, REBECCA SINGLETON, a Notary Public of said County and State, do hereby certify that KIM HENDERSON did personally appear and sign before me this day, produced proper identification in the form of DRIVERS LICENSE, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 11th day of September, 2014

Notary Public (signature)

(OFFICIAL SEAL)

REBECCA S SINGLETON NOTARY PUBLIC MY COMMISSION NUMBER 180890 COMMONWEALTH OF VIRGINIA

My commission expires: 12/31/16

Document Certification Form No. DC - II
(Revised 8/11)

TECHNICAL MEMORANDUM CH2MHILL®

Remedial Action Progress Report
Third Quarter 2014
IHSB Site Name: Towers Road Disposal Area
IHSB Site ID No.: NONCD0002893

PREPARED FOR:	NCDENR Inactive Hazardous Sites Branch - REC Program
COPIES:	Brian Murphy, HPDTA Dawn Hayes, NAVFAC Brian Lee, NAVFAC
PREPARED BY:	CH2M HILL
DATE:	September 2014

1 Introduction

This Progress Report presents the field activities and results of the Remedial Action (RA), which began in June 2014 and is currently in progress, at the Towers Road Disposal Area, Harvey Point Defense Testing Activity (HPDTA), located at 2835 Harvey Point Road in Hertford, Perquimans County, North Carolina (**Figure 1** and **Figure 2**). The RA is being conducted to address potential human health risks associated with exposure to waste and constituents in soil. Once the RA for waste and soil is complete, groundwater will be further evaluated as part of the Phase II Remedial Investigation (RI).

The RA has been initiated prior to completion of the RI to expedite the site remediation and closure process by addressing waste, which is the presumed source of contamination to other site media. The RA consists of the excavation and offsite transportation and disposal of waste and impacted soil, as well as support activities such as erosion and sediment control installation, vegetation clearing, geophysical and topographic surveying, confirmation sampling and site restoration. The RA activities and preparation of this RA Progress Report were conducted on behalf of HPDTA and Naval Facilities Engineering Command (NAVFAC) in accordance with the Remedial Action Plan (RAP) and Preconstruction Report[1] (CH2M HILL, 2014b) and reporting requirements for the REC Program Rules pursuant to 15A North Carolina Administrative Code (NCAC) 13C .0306(c) and 15A NCAC 13C .0306(o).

2 Background

The Towers Road Disposal Area consists of the 2nd Street Disposal Area and 5th Street Disposal Area, both located in the northern portion of HPDTA. The 2nd Street Disposal Area is located in the northeast quadrant of the intersection of 2nd Street and Flat Run Road. The 5th Street Disposal Area is located north of Flat Run Road approximately 1,000 feet east of the 2nd Street Disposal Area (**Figure 2**). The 2nd Street Disposal Area is primarily a grassy field. The 5th Street Disposal Area contains a concrete pad on both the northern and southern sides of Flat Run Road. The ground surface at both sites is relatively flat.

The disposal areas were initially reported to North Carolina Department of the Environment and Natural Resources (NCDENR) in 2011. The site was entered into the Registered Environmental Consultant (REC) program on April 8, 2013. The REC Phase I RI field activities were completed in 2014 and identified waste in-place; volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated

[1] The Interim Remedial Action Plan (IRAP) and Preconstruction Report document was submitted to the REC Program in April 2014. Following submittal, because the remedy was designed to remove waste and meet the remedial goals for soil, the IRAP was subsequently changed to remove "interim" and is now considered the RA for waste and soil.

biphenyls (PCBs), and metals at concentrations above regulatory criteria in soil; and VOCs, SVOCs, and metals at concentrations above regulatory criteria in groundwater (CH2M HILL, 2014a). In addition to the RA, the REC Phase II RI field activities are in progress (CH2M HILL, 2014c).

3 Remedial Action Activities and Performance Evaluation Results

This section provides a summary of the RA activities conducted to-date at the Towers Road Disposal Area to meet following remedial action objectives:

- Limit direct exposure to waste and impacted soil.
- Reduce the potential for contaminant migration from soil to groundwater and from the waste to soil and groundwater.

The RA for waste and impacted soil at the Towers Road Disposal Area was initiated on June 27, 2014. Work commenced with mobilization of personnel and equipment followed by site setup activities, which included setup of sanitation facilities and material storage areas, utility location, installation of erosion and sediment controls, and vegetation clearance.

During the Phase II RI soil sampling, in-situ waste characterization sampling was conducted at the 2nd Street Disposal Area and 5th Street Disposal Area. Based on the results of the waste characterization sampling, the waste and soil from both disposal areas was determined to be non-hazardous for offsite disposal at a permitted disposal facility. However, the 5th Street Disposal Area surface soil sample collected at location SS07 had a combined PCB concentration of 72 milligrams per kilogram (mg/kg) (12 mg/kg of aroclor-1254 and 60 mg/kg of aroclor-1260). As a result of the concentration being greater than 50 mg/kg, the soil was considered Toxic Substances Control Act (TSCA)-regulated and the area surrounding sample location SS07 was delineated via sample collection in accordance with **Table 1** (see **Figure 3** for sample locations and **Attachment 1** for analytical results and lab report). The TSCA-regulated soil area was delineated to a depth of 6 inches below ground surface (bgs) and 2.5 feet north, east, and west of sample SS07; the southern boundary was a concrete pad. Following completion of the delineation sampling activities, the TSCA-regulated PCB soil area was excavated and containerized (1 drum) and the shovel used to remove the soil was broken in half and placed in the drum for disposal.

Through August 1, 2014, a total of 4,838.01 tons of waste and soil were excavated and transported for offsite disposal from the 5th Street Disposal Area to the Clearfield MMG, Inc. Suffolk Plant in Suffolk, VA (Suffolk Plant). Monitoring well TR-5TH-MW01 was abandoned to allow for excavation of the waste and impacted soil around the monitoring well (see **Figure 4** for monitoring well locations). In addition to the waste and soil from the 5th Street Disposal Area transported to the Suffolk Plant, the following wastes have been identified and/or removed from the 5th Street Disposal Area:

- Four loads of scrap metal totaling 71.63 tons, transported offsite to the Empire Recycling facility in Morgan's Corner, Elizabeth City, NC.
- Approximately 2,500 tires, excavated and stockpiled onsite pending development of a plan for their management.
- Three intact compressed gas cylinders, identified and remain within an approximately 8 foot deep trench surrounded by caution tape, excavation area warning signs, and high visibility construction fencing to prevent inadvertent contact with them pending development of a plan for their management.

Following completion of the initial excavation of waste to visible limits at the 5th Street Disposal Area, a geophysical survey was conducted across the excavation floor, in areas where the excavation was less than or equal to 4 feet bgs and above the water table, in an attempt to determine whether any suspected buried debris remained at depths below the excavation floor. The geophysical survey

identified anomalies in the southeast portion of the removal area adjacent to the concrete pad. These anomalies will be further investigated via test pitting and removal of any waste, if identified.

Confirmation sampling was conducted at the 5th Street Disposal Area to confirm the horizontal and vertical extent of the excavations is sufficient. The samples were analyzed for the site-specific constituents of concern (COCs) and compared to the soil remediation goals (SRGs) shown in **Table 2** (see **Attachment 2** for the technical memorandum outlining the selection of the site soil COCs and SRGs). The sampling was conducted at the locations shown on **Figure 5**, as detailed in **Table 3** and **Table 4**, and the analytical results and lab report are provided as **Attachment 3**. The confirmation sampling results were below the SRGs.

As of August 1, 2014[2], a total of 1,563.84 tons of waste and soil have been excavated and transported for offsite disposal from the 2nd Street Disposal Area to the Suffolk Plant. Monitoring wells TR-2ND-MW01 and TR-2ND-MW02 were within the horizontal extents of the waste and soil (see **Figure 4** for monitoring well locations) and were abandoned to allow excavation of the waste and impacted soil around the monitoring wells. Material potentially presenting an explosive hazard (MPPEH), consisting of whole and parts of 3.5-inch M29 Practice Rockets, were identified in the stockpiled soil. As a result, work was stopped and all equipment and personnel demobilized from the site on August 4, 2014 and Explosives Safety Submissions (ESSs) are being prepared for submittal to Naval Ordnance Safety and Security Activity (NOSSA) for review and approval to ensure applicable Department of Defense regulations and standards are applied and health and safety procedures are identified and implemented to allow the work to resume safely.

[2] On August 1, 2014, a Puryear haul truck traveling from HPDTA was in an accident on Harvey Point Road involving an oncoming vehicle. Local fire and EMS responded to the accident, both drivers were taken from the scene by ambulance, and were released, reportedly with minor injuries. The dump truck turned on its side, spilling its load (waste and soil from the 2nd Street Disposal Area portion of the site) and diesel spilled from the vehicles. Puryear's environmental response contractor (Eastern Environmental Management) responded to the accident, reported the spill to North Carolina (the Incident # given by the NC state EOC is 81141712), applied sorbent pads and boom to a ditch where diesel spilled and installed a boom downstream, and excavated the spilled material and diesel impacted soil into haul trucks.

Table 1

5th Street Disposal Area PCB Delineation Sampling

SAMPLING LOCATION/TYPE	NUMBER OF SAMPLE LOCATIONS	ANALYSIS	SAMPLING INTERVALS (ft bgs)
SS at SS07	1	PCBs	0.5 – 1.0
SS at 2.5 ft N of SS07	2	PCBs	0.0 – 0.5 and 0.5 – 1.0
SS at 5.0 ft N of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 7.5 ft N of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 2.5 ft E of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 5.0 ft E of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 7.5 ft E of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 2.5 ft W of SS07	2	PCBs	0.0 – 0.5 and 0.5 – 1.0
SS at 5.0 ft W of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0
SS at 7.5 ft W of SS07	2	none*	0.0 – 0.5 and 0.5 – 1.0

SS = Surface Soil
N = north
E = east
W = west
ft = feet/foot
bgs = below ground surface
*Samples were collected for potential PCBs analysis, but analysis was not run because the total PCBs concentration in the next closest interval did not exceed 50 mg/kg.

Table 2

5th Street Disposal Area Soil Remediation Goals

COC	SRG (mg/kg)	Basis[1]
Volatile Organic Compounds		
1,4-Dichlorobenzene	0.07	PG
Methylene chloride	180	SB
Semivolatile Organic Compounds		
Benzo(a)anthracene	1.36	SB
Benzo(a)pyrene	0.136	SB
Benzo(b)fluoranthene	1.36	SB
Carbazole	240	SB
Dibenz(a,h)anthracene	0.136	SB
Indeno(1,2,3-cd)pyrene	1.36	SB
Polychlorinated Biphenyls		
Aroclor-1254	1	SS/SB
Aroclor-1260	1	SS/SB
Total Metals		
Antimony	16	SB
Arsenic	5.5	SB
Cadmium	70	SS/SB
Cobalt	4.6	B
Iron	14,100	B
Lead	270	PG
Mercury	23	SS/SB
Zinc	1,200	PG/SB

COC = constituent of concern

SRG = soil remediation goal

mg/kg = milligram per kilogram

[1]Basis:

B - Maximum background value selected; most conservative screening value below background.

PG - All screening values above background; Protection of Groundwater value selected as most conservative screening value

SS - All screening values above background; surface soil adjusted residential health-based SRG selected as most conservative screening value

SB - All screening values above background; subsurface soil adjusted residential health-based SRG selected as most conservative screening value

Table 3

5th Street Disposal Area Wall Confirmation Sampling

SAMPLING LOCATION/TYPE	ANALYSIS[1]	SAMPLING INTERVALS (ft bgs)[2]
SO at CSW01	Site COCs	0 – 2
SO at CSW02	Site COCs	0 – 2
SO at CSW03	Site COCs	0 – 2
SO at CSW04	Site COCs	0 – 4
SO at CSW05	Site COCs	0 – 2
SO at CSW06	Site COCs	0 – 1
SO at CSW07	Site COCs	0 – 1
SO at CSW08	Site COCs	0 – 1
SO at CSW09	Site COCs	0 – 1
SO at CSW10	Site COCs	0 – 3
SO at CSW11	Site COCs	0 – 4
SO at CSW12	Site COCs	0 – 3
SO at CSW13	Site COCs	0 – 3
SO at CSW14	Site COCs	0 – 8
SO at CSW15	Site COCs	0 – 8

SO = Soil

CSW = Confirmation Sample Wall

ft = feet/foot

bgs = below ground surface

[1] Samples analyzed for the COCs that exceeded final SRGs during RI and pre-delineation sampling (1,4-dichlorobenzene, benzo(a)pyrene, aroclor-1254, aroclor-1260, antimony, arsenic, cobalt, iron, lead, zinc).

[2] Wall samples collected from 0 ft bgs to excavation floor, or water table, along height of excavation wall.

Table 4

5th Street Disposal Area Floor Confirmation Sampling

SAMPLING LOCATION/TYPE	ANALYSIS[1]	EXCAVATION DEPTH (ft bgs)[2]
SO at CSF01	Site COCs	0 – 2
SO at CSF02	Site COCs	0 – 2
SO at CSF03	Site COCs	0 – 2
SO at CSF04	Site COCs	0 – 3
SO at CSF05	Site COCs	0 – 3
SO at CSF06	Site COCs	0 – 1
SO at CSF07	Site COCs	0 – 1
SO at CSF08	Site COCs	0 – 3
SO at CSF09	Site COCs	0 – 1

SO = Soil

CSF = Confirmation Sample Floor

ft = feet/foot

bgs = below ground surface

[1] Samples analyzed for the COCs that exceeded final SRGs during RI and pre-delineation sampling (1,4-dichlorobenzene, benzo(a)pyrene, aroclor-1254, aroclor-1260, antimony, arsenic, cobalt, iron, lead, zinc).

[2] Floor samples collected from 0 to 3 inches below the excavation floor.

4 Quality Assurance/Quality Control

Soil for the 5th Street Disposal Area PCB delineation and confirmation sampling events were collected in pre-preserved laboratory-prepared sample bottles, placed on ice, and packed for overnight delivery under chain-of-custody control to Environmental Conservation (ENCO) Laboratories of Orlando, Florida (a North Carolina certified analytical laboratory). Analytical data (**Attachment 1** and **Attachment 3**) submitted for this project were reviewed for compliance with the analytical method requirements along with accuracy, precision, and completeness.

Field quality assurance/quality control (QA/QC) samples were collected for the 5th Street Disposal Area confirmation samples and submitted for laboratory analysis (**Attachment 3**) of VOCs (by SW-846 8260B), SVOCs (by SW-846 8270D_SIM), PCBs (by SW-8468082A), and metals (by SW-846 6010C) at the following frequency, as specified in the Quality Assurance Project Plan (QAPP) (CH2M HILL, 2014b):

- Trip blank - 1 per cooler with VOC samples to document contamination attributable to shipping and field handling procedures
- Duplicate samples - 1 per 10 samples to assess precision of the field sampling process
- Matrix spike/matrix spike duplicate (MS/MSD) - 1 per 20 samples to assess matrix effects on analytical accuracy
- Equipment blank - 1 per day when equipment is decontaminated to monitor the effectiveness of the decontamination process
- Temperature blank - 1 per cooler containing samples requiring preservation at 4°C to verify the temperature of the samples contained in the cooler

The equipment blank associated with the 5th Street Disposal Area confirmation samples was not analyzed for VOCs by SW-846 8260B due to the vials breaking after freezing the samples[3]; however, the trip blank and laboratory method blank are available to assess possible contamination.

Laboratory QA/QC (**Attachment 3**) were analyzed as specified in the QAPP. Examples of laboratory QA/QC samples include (CH2M HILL, 2014b):

- Method blank – 1 per 20 samples (or for each analytical batch, whichever is more frequent) to monitor laboratory performance and to check for contamination introduced during the preparation and analytical procedures
- Laboratory control samples – 1 per preparation and analytical batch to evaluate precision and accuracy of the analytical method
- Interference check samples – for ICP analysis only to verify background and interelement correction factors
- Internal standards – added after preparation or extraction of a sample to assess precision and accuracy of the analytical method
- Dilution test (for metals analysis) – used to determine if a chemical or physical interference effect (i.e. a matrix interferant) is suspected
- Post spike (for metals analysis) – used to determine if a matrix effect is suspected
- Surrogates – surrogate spike recoveries are used to assess accuracy of laboratory methods and matrix interferences

[3] The 5th Street Disposal Area confirmation samples collected on August 1, 2014 were placed on ice as the samples were being collected. During transport of the samples from HPDTA to FedEx the field team had to respond to the haul truck incident on Harvey Point Road (see footnote 2) and could not get to FedEx prior to the last pickup time. As a result of not being able to ship the samples on August 1, 2014, in accordance with the SOPs (VOC sample holding time of freezing within 48 hours of collection and arrival at the laboratory frozen and cooling to 4°C for all non-VOC samples), the VOC samples were placed in a freezer and the non-VOC samples were placed in a refrigerator on August 1, 2014 and overnight shipped to the laboratory on the next available shipping day, August 4, 2014. The VOC samples arrived to the laboratory still frozen and the remaining samples arrived at the laboratory at temperatures less than 4°C. All samples were received and analyzed by the laboratory within their respective holding times with the exception of the equipment blank samples that were broken after freezing.

5 Remedial Action-Derived Wastes

RA-derived waste, as well as Phase II RI-derived waste, is being managed in accordance with REC Program Guidance, in a manner that provides protection of human health and the environment and that complies with all applicable federal, state, and local laws, rules, and regulations (NCDENR IHSB, 2013).

TSCA-regulated solid RA-derived waste and non-hazardous aqueous Phase II RI-derived waste were placed into two separate 55-gallon drums. The drums have been labeled and staged at the facility's drum storage area pending final disposition. The drums will be transported offsite to permitted disposal facilities.

6 Schedule

The following work is anticipated to be performed from September through December 2014:

- Submit an Explosives Safety Submission-Determination Request (ESS-DR) for the 5th Street Disposal Area to assess the munitions safety aspects of the project and clarify what RA activities can be conducted without an ESS, since MPPEH has not been identified at the 5th Street Disposal Area.
- Submit the draft ESS for the 2nd Street Disposal Area to NOSSA for review to ensure applicable Department of Defense regulations and standards are applied and health and safety procedures are identified and implemented during the remainder of the RA at the 2nd Street Disposal Area.
- Remobilization for completion of the RA will be conducted pending approval of the ESS-DR for the 5th Street Disposal Area and the ESS for the 2nd Street Disposal Area. The anticipated activities during the next quarter include:
    - Complete test pitting, and additional excavation if waste is encountered, at the 5th Street Disposal Area to further investigate anomalies identified during the geophysical surveying.
    - Complete offsite transportation and disposal of waste and soil, TSCA-regulated soil, tires, and compressed gas cylinders from the 5th Street Disposal Area.
    - Transport scrap metal from 5th Street Disposal Area to HPDTA Recycling Center for offsite recycling.
    - Complete site restoration activities at the 5th Street Disposal Area, consisting of a post-excavation topographic survey, backfilling to pre-excavation elevations, and applying seed and straw to all disturbed areas.

The project continues to proceed in a manner to achieve the mandatory work phase completion deadlines set out in the REC Administrative Agreement for the site. This includes completing the RI by April 2016 and the RA for soil by April 2021.

7 References

CH2M HILL. 2014a. Final Phase I Remedial Investigation Report, Towers Road Disposal Area, Harvey Point Defense Testing Activity, Hertford, North Carolina. March.

CH2M HILL. 2014b. Final Interim Remedial Action Plan and Preconstruction Report, Towers Road Disposal Areas – Waste and Soil, Harvey Point Defense Testing Activity, Hertford, North Carolina. April.

CH2M HILL. 2014c. Final Phase II Remedial Investigation Work Plan, Towers Road Disposal Areas, Harvey Point Defense Testing Activity, Hertford, North Carolina. April.

Department of Environment and Natural Resources, Division of Waste Management, Superfund Section, Inactive Hazardous Sites Branch (NCDENR IHSB). 2013. *Registered Environmental Consultant Program Implementation Guidance (Web Links Revised March 2014)*. December.

FIGURES

Legend

HPDTA Boundary

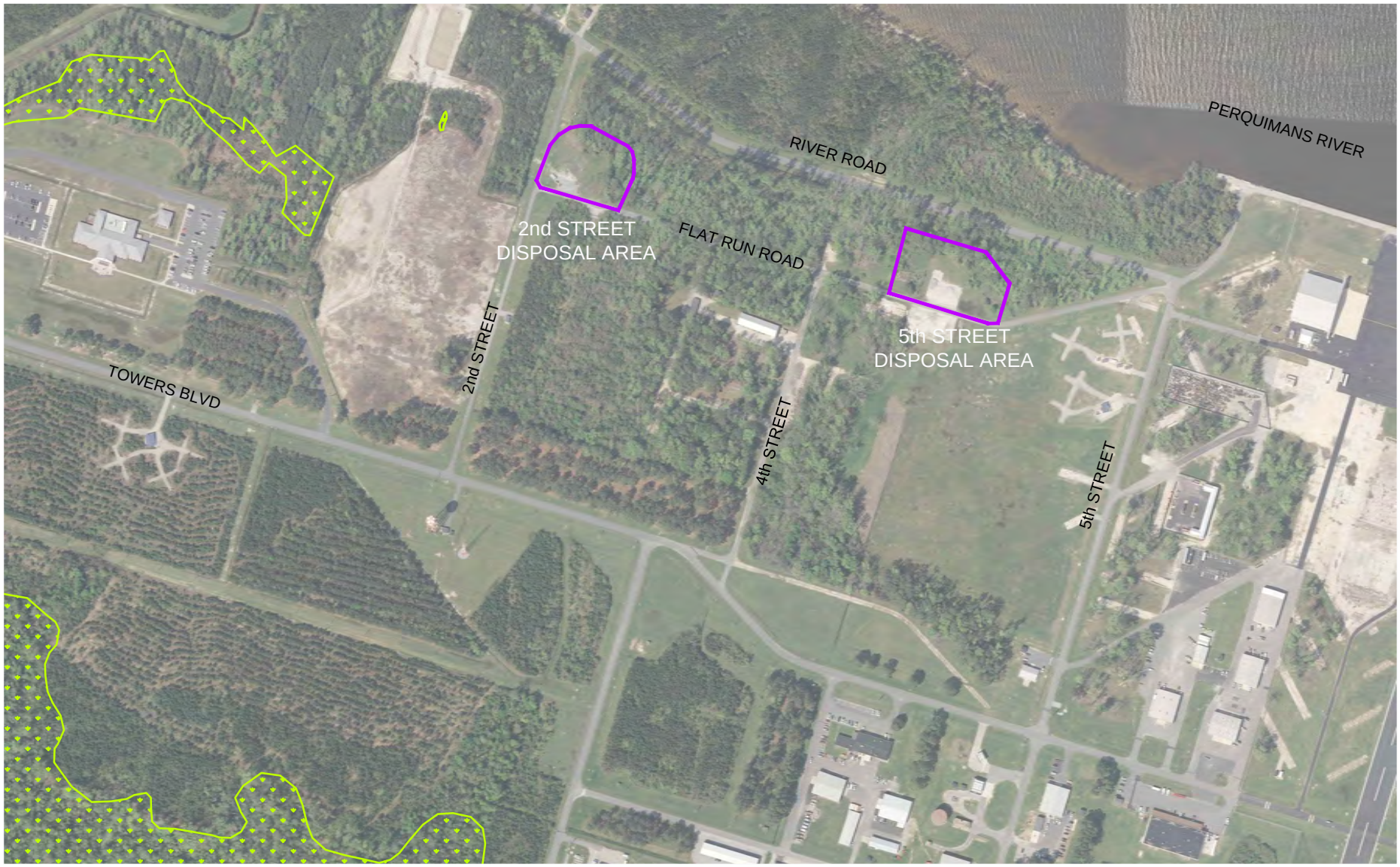
N
W E
S

0 6000 12000 Feet

Figure 1
HPDTA Location
Harvey Point Defense Testing Activity
Hertford, North Carolina

CUES MappingServices

12-112-006



Legend

Wetland

Investigation Area

N
W E
S

0 250 500 Feet

Figure 2
Site Location Map
Harvey Point Defense Testing Activity
Hertford, North Carolina

CUES MappingServices

12-112-006

Legend

- Estimated Extent of Waste/Removal Area
- 50' Grid
- Surface Soil Sample (COPCs)

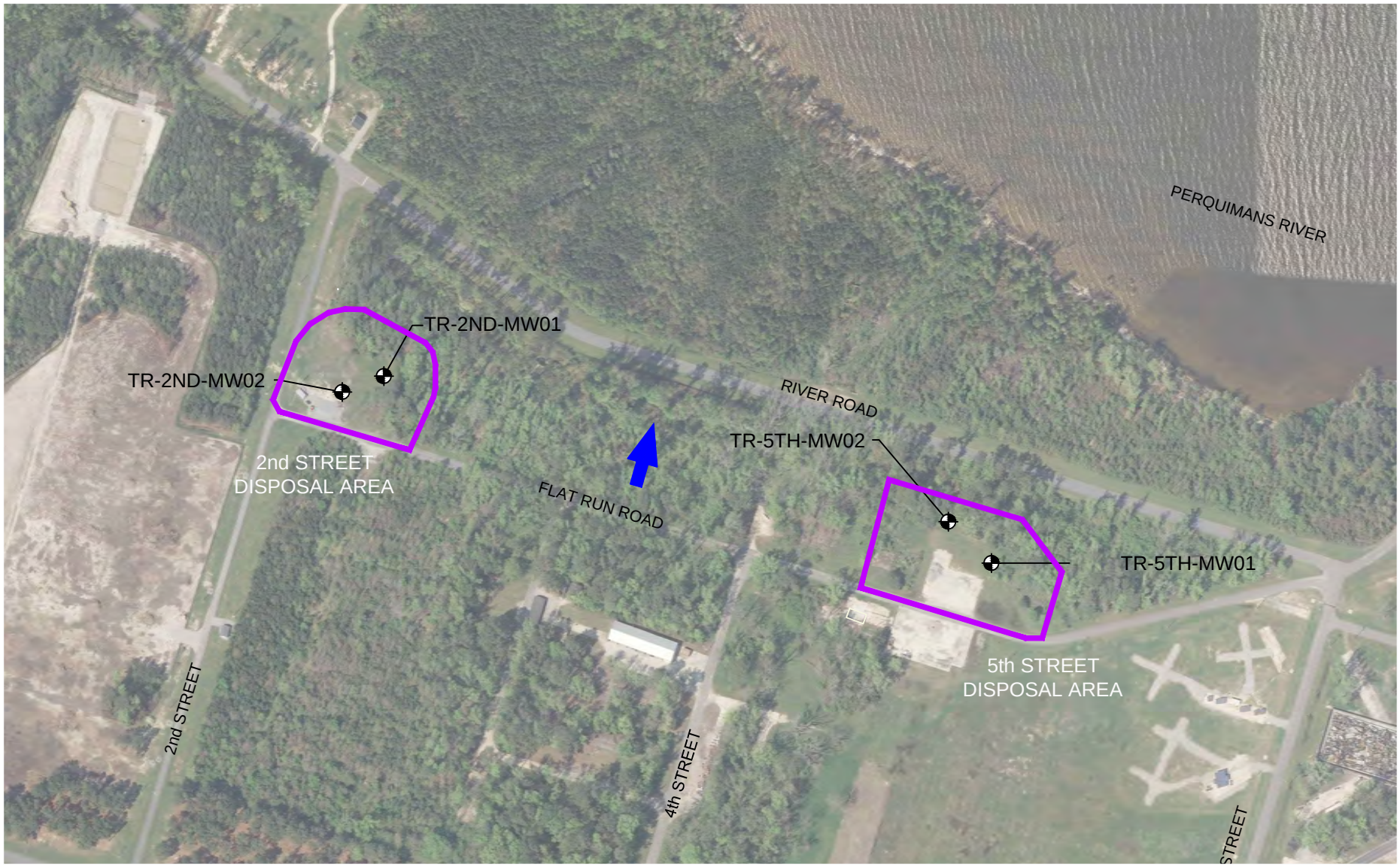
N
W E
S

0 40 80 Feet

Figure 3
5th Street Disposal Area PCB Delineation Sample Locations
Harvey Point Defense Testing Activity
Hertford, North Carolina

CUES MappingServices

12-112-006



Legend

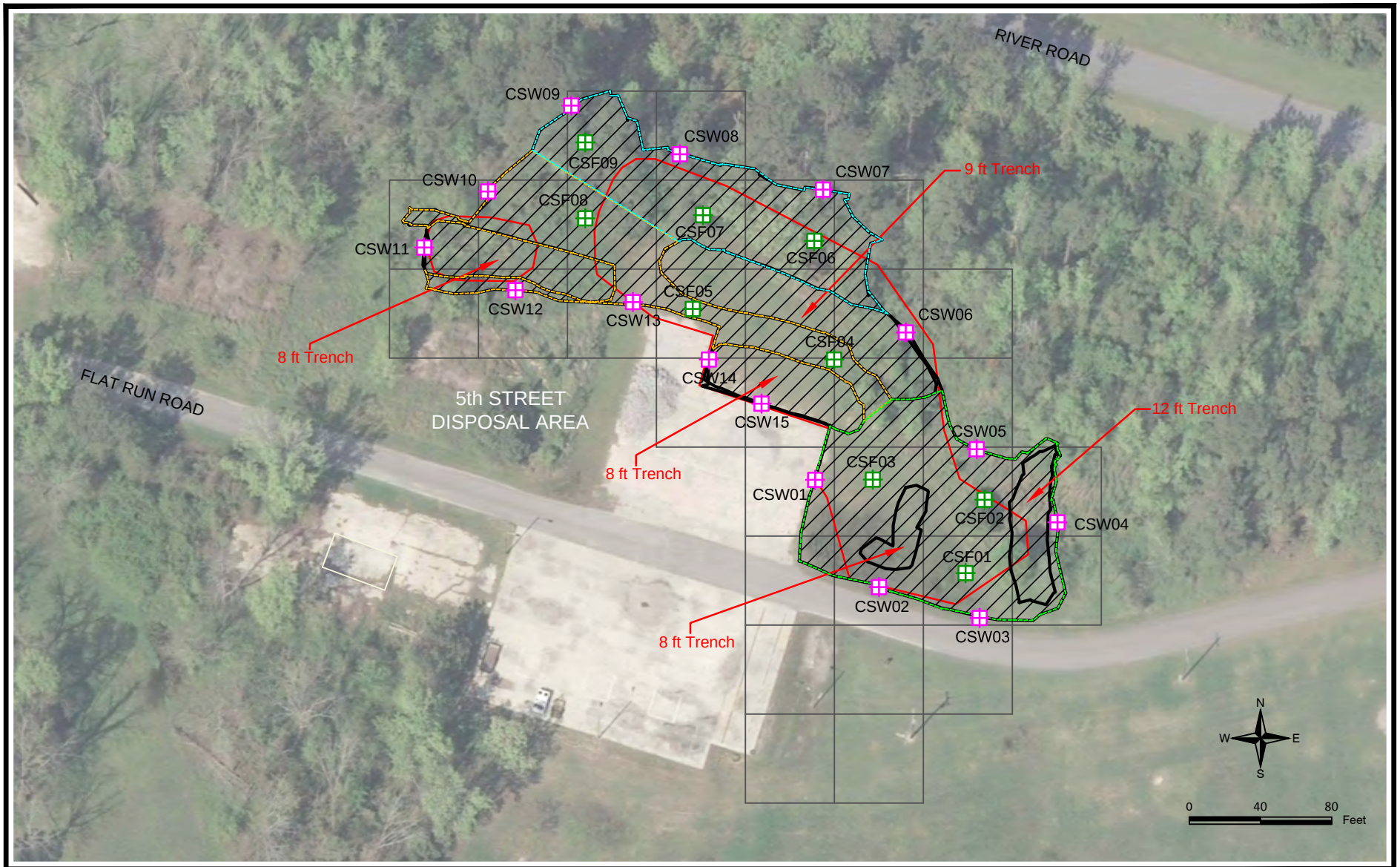
- Monitoring Well
- Groundwater Flow Direction
- Investigation Area

N
W E
S

0 150 300 Feet

Figure 4
Towers Road Disposal Area Monitoring Wells
Harvey Point Defense Testing Activity
Hertford, North Carolina

CUES MappingServices



Legend

- Extent of Waste/Removal Area
- 50' Grid
- Trench
- Wall Confirmation Sample Location
- Floor Confirmation Sample Location
- 1 ft Excavation
- 2 ft Excavation
- 3 ft Excavation
- Estimated Extent of Waste/Removal Area

Figure 5
5th Street Disposal Area Confirmation Sample Locations
Harvey Point Defense Testing Activity
Hertford, North Carolina

CUES MappingServices

ATTACHMENTS

ATTACHMENT 1
PCB Delineation Analytical Data and Lab Report

Attachment 1

5th Street Disposal Area PCB Delineation Analytical Data

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Sample ID	TR-5TH-SS07-0.5-01-0614	TR-5TH-SS07-E1-0614	TR-5TH-SS07-N1-0614	TR-5TH-SS07-W1-0614
Sample Date	6/27/2014 8:45	6/27/2014 10:25	6/27/2014 8:55	6/27/2014 9:40
Chemical Name				
Pesticide/Polychlorinated Biphenyls (MG/KG)				
Aroclor-1016	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1221	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1232	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1242	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1248	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1254	0.023 U	0.59 Q	0.4	0.46
Aroclor-1260	0.023 U	2.1 D	1.4 D	1.4 D
Aroclor-1262	0.023 U	0.022 U	0.021 U	0.022 U
Aroclor-1268	0.023 U	0.022 U	0.021 U	0.022 U
Total PCBs	0.1035 U	2.767	1.8735	1.937

Notes:

D - Compound identified in an analysis at a secondary dilution factor.

Q - One or more QC criteria recovered outside acceptance limits

U - The material was analyzed for, but not detected

MG/KG - Milligrams per kilogram

Shading indicates detection

Bold text indicates exceedance of 50 mg/kg total PCBs

TABLE OF CONTENTS

SECTION	PAGE
A403770 Final Report	2
A403770 Project Narrative	3
A403770 Chain of Custody	11
A403770 Shipping Documentation	13
A403770 Login Report	14
EPA 8082A Data Summary Package	17
EPA 8082A Raw Data	59

Environmental Conservation Laboratories, Inc.
10775 Central Port Drive
Orlando FL, 32824
Phone: 407.826.5314 FAX: 407.850.6945
www.encolabs.com

Monday, July 7, 2014

CH2M Hill, Inc. (CH025)

Attn: Juliana Dean

5701 Cleveland Street, Suite 200

Virginia Beach, VA 23462

RE: Laboratory Results for
Project Number: 458605, Project Name/Desc: CTO-0017 Towers Road Disposal-5th St. PCB
ENCO Workorder(s): A403770

Dear Juliana Dean,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Saturday, June 28, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Marcia Colon

Project Manager

Enclosure(s)

www.encolabs.com

PROJECT NARRATIVE

Client: CH2M Hill, Inc.
Project: CTO-0017 Towers Road Disposal
Project Number: 458605
ENCO Project ID: A403770
SDG: A403770-CTO0017

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

Remarks

List of instruments used:

Analytical and Preparation Method	SOP Reference Instrument
EPA 8082A	OSVGCECD2

Analysis: EPA 8082A
Affected Sample(s): TR-5TH-SS07-N1-0.5-01-0614 [A403770-03], TR-5TH-SS07-N2-0614 [A403770-04], TR-5TH-SS07-N2-0.5-01-0614 [A403770-05], TR-5TH-SS07-N3-0614 [A403770-06], TR-5TH-SS07-N3-0.5-01-0614 [A403770-07], TR-5TH-SS07-W1-0.5-01-0614 [A403770-09], TR-5TH-SS07-W2-0614 [A403770-10], TR-5TH-SS07-W2-0.5-01-0614 [A403770-11], TR-5TH-SS07-W3-0614 [A403770-12], TR-5TH-SS07-W3-0.5-01-0614 [A403770-13], TR-5TH-SS07-E1-0.5-01-0614 [A403770-15], TR-5TH-SS07-E2-0614 [A403770-16], TR-5TH-SS07-E2-0.5-01-0614 [A403770-17], TR-5TH-SS07-E3-0614 [A403770-18], TR-5TH-SS07-E3-0.5-01-0614 [A403770-19]
Additional Information: Samples were place on HOLD per client request. If samples are requested to be analyzed they will be reported under a separate report.

Analysis: EPA 8082A
Affected Sample(s): TR-5TH-SS07-N1-0614 [A403770-02], TR-5TH-SS07-N1-0614 [A403770-02RE1], TR-5th-SS07-W1-0614 [A403770-08], TR-5th-SS07-W1-0614 [A403770-08RE1], TR-5th-SS07-E1-0614 [A403770-14], TR-5th-SS07-E1-0614 [A403770-14RE1]
Nonconformance: The concentration indicated for PCB-1260 is an estimated value above the calibration range. The sample was re-analyzed at a dilution for confirmation. Both sets of data are reported.

Analysis: EPA 8082A
Affected Sample(s): TR-5TH-SS07-N1-0614 [A403770-02]
Nonconformance: Surrogate recovery for Decachlorobiphenyl exceeded acceptance criteria due to the presence of a coeluting compound. This is a confirmed matrix effect.

Analysis: EPA 8082A
Affected Sample(s): TR-5th-SS07-E1-0614 [A403770-14]
Nonconformance: Confirmation result for PCB-1254 exceeds 40% RPD, higher result is reported.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Marcia Colon
July 7, 2014

Project Manager

www.encolabs.com

SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID: TR-5TH-SS07-0.5-01-0614 Lab ID: A403770-01 Sampled: 06/27/14 08:45 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/2/2014 14:33

Client ID: TR-5TH-SS07-N1-0614 Lab ID: A403770-02 Sampled: 06/27/14 08:55 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/2/2014 14:45

Client ID: TR-5TH-SS07-N1-0614 Lab ID: A403770-02RE1 Sampled: 06/27/14 08:55 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/3/2014 14:03

Client ID: TR-5TH-SS07-W1-0614 Lab ID: A403770-08 Sampled: 06/27/14 09:40 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/2/2014 14:57

Client ID: TR-5TH-SS07-W1-0614 Lab ID: A403770-08RE1 Sampled: 06/27/14 09:40 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/3/2014 14:15

Client ID: TR-5TH-SS07-E1-0614 Lab ID: A403770-14 Sampled: 06/27/14 10:25 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/2/2014 15:09

Client ID: TR-5TH-SS07-E1-0614 Lab ID: A403770-14RE1 Sampled: 06/27/14 10:25 Received: 06/28/14 12:38

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	06/27/15	06/27/15	07/01/14	06:30	7/3/2014 14:27

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ANALYTICAL RESULTS

Description: TR-5TH-SS07-0.5-01-0614
Matrix: Soil
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Lab Sample ID: A403770-01
Sampled: 06/27/14 08:45
Sampled By: Nate Price

Received: 06/28/14 12:38
Work Order: A403770
% Solids: 88.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1016 [12674-11-2] ^	<0.023	U	mg/kg dry	1	0.016	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1221 [11104-28-2] ^	<0.023	U	mg/kg dry	1	0.016	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1232 [11141-16-5] ^	<0.023	U	mg/kg dry	1	0.016	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1242 [53469-21-9] ^	<0.023	U	mg/kg dry	1	0.017	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1248 [12672-29-6] ^	<0.023	U	mg/kg dry	1	0.0071	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1254 [11097-69-1] ^	<0.023	U	mg/kg dry	1	0.018	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1260 [11096-82-5] ^	<0.023	U	mg/kg dry	1	0.012	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1262 [37324-23-5] ^	<0.023	U	mg/kg dry	1	0.016	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	
PCB-1268 [11100-14-4] ^	<0.023	U	mg/kg dry	1	0.011	0.023	0.045	EPA 8082A	07/02/14 14:33	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.030*	*1*	*0.0376*	*80 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/02/14 14:33*	*RC*	
Decachlorobiphenyl	*0.043*	*1*	*0.0376*	*115 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/02/14 14:33*	*RC*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-SS07-N1-0614	**Lab Sample ID:**	A403770-02	**Received:**	06/28/14 12:38
Matrix:	Soil	**Sampled:**	06/27/14 08:55	**Work Order:**	A403770
Project:	CTO-0017 Towers Road Disposal-5th St. PCB	**Sampled By:**	Nate Price	**% Solids:**	94.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1016 [12674-11-2] ^	<0.021	U	mg/kg dry	1	0.015	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1016 [12674-11-2] ^	<0.042	UD	mg/kg dry	2	0.030	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1221 [11104-28-2] ^	<0.021	U	mg/kg dry	1	0.015	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1221 [11104-28-2] ^	<0.042	UD	mg/kg dry	2	0.030	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1232 [11141-16-5] ^	<0.021	U	mg/kg dry	1	0.015	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1232 [11141-16-5] ^	<0.042	UD	mg/kg dry	2	0.030	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1242 [53469-21-9] ^	<0.021	U	mg/kg dry	1	0.016	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1242 [53469-21-9] ^	<0.042	UD	mg/kg dry	2	0.032	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1248 [12672-29-6] ^	<0.021	U	mg/kg dry	1	0.0067	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1248 [12672-29-6] ^	<0.042	UD	mg/kg dry	2	0.013	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1254 [11097-69-1] ^	<0.042	UD	mg/kg dry	2	0.034	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1254 [11097-69-1] ^	**0.40**		mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1260 [11096-82-5] ^	**1.4**	D	mg/kg dry	2	0.023	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1260 [11096-82-5] ^	**1.6**	EQ	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	E
PCB-1262 [37324-23-5] ^	<0.021	U	mg/kg dry	1	0.015	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1262 [37324-23-5] ^	<0.042	UD	mg/kg dry	2	0.030	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	
PCB-1268 [11100-14-4] ^	<0.021	U	mg/kg dry	1	0.011	0.021	0.042	EPA 8082A	07/02/14 14:45	RC	
PCB-1268 [11100-14-4] ^	<0.042	UD	mg/kg dry	2	0.021	0.042	0.085	EPA 8082A	07/03/14 14:03	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.028*	*2*	*0.0353*	*78 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/03/14 14:03*	*RC*	
2,4,5,6-TCMX	*0.043*	*1*	*0.0353*	*122 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/02/14 14:45*	*RC*	
Decachlorobiphenyl	*0.050*	*1*	*0.0353*	*141 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/02/14 14:45*	*RC*	*QS-06*
Decachlorobiphenyl	*0.044*	*2*	*0.0353*	*125 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/03/14 14:03*	*RC*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-SS07-W1-0614	**Lab Sample ID:**	A403770-08	**Received:**	06/28/14 12:38
Matrix:	Soil	**Sampled:**	06/27/14 09:40	**Work Order:**	A403770
Project:	CTO-0017 Towers Road Disposal-5th St. PCB	**Sampled By:**	Nate Price	**% Solids:**	89.2

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1016 [12674-11-2] ^	<0.022	U	mg/kg dry	1	0.016	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1016 [12674-11-2] ^	<0.045	UD	mg/kg dry	2	0.031	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1221 [11104-28-2] ^	<0.022	U	mg/kg dry	1	0.016	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1221 [11104-28-2] ^	<0.045	UD	mg/kg dry	2	0.031	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1232 [11141-16-5] ^	<0.022	U	mg/kg dry	1	0.016	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1232 [11141-16-5] ^	<0.045	UD	mg/kg dry	2	0.031	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1242 [53469-21-9] ^	<0.022	U	mg/kg dry	1	0.017	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1242 [53469-21-9] ^	<0.045	UD	mg/kg dry	2	0.034	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1248 [12672-29-6] ^	<0.022	U	mg/kg dry	1	0.0071	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1248 [12672-29-6] ^	<0.045	UD	mg/kg dry	2	0.014	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1254 [11097-69-1] ^	<0.045	UD	mg/kg dry	2	0.036	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1254 [11097-69-1] ^	**0.46**		mg/kg dry	1	0.018	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1260 [11096-82-5] ^	**1.4**	D	mg/kg dry	2	0.025	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1260 [11096-82-5] ^	**1.6**	EQ	mg/kg dry	1	0.012	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	E
PCB-1262 [37324-23-5] ^	<0.022	U	mg/kg dry	1	0.016	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1262 [37324-23-5] ^	<0.045	UD	mg/kg dry	2	0.031	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	
PCB-1268 [11100-14-4] ^	<0.022	U	mg/kg dry	1	0.011	0.022	0.045	EPA 8082A	07/02/14 14:57	RC	
PCB-1268 [11100-14-4] ^	<0.045	UD	mg/kg dry	2	0.022	0.045	0.090	EPA 8082A	07/03/14 14:15	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.030*	*2*	*0.0374*	*81 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/03/14 14:15*	*RC*	
2,4,5,6-TCMX	*0.043*	*1*	*0.0374*	*116 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/02/14 14:57*	*RC*	
Decachlorobiphenyl	*0.044*	*1*	*0.0374*	*118 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/02/14 14:57*	*RC*	
Decachlorobiphenyl	*0.039*	*2*	*0.0374*	*103 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/03/14 14:15*	*RC*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-SS07-E1-0614	**Lab Sample ID:**	A403770-14	**Received:**	06/28/14 12:38
Matrix:	Soil	**Sampled:**	06/27/14 10:25	**Work Order:**	A403770
Project:	CTO-0017 Towers Road Disposal-5th St. PCB	**Sampled By:**	Nate Price	**% Solids:**	91.4

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1016 [12674-11-2] ^	<0.022	U	mg/kg dry	1	0.015	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1016 [12674-11-2] ^	<0.044	UD	mg/kg dry	2	0.031	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1221 [11104-28-2] ^	<0.022	U	mg/kg dry	1	0.015	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1221 [11104-28-2] ^	<0.044	UD	mg/kg dry	2	0.031	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1232 [11141-16-5] ^	<0.022	U	mg/kg dry	1	0.015	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1232 [11141-16-5] ^	<0.044	UD	mg/kg dry	2	0.031	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1242 [53469-21-9] ^	<0.022	U	mg/kg dry	1	0.016	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1242 [53469-21-9] ^	<0.044	UD	mg/kg dry	2	0.033	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1248 [12672-29-6] ^	<0.022	U	mg/kg dry	1	0.0069	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1248 [12672-29-6] ^	<0.044	UD	mg/kg dry	2	0.014	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1254 [11097-69-1] ^	<0.044	UD	mg/kg dry	2	0.035	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1254 [11097-69-1] ^	**0.59**	Q	mg/kg dry	1	0.017	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	GC-06
PCB-1260 [11096-82-5] ^	**2.1**	D	mg/kg dry	2	0.024	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1260 [11096-82-5] ^	**1.9**	EQ	mg/kg dry	1	0.012	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	E
PCB-1262 [37324-23-5] ^	<0.022	U	mg/kg dry	1	0.015	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1262 [37324-23-5] ^	<0.044	UD	mg/kg dry	2	0.031	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	
PCB-1268 [11100-14-4] ^	<0.022	U	mg/kg dry	1	0.011	0.022	0.044	EPA 8082A	07/02/14 15:09	RC	
PCB-1268 [11100-14-4] ^	<0.044	UD	mg/kg dry	2	0.022	0.044	0.087	EPA 8082A	07/03/14 14:27	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.028*	*2*	*0.0365*	*78 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/03/14 14:27*	*RC*	
2,4,5,6-TCMX	*0.031*	*1*	*0.0365*	*85 %*	*20-137*	*4G01003*	*EPA 8082A*	*07/02/14 15:09*	*RC*	
Decachlorobiphenyl	*0.041*	*1*	*0.0365*	*113 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/02/14 15:09*	*RC*	
Decachlorobiphenyl	*0.044*	*2*	*0.0365*	*122 %*	*60-125*	*4G01003*	*EPA 8082A*	*07/03/14 14:27*	*RC*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 4G01003 - EPA 3550C

Blank (4G01003-BLK1) Prepared: 07/01/2014 06:30 Analyzed: 07/02/2014 13:57

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016	<0.020	U	0.040	mg/kg wet							
PCB-1221	<0.020	U	0.040	mg/kg wet							
PCB-1232	<0.020	U	0.040	mg/kg wet							
PCB-1242	<0.020	U	0.040	mg/kg wet							
PCB-1248	<0.020	U	0.040	mg/kg wet							
PCB-1254	<0.020	U	0.040	mg/kg wet							
PCB-1260	<0.020	U	0.040	mg/kg wet							
PCB-1262	<0.020	U	0.040	mg/kg wet							
PCB-1268	<0.020	U	0.040	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.023*			*mg/kg wet*	*0.0333*		*68*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.039*			*mg/kg wet*	*0.0333*		*116*	*60-125*			

LCS (4G01003-BS1) Prepared: 07/01/2014 06:30 Analyzed: 07/02/2014 14:09

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016	0.28		0.040	mg/kg wet				40-140			
PCB-1016/1242	0.28		0.040	mg/kg wet	0.333		85	40-140			
PCB-1221	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1232	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1242	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1248	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1260	0.35		0.040	mg/kg wet	0.333		106	60-130			
PCB-1262	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1268	<0.020	U	0.040	mg/kg wet				29-185			
Surrogate: 2,4,5,6-TCMX	*0.023*			*mg/kg wet*	*0.0333*		*69*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.039*			*mg/kg wet*	*0.0333*		*118*	*60-125*			

LCS Dup (4G01003-BSD1) Prepared: 07/01/2014 06:30 Analyzed: 07/02/2014 14:21

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1016	0.24		0.040	mg/kg wet				40-140	15	30	
PCB-1016/1242	0.24		0.040	mg/kg wet	0.333		73	40-140	15	30	
PCB-1221	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1232	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1242	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1248	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1260	0.32		0.040	mg/kg wet	0.333		95	60-130	11	30	
PCB-1262	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1268	<0.020	U	0.040	mg/kg wet				29-185		30	
Surrogate: 2,4,5,6-TCMX	*0.024*			*mg/kg wet*	*0.0333*		*72*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.038*			*mg/kg wet*	*0.0333*		*113*	*60-125*			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported result is an estimated value.
U	Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
Q	One or more quality control criteria failed.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
GC-06	Confirmation result exceeds 40% RPD, higher result reported.
QS-06	Surrogate recovery exceeded acceptance criteria due to the presence of a coeluting compound. This is a confirmed matrix effect.

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th St. Surface Soil
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954594
Tel: (757) 671-6232 Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): NATE PRICE / CH2M HILL	Billing Contact: ~~Angela Petree~~ JANNA STASZAK
Sampler(s) Signature: [signature]	Site Location / Time Zone: HERTFORD, NC / EST

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

X Expedited

Due ___/___/___

Lab Workorder: A402358

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B TCL SOM01.2 DOD	8270D PAH SIM DOD	8082A DOD	8270D TCL SOM01.2 DOD	Sb EPA 6020A DOD, HG EPA 7000 DOD	EPA 6010C DOD: Al,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Na,V,Zn					Sample Comments
									I								
	TR-5TH-SS07-0.5-01-0614	6/27/14	0845	Grab	SO	1			X								
	TR-5TH-SS07-N1-0614	6/27/14	0855	Grab	SO	1			X								
	TR-5TH-SS07-N1-0.5-01-0614	6/27/14	0900	Grab	SO	1			X								HOLD
	TR-5TH-SS07-N2-0614	6/27/14	0910	Grab	SO	1			X								HOLD
	TR-5TH-SS07-N2-0.5-01-0614	6/27/14	0915	Grab	SO	1			X								HOLD
	TR-5TH-SS07-N3-0614	6/27/14	0925	Grab	SO	1			X								HOLD
	TR-5TH-SS07-N3-0.5-01-0614	6/27/14	0930	Grab	SO	1			X								HOLD
	TR-5TH-SS07-W1-0614	6/27/14	0940	Grab	SO	1			X								
	TR-5TH-SS07-W1-0.5-01-0614	6/27/14	0945	Grab	SO	1			X								HOLD
	TR-5TH-SS07-W2-0614	6/27/14	0955	Grab	SO	1			X								HOLD
	TR-5TH-SS07-W2-0.5-01-0614	6/27/14	1000	Grab	SO	1			X								HOLD
	TR-5TH-SS07-W3-0614	6/27/14	1010	Grab	SO	1			X								HOLD
						12	<-- Total # of Containers										

Sample Kit Prepared By: RJC	Date/Time: 4/25/2014 1330	Relinquished By: Rebecca Collins	Date/Time: 4/25/2014 1330	Received By:	Date/Time:
Comments/Special Reporting Requirements: 7-DAY TAT; PCBs (Full 9 Aroclor List)		Relinquished By: [signature]	Date/Time: 6/27/14 1730	Received By: [signature]	Date/Time:
		Relinquished By:	Date/Time:	Received By: [signature] 6/28/14	Date/Time: 1000
		Cooler #'s & Temps on Receipt: B1-02 2°C		Condition Upon Receipt: X Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments) **Preservation:** I-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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102-A Woodwinds Industrial Ct.
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th St. Surface Soil
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954594
Tel: (757) 671-6232 Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): NATE PRICE / CH2M HILL	Billing Contact: ~~Angela Petree~~ JANNA STASZAK
Sampler(s) Signature: Nathan C. R	Site Location / Time Zone: HERTFORD, NC / EST

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard

X Expedited

Due ___/___/___

Lab Workorder: A402358

Requested Analyses: 8260B TCL SOM01.2 DOD; 8270D PAH SIM DOD; 8082A DOD; 8270D TCL SOM01.2 DOD; Sb EPA 6020A DOD, HG EPA 7000 DOD; EPA 6010C DOD: Al,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Hg,K,Na,V,Zn

Preservation (See Codes) (Combine as necessary): I

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8082A DOD	Sample Comments
	TR-5TH-5507-W3-0.5-01-0614	6/27/14	1015	Grab	SO	1	X	HOLD
	TR-5TH-5507-E1-0614	6/27/14	1025	Grab	SO	1	X	
	TR-5TH-5507-E1-0.5-01-0614	6/27/14	1030	Grab	SO	1	X	HOLD
	TR-5TH-5507-E2-0614	6/27/14	1040	Grab	SO	1	X	HOLD
	TR-5TH-5507-E2-0.5-01-0614	6/27/14	1045	Grab	SO	1	X	HOLD
	TR-5TH-5507-E3-0614	6/27/14	1055	Grab	SO	1	X	HOLD
	TR-5TH-5507-E3-0.5-01-0614	6/27/14	1100	Grab	SO	1	X	HOLD
						7	<-- Total # of Containers	

Sample Kit Prepared By: KJC	Date/Time: 4/25/2014 1330	Relinquished By: Rebecca Collins	Date/Time: 4/25/2014 1330
Comments/Special Reporting Requirements: 7-DAY TAT; PCBs (Full 9 Aroclor List)		Relinquished By: Nathan C. R	Date/Time: 6/27/14 1730
		Relinquished By:	Date/Time:
Received By:	Date/Time:	Received By:	Date/Time:
Received By:	Date/Time: 6/28/14 1000	Received By:	Date/Time:
Cooler #'s & Temps on Receipt: B1-02 2°C		Condition Upon Receipt: ___ Acceptable ___ Unacceptable	

Matrix : **GW**-Groundwater **SO**-Soil **DW**-Drinking Water **SE**-Sediment **SW**-Surface Water **WW**-Wastewater **A**-Air **O**-Other (detail in comments)

Preservation: **I**-Ice **H**-HCl **N**-HNO3 **S**-H2SO4 **NO**-NaOH **O**-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

FedEx Express *NEW Package US Airbill*

FedEx Tracking Number 8022 4045 7806

Form ID No. 0200 **Recipient's Copy**

1 From

Date 6/27/14 [redacted]

Sender's Name NATHANIEL PRICE Phone 757 671-6280

Company CH2M HILL

Address 5701 Cleveland St. Suite 200 (Dept./Floor/Suite/Room)

City Virginia Beach State VA ZIP 23462

2 Your Internal Billing Reference 458605.FI.TP

3 To

Recipient's Name Maria Colon Phone 407 826-5514

Company ENCO

Address 10775 Central Port Drive (Dept./Floor/Suite/Room)

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Orlando State FL ZIP 32824

☐ HOLD Weekday — FedEx location address REQUIRED. NOT available for FedEx First Overnight.

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4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

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☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected

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6 Special Handling and Delivery Signature Options

☒ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

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Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes — As per attached Shipper's Declaration. ☐ Yes — Shipper's Declaration not required. ☐ Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

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[redacted]

Total Packages 1 Total Weight 3.4 lbs. [redacted] Credit Card Auth.

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WORK ORDER

Printed: 6/28/2014 1:05:31PM

A403770

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St. PCB**	**Project Number:**	**458605**
PO #:	**954594**		

Report To:

CH2M Hill, Inc. (CH025)
Juliana Dean
5701 Cleveland Street, Suite 200
Virginia Beach, VA 23462
Phone: (757) 671-6232
Fax:

Invoice To:

CH2M Hill, Inc. (CH025)
Janna Staszak
5701 Cleveland Street, Suite 200
Virginia Beach, VA 23462
Phone :(757) 671-6256
Fax:

Client Notes

Project Notes

Work Order Notes

Client needs full list EPA 8082A. Full data package needed in 7 days. MCC 6/28/14

Many samples on HOLD pending initial results. MCC 6/28/14

Date Due:	07-Jul-14 17:00 (4 day TAT)		
Received By:	Marcia Colon	Date Received:	28-Jun-14 12:38
Logged In By:	Marcia Colon	Date Logged In:	28-Jun-14 12:38

Cooler: BI-02 received at 2.0°C

Containers Intact	Y	Containers Properly Preserved	N	Proper Containers Received	Y	COC/Labels Agree	Y	Custody Seals Intact	Y
Volatile Containers Preserved	N	Volatile Containers Headspace Free	N	Aqueous Samples Checked for Residual Cl	N	All Samples in PreLog Received	Y	Received On Ice	Y
Temperature Corrected	Y								

Analysis	Due	TAT	Expires	Status	Comments
A403770-01 TR-5TH-SS07-0.5-01-0614 [Soil] Sampled 27-Jun-14 08:45 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 08:45	Received	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 08:45	Received	
A403770-02 TR-5TH-SS07-N1-0614 [Soil] Sampled 27-Jun-14 08:55 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 08:55	Received	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 08:55	Received	
A403770-03 TR-5TH-SS07-N1-0.5-01-0614 [Soil] Sampled 27-Jun-14 09:00 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:00	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:00	Hold	

A403770

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St. PCB**	**Project Number:**	**458605**
PO #:	**954594**		

Analysis	Due	TAT	Expires	Status	Comments
A403770-04 TR-5TH-SS07-N2-0614 [Soil] Sampled 27-Jun-14 09:10 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:10	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:10	Hold	
A403770-05 TR-5TH-SS07-N2-0.5-01-0614 [Soil] Sampled 27-Jun-14 09:15 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:15	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:15	Hold	
A403770-06 TR-5TH-SS07-N3-0614 [Soil] Sampled 27-Jun-14 09:25 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:25	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:25	Hold	
A403770-07 TR-5TH-SS07-N3-0.5-01-0614 [Soil] Sampled 27-Jun-14 09:30 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:30	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:30	Hold	
A403770-08 TR-5TH-SS07-W1-0614 [Soil] Sampled 27-Jun-14 09:40 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:40	Received	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:40	Received	
A403770-09 TR-5TH-SS07-W1-0.5-01-0614 [Soil] Sampled 27-Jun-14 09:45 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:45	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:45	Hold	
A403770-10 TR-5TH-SS07-W2-0614 [Soil] Sampled 27-Jun-14 09:55 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 09:55	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 09:55	Hold	
A403770-11 TR-5TH-SS07-W2-0.5-01-0614 [Soil] Sampled 27-Jun-14 10:00 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:00	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:00	Hold	
A403770-12 TR-5TH-SS07-W3-0614 [Soil] Sampled 27-Jun-14 10:10 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:10	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:10	Hold	

A403770

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St. PCB**	**Project Number:**	**458605**
PO #:	**954594**		

Analysis	Due	TAT	Expires	Status	Comments
A403770-13 TR-5TH-SS07-W3-0.5-01-0614 [Soil] Sampled 27-Jun-14 10:15 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:15	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:15	Hold	
A403770-14 TR-5TH-SS07-E1-0614 [Soil] Sampled 27-Jun-14 10:25 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:25	Received	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:25	Received	
A403770-15 TR-5TH-SS07-E1-0.5-01-0614 [Soil] Sampled 27-Jun-14 10:30 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:30	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:30	Hold	
A403770-16 TR-5TH-SS07-E2-0614 [Soil] Sampled 27-Jun-14 10:40 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:40	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:40	Hold	
A403770-17 TR-5TH-SS07-E2-0.5-01-0614 [Soil] Sampled 27-Jun-14 10:45 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:45	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:45	Hold	
A403770-18 TR-5TH-SS07-E3-0614 [Soil] Sampled 27-Jun-14 10:55 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 10:55	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 10:55	Hold	
A403770-19 TR-5TH-SS07-E3-0.5-01-0614 [Soil] Sampled 27-Jun-14 11:00 Eastern					
8082A DOD	07-Jul-14 15:00	4	27-Jun-15 11:00	Hold	Full List
Solids, Dry Weight	07-Jul-14 15:00	4	24-Dec-14 11:00	Hold	

Reviewed By

Date

ENCO Orlando

SDG: A403770-CTO0017

CLASS: 15_PCB

METHOD: EPA 8082A

ANALYSES DATA PACKAGE COVER PAGE

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Client Sample Id:	Lab Sample Id:
TR-5TH-SS07-0.5-01-0614	A403770-01
TR-5TH-SS07-N1-0614	A403770-02
TR-5TH-SS07-N1-0614	A403770-02RE1
TR-5TH-SS07-W1-0614	A403770-08
TR-5TH-SS07-W1-0614	A403770-08RE1
TR-5TH-SS07-E1-0614	A403770-14
TR-5TH-SS07-E1-0614	A403770-14RE1

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-0.5-01-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-01	File ID:	2G2022.D
Sampled:	06/27/14 08:45	Prepared:	07/01/14 06:30	Analyzed:	07/02/14 14:33
Solids:	88.28	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch: 4G01003 Sequence: AA29428 Calibration: 1407013 Instrument: OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	1	<0.023	U	0.016	0.023	0.045
53469-21-9	PCB-1242	1	<0.023	U	0.017	0.023	0.045
11104-28-2	PCB-1221	1	<0.023	U	0.016	0.023	0.045
11141-16-5	PCB-1232	1	<0.023	U	0.016	0.023	0.045
12672-29-6	PCB-1248	1	<0.023	U	0.0071	0.023	0.045
11097-69-1	PCB-1254 [2C]	1	<0.023	U	0.018	0.023	0.045
11096-82-5	PCB-1260 [2C]	1	<0.023	U	0.012	0.023	0.045
37324-23-5	PCB-1262	1	<0.023	U	0.016	0.023	0.045
11100-14-4	PCB-1268	1	<0.023	U	0.011	0.023	0.045

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0376	0.026	68	20 - 137	
2,4,5,6-TCMX [2C]	0.0376	0.030	80	20 - 137	
Decachlorobiphenyl	0.0376	0.043	115	60 - 125	
Decachlorobiphenyl [2C]	0.0376	0.045	118	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-N1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-02	File ID:	2G2023.D
Sampled:	06/27/14 08:55	Prepared:	07/01/14 06:30	Analyzed:	07/02/14 14:45
Solids:	94.63	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4G01003	Sequence:	AA29428	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	1	<0.021	U	0.015	0.021	0.042
53469-21-9	PCB-1242	1	<0.021	U	0.016	0.021	0.042
11104-28-2	PCB-1221	1	<0.021	U	0.015	0.021	0.042
11141-16-5	PCB-1232	1	<0.021	U	0.015	0.021	0.042
12672-29-6	PCB-1248	1	<0.021	U	0.0067	0.021	0.042
11097-69-1	PCB-1254 [2C]	1	0.40		0.017	0.021	0.042
11096-82-5	PCB-1260 [2C]	1	1.6	EQ	0.012	0.021	0.042
37324-23-5	PCB-1262	1	<0.021	U	0.015	0.021	0.042
11100-14-4	PCB-1268	1	<0.021	U	0.011	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0353	0.038	106	20 - 137	
2,4,5,6-TCMX [2C]	0.0353	0.043	122	20 - 137	
Decachlorobiphenyl	0.0353	0.050	141	60 - 125	*
Decachlorobiphenyl [2C]	0.0353	0.053	150	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-N1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-02RE1	File ID:	2G3030.D
Sampled:	06/27/14 08:55	Prepared:	07/01/14 06:30	Analyzed:	07/03/14 14:03
Solids:	94.63	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4G01003	Sequence:	AA29477	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	2	<0.042	UD	0.030	0.042	0.085
53469-21-9	PCB-1242	2	<0.042	UD	0.032	0.042	0.085
11104-28-2	PCB-1221	2	<0.042	UD	0.030	0.042	0.085
11141-16-5	PCB-1232	2	<0.042	UD	0.030	0.042	0.085
12672-29-6	PCB-1248	2	<0.042	UD	0.013	0.042	0.085
11097-69-1	PCB-1254	2	<0.042	UD	0.034	0.042	0.085
11096-82-5	PCB-1260	2	1.4	D	0.023	0.042	0.085
37324-23-5	PCB-1262	2	<0.042	UD	0.030	0.042	0.085
11100-14-4	PCB-1268	2	<0.042	UD	0.021	0.042	0.085

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0353	0.028	78	20 - 137	
Decachlorobiphenyl	0.0353	0.044	125	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-W1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-08	File ID:	2G2024.D
Sampled:	06/27/14 09:40	Prepared:	07/01/14 06:30	Analyzed:	07/02/14 14:57
Solids:	89.19	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4G01003	Sequence:	AA29428	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	1	<0.022	U	0.016	0.022	0.045
53469-21-9	PCB-1242	1	<0.022	U	0.017	0.022	0.045
11104-28-2	PCB-1221	1	<0.022	U	0.016	0.022	0.045
11141-16-5	PCB-1232	1	<0.022	U	0.016	0.022	0.045
12672-29-6	PCB-1248	1	<0.022	U	0.0071	0.022	0.045
11097-69-1	PCB-1254 [2C]	1	0.46		0.018	0.022	0.045
11096-82-5	PCB-1260 [2C]	1	1.6	EQ	0.012	0.022	0.045
37324-23-5	PCB-1262	1	<0.022	U	0.016	0.022	0.045
11100-14-4	PCB-1268	1	<0.022	U	0.011	0.022	0.045

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0374	0.039	105	20 - 137	
2,4,5,6-TCMX [2C]	0.0374	0.043	116	20 - 137	
Decachlorobiphenyl	0.0374	0.044	118	60 - 125	
Decachlorobiphenyl [2C]	0.0374	0.048	129	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-W1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-08RE1	File ID:	2G3031.D
Sampled:	06/27/14 09:40	Prepared:	07/01/14 06:30	Analyzed:	07/03/14 14:15
Solids:	89.19	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4G01003	Sequence:	AA29477	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	2	<0.045	UD	0.031	0.045	0.090
53469-21-9	PCB-1242	2	<0.045	UD	0.034	0.045	0.090
11104-28-2	PCB-1221	2	<0.045	UD	0.031	0.045	0.090
11141-16-5	PCB-1232	2	<0.045	UD	0.031	0.045	0.090
12672-29-6	PCB-1248	2	<0.045	UD	0.014	0.045	0.090
11097-69-1	PCB-1254	2	<0.045	UD	0.036	0.045	0.090
11096-82-5	PCB-1260	2	1.4	D	0.025	0.045	0.090
37324-23-5	PCB-1262	2	<0.045	UD	0.031	0.045	0.090
11100-14-4	PCB-1268	2	<0.045	UD	0.022	0.045	0.090

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0374	0.030	81	20 - 137	
Decachlorobiphenyl	0.0374	0.039	103	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-E1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-14	File ID:	2G2025.D
Sampled:	06/27/14 10:25	Prepared:	07/01/14 06:30	Analyzed:	07/02/14 15:09
Solids:	91.44	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4G01003	Sequence:	AA29428	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	1	<0.022	U	0.015	0.022	0.044
53469-21-9	PCB-1242	1	<0.022	U	0.016	0.022	0.044
11104-28-2	PCB-1221	1	<0.022	U	0.015	0.022	0.044
11141-16-5	PCB-1232	1	<0.022	U	0.015	0.022	0.044
12672-29-6	PCB-1248	1	<0.022	U	0.0069	0.022	0.044
11097-69-1	PCB-1254 [2C]	1	0.59	Q	0.017	0.022	0.044
11096-82-5	PCB-1260 [2C]	1	1.9	EQ	0.012	0.022	0.044
37324-23-5	PCB-1262	1	<0.022	U	0.015	0.022	0.044
11100-14-4	PCB-1268	1	<0.022	U	0.011	0.022	0.044

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0365	0.027	75	20 - 137	
2,4,5,6-TCMX [2C]	0.0365	0.031	85	20 - 137	
Decachlorobiphenyl	0.0365	0.041	113	60 - 125	
Decachlorobiphenyl [2C]	0.0365	0.043	119	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-SS07-E1-0614

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-14RE1	File ID:	2G3032.D
Sampled:	06/27/14 10:25	Prepared:	07/01/14 06:30	Analyzed:	07/03/14 14:27
Solids:	91.44	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4G01003	Sequence:	AA29477	Calibration:	1407013	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
12674-11-2	PCB-1016	2	<0.044	UD	0.031	0.044	0.087
53469-21-9	PCB-1242	2	<0.044	UD	0.033	0.044	0.087
11104-28-2	PCB-1221	2	<0.044	UD	0.031	0.044	0.087
11141-16-5	PCB-1232	2	<0.044	UD	0.031	0.044	0.087
12672-29-6	PCB-1248	2	<0.044	UD	0.014	0.044	0.087
11097-69-1	PCB-1254	2	<0.044	UD	0.035	0.044	0.087
11096-82-5	PCB-1260	2	2.1	D	0.024	0.044	0.087
37324-23-5	PCB-1262	2	<0.044	UD	0.031	0.044	0.087
11100-14-4	PCB-1268	2	<0.044	UD	0.022	0.044	0.087

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0365	0.028	78	20 - 137	
Decachlorobiphenyl	0.0365	0.044	122	60 - 125	

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-SS07-0.5-01-0614	06/27/14 08:45	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/02/14 14:33	1.00	365.00	
TR-5TH-SS07-N1-0614	06/27/14 08:55	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/02/14 14:45	1.00	365.00	
TR-5TH-SS07-N1-0614	06/27/14 08:55	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/03/14 14:03	2.00	365.00	
TR-5TH-SS07-W1-0614	06/27/14 09:40	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/02/14 14:57	1.00	365.00	
TR-5TH-SS07-W1-0614	06/27/14 09:40	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/03/14 14:15	2.00	365.00	
TR-5TH-SS07-E1-0614	06/27/14 10:25	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/02/14 15:09	1.00	365.00	
TR-5TH-SS07-E1-0614	06/27/14 10:25	06/28/14 12:38	07/01/14 06:30	4.00	365.00	07/03/14 14:27	2.00	365.00	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St. PCB

Batch: 4G01003 Batch Matrix: Soil Preparation: EPA 3550C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4G01003-BLK1	2G2019.D	07/01/14 06:30	
LCS	4G01003-BS1	2G2020.D	07/01/14 06:30	
LCS Dup	4G01003-BSD1	2G2021.D	07/01/14 06:30	
TR-5TH-SS07-0.5-01-0614	A403770-01	2G2022.D	07/01/14 06:30	
TR-5TH-SS07-N1-0614	A403770-02	2G2023.D	07/01/14 06:30	
TR-5TH-SS07-N1-0614	A403770-02RE1	2G3030.D	07/01/14 06:30	
TR-5TH-SS07-W1-0614	A403770-08	2G2024.D	07/01/14 06:30	
TR-5TH-SS07-W1-0614	A403770-08RE1	2G3031.D	07/01/14 06:30	
TR-5TH-SS07-E1-0614	A403770-14	2G2025.D	07/01/14 06:30	
TR-5TH-SS07-E1-0614	A403770-14RE1	2G3032.D	07/01/14 06:30	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	4G01003-BLK1	File ID:	2G2019.D
Prepared:	07/01/14 06:30	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL
Analyzed:	07/02/14 13:57	Instrument:	OSVGCECD2		
Batch:	4G01003	Sequence:	AA29428	Calibration:	1407013

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
12674-11-2	PCB-1016	<0.020	U
53469-21-9	PCB-1242	<0.020	U
11104-28-2	PCB-1221	<0.020	U
11141-16-5	PCB-1232	<0.020	U
12672-29-6	PCB-1248	<0.020	U
11097-69-1	PCB-1254	<0.020	U
11096-82-5	PCB-1260	<0.020	U
37324-23-5	PCB-1262	<0.020	U
11100-14-4	PCB-1268	<0.020	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.023	68	20 - 137	
Decachlorobiphenyl	0.0333	0.039	116	60 - 125	

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Matrix:	Soil		
Batch:	4G01003	Laboratory ID:	4G01003-BS1
Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
PCB-1016		0.28		40 - 140
PCB-1242		ND		29 - 185
PCB-1016/1242	0.333	0.28	85	40 - 140
PCB-1221		ND		29 - 185
PCB-1232		ND		29 - 185
PCB-1248		ND		29 - 185
PCB-1254		ND		29 - 185
PCB-1260	0.333	0.35	106	60 - 130
PCB-1262		ND		29 - 185
PCB-1268		ND		29 - 185

COMPOUND	SPIKE ADDED (mg/kg wet)	LCSD CONCENTRATION (mg/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PCB-1016		0.24		15	30	40 - 140
PCB-1242		ND			30	29 - 185
PCB-1016/1242	0.333	0.24	73	15	30	40 - 140
PCB-1221		ND			30	29 - 185
PCB-1232		ND			30	29 - 185
PCB-1248		ND			30	29 - 185
PCB-1254		ND			30	29 - 185
PCB-1260	0.333	0.32	95	11	30	60 - 130
PCB-1262		ND			30	29 - 185
PCB-1268		ND			30	29 - 185

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TR-5TH-SS07-0.5-01-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB

Matrix:	Soil	Laboratory ID:	A403770-01	File ID:	2G2022.D
Sampled:	06/27/14 08:45	Prepared:	07/01/14 06:30	Analyzed:	07/02/14 14:33
Solids:	88.28	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4G01003	Sequence:	AA29428		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 2	2.266	2.270167	0.00417		0.030	14.3
Decachlorobiphenyl	* 1	6.75	6.7505	0.0005		0.043	4.55

* Column used for quantitation

TR-5TH-SS07-N1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-02
File ID: 2G2023.D
Sampled: 06/27/14 08:55
Prepared: 07/01/14 06:30
Analyzed: 07/02/14 14:45
Solids: 94.63
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29428
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 2	4.587	5.083167	0.496		0.40	4.88
PCB-1260	* 2	5.57	5.5715	0.0015		1.6	6.06
2,4,5,6-TCMX	2	2.267	2.270167	0.00317		0.043	12.3
Decachlorobiphenyl	* 1	6.749	6.7505	0.0015		0.050	5.83

* Column used for quantitation

TR-5TH-SS07-W1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-08
File ID: 2G2024.D
Sampled: 06/27/14 09:40
Prepared: 07/01/14 06:30
Analyzed: 07/02/14 14:57
Solids: 89.19
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29428
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 2	4.585	5.083167	0.498		0.46	35.9
PCB-1260	* 2	5.568	5.5715	0.0035		1.6	0
2,4,5,6-TCMX	* 2	2.266	2.270167	0.00417		0.043	9.76
Decachlorobiphenyl	* 1	6.746	6.7505	0.0045		0.044	8.7

* Column used for quantitation

TR-5TH-SS07-E1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-14
File ID: 2G2025.D
Sampled: 06/27/14 10:25
Prepared: 07/01/14 06:30
Analyzed: 07/02/14 15:09
Solids: 91.44
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29428
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	1	4.853	4.878833	0.0258		0.35	51.1
PCB-1254	* 2	4.586	5.083167	0.497		0.59	51.1
PCB-1260	* 2	5.569	5.5715	0.0025		1.9	0
2,4,5,6-TCMX	* 2	2.267	2.270167	0.00317		0.031	13.8
Decachlorobiphenyl	* 1	6.748	6.7505	0.0025		0.041	4.76

* Column used for quantitation

TR-5TH-SS07-N1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-02RE1
File ID: 2G3030.D
Sampled: 06/27/14 08:55
Prepared: 07/01/14 06:30
Analyzed: 07/03/14 14:03
Solids: 94.63
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29477
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.844	5.843833	0.000167		1.4	0
2,4,5,6-TCMX	* 1	2.64	2.641667	0.00167		0.028	16.4
Decachlorobiphenyl	* 1	6.752	6.7505	0.0015		0.044	4.44

* Column used for quantitation

TR-5TH-SS07-W1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-08RE1
File ID: 2G3031.D
Sampled: 06/27/14 09:40
Prepared: 07/01/14 06:30
Analyzed: 07/03/14 14:15
Solids: 89.19
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29477
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.843	5.843833	0.000833		1.4	6.9
2,4,5,6-TCMX	* 1	2.64	2.641667	0.00167		0.030	15.4
Decachlorobiphenyl	* 1	6.75	6.7505	0.0005		0.039	7.41

* Column used for quantitation

TR-5TH-SS07-E1-0614

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Matrix: Soil
Laboratory ID: A403770-14RE1
File ID: 2G3032.D
Sampled: 06/27/14 10:25
Prepared: 07/01/14 06:30
Analyzed: 07/03/14 14:27
Solids: 91.44
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4G01003
Sequence: AA29477
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.844	5.843833	0.000167		2.1	4.65
2,4,5,6-TCMX	* 1	2.639	2.641667	0.00267		0.028	16.4
Decachlorobiphenyl	* 1	6.752	6.7505	0.0015		0.044	0

* Column used for quantitation

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sequence: AA29428
Instrument: OSVGCECD2
Matrix: Soil
Calibration: 1407013

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29428-CCV1)			Lab File ID: 2G2017.D		Analyzed: 07/02/14 13:32			
2,4,5,6-TCMX	0.200	95	80 - 120	2.643	2.641667	0.0013	+/-1.0	
2,4,5,6-TCMX	0.200	95	80 - 120	2.643	2.641667	0.0013	+/-1.0	
Decachlorobiphenyl	0.200	90	80 - 120	6.751	6.7505	0.0005	+/-1.0	
Decachlorobiphenyl	0.200	90	80 - 120	6.751	6.7505	0.0005	+/-1.0	
Blank (4G01003-BLK1)			Lab File ID: 2G2019.D		Analyzed: 07/02/14 13:57			
2,4,5,6-TCMX	0.0333	68	20 - 137	2.634	2.641667	-0.0077	+/-1.0	
2,4,5,6-TCMX	0.0333	68	20 - 137	2.634	2.641667	-0.0077	+/-1.0	
Decachlorobiphenyl	0.0333	116	60 - 125	6.751	6.7505	0.0005	+/-1.0	
Decachlorobiphenyl	0.0333	116	60 - 125	6.751	6.7505	0.0005	+/-1.0	
LCS (4G01003-BS1)			Lab File ID: 2G2020.D		Analyzed: 07/02/14 14:09			
2,4,5,6-TCMX	0.0333	69	20 - 137	2.635	2.641667	-0.0067	+/-1.0	
2,4,5,6-TCMX	0.0333	69	20 - 137	2.635	2.641667	-0.0067	+/-1.0	
Decachlorobiphenyl	0.0333	118	60 - 125	6.752	6.7505	0.0015	+/-1.0	
Decachlorobiphenyl	0.0333	118	60 - 125	6.752	6.7505	0.0015	+/-1.0	
LCS Dup (4G01003-BSD1)			Lab File ID: 2G2021.D		Analyzed: 07/02/14 14:21			
2,4,5,6-TCMX	0.0333	72	20 - 137	2.635	2.641667	-0.0067	+/-1.0	
2,4,5,6-TCMX	0.0333	72	20 - 137	2.635	2.641667	-0.0067	+/-1.0	
Decachlorobiphenyl	0.0333	113	60 - 125	6.751	6.7505	0.0005	+/-1.0	
Decachlorobiphenyl	0.0333	113	60 - 125	6.751	6.7505	0.0005	+/-1.0	
TR-5TH-SS07-0.5-01-0614 (A403770-01)			Lab File ID: 2G2022.D		Analyzed: 07/02/14 14:33			
2,4,5,6-TCMX [2C]	0.0376	80	20 - 137	2.266	2.270167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0376	115	60 - 125	6.75	6.7505	-0.0005	+/-1.0	
TR-5TH-SS07-N1-0614 (A403770-02)			Lab File ID: 2G2023.D		Analyzed: 07/02/14 14:45			
2,4,5,6-TCMX [2C]	0.0353	122	20 - 137	2.267	2.270167	-0.0032	+/-1.0	
Decachlorobiphenyl	0.0353	141	60 - 125	6.749	6.7505	-0.0015	+/-1.0	*
TR-5TH-SS07-W1-0614 (A403770-08)			Lab File ID: 2G2024.D		Analyzed: 07/02/14 14:57			
2,4,5,6-TCMX [2C]	0.0374	116	20 - 137	2.266	2.270167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0374	118	60 - 125	6.746	6.7505	-0.0045	+/-1.0	
TR-5TH-SS07-E1-0614 (A403770-14)			Lab File ID: 2G2025.D		Analyzed: 07/02/14 15:09			
2,4,5,6-TCMX [2C]	0.0365	85	20 - 137	2.267	2.270167	-0.0032	+/-1.0	
Decachlorobiphenyl	0.0365	113	60 - 125	6.748	6.7505	-0.0025	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Sequence:	AA29428	Instrument:	OSVGCECD2
Matrix:	Soil	Calibration:	1407013

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29428-CCV2)			Lab File ID: 2G2026.D		Analyzed: 07/02/14 15:22			
2,4,5,6-TCMX [2C]	0.100	88	80 - 120	2.274	2.270167	0.0038	+/-1.0	
2,4,5,6-TCMX [2C]	0.100	88	80 - 120	2.274	2.270167	0.0038	+/-1.0	
Decachlorobiphenyl	0.100	99	80 - 120	6.75	6.7505	-0.0005	+/-1.0	
Decachlorobiphenyl	0.100	99	80 - 120	6.75	6.7505	-0.0005	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Sequence:	AA29452	Instrument:	OSVGCECD2
Matrix:	Water	Calibration:	1407013

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Secondary Cal Check (AA29452-SCV1)			Lab File ID: 2G2017.D		Analyzed: 07/02/14 13:32			
2,4,5,6-TCMX	0.200	95	80 - 120	2.643	2.641667	0.0013	+/-1.0	
Decachlorobiphenyl	0.200	90	80 - 120	6.751	6.7505	0.0005	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sequence: AA29477
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1407013

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29477-CCV1)			Lab File ID: 2G3029.D		Analyzed: 07/03/14 13:50			
2,4,5,6-TCMX	0.100	86	80 - 120	2.648	2.641667	0.0063	+/-1.0	
2,4,5,6-TCMX	0.100	86	80 - 120	2.648	2.641667	0.0063	+/-1.0	
Decachlorobiphenyl	0.100	114	80 - 120	6.751	6.7505	0.0005	+/-1.0	
Decachlorobiphenyl	0.100	114	80 - 120	6.751	6.7505	0.0005	+/-1.0	
TR-5TH-SS07-N1-0614 (A403770-02RE1)			Lab File ID: 2G3030.D		Analyzed: 07/03/14 14:03			
2,4,5,6-TCMX	0.0353	78	20 - 137	2.64	2.641667	-0.0017	+/-1.0	
Decachlorobiphenyl	0.0353	125	60 - 125	6.752	6.7505	0.0015	+/-1.0	
TR-5TH-SS07-W1-0614 (A403770-08RE1)			Lab File ID: 2G3031.D		Analyzed: 07/03/14 14:15			
2,4,5,6-TCMX	0.0374	81	20 - 137	2.64	2.641667	-0.0017	+/-1.0	
Decachlorobiphenyl	0.0374	103	60 - 125	6.75	6.7505	-0.0005	+/-1.0	
TR-5TH-SS07-E1-0614 (A403770-14RE1)			Lab File ID: 2G3032.D		Analyzed: 07/03/14 14:27			
2,4,5,6-TCMX	0.0365	78	20 - 137	2.639	2.641667	-0.0027	+/-1.0	
Decachlorobiphenyl	0.0365	122	60 - 125	6.752	6.7505	0.0015	+/-1.0	
Calibration Check (AA29477-CCV2)			Lab File ID: 2G3033.D		Analyzed: 07/03/14 14:39			
2,4,5,6-TCMX	0.100	84	80 - 120	2.648	2.641667	0.0063	+/-1.0	
2,4,5,6-TCMX	0.100	84	80 - 120	2.648	2.641667	0.0063	+/-1.0	
Decachlorobiphenyl	0.100	112	80 - 120	6.753	6.7505	0.0025	+/-1.0	
Decachlorobiphenyl	0.100	112	80 - 120	6.753	6.7505	0.0025	+/-1.0	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sequence: AA29428

Instrument: OSVGCECD2

Calibration: 1407013

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA29428-CCV1	2G2017.D	07/02/14 13:32
Aroclor Reference	AA29428-ARC1	2G2018.D	07/02/14 13:44
Blank	4G01003-BLK1	2G2019.D	07/02/14 13:57
LCS	4G01003-BS1	2G2020.D	07/02/14 14:09
LCS Dup	4G01003-BSD1	2G2021.D	07/02/14 14:21
TR-5TH-SS07-0.5-01-0614	A403770-01	2G2022.D	07/02/14 14:33
TR-5TH-SS07-N1-0614	A403770-02	2G2023.D	07/02/14 14:45
TR-5TH-SS07-W1-0614	A403770-08	2G2024.D	07/02/14 14:57
TR-5TH-SS07-E1-0614	A403770-14	2G2025.D	07/02/14 15:09
Calibration Check	AA29428-CCV2	2G2026.D	07/02/14 15:22
Aroclor Reference	AA29428-ARC2	2G2027.D	07/02/14 15:34

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sequence: AA29452

Instrument: OSVGCECD2

Calibration: 1407013

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	AA29452-CAL1	2G2011.D	07/02/14 12:19
Cal Standard	AA29452-CAL2	2G2012.D	07/02/14 12:32
Cal Standard	AA29452-CAL3	2G2013.D	07/02/14 12:44
Cal Standard	AA29452-CAL4	2G2014.D	07/02/14 12:56
Cal Standard	AA29452-CAL5	2G2015.D	07/02/14 13:08
Cal Standard	AA29452-CAL6	2G2016.D	07/02/14 13:20
Secondary Cal Check	AA29452-SCV1	2G2017.D	07/02/14 13:32

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Sequence: AA29477

Instrument: OSVGCECD2

Calibration: 1407013

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA29477-CCV1	2G3029.D	07/03/14 13:50
TR-5TH-SS07-N1-0614	A403770-02RE1	2G3030.D	07/03/14 14:03
TR-5TH-SS07-W1-0614	A403770-08RE1	2G3031.D	07/03/14 14:15
TR-5TH-SS07-E1-0614	A403770-14RE1	2G3032.D	07/03/14 14:27
Calibration Check	AA29477-CCV2	2G3033.D	07/03/14 14:39

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Instrument ID:	OSVGCECD2	Calibration:	1407013
Lab File ID:	2G2017.D	Calibration Date:	07/02/14 13:44
Sequence:	AA29428	Injection Date:	07/02/14
Lab Sample ID:	AA29428-CCV1	Injection Time:	13:32

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1016/1242	A	2.00	1.8	3.898465E+08	3.5072E+08		-10.0	20
PCB-1260	A	2.00	1.8	7.161191E+08	6.4662E+08		-9.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Instrument ID:	OSVGCECD2	Calibration:	1407013
Lab File ID:	2G2026.D	Calibration Date:	07/02/14 13:44
Sequence:	AA29428	Injection Date:	07/02/14
Lab Sample ID:	AA29428-CCV2	Injection Time:	15:22

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1016/1242	A	1.00	0.83	3.898465E+08	3.3082E+08		-15.1	20
PCB-1260 [2C]	A	1.00	0.81	7.388911E+08	6.1304E+08		-17.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Instrument ID:	OSVGCECD2	Calibration:	1407013
Lab File ID:	2G3029.D	Calibration Date:	07/02/14 13:44
Sequence:	AA29477	Injection Date:	07/03/14
Lab Sample ID:	AA29477-CCV1	Injection Time:	13:50

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1016/1242	A	1.00	0.89	3.898465E+08	3.5454E+08		-9.1	20
PCB-1260	A	1.00	0.86	7.161191E+08	6.244E+08		-12.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Instrument ID:	OSVGCECD2	Calibration:	1407013
Lab File ID:	2G3033.D	Calibration Date:	07/02/14 13:44
Sequence:	AA29477	Injection Date:	07/03/14
Lab Sample ID:	AA29477-CCV2	Injection Time:	14:39

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1016/1242	A	1.00	0.88	3.898465E+08	3.476E+08		-10.8	20
PCB-1260	A	1.00	0.84	7.161191E+08	6.1254E+08		-14.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Sequence:	AA27516		
Calibration:	1407013	Instrument:	OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4A0434	PCB1221 working Curve Cal-1	AA27516-CAL1		
A4A0433	PCB1221 working Curve Cal-2	AA27516-CAL2		
A4A0432	PCB1221 working Curve Cal-3	AA27516-CAL3		
A4A0431	PCB1221 working Curve Cal-4	AA27516-CAL4		
A4A0430	PCB1221 working Curve Cal-5	AA27516-CAL5		
A4A0429	PCB1221 working Curve Cal-6	AA27516-CAL6		
A4A0434	PCB1221 working Curve Cal-1	AA27516-CAL1	2BH009.D	02/13/14 15:08
A4A0433	PCB1221 working Curve Cal-2	AA27516-CAL2	2BH010.D	02/13/14 15:20
A4A0432	PCB1221 working Curve Cal-3	AA27516-CAL3	2BH011.D	02/13/14 15:32
A4A0431	PCB1221 working Curve Cal-4	AA27516-CAL4	2BH012.D	02/13/14 15:44
A4A0430	PCB1221 working Curve Cal-5	AA27516-CAL5	2BH013.D	02/13/14 15:56
A4A0429	PCB1221 working Curve Cal-6	AA27516-CAL6	2BH014.D	02/13/14 16:08
A4A0428	PCB1221 working SCV1	AA27516-SCV1	2BH111.D	02/14/14 11:28

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Sequence:	AA27519		
Calibration:	1407013	Instrument:	OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0254	PCB1262 working Curve Cal-1	AA27519-CAL1		
A4B0253	PCB1262 working Curve Cal-2	AA27519-CAL2		
A4B0252	PCB1262 working Curve Cal-3	AA27519-CAL3		
A4B0251	PCB1262 working Curve Cal-4	AA27519-CAL4		
A4B0250	PCB1262 working Curve Cal-5	AA27519-CAL5		
A4B0249	PCB1262 working Curve Cal-6	AA27519-CAL6		
A4B0254	PCB1262 working Curve Cal-1	AA27519-CAL1	2BH023.D	02/13/14 17:55
A4B0253	PCB1262 working Curve Cal-2	AA27519-CAL2	2BH024.D	02/13/14 18:07
A4B0252	PCB1262 working Curve Cal-3	AA27519-CAL3	2BH025.D	02/13/14 18:19
A4B0251	PCB1262 working Curve Cal-4	AA27519-CAL4	2BH026.D	02/13/14 18:31
A4B0250	PCB1262 working Curve Cal-5	AA27519-CAL5	2BH027.D	02/13/14 18:43

A4B0249	PCB1262 working Curve Cal-6	AA27519-CAL6	2BH028.D	02/13/14 18:55
A4B0255	PCB1262 working SCV1	AA27519-SCV1	2BH029.D	02/13/14 19:07

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA27520
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0265	PCB1268 working Curve Cal-1	AA27520-CAL1		
A4B0264	PCB1268 working Curve Cal-2	AA27520-CAL2		
A4B0263	PCB1268 working Curve Cal-3	AA27520-CAL3		
A4B0261	PCB1268 working Curve Cal-4	AA27520-CAL4		
A4B0258	PCB1268 working Curve Cal-5	AA27520-CAL5		
A4B0256	PCB1268 working Curve Cal-6	AA27520-CAL6		
A4B0265	PCB1268 working Curve Cal-1	AA27520-CAL1	2BH030.D	02/13/14 19:19
A4B0264	PCB1268 working Curve Cal-2	AA27520-CAL2	2BH031.D	02/13/14 19:31
A4B0263	PCB1268 working Curve Cal-3	AA27520-CAL3	2BH032.D	02/13/14 19:43
A4B0261	PCB1268 working Curve Cal-4	AA27520-CAL4	2BH033.D	02/13/14 19:55
A4B0258	PCB1268 working Curve Cal-5	AA27520-CAL5	2BH034.D	02/13/14 20:07
A4B0256	PCB1268 working Curve Cal-6	AA27520-CAL6	2BH035.D	02/13/14 20:19
A4B0266	PCB1268 working SCV1	AA27520-SCV1	2BH036.D	02/13/14 20:31

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA28377
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0246	PCB1254 Working Curve Cal-1	AA28377-CAL1		
A4B0243	PCB1254 Working Curve Cal-2	AA28377-CAL2		
A4B0242	PCB1254 Working Curve Cal-3	AA28377-CAL3		
A4B0240	PCB1254 Working Curve Cal-4	AA28377-CAL4		
A4B0239	PCB1254 Working Curve Cal-5	AA28377-CAL5		
A4B0238	PCB1254 working Curve Cal-6	AA28377-CAL6		
A4B0246	PCB1254 Working Curve Cal-1	AA28377-CAL1	2DL012.D	04/17/14 12:42
A4B0243	PCB1254 Working Curve Cal-2	AA28377-CAL2	2DL013.D	04/17/14 12:54
A4B0242	PCB1254 Working Curve Cal-3	AA28377-CAL3	2DL014.D	04/17/14 13:06

A4B0240	PCB1254 Working Curve Cal-4	AA28377-CAL4	2DL015.D	04/17/14 13:18
A4B0239	PCB1254 Working Curve Cal-5	AA28377-CAL5	2DL016.D	04/17/14 13:31
A4B0238	PCB1254 working Curve Cal-6	AA28377-CAL6	2DL017.D	04/17/14 13:43
A4B0248	PCB1254 Working SCV1	AA28377-SCV1	2DL018.D	04/17/14 13:55

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA28395
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4C0198	PCB1232 working Curve Cal-1	AA28395-CAL1		
A4C0197	PCB1232 working Curve Cal-2	AA28395-CAL2		
A4C0196	PCB1232 working Curve Cal-3	AA28395-CAL3		
A4C0195	PCB1232 working Curve Cal-4	AA28395-CAL4		
A4C0194	PCB1232 working Curve Cal-5	AA28395-CAL5		
A4C0193	PCB1232 working Curve Cal-6	AA28395-CAL6		
A4C0198	PCB1232 working Curve Cal-1	AA28395-CAL1	2DM002.D	04/18/14 08:47
A4C0197	PCB1232 working Curve Cal-2	AA28395-CAL2	2DM003.D	04/18/14 08:59
A4C0196	PCB1232 working Curve Cal-3	AA28395-CAL3	2DM004.D	04/18/14 09:11
A4C0195	PCB1232 working Curve Cal-4	AA28395-CAL4	2DM005.D	04/18/14 09:23
A4C0194	PCB1232 working Curve Cal-5	AA28395-CAL5	2DM006.D	04/18/14 09:35
A4C0193	PCB1232 working Curve Cal-6	AA28395-CAL6	2DM007.D	04/18/14 09:47
A4C0200	PCB1232 Working SCV1	AA28395-SCV1	2DM008.D	04/18/14 10:00

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA28396
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0085	PCB1242 working Curve Cal-1	AA28396-CAL1		
A4B0084	PCB1242 working Curve Cal-2	AA28396-CAL2		
A4B0083	PCB1242 working Curve Cal-3	AA28396-CAL3		
A4B0082	PCB1242 working Curve Cal-4	AA28396-CAL4		
A4B0081	PCB1242 working Curve Cal-5	AA28396-CAL5		
A4B0080	PCB1242 working Curve Cal-6	AA28396-CAL6		
A4B0085	PCB1242 working Curve Cal-1	AA28396-CAL1	2DM009.D	04/18/14 10:12

A4B0084	PCB1242 working Curve Cal-2	AA28396-CAL2	2DM010.D	04/18/14 10:24
A4B0083	PCB1242 working Curve Cal-3	AA28396-CAL3	2DM011.D	04/18/14 10:36
A4B0082	PCB1242 working Curve Cal-4	AA28396-CAL4	2DM012.D	04/18/14 10:48
A4B0081	PCB1242 working Curve Cal-5	AA28396-CAL5	2DM013.D	04/18/14 11:00
A4B0080	PCB1242 working Curve Cal-6	AA28396-CAL6	2DM014.D	04/18/14 11:12
A4B0086	PCB1242 working SCV1	AA28396-SCV1	2DM015.D	04/18/14 11:27

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA28397
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4C0214	PCB1248 working Curve Cal-1	AA28397-CAL1		
A4C0212	PCB1248 working Curve Cal-2	AA28397-CAL2		
A4C0211	PCB1248 working Curve Cal-3	AA28397-CAL3		
A4C0209	PCB1248 working Curve Cal-4	AA28397-CAL4		
A4C0206	PCB1248 working Curve Cal-5	AA28397-CAL5		
A4C0203	PCB1248 working Curve Cal-6	AA28397-CAL6		
A4C0214	PCB1248 working Curve Cal-1	AA28397-CAL1	2DM016.D	04/18/14 11:39
A4C0212	PCB1248 working Curve Cal-2	AA28397-CAL2	2DM017.D	04/18/14 11:52
A4C0211	PCB1248 working Curve Cal-3	AA28397-CAL3	2DM018.D	04/18/14 12:04
A4C0209	PCB1248 working Curve Cal-4	AA28397-CAL4	2DM019.D	04/18/14 12:16
A4C0206	PCB1248 working Curve Cal-5	AA28397-CAL5	2DM020.D	04/18/14 12:28
A4C0203	PCB1248 working Curve Cal-6	AA28397-CAL6	2DM021.D	04/18/14 12:40
A4C0216	PCB1248 working SCV1	AA28397-SCV1	2DM022.D	04/18/14 12:52

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Sequence: AA29452
Calibration: 1407013
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4A0397	PCB working Curve Cal-1	AA29452-CAL1	2G2011.D	07/02/14 12:19
A4A0395	PCB working Curve Cal-2	AA29452-CAL2	2G2012.D	07/02/14 12:32
A4A0394	PCB working Curve Cal-3	AA29452-CAL3	2G2013.D	07/02/14 12:44
A4A0392	PCB working Curve Cal-4	AA29452-CAL4	2G2014.D	07/02/14 12:56
A4A0391	PCB working Curve Cal-5	AA29452-CAL5	2G2015.D	07/02/14 13:08

A4A0390	PCB working Curve Cal-6	AA29452-CAL6	2G2016.D	07/02/14 13:20
A4A0398	PCB Working SCV	AA29452-SCV1	2G2017.D	07/02/14 13:32

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Calibration:	1407013	Instrument:	OSVGCECD2
Matrix:	Water	Calibration Date:	07/02/14 13:44

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242	0.05	3.39274E+08	0.1	3.953998E+08	0.5	3.5928E+08	1	3.9786E+08	2	4.1346E+08	4	4.33805E+08
PCB-1221												
PCB-1232												
PCB-1248												
PCB-1254												
PCB-1260	0.05	6.1183E+08	0.1	7.263143E+08	0.5	6.5276E+08	1	7.203E+08	2	8.0179E+08	4	7.8372E+08
PCB-1262												
PCB-1268												
2,4,5,6-TCMX	0.005	1.145144E+10	0.01	1.411E+10	0.05	1.3976E+10	0.1	1.5366E+10	0.2	1.61415E+10	0.4	1.636525E+10
Decachlorobiphenyl	0.005	5.470714E+09	0.01	6.661337E+09	0.05	5.118E+09	0.1	6.959001E+09	0.2	8.6165E+09	0.4	7.81425E+09

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Calibration:	1407013	Instrument:	OSVGCECD2
Matrix:	Water	Calibration Date:	07/02/14 13:44

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242												
PCB-1221	0.05	1.541964E+08	0.1	1.499579E+08	0.5	1.431767E+08	1	1.393881E+08	2	1.287478E+08	4	1.2605E+08
PCB-1232												
PCB-1248												
PCB-1254												
PCB-1260												
PCB-1262												
PCB-1268												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Calibration: 1407013
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 07/02/14 13:44

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242												
PCB-1221												
PCB-1232	0.05	1.360562E+08	0.1	1.276021E+08	0.5	1.247825E+08	1	1.375053E+08	2	1.2932E+08	4	1.4259E+08
PCB-1248												
PCB-1254												
PCB-1260												
PCB-1262												
PCB-1268												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A403770-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St. PCB
Calibration: 1407013
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 07/02/14 13:44

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242												
PCB-1221												
PCB-1232												
PCB-1248												
PCB-1254												
PCB-1260												
PCB-1262												
PCB-1268												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Calibration: 1407013

Instrument: OSVGCECD2

Matrix: Water

Calibration Date: 07/02/14 13:44

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242												
PCB-1221												
PCB-1232												
PCB-1248	0.05	2.05193E+08	0.1	1.941961E+08	0.5	2.000332E+08	1	2.105007E+08	2	2.0958E+08	4	2.0827E+08
PCB-1254												
PCB-1260												
PCB-1262												
PCB-1268												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Calibration: 1407013

Instrument: OSVGCECD2

Matrix: Water

Calibration Date: 07/02/14 13:44

Compound	Level 31		Level 32		Level 33		Level 34		Level 35		Level 36	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1016/1242												
PCB-1221												
PCB-1232												
PCB-1248												
PCB-1254	0.05	4.491526E+08	0.1	4.378171E+08	0.5	3.9532E+08	1	4.4376E+08	2	4.7589E+08	4	4.95035E+08
PCB-1260												
PCB-1262												
PCB-1268												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A403770-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St. PCB
Calibration:	1407013	Instrument:	OSVGCECD2
Matrix:	Water	Calibration Date:	07/02/14 13:44

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
PCB-1016/1242	3.898465E+08	8.942564	3.7415	1.574486E-02			20	
PCB-1221	1.402528E+08	8.016044	3.038833	0.1165848			20	
PCB-1232	1.32976E+08	5.120433	3.5325	2.190042E-02			20	
PCB-1248	2.046288E+08	3.110241	5.077833	1.943411E-02			20	
PCB-1254	4.494958E+08	7.625872	4.878833	6.309508E-02			20	
PCB-1260	7.161191E+08	10.24657	5.843833	2.309528E-02			20	
PCB-1262	9.254012E+08	3.159406	5.607333	1.054577E-02			20	
PCB-1268	1.554211E+09	6.337946	6.383167	3.197002E-03			20	
2,4,5,6-TCMX	1.456837E+10	12.51316	2.641667	2.864298E-02			20	
Decachlorobiphenyl	6.7733E+09	19.76894	6.7505	0.0160798			20	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: ENCO Orlando

SDG: A403770-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St. PCB

Calibration: 1407013

Laboratory ID: AA29452-SCV1

Sequence: AA29452

Standard ID: A4A0398

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
2,4,5,6-TCMX	0.200	0.19	-4.6	20.00
Decachlorobiphenyl	0.200	0.18	-10.4	20.00
PCB-1016/1242	2.00	1.8	-10.5	20.00
PCB-1260	2.00	1.8	-10.0	20.00

* Values outside of QC limits

ANALYSIS SEQUENCE

AA29428

Instrument: OSVGCECD2

Calibration ID: 1407013

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29428-CCV1	QC		1		A4A0398		
AA29428-ARC1	QC		2		A4F0548		
4G01003-BLK1	QC		3				
4G01003-BS1	QC		4				
4G01003-BSD1	QC		5				
A403770-01	8082A DOD	A	6				CH2M Hill, Inc. (CH025)
A403770-02	8082A DOD	A	7				CH2M Hill, Inc. (CH025)
A403770-08	8082A DOD	A	8				CH2M Hill, Inc. (CH025)
A403770-14	8082A DOD	A	9				CH2M Hill, Inc. (CH025)
AA29428-CCV2	QC		10		A4F0547		
AA29428-ARC2	QC		11		A4F0548		

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 7/1/2014 5:39:01AM

4G01003

ENCO Orlando

Analysis
8082A DOD [EPA 8082A]

Prepared using: EPA 3550C

Surrogate Solution
___ A4F0313 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4G01003-BLK1		Blank		QC	–	–	30.0	10.0			1000		
4G01003-BS1		LCS		QC	–	–	30.0	10.0	A4E0189	1000	1000		
4G01003-BSD1		LCS Dup		QC	–	–	30.0	10.0	A4E0189	1000	1000		
A403770-01 1	D	TR-5TH-SS07-0.5-01-0614 A[C10]	07-Jul-14	8082A DOD	–	–	30.1	10.0			1000		Full List
A403770-02 2	D	TR-5TH-SS07-N1-0614 A[C10]	07-Jul-14	8082A DOD	–	–	29.9	10.0			1000		Full List
A403770-08 3	D	TR-5TH-SS07-W1-0614 A[C10]	07-Jul-14	8082A DOD	–	–	30.0	10.0			1000		Full List
A403770-14 4	D	TR-5TH-SS07-E1-0614 A[C10]	07-Jul-14	8082A DOD	–	–	30.0	10.0			1000		Full List

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 soil

Start Date/Time 6:30 7-01-14

StopDate/Time 11:00 7-01-14

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4E0358	Solvent Hexane	141350
A4F0167	Baked Sodium Sulfate	137632
A4F0327	Solvent Dichloromethane	Solvent Lot # DK577

Equipment Used

Tuned per manufacturer instructions? [ ] Yes [ ] No [ ] NA

Sonicator	OSON 1,2,3			
Turbovap	OTVAP 1	Temperature (°C): 40	N2 pressure (initial) (psi): 3	(final): 12
Turbovap	OTVAP 2	Temperature (°C): 40	N2 pressure (initial) (psi): 3	(final): 12
Turbovap	OTVAP 3	Temperature (°C): 40	N2 pressure (initial) (psi): 3	(final): 12
Balance	OEXTBAL 7	Daily calibration complete? [X] Yes [ ] No [ ] NA		
Thermometer	ORL-T-42			
Other				

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PREPARATION BENCH SHEET

Printed: 7/1/2014 5:39:01AM

4G01003

ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4F0313 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

YGM 7-01-14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:32
Operator : RC
Sample : AA29452-SCV1
Misc : AA29428-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:41:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.643	2.271	2781.1E6	2237.1E6	0.1909	0.1875
2)	PCB1016#1	2.911	2.598	480.3E6	451.1E6	1.6779	1.7907
3)	PCB1016#2	3.188	2.883	914.0E6	851.9E6	1.8158	1.7995
4)	PCB1016#3	3.573	3.493	1043.4E6	353.0E6	1.8263	1.6967
5)	PCB1016#4	3.687	3.530	635.0E6	368.4E6	1.8209	1.6934
6)	PCB1016#5	3.742	3.568	434.5E6	436.8E6	1.8135	1.7358
7)	PCB1260#6	4.991	4.733	1102.1E6	1236.8E6	1.7823	1.7642
8)	PCB1260#7	5.187	4.883	1492.6E6	1212.7E6	1.7717	1.7371
9)	PCB1260#8	5.467	5.203	913.4E6	995.5E6	1.7632	1.7758
10)	PCB1260#9	5.640	5.407	944.0E6	1090.9E6	1.8308	1.8060
11)	PCB1260#10	5.844	5.572	2014.1E6	2038.8E6	1.8546	1.8033
12)	DECACHLOR...	6.751	6.548	1212.8E6	1334.5E6	0.1791	0.1798

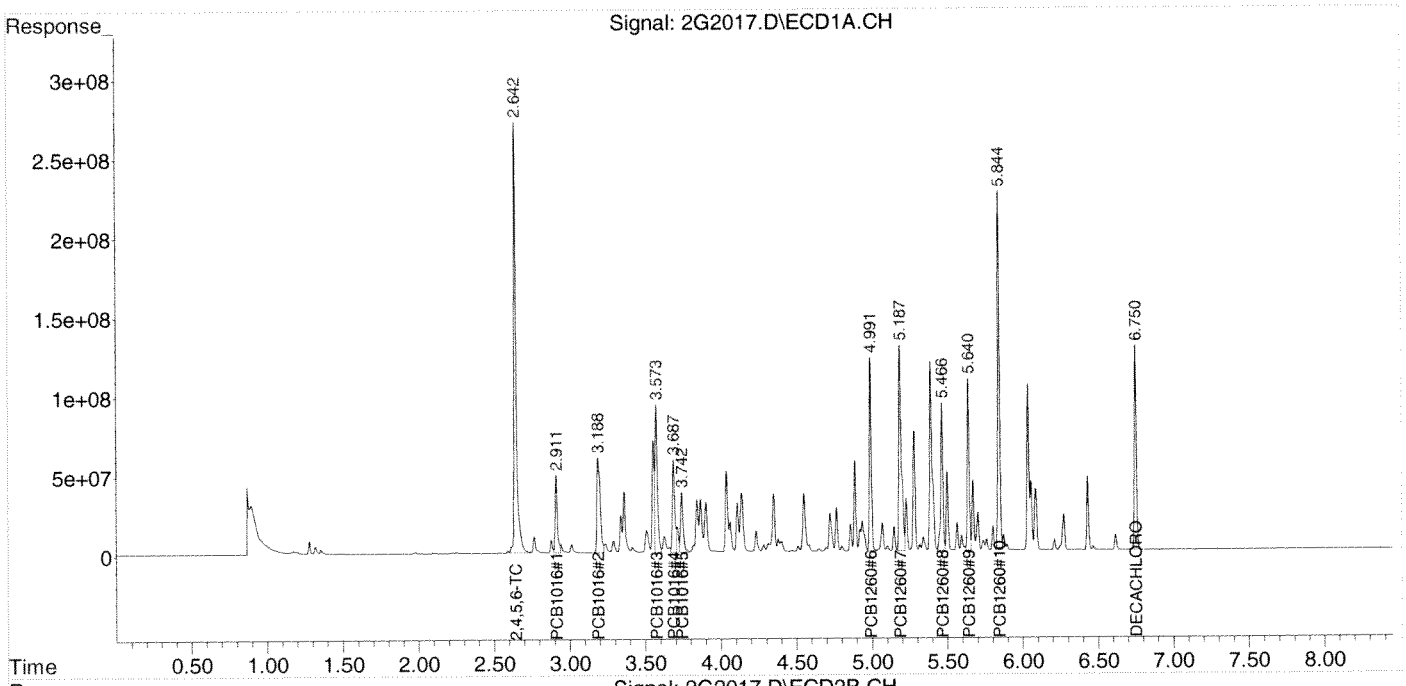
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

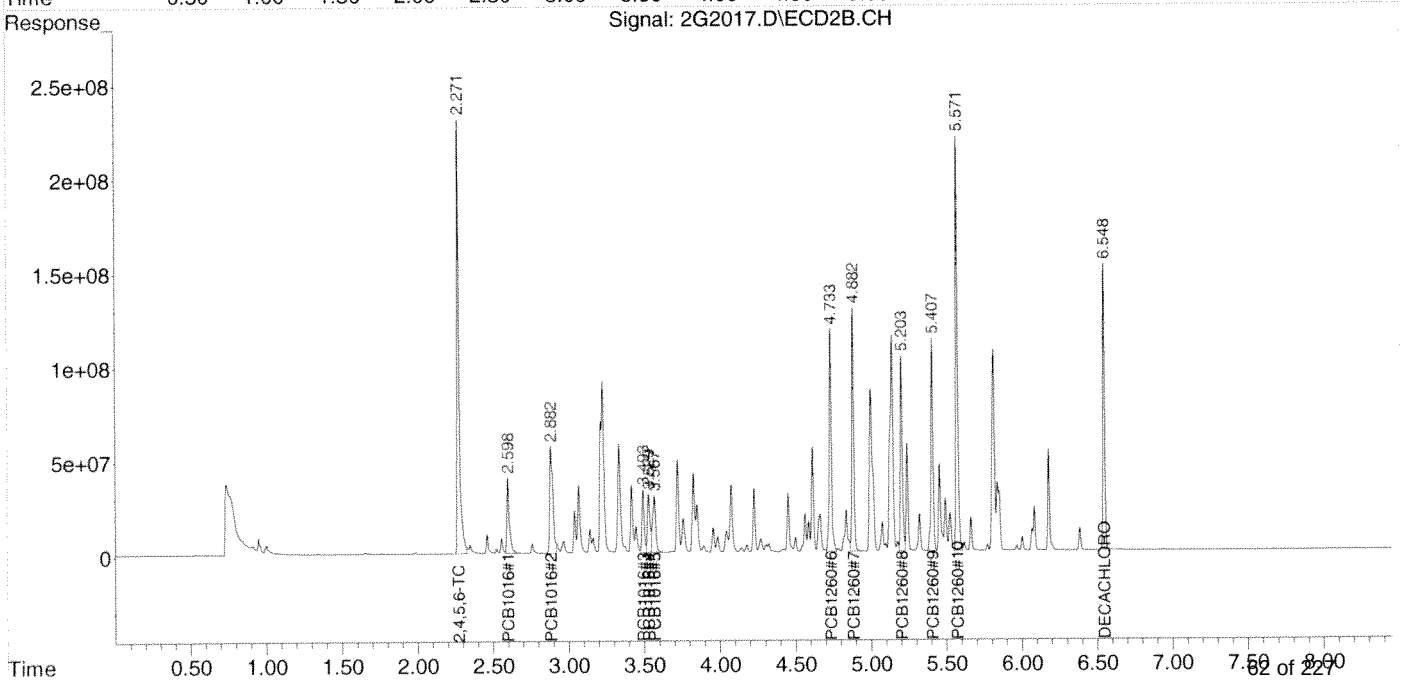
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:32
Operator : RC
Sample : AA29452-SCV1
Misc : AA29428-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:41:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:44
Operator : RC
Sample : AA29428-ARC1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:54:45 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.641	2.270	1459.0E6	1242.0E6	0.1996	0.1275	#
2)	PCB1254#1	4.349	4.075	419.7E6	463.9E6	1.2039	1.1796	
3)	PCB1254#2	4.548	4.226	722.9E6	504.1E6	1.2099	1.1193	
4)	PCB1254#3	4.766	4.500	419.2E6	377.7E6	1.2403	1.0657	
5)	PCB1254#4	4.857	4.588	722.9E6	709.6E6	1.2763	1.0899	
6)	PCB1254#5	5.059	4.883	509.9E6	337.5E6	1.2846	1.1403	
7)	DECACHLOR...	6.751	6.549	799.4E6	874.3E6	0.1674	0.1427	

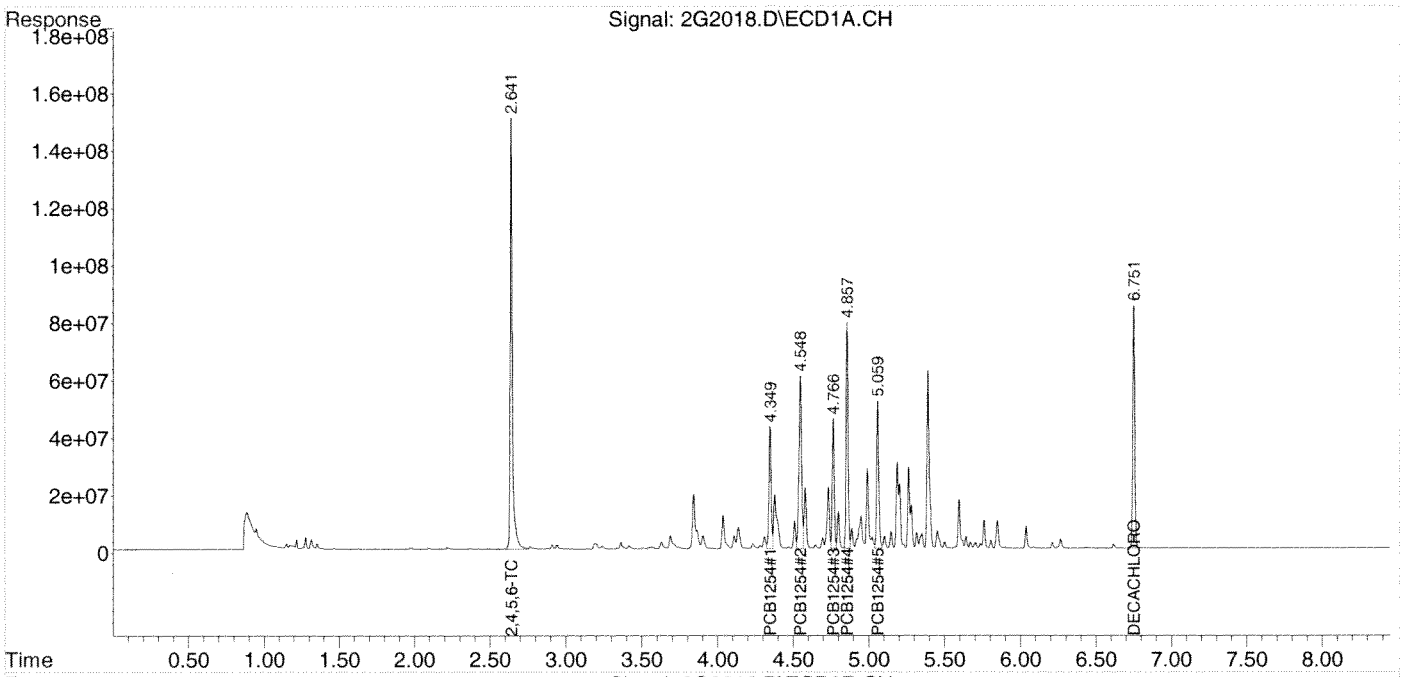
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

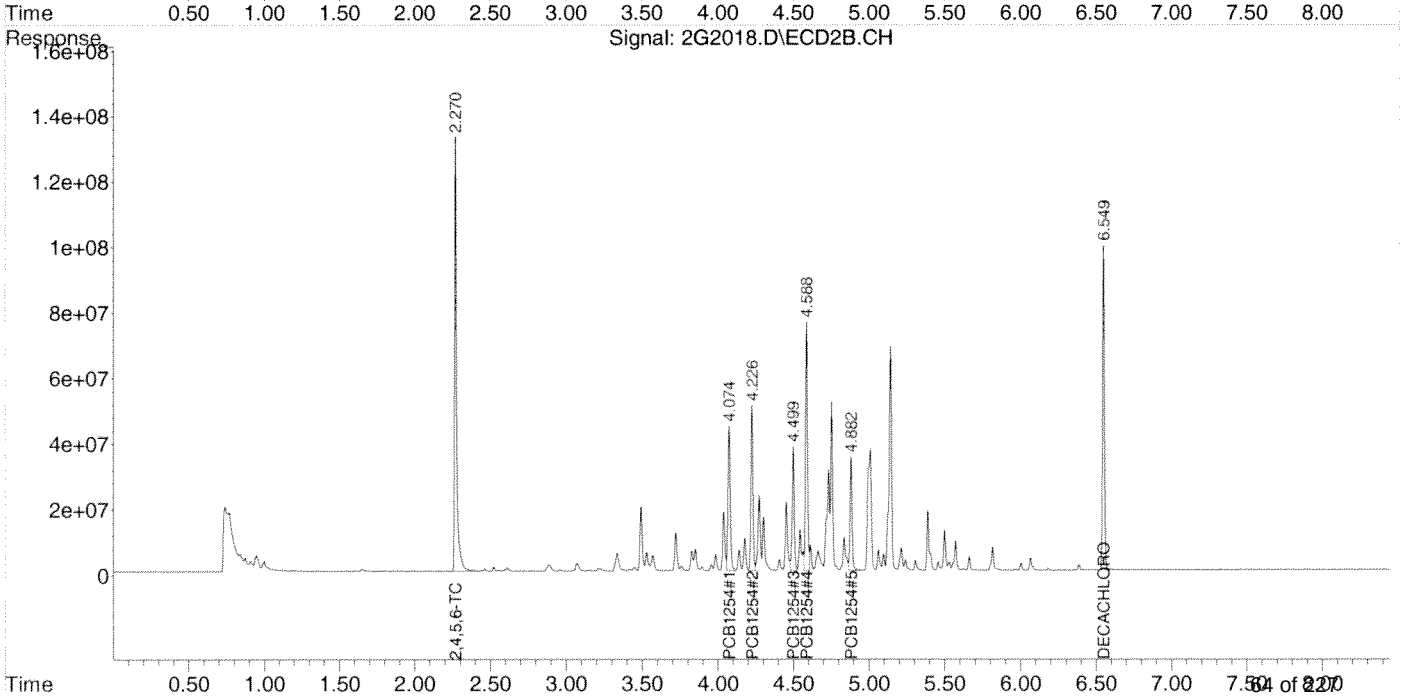
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:44
Operator : RC
Sample : AA29428-ARC1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:54:45 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:57
Operator : RC
Sample : 4G01003-BLK1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 14:08:02 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.634	2.265	985.4E6	914.6E6	0.0676	0.0767
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.751	6.549	789.0E6	878.9E6	0.1165	0.1184

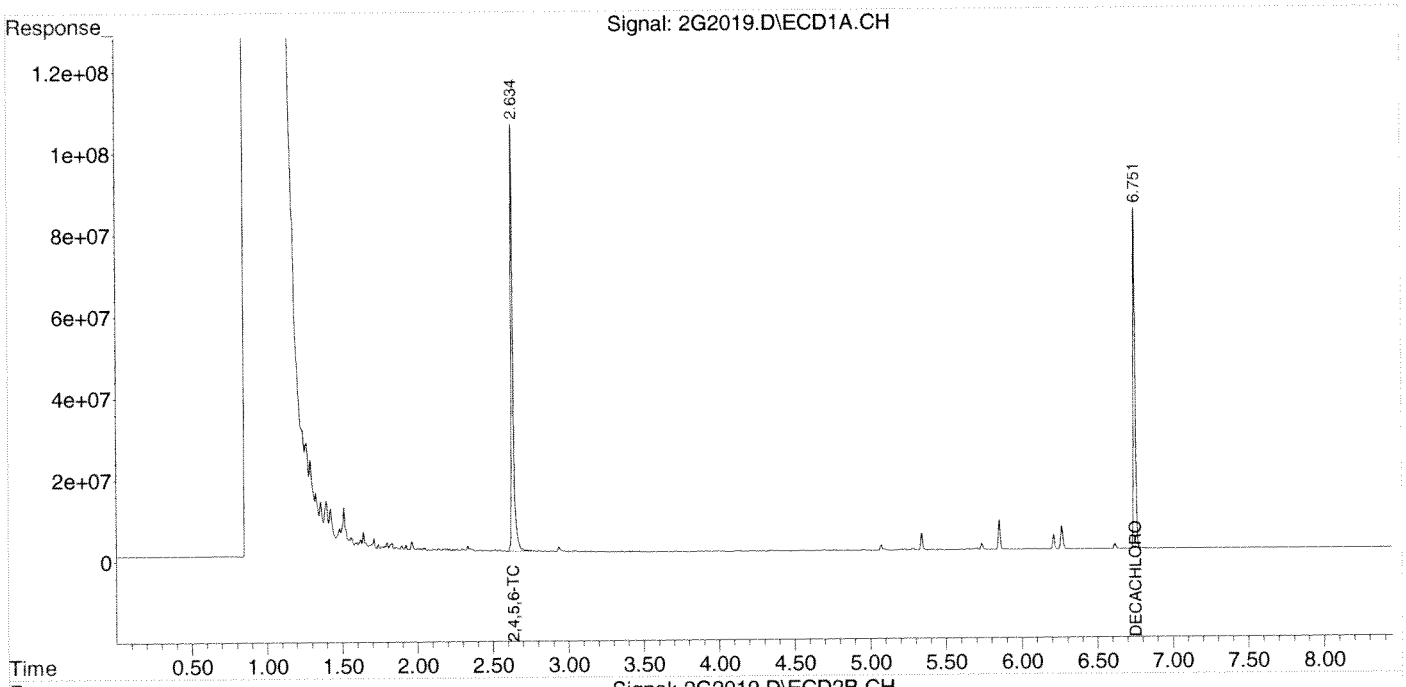
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

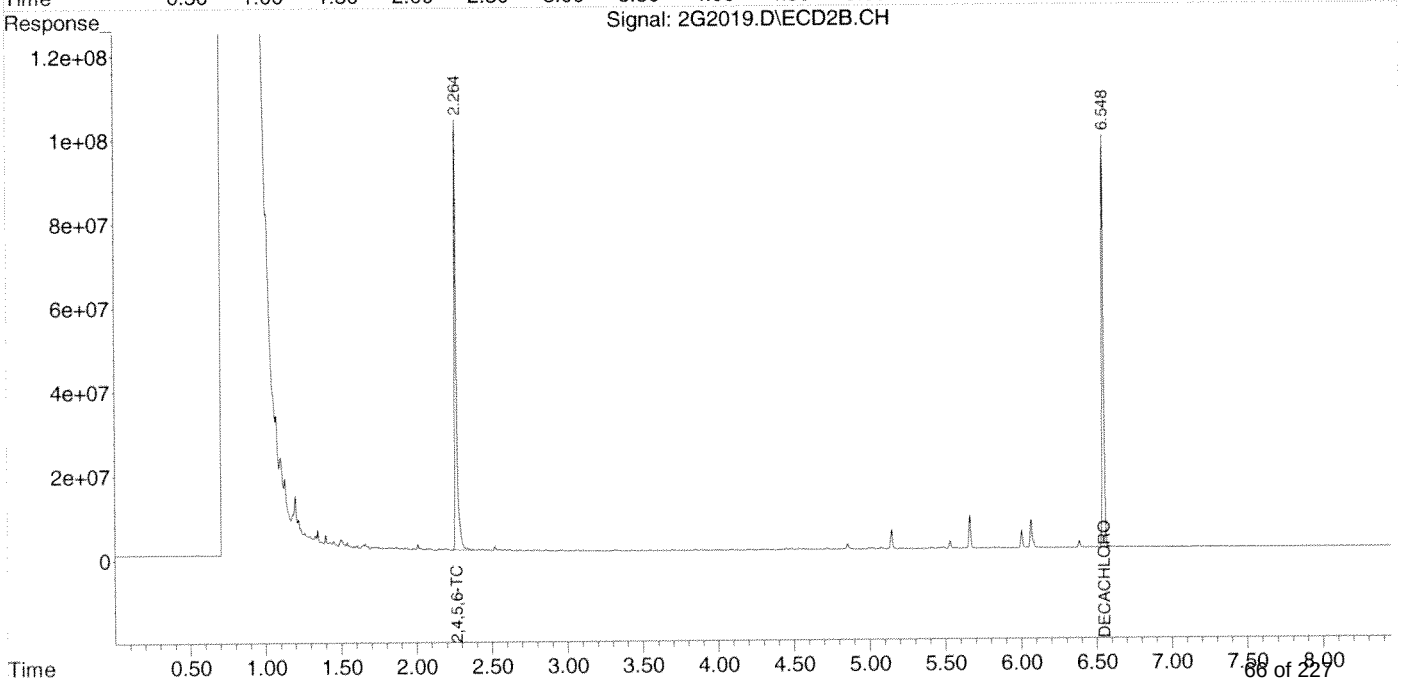
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:57
Operator : RC
Sample : 4G01003-BLK1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 14:08:02 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:09
Operator : RC
Sample : 4G01003-BS1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:21 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.635	2.265	1007.9E6	917.0E6	0.0692	0.0769
2)	PCB1016#1	2.904	2.594	207.8E6	188.1E6	0.7258	0.7465
3)	PCB1016#2	3.183	2.879	395.6E6	376.0E6	0.7859	0.7943
4)	PCB1016#3	3.570	3.491	496.3E6	185.3E6	0.8687	0.8905
5)	PCB1016#4	3.684	3.528	356.7E6	191.7E6	1.0228	0.8812
6)	PCB1016#5	3.739	3.565	207.9E6	213.0E6	0.8676	0.8464
7)	PCB1260#6	4.991	4.734	668.2E6	787.0E6	1.0806	1.1226
8)	PCB1260#7	5.188	4.883	971.4E6	776.9E6	1.1530	1.1128
9)	PCB1260#8	5.467	5.204	505.3E6	555.4E6	0.9754	0.9907
10)	PCB1260#9	5.641	5.408	530.8E6	668.0E6	1.0294	1.1059
11)	PCB1260#10	5.845	5.572	1150.6E6	1173.9E6	1.0594	1.0383
12)	DECACHLOR...	6.752	6.549	800.7E6	899.9E6	0.1182	0.1212

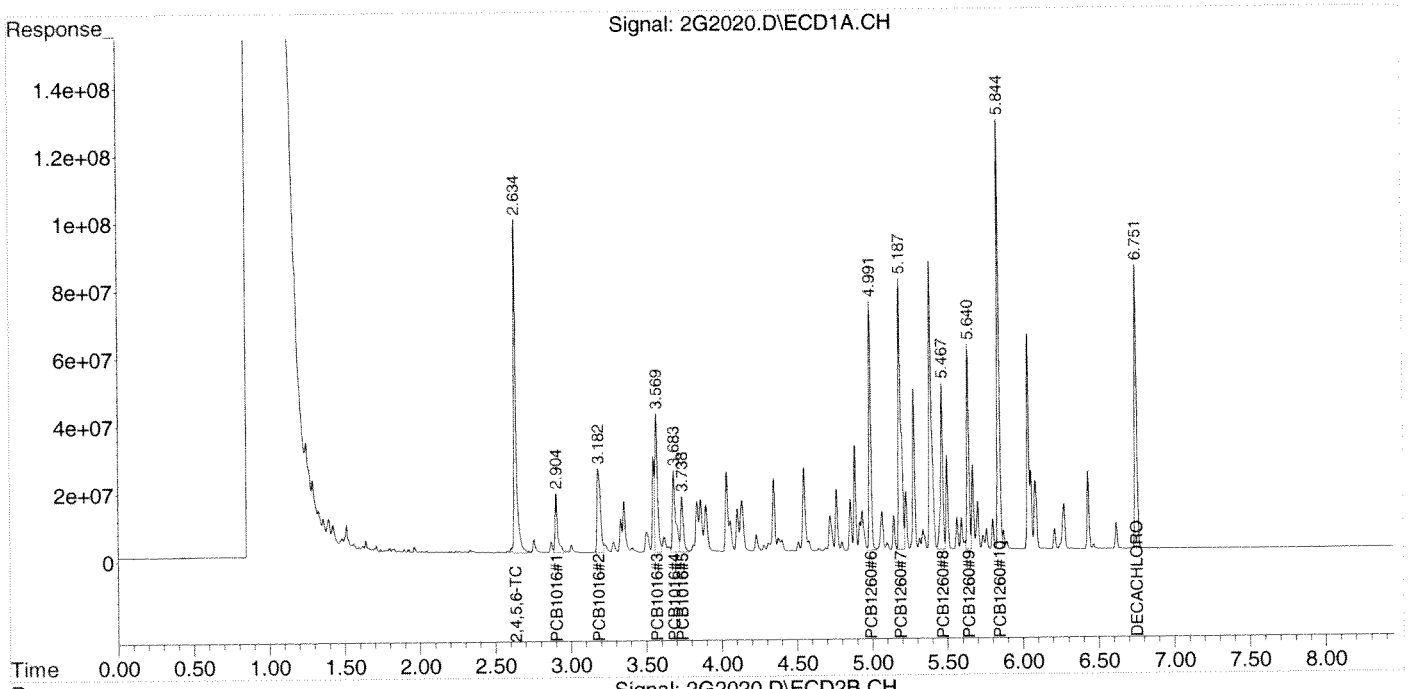
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

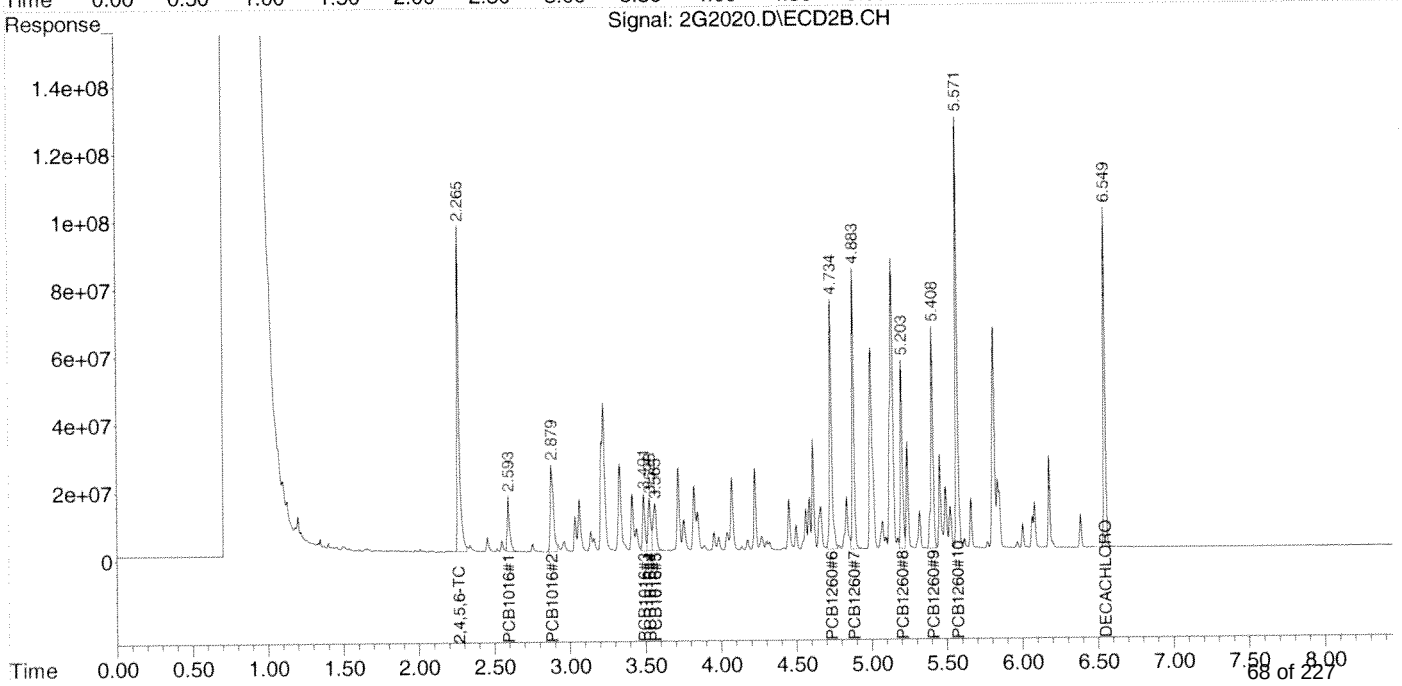
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:09
Operator : RC
Sample : 4G01003-BS1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:21 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:21
Operator : RC
Sample : 4G01003-BSD1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:24 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.635	2.266	1044.7E6	942.2E6	0.0717	0.0790
2)	PCB1016#1	2.905	2.593	167.3E6	175.5E6	0.5844	0.6966
3)	PCB1016#2	3.183	2.879	375.2E6	355.2E6	0.7454	0.7502
4)	PCB1016#3	3.570	3.490	448.7E6	174.0E6	0.7853	0.8366
5)	PCB1016#4	3.684	3.527	260.5E6	181.0E6	0.7469	0.8321
6)	PCB1016#5	3.738	3.564	192.4E6	195.5E6	0.8030	0.7769
7)	PCB1260#6	4.991	4.733	595.8E6	699.6E6	0.9635	0.9979
8)	PCB1260#7	5.187	4.882	866.4E6	694.1E6	1.0284	0.9943
9)	PCB1260#8	5.467	5.203	453.0E6	495.9E6	0.8745	0.8846
10)	PCB1260#9	5.640	5.407	476.0E6	596.2E6	0.9231	0.9871
11)	PCB1260#10	5.844	5.571	1038.2E6	1073.0E6	0.9560	0.9491
12)	DECACHLOR...	6.751	6.548	764.7E6	850.5E6	0.1129	0.1146

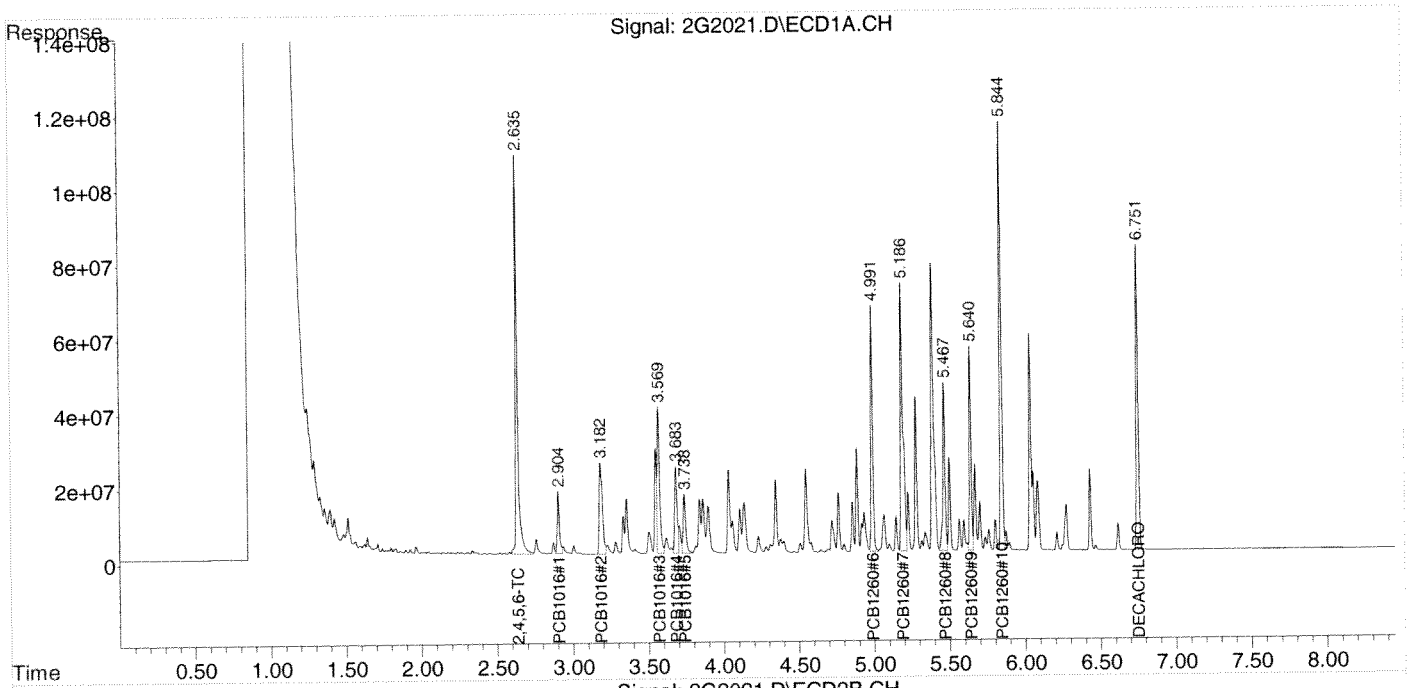
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

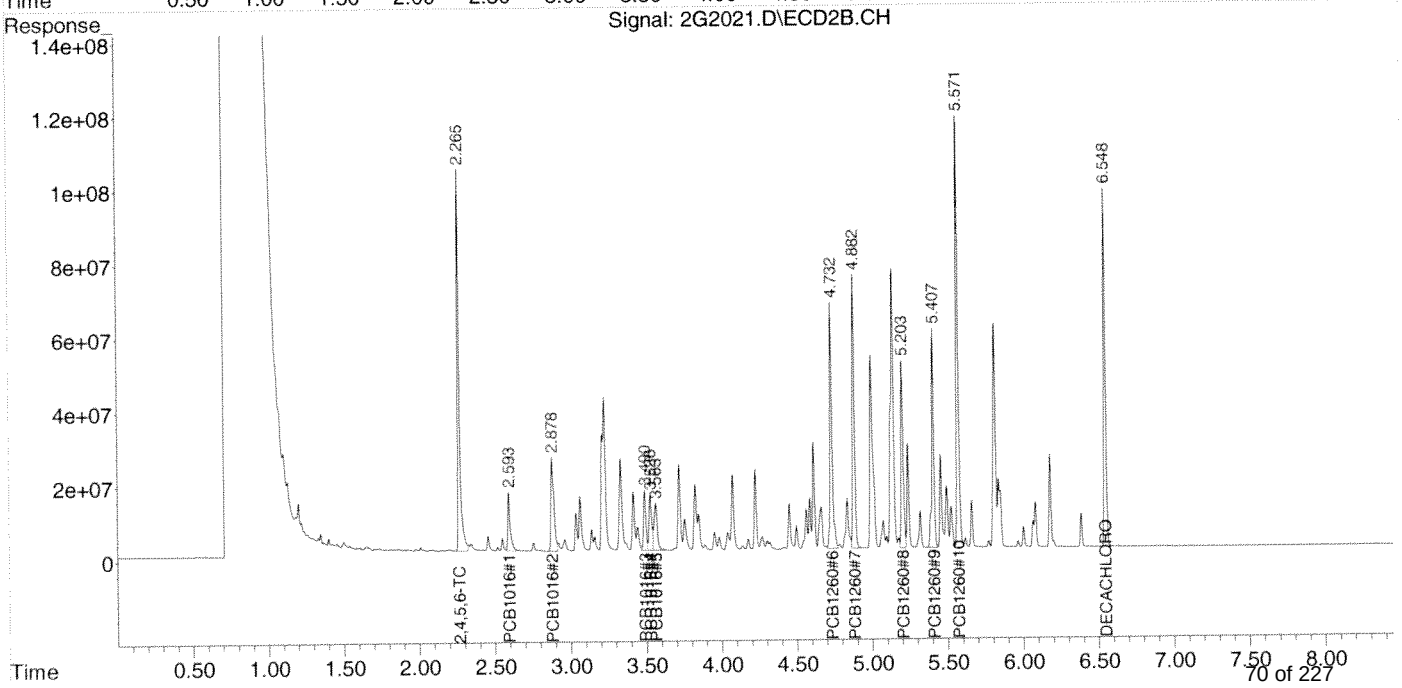
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:21
Operator : RC
Sample : 4G01003-BSD1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:24 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:33
Operator : RC
Sample : A403770-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 07:59:53 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.635	2.266	991.0E6	950.0E6	0.0680	0.0796	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.992	4.734	8216766	12165139	0.0133	0.0174	#
8)	PCB1260#7	5.188	4.883	23275400	22339044	0.0276	0.0320	
9)	PCB1260#8	5.467	5.204	15374081	17396194	0.0297	0.0310	
10)	PCB1260#9	5.641	5.408	13998452	15108926	0.0271	0.0250	
11)	PCB1260#10	5.850	5.572	111.4E6	28442313	0.1026	0.0252	#
12)	DECACHLOR...	6.750	6.548	777.7E6	878.6E6	0.1148	0.1183	

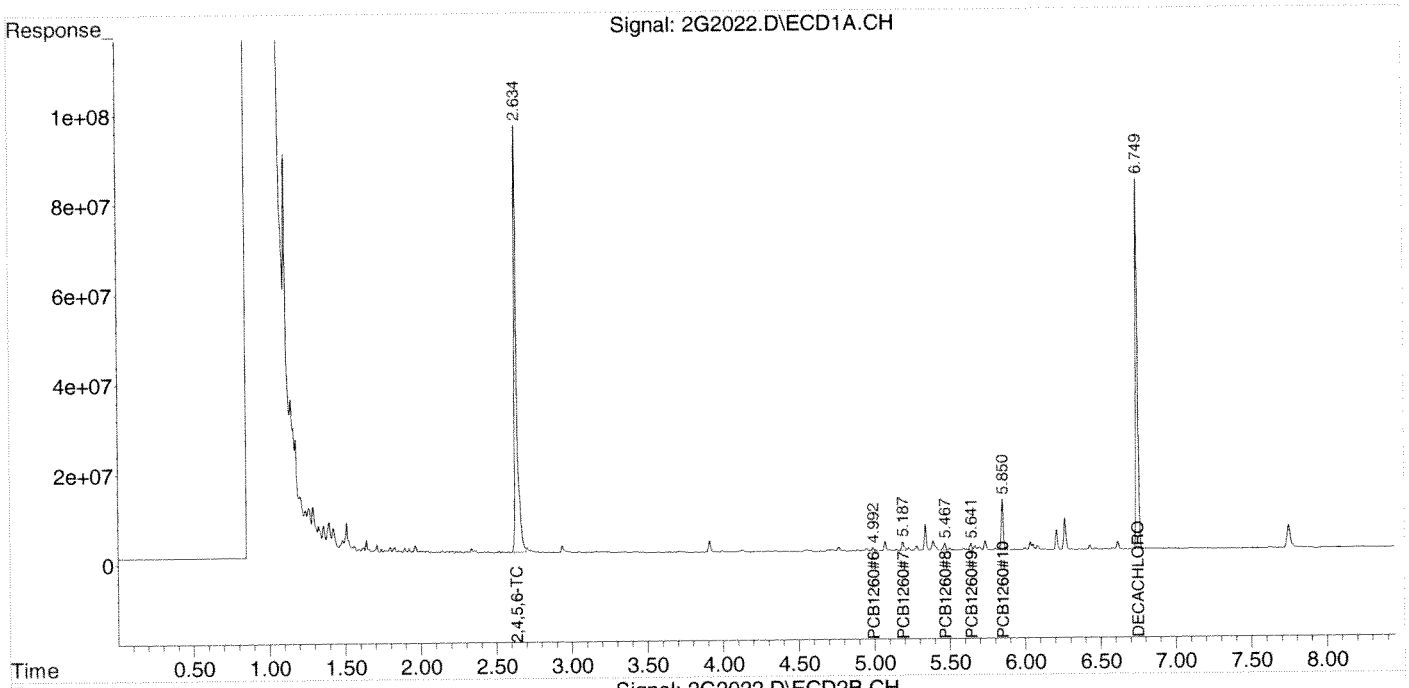
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

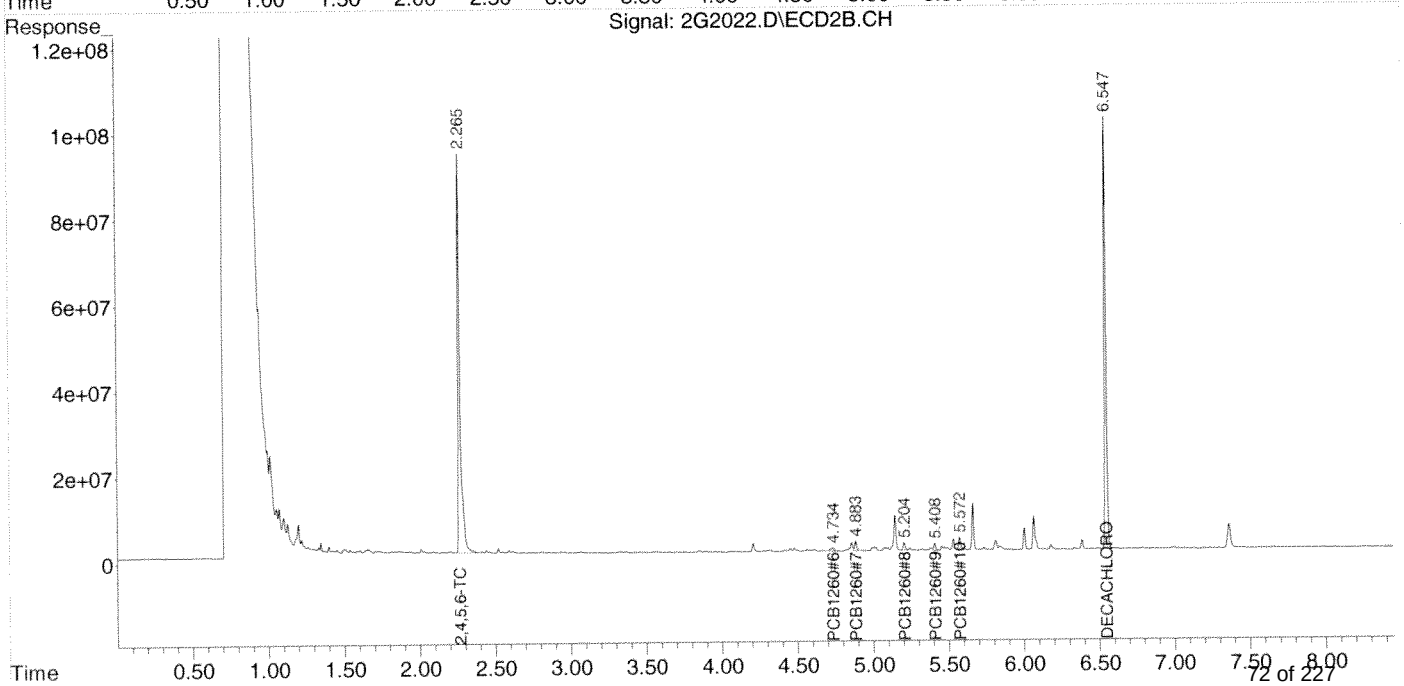
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:33
Operator : RC
Sample : A403770-01
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 07:59:53 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:45
Operator : RC
Sample : A403770-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:00:57 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.636	2.267	1549.5E6	1459.5E6	0.1064	0.1223
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.988	4.732	2572.4E6	2886.5E6	4.1600	4.1174
8)	PCB1260#7	5.184	4.881	4155.9E6	3210.3E6	4.9330	4.5982
9)	PCB1260#8	5.464	5.201	2650.4E6	2649.8E6	5.1164	4.7268
10)	PCB1260#9	5.638	5.406	2303.8E6	2744.7E6	4.4678	4.5439
11)	PCB1260#10	5.842	5.570	5115.6E6	5261.5E6	4.7105	4.6536
12)	DECACHLOR...	6.749	6.548	956.2E6	1113.9E6	0.1412	0.1500

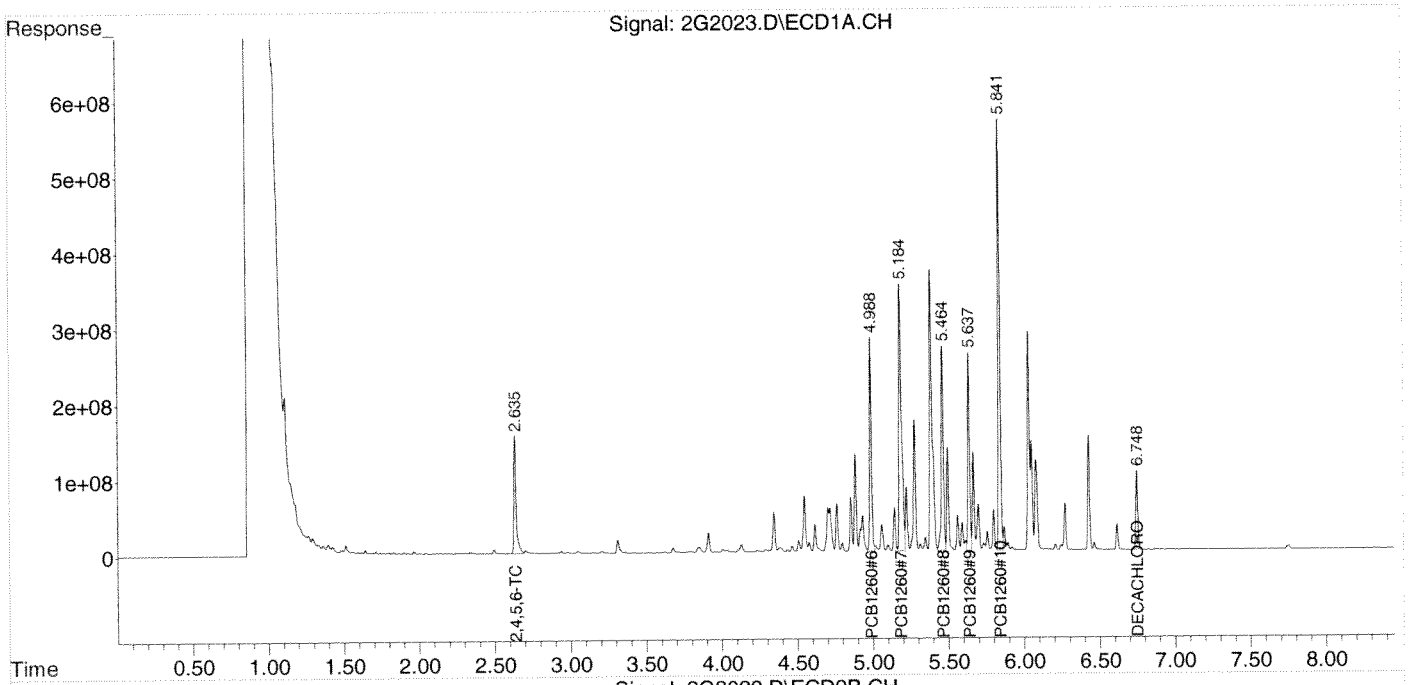
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

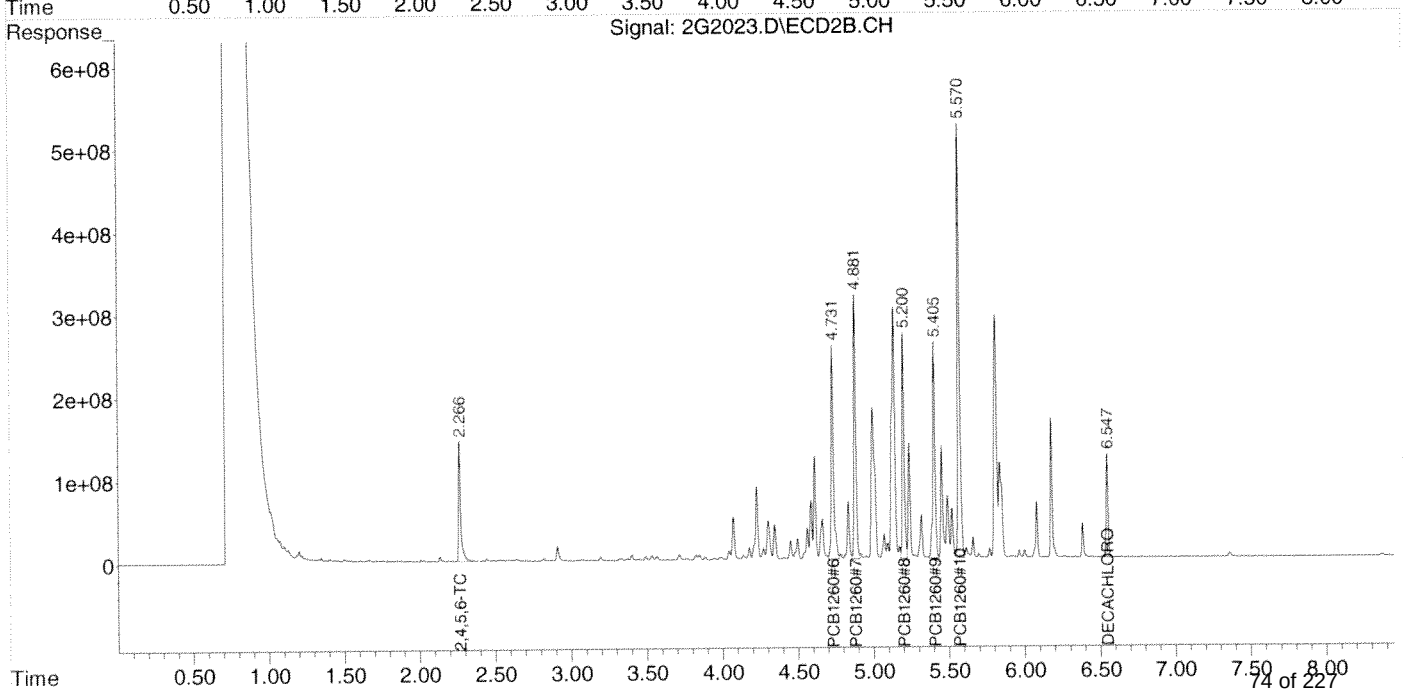
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:45
Operator : RC
Sample : A403770-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:00:57 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:45
Operator : RC
Sample : A403770-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:55:34 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.636	2.267	1546.0E6	1469.9E6	0.2115	0.1509	#
2)	PCB1254#1	4.346	4.073	561.3E6	552.4E6	1.6099	1.4048	
3)	PCB1254#2	4.547	4.227	802.1E6	1082.4E6	1.3424	2.4035	#
4)	PCB1254#3	4.762	4.498	613.1E6	305.7E6	1.8137	0.8624	#
5)	PCB1254#4	4.855	4.587	649.6E6	653.6E6	1.1469	1.0039	
6)	PCB1254#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	DECACHLOR...	6.749	6.548	966.4E6	1122.5E6	0.2024	0.1832	

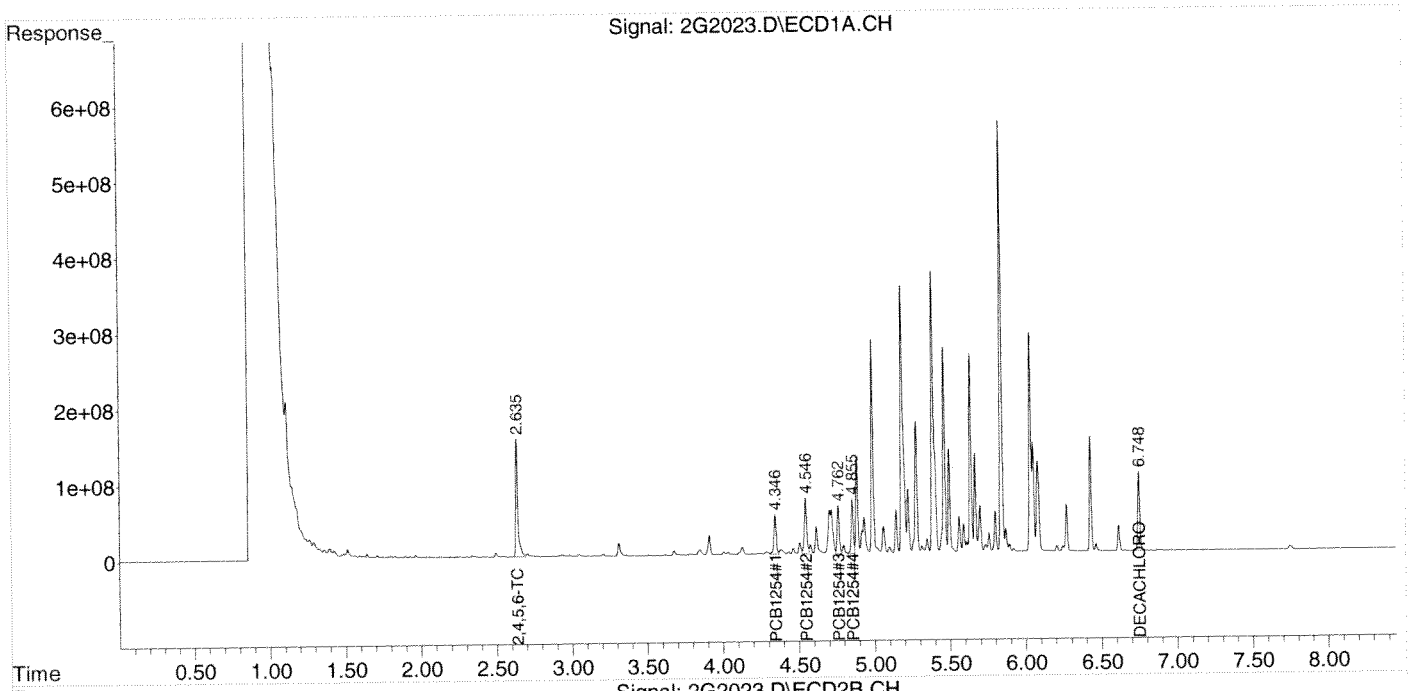
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

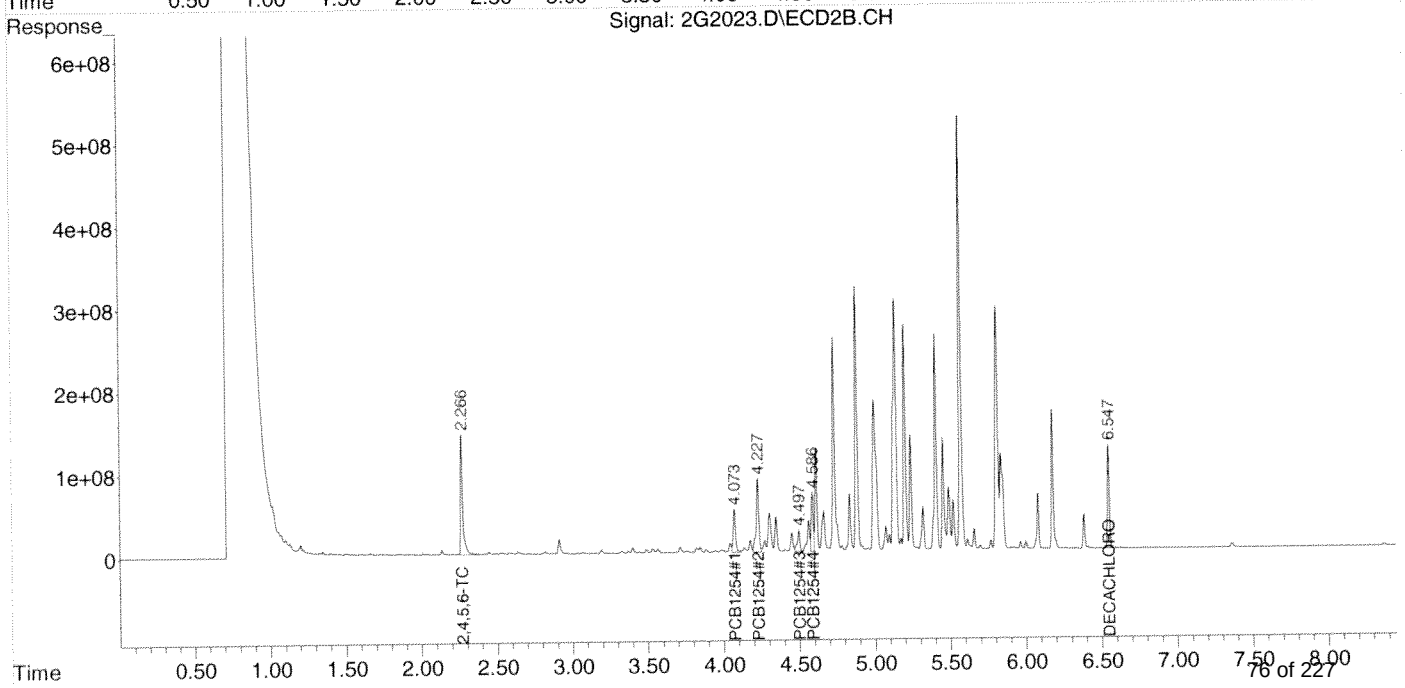
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:45
Operator : RC
Sample : A403770-02
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:55:34 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:57
Operator : RC
Sample : A403770-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:01:35 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.634	2.266	1529.8E6	1384.8E6	0.1050	0.1161
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.986	4.730	2052.1E6	2499.5E6	3.3186	3.5654
8)	PCB1260#7	5.183	4.880	3956.7E6	3313.8E6	4.6965	4.7465
9)	PCB1260#8	5.462	5.199	2354.7E6	2395.4E6	4.5456	4.2729
10)	PCB1260#9	5.635	5.403	2048.8E6	2504.0E6	3.9733	4.1455
11)	PCB1260#10	5.840	5.568	4687.7E6	5011.5E6	4.3165	4.4325
12)	DECACHLOR...	6.746	6.544	795.9E6	960.5E6	0.1175	0.1294

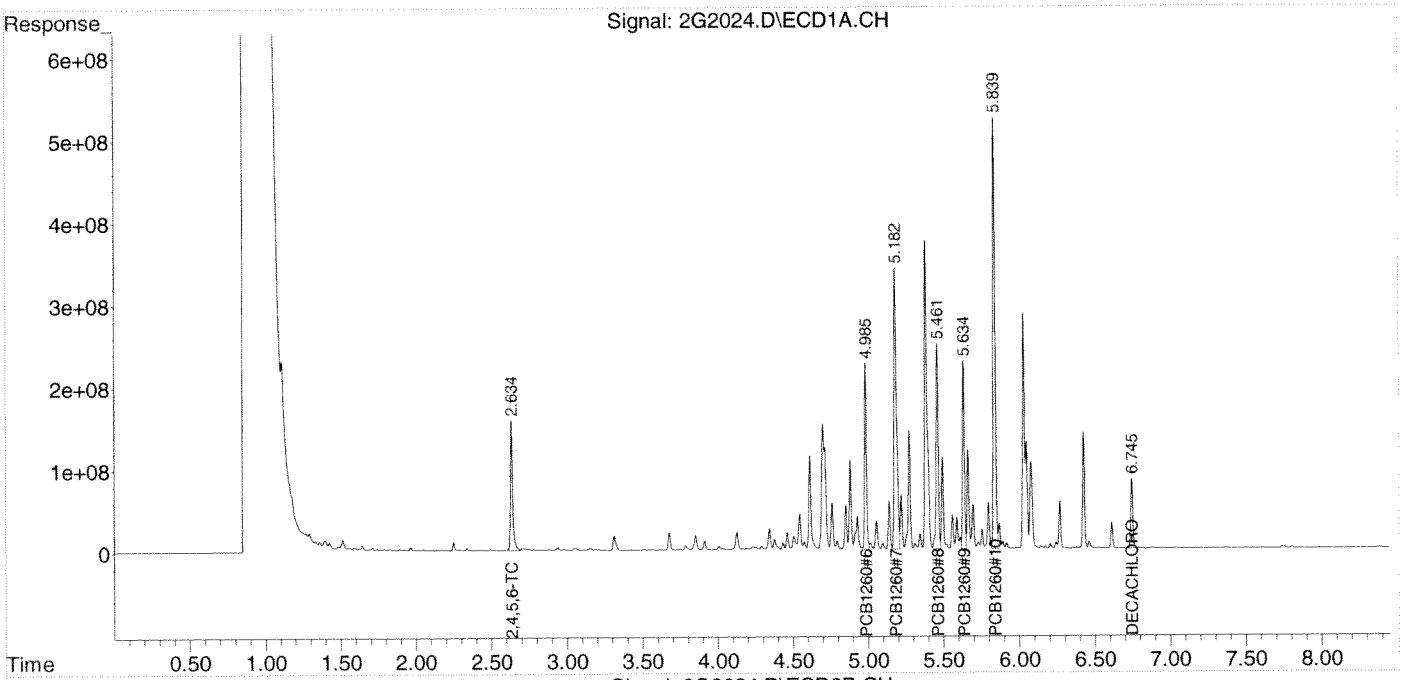
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

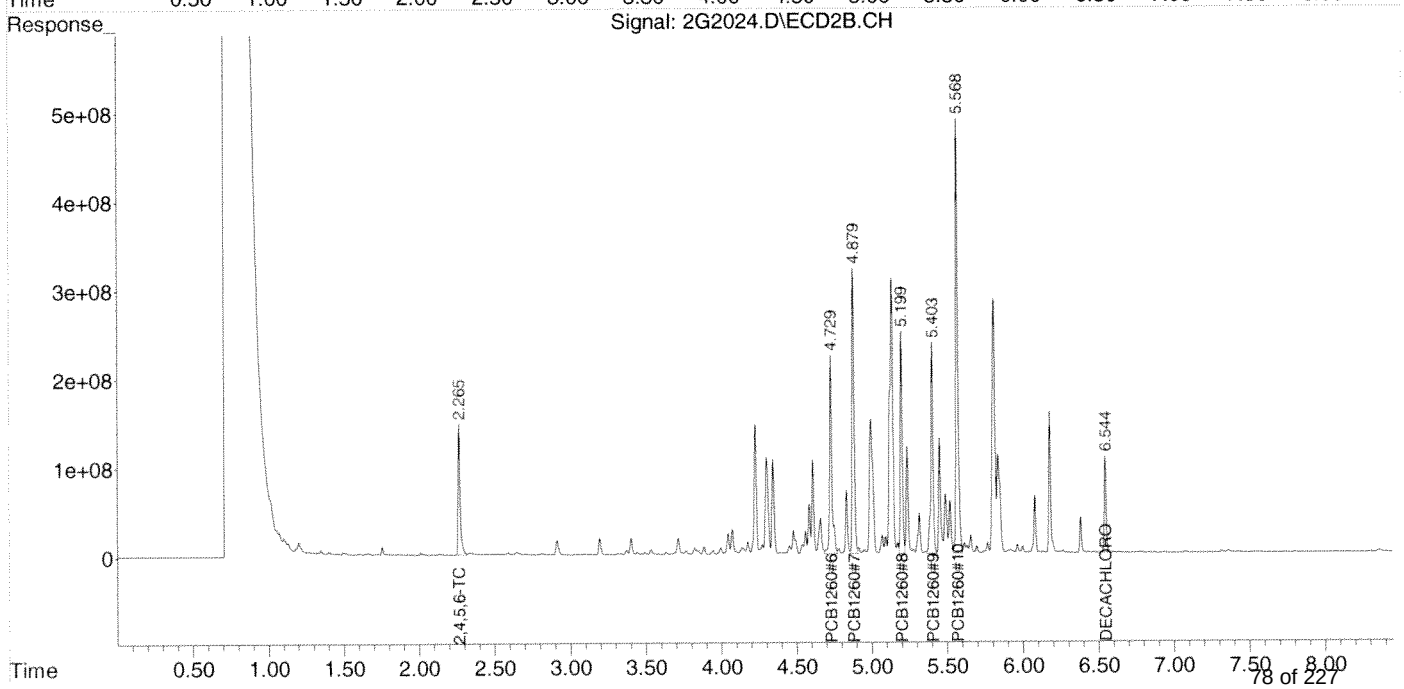
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:57
Operator : RC
Sample : A403770-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:01:35 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:57
Operator : RC
Sample : A403770-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:56:38 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.634	2.266	1538.9E6	1387.8E6	0.2105	0.1425	#
2)	PCB1254#1	4.344	4.072	287.4E6	283.5E6	0.8245	0.7211	
3)	PCB1254#2	4.545	4.226	500.0E6	1587.1E6	0.8368	3.5243	#
4)	PCB1254#3	4.761	4.480f	569.8E6	380.0E6	1.6856	1.0720	#
5)	PCB1254#4	4.853	4.585	499.8E6	509.7E6	0.8824	0.7830	
6)	PCB1254#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	DECACHLOR...	6.746	6.544	801.8E6	972.5E6	0.1679	0.1587	

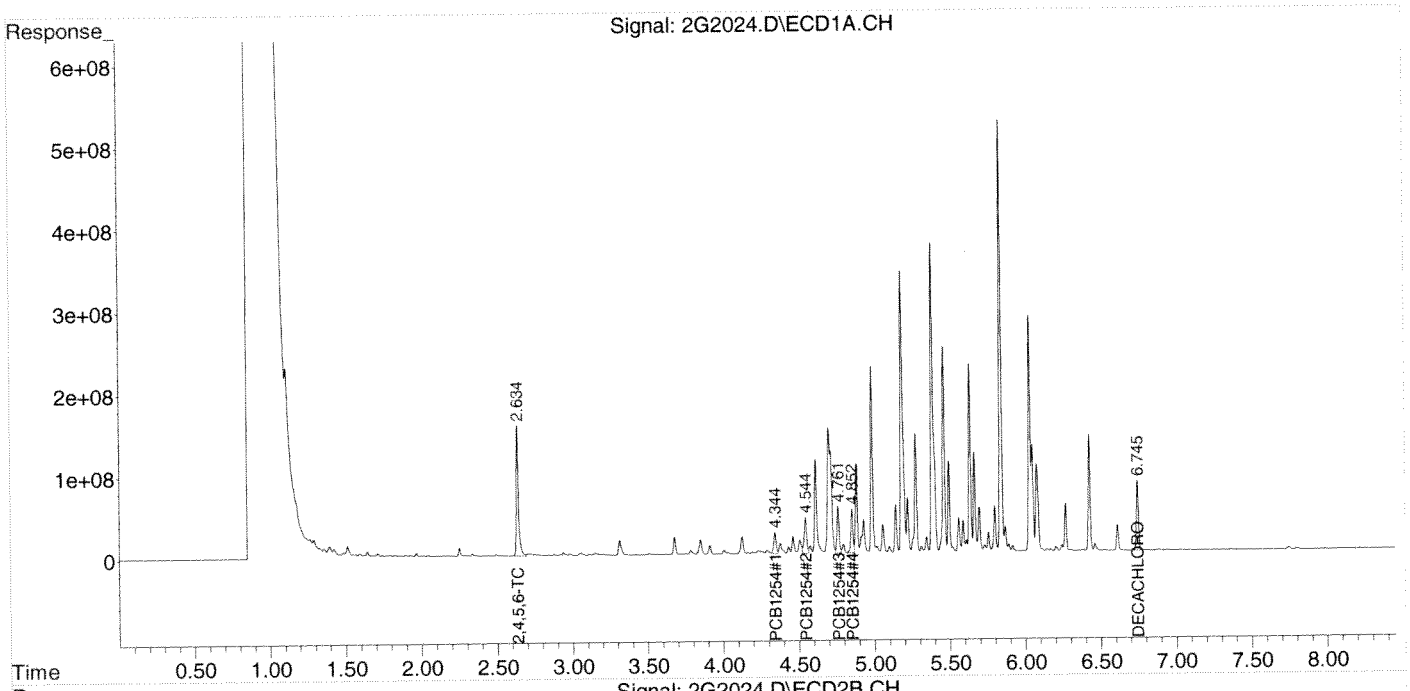
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

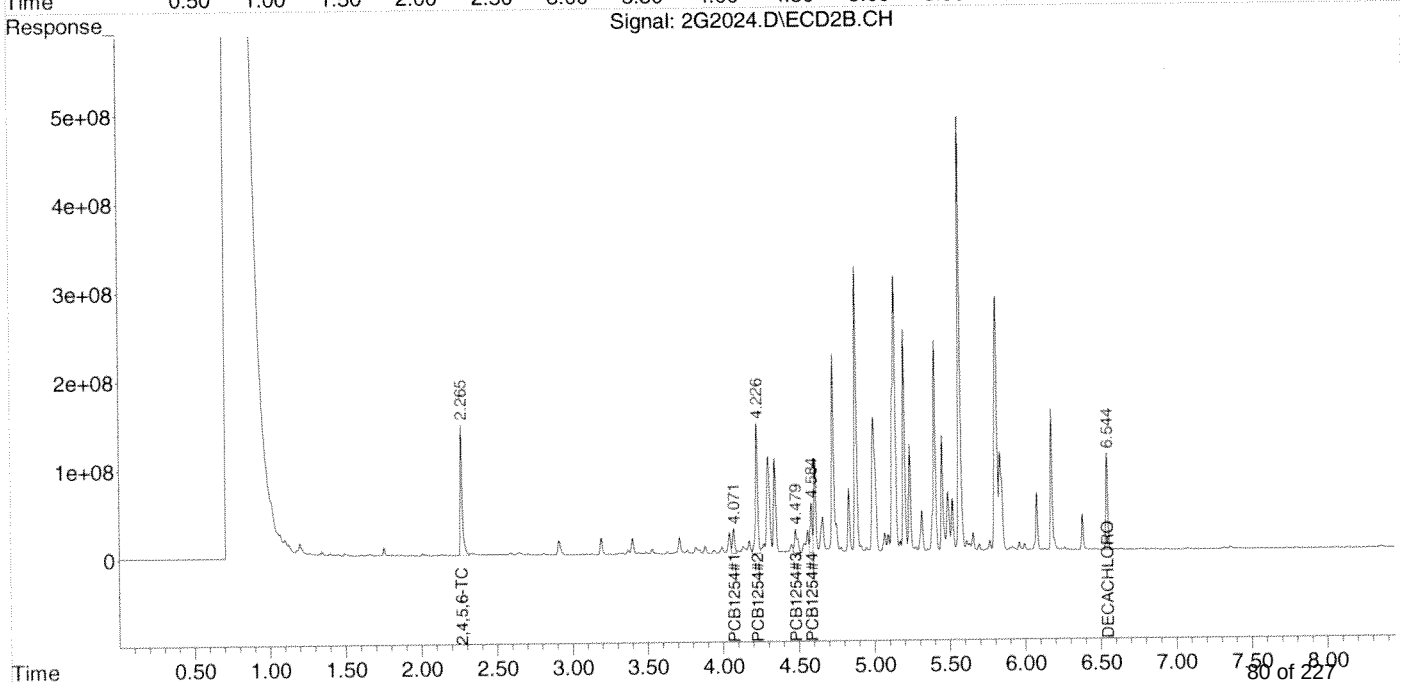
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 14:57
Operator : RC
Sample : A403770-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:56:38 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:09
Operator : RC
Sample : A403770-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:02:08 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.636	2.267	1097.9E6	1014.9E6	0.0754	0.0851
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.986	4.730	2502.7E6	3121.5E6	4.0474	4.4526
8)	PCB1260#7	5.184	4.881	4756.7E6	4204.4E6	5.6461	6.0222
9)	PCB1260#8	5.463	5.200	2958.5E6	2984.1E6	5.7111	5.3231
10)	PCB1260#9	5.636	5.404	2517.0E6	3133.4E6	4.8813	5.1874
11)	PCB1260#10	5.841	5.569	5695.7E6	6110.9E6	5.2446	5.4049
12)	DECACHLOR...	6.748	6.547	763.7E6	884.8E6	0.1128	0.1192

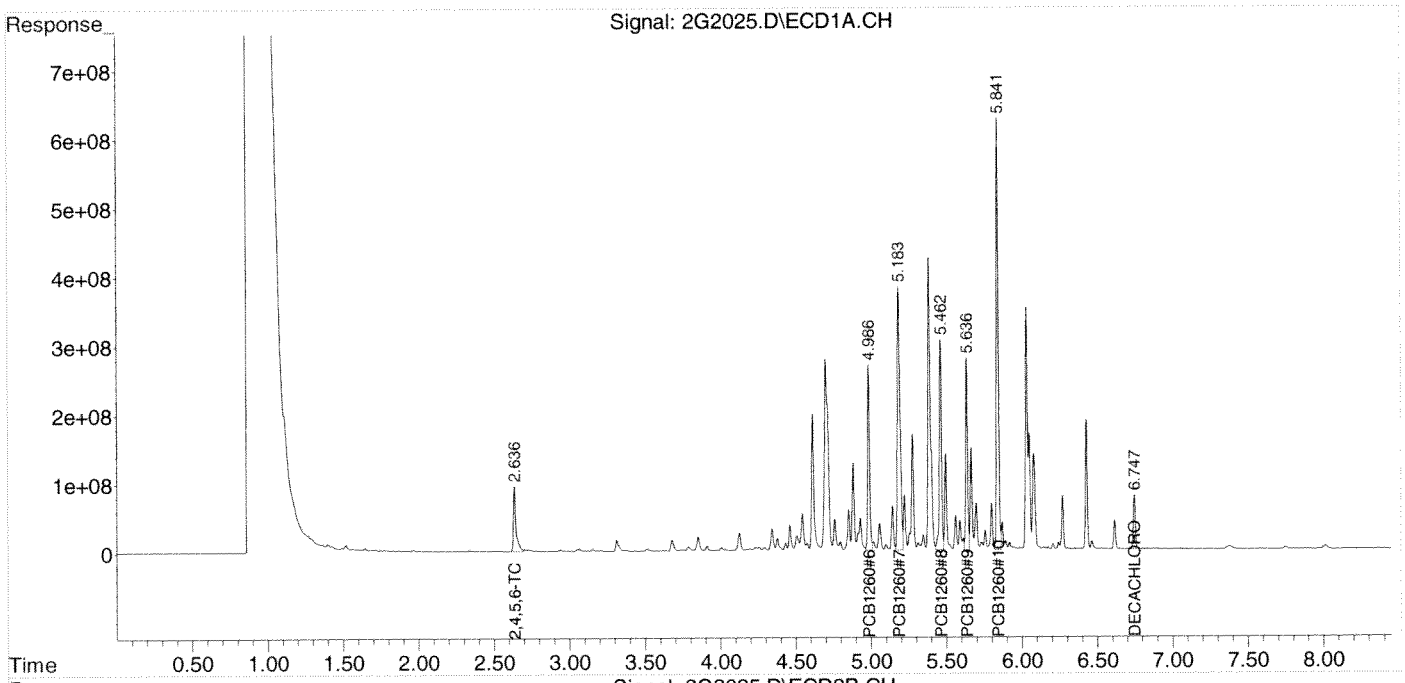
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

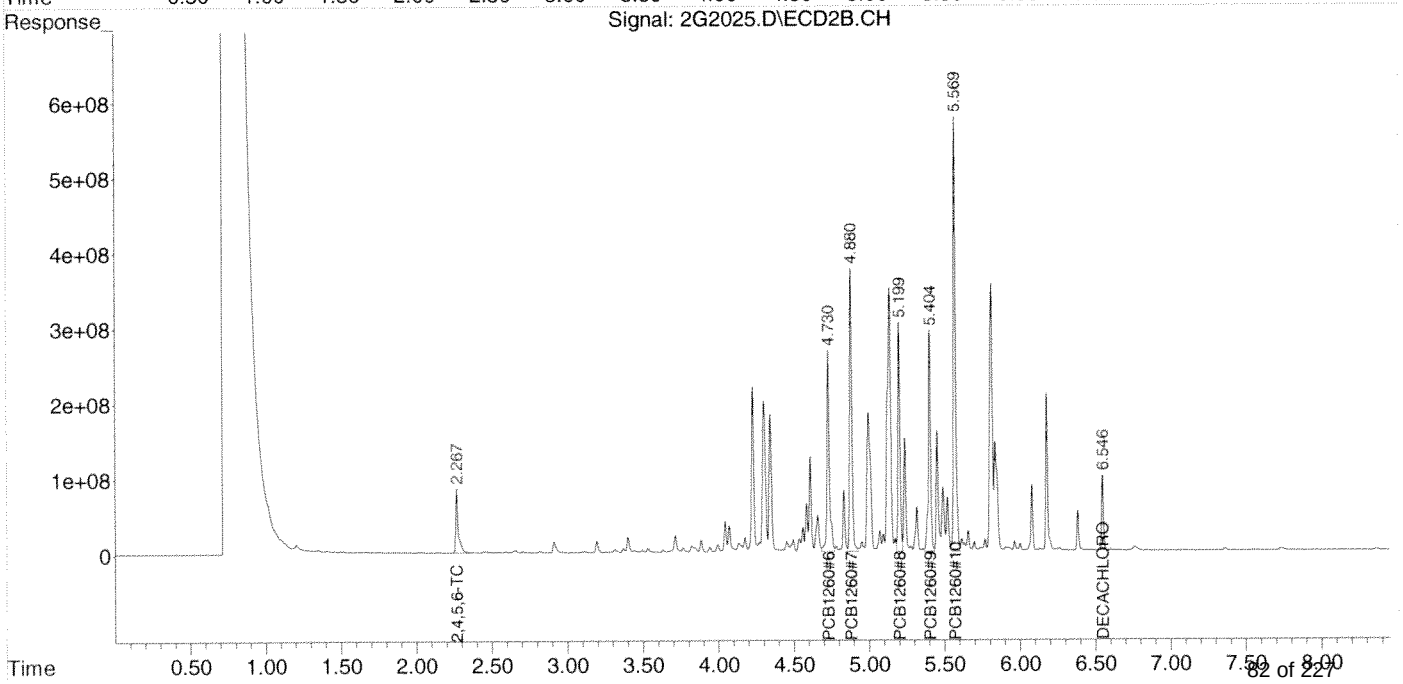
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:09
Operator : RC
Sample : A403770-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:02:08 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:09
Operator : RC
Sample : A403770-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:56:49 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.636	2.267	1104.1E6	1014.9E6	0.1510	0.1042	#
2)	PCB1254#1	4.344	4.072	378.0E6	430.7E6	1.0844	1.0953	
3)	PCB1254#2	4.545	4.227	659.7E6	2494.8E6	1.1041	5.5398	#
4)	PCB1254#3	4.760	4.496	512.3E6	174.9E6	1.5155	0.4933	#
5)	PCB1254#4	4.853	4.586	598.6E6	619.6E6	1.0569	0.9517	
6)	PCB1254#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	DECACHLOR...	6.748	6.547	790.5E6	915.5E6	0.1656	0.1494	

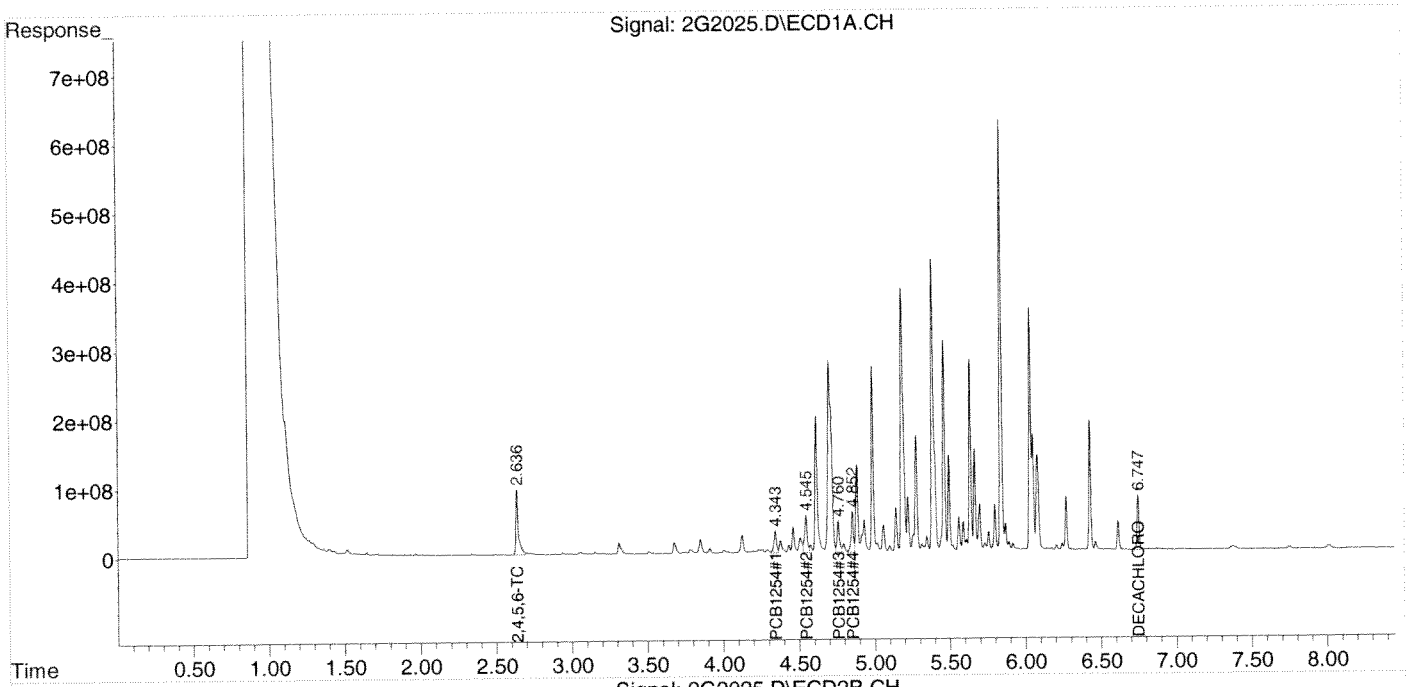
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

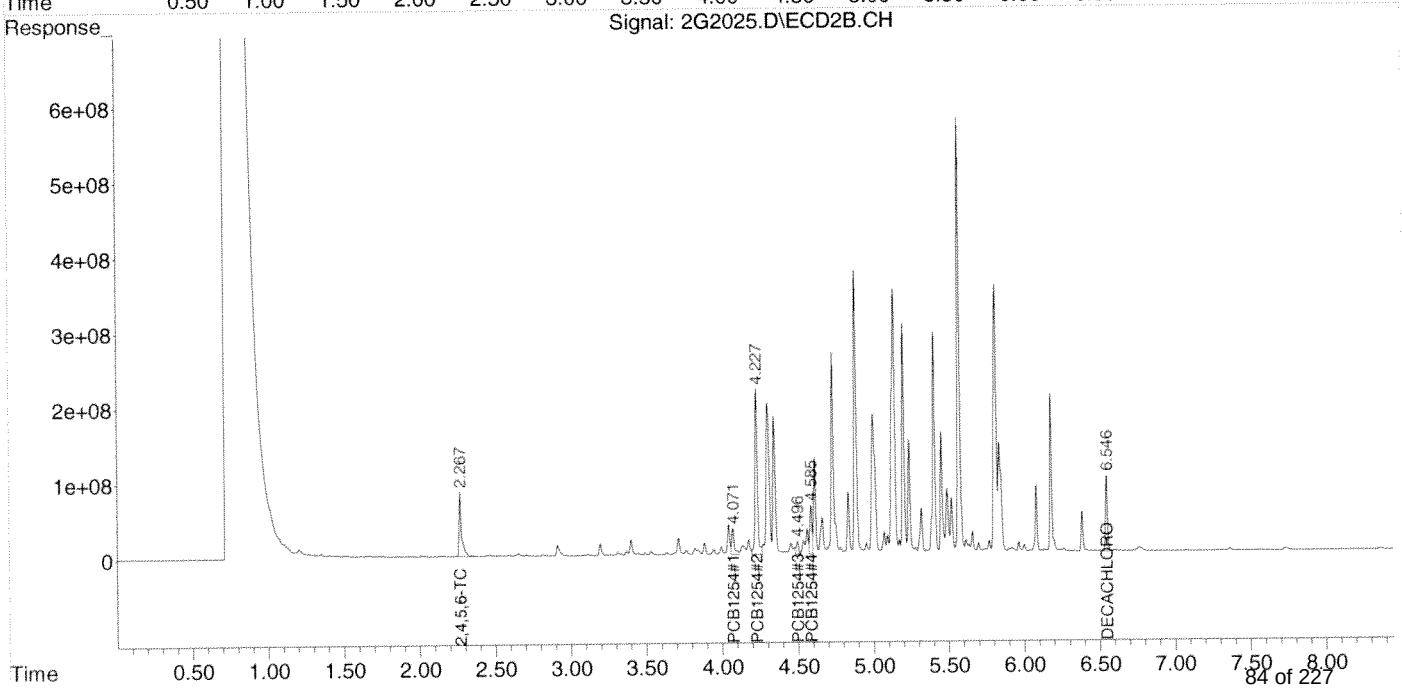
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:09
Operator : RC
Sample : A403770-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 09:56:49 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:22
Operator : RC
Sample : AA29428-CCV2
Misc : AA29429-CCV1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:39 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.645	2.274	1151.5E6	1051.3E6	0.0790	0.0881	
2)	PCB1016#1	2.913	2.600	193.5E6	177.4E6	0.6761	0.7040	
3)	PCB1016#2	3.191	2.885	396.5E6	379.4E6	0.7877	0.8014	
4)	PCB1016#3	3.576	3.494	544.8E6	160.5E6	0.9536	0.7716	
5)	PCB1016#4	3.689	3.531	316.3E6	170.3E6	0.9070	0.7829	
6)	PCB1016#5	3.744	3.565	203.0E6	143.7E6	0.8474	0.5710	#
7)	PCB1260#6	4.991	4.734	428.5E6	485.4E6	0.6930	0.6924	
8)	PCB1260#7	5.187	4.883	606.5E6	581.5E6	0.7199	0.8329	
9)	PCB1260#8	5.467	5.203	363.5E6	464.4E6	0.7017	0.8284	
10)	PCB1260#9	5.640	5.408	369.2E6	467.3E6	0.7159	0.7737	
11)	PCB1260#10	5.844	5.572	849.5E6	1066.6E6	0.7822	0.9433	
12)	DECACHLOR...	6.750	6.548	673.1E6	737.1E6	0.0994	0.0993	

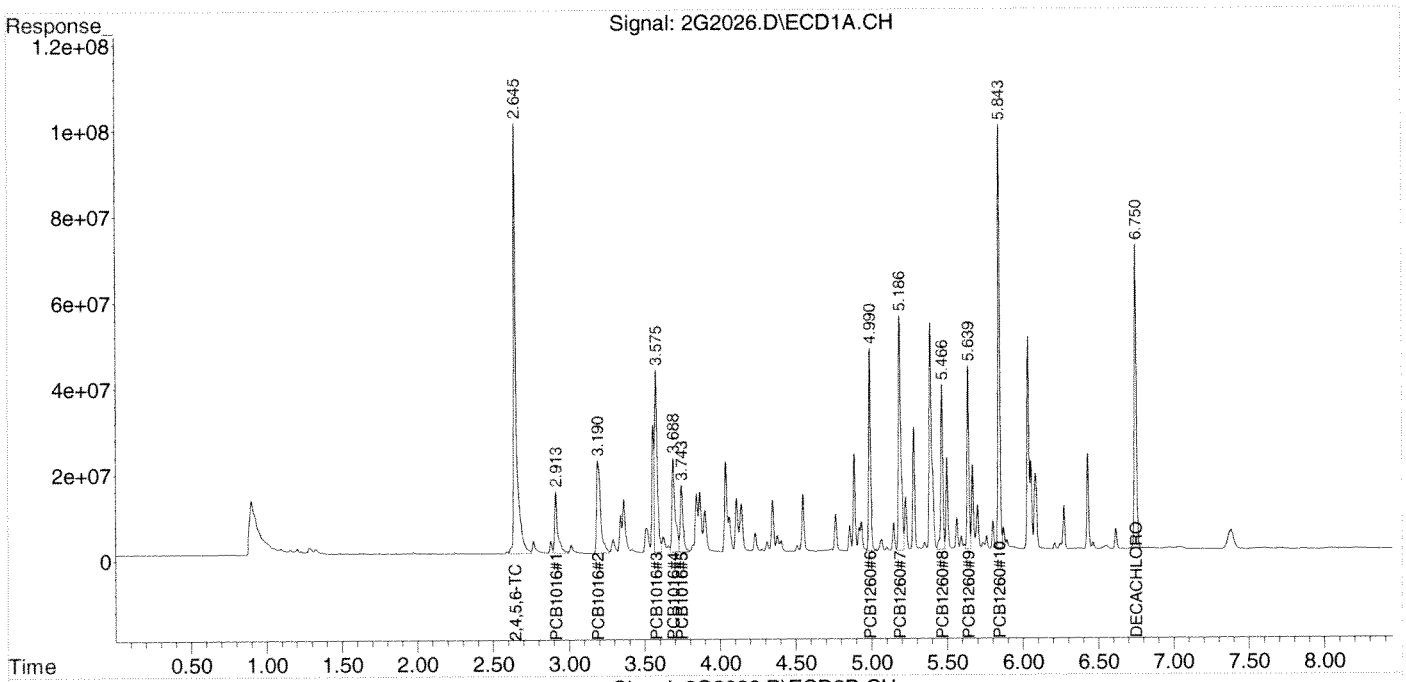
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

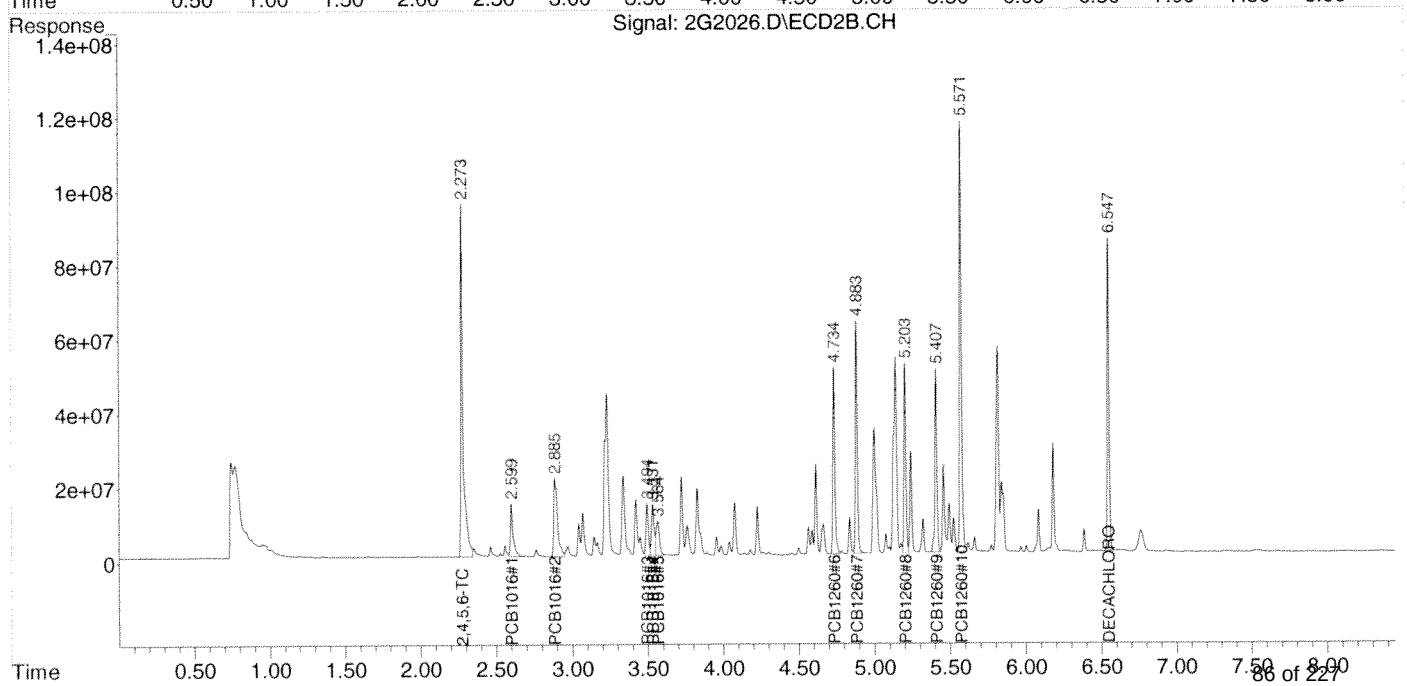
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:22
Operator : RC
Sample : AA29428-CCV2
Misc : AA29429-CCV1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 06:50:39 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:34
Operator : RC
Sample : AA29428-ARC2
Misc : AA29429-ARC1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:31:15 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.644	2.273	1260.3E6	1134.4E6	0.1724	0.1165	#
2)	PCB1254#1	4.350	4.076	352.2E6	398.4E6	1.0102	1.0133	
3)	PCB1254#2	4.548	4.226	618.1E6	454.3E6	1.0344	1.0088	
4)	PCB1254#3	4.767	4.500	365.5E6	338.1E6	1.0812	0.9537	
5)	PCB1254#4	4.857	4.589	648.4E6	635.6E6	1.1449	0.9763	
6)	PCB1254#5	5.060	4.883	467.9E6	300.5E6	1.1790	1.0154	
7)	DECACHLOR...	6.752	6.550	710.8E6	852.8E6	0.1489	0.1392	

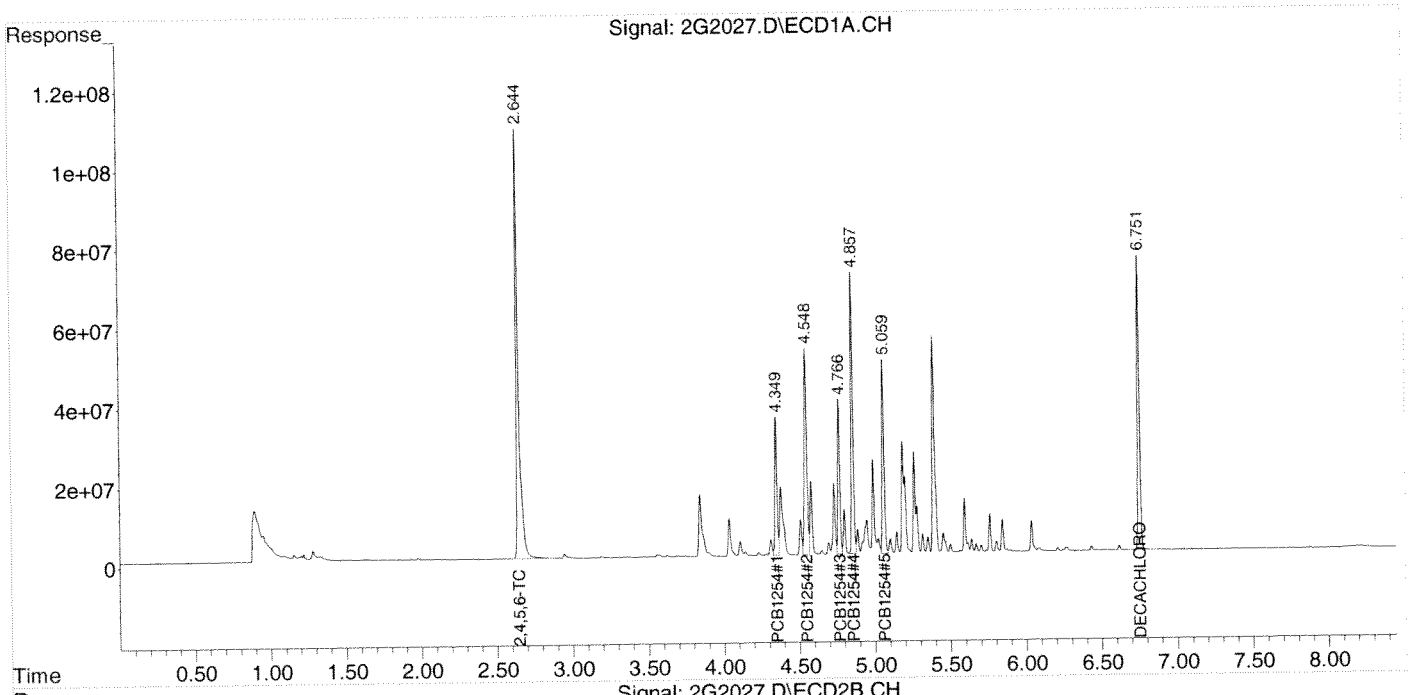
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

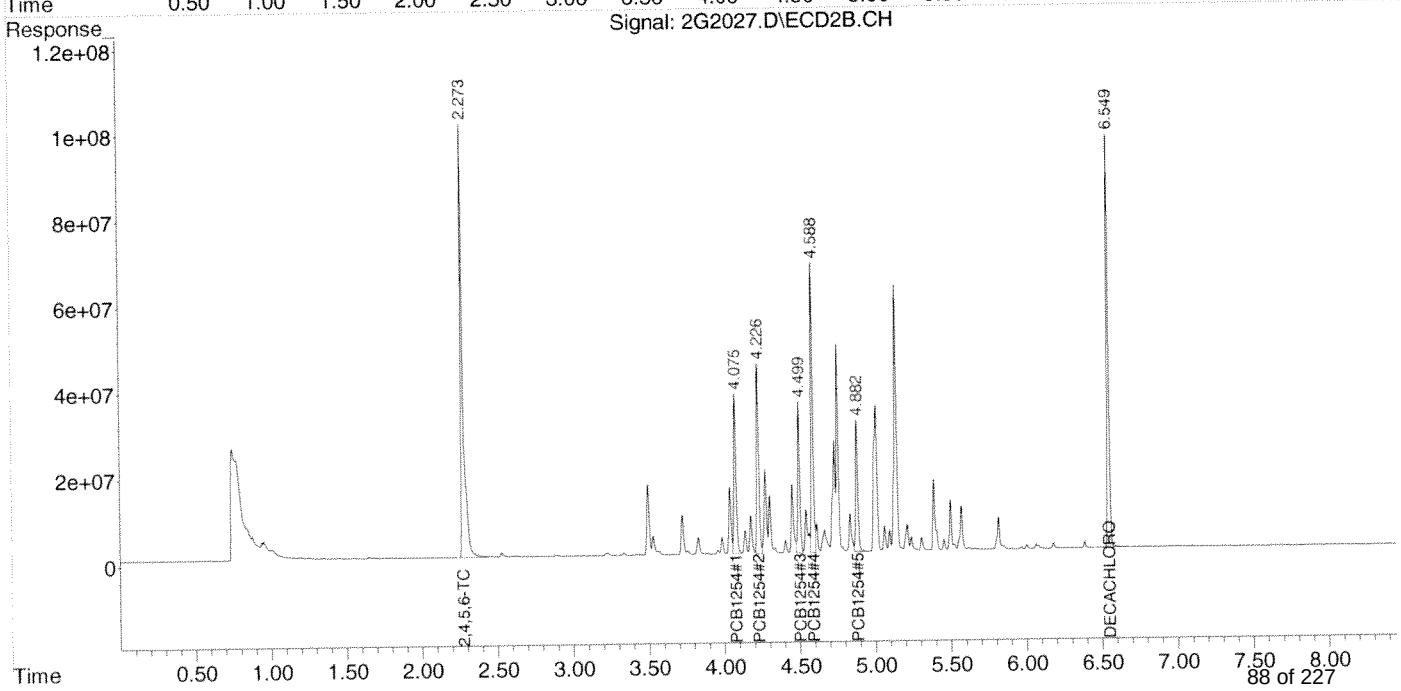
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 15:34
Operator : RC
Sample : AA29428-ARC2
Misc : AA29429-ARC1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 03 08:31:15 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Jul 02 13:54:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA29477

Instrument: OSVGCECD2

Calibration ID: 1407013

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29477-CCV1	QC		1		A4F0547		
A403770-02RE1	8082A DOD	A	2				CH2M Hill, Inc. (CH025)
A403770-08RE1	8082A DOD	A	3				CH2M Hill, Inc. (CH025)
A403770-14RE1	8082A DOD	A	4				CH2M Hill, Inc. (CH025)
AA29477-CCV2	QC		5		A4F0547		

Samples Loaded By Date Data Processed By Date

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 13:50
Operator : RC
Sample : AA29429-CCV2
Misc : AA29477-CCV1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:00:17 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.648	2.276	1245.7E6	1103.5E6	0.0855	0.0925	
2)	PCB1016#1	2.916	2.602	205.5E6	176.6E6	0.7179	0.7010	
3)	PCB1016#2	3.195	2.888	426.2E6	376.9E6	0.8468	0.7962	
4)	PCB1016#3	3.579	3.497	579.0E6	178.2E6	1.0134	0.8565	
5)	PCB1016#4	3.692	3.534	348.2E6	187.1E6	0.9986	0.8602	
6)	PCB1016#5	3.747	3.568	213.8E6	150.5E6	0.8924	0.5982	#
7)	PCB1260#6	4.991	4.734	490.4E6	536.1E6	0.7930	0.7647	
8)	PCB1260#7	5.188	4.884	729.0E6	643.7E6	0.8652	0.9219	
9)	PCB1260#8	5.467	5.204	432.1E6	484.6E6	0.8340	0.8645	
10)	PCB1260#9	5.640	5.408	442.4E6	533.7E6	0.8579	0.8836	
11)	PCB1260#10	5.845	5.573	1028.1E6	1166.4E6	0.9466	1.0316	
12)	DECACHLOR...	6.751	6.550	773.7E6	864.5E6	0.1142	0.1164	

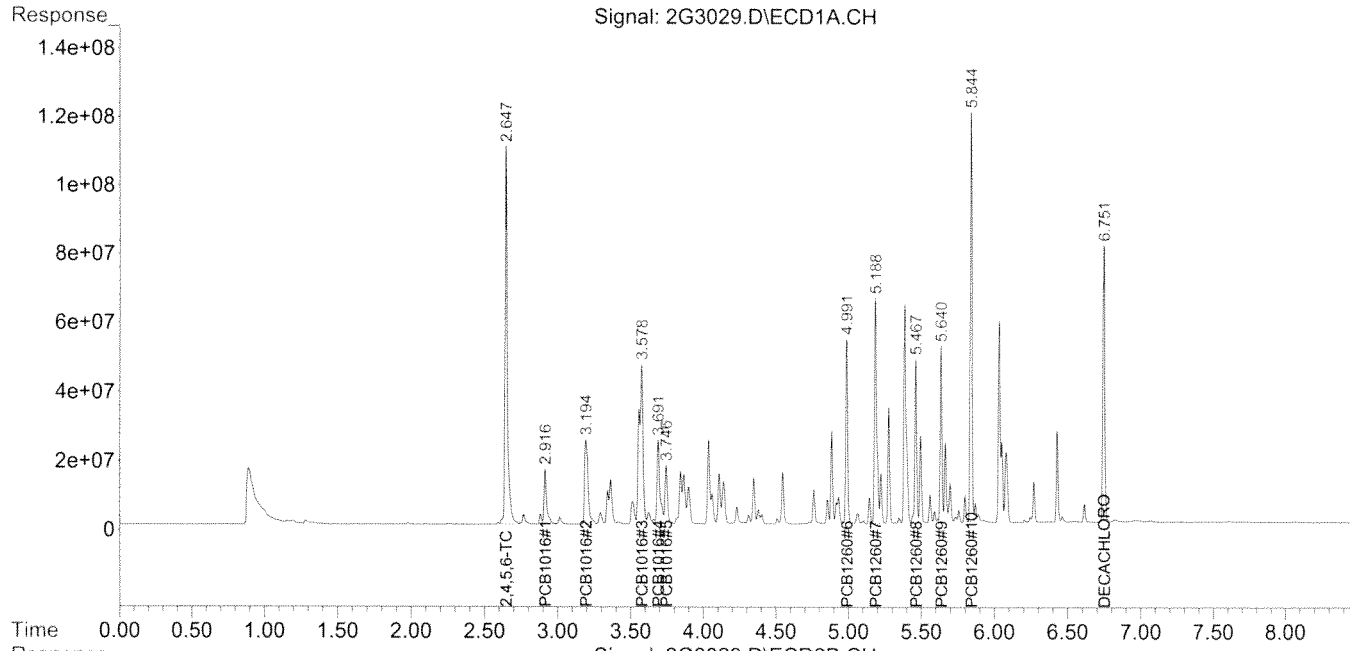
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

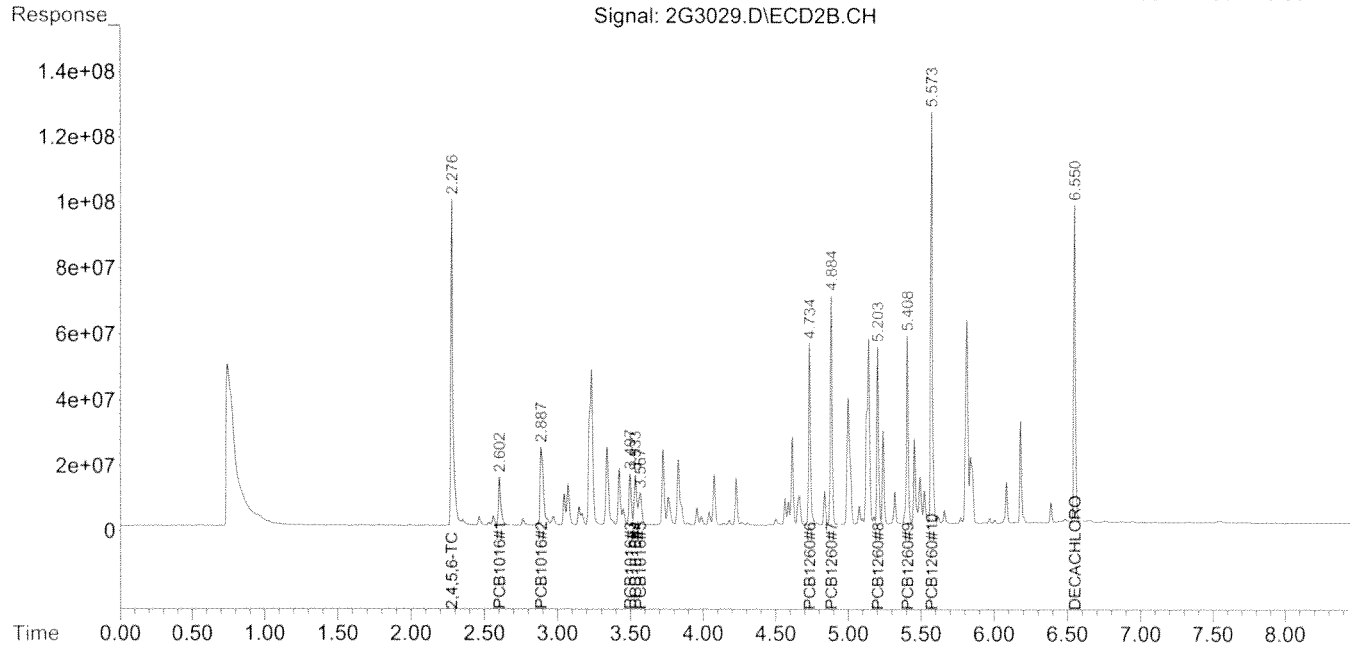
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 13:50
Operator : RC
Sample : AA29429-CCV2
Misc : AA29477-CCV1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:00:17 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:03
Operator : RC
Sample : A403770-02RE1@2X
Misc : 2X
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:12 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.640	2.270	571.5E6	557.1E6	0.0392	0.0467
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.990	4.734	1077.2E6	1209.3E6	1.7420	1.7250
8)	PCB1260#7	5.188	4.884	1823.5E6	1524.6E6	2.1644	2.1837
9)	PCB1260#8	5.466	5.203	1104.1E6	1183.8E6	2.1314	2.1116
10)	PCB1260#9	5.640	5.407	963.9E6	1175.9E6	1.8694	1.9468
11)	PCB1260#10	5.844	5.573	2275.8E6	2476.3E6	2.0955	2.1902
12)	DECACHLOR...	6.752	6.551	424.9E6	480.5E6	0.0627	0.0647

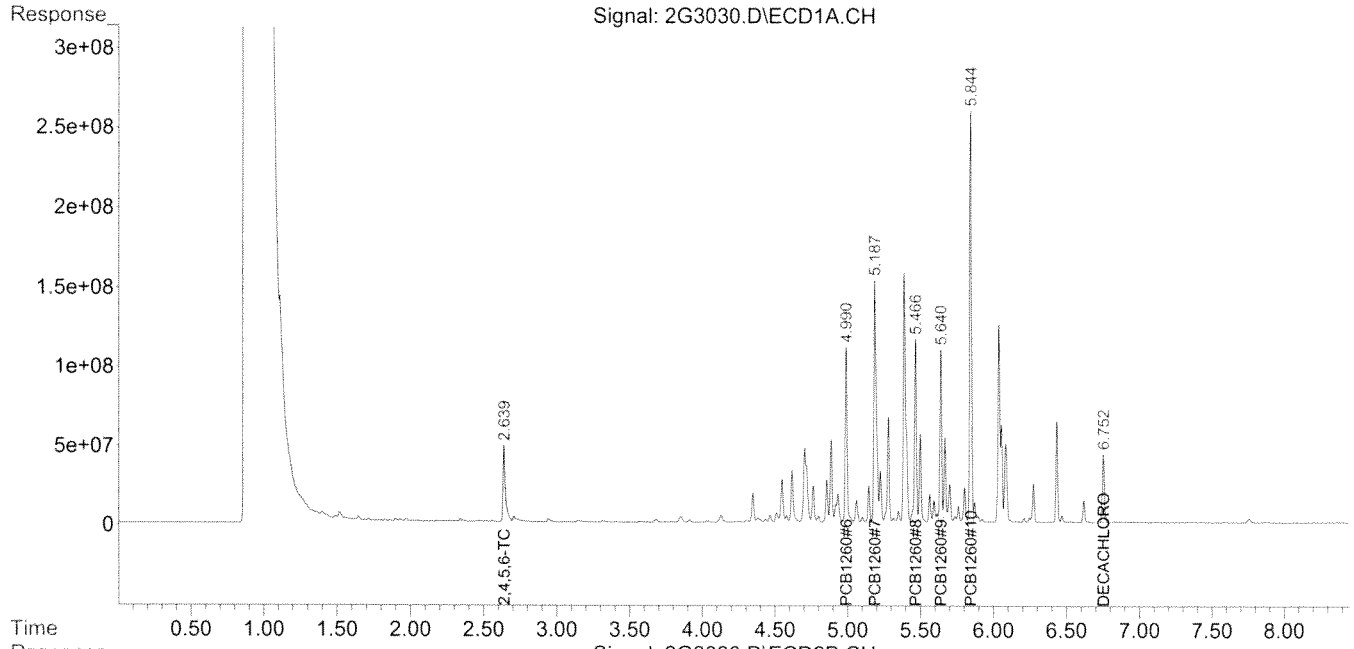
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

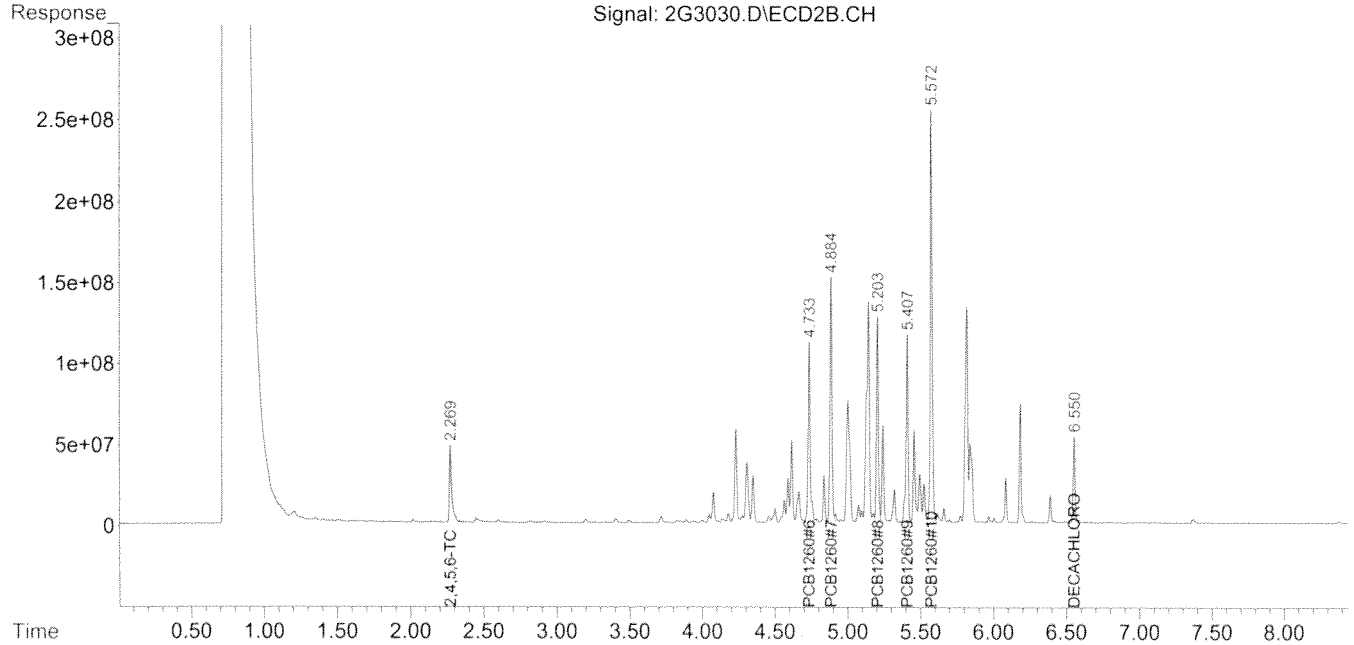
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:03
Operator : RC
Sample : A403770-02RE1@2X
Misc : 2X
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:12 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:15
Operator : RC
Sample : A403770-08RE1@2X
Misc : 2X
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:30 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.640	2.270	586.7E6	559.8E6	0.0403	0.0469
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.990	4.733	927.2E6	1110.5E6	1.4995	1.5840
8)	PCB1260#7	5.187	4.884	1846.1E6	1559.6E6	2.1913	2.2339
9)	PCB1260#8	5.466	5.203	1072.2E6	1103.9E6	2.0698	1.9692
10)	PCB1260#9	5.639	5.407	887.6E6	1108.5E6	1.7214	1.8352
11)	PCB1260#10	5.843	5.572	2133.0E6	2387.9E6	1.9641	2.1120
12)	DECACHLOR...	6.750	6.548	350.4E6	417.4E6	0.0517	0.0562

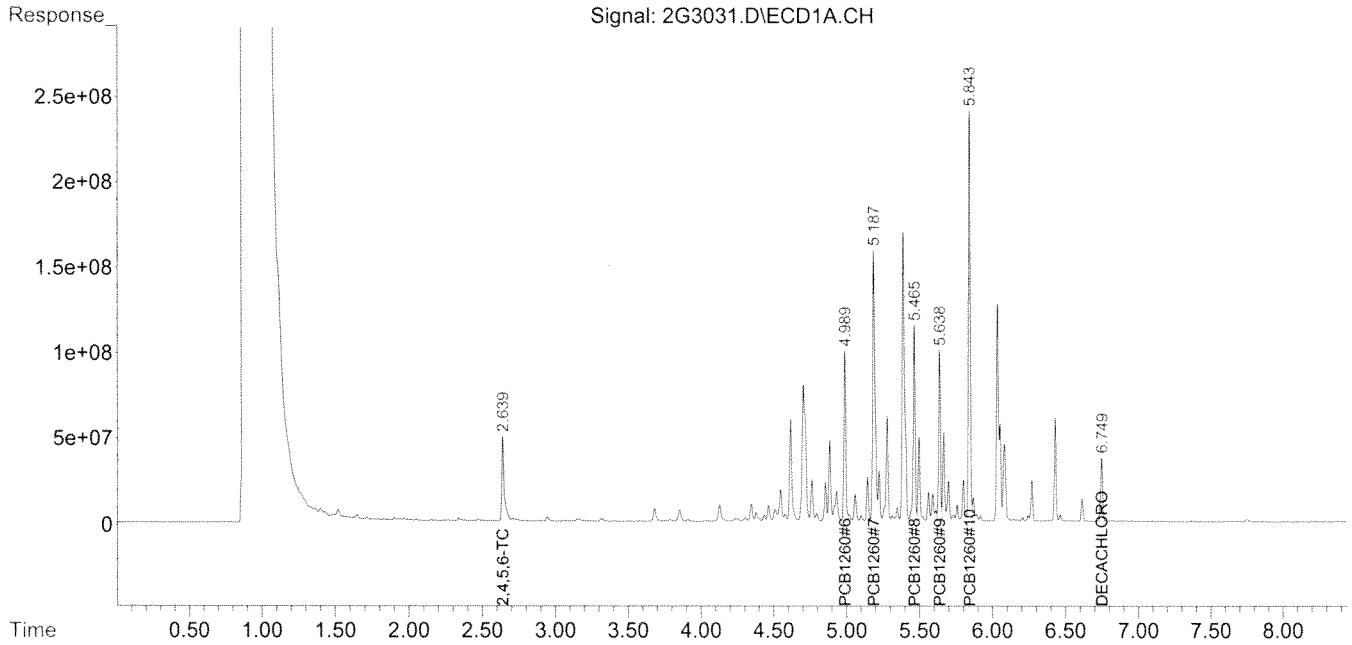
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

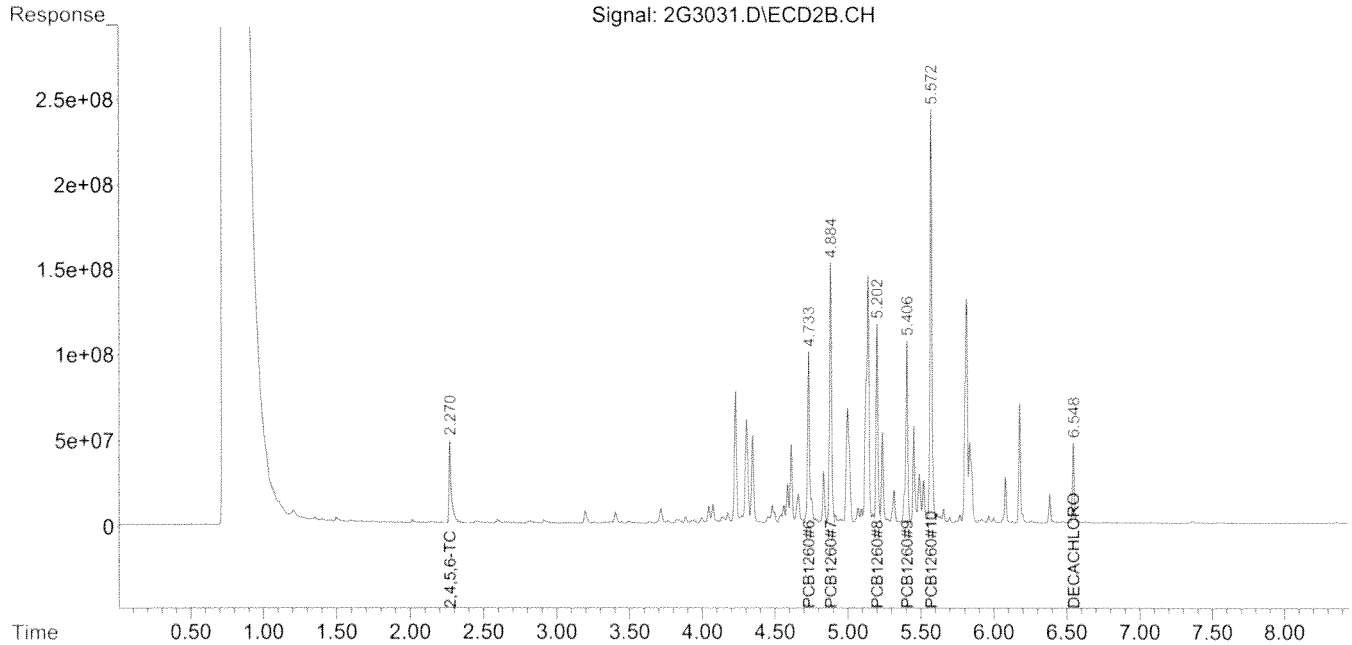
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:15
Operator : RC
Sample : A403770-08RE1@2X
Misc : 2X
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:30 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:27
Operator : RC
Sample : A403770-14RE1@2X
Misc : 2X
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:45 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.639	2.270	565.6E6	534.6E6	0.0388	0.0448
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.990	4.734	1404.5E6	1728.6E6	2.2714	2.4657
8)	PCB1260#7	5.187	4.884	2794.7E6	2453.8E6	3.3173	3.5147
9)	PCB1260#8	5.466	5.203	1685.5E6	1675.4E6	3.2537	2.9885
10)	PCB1260#9	5.639	5.407	1413.7E6	1724.1E6	2.7416	2.8542
11)	PCB1260#10	5.844	5.572	3303.3E6	3568.0E6	3.0417	3.1558
12)	DECACHLOR...	6.752	6.550	412.3E6	451.5E6	0.0609	0.0608

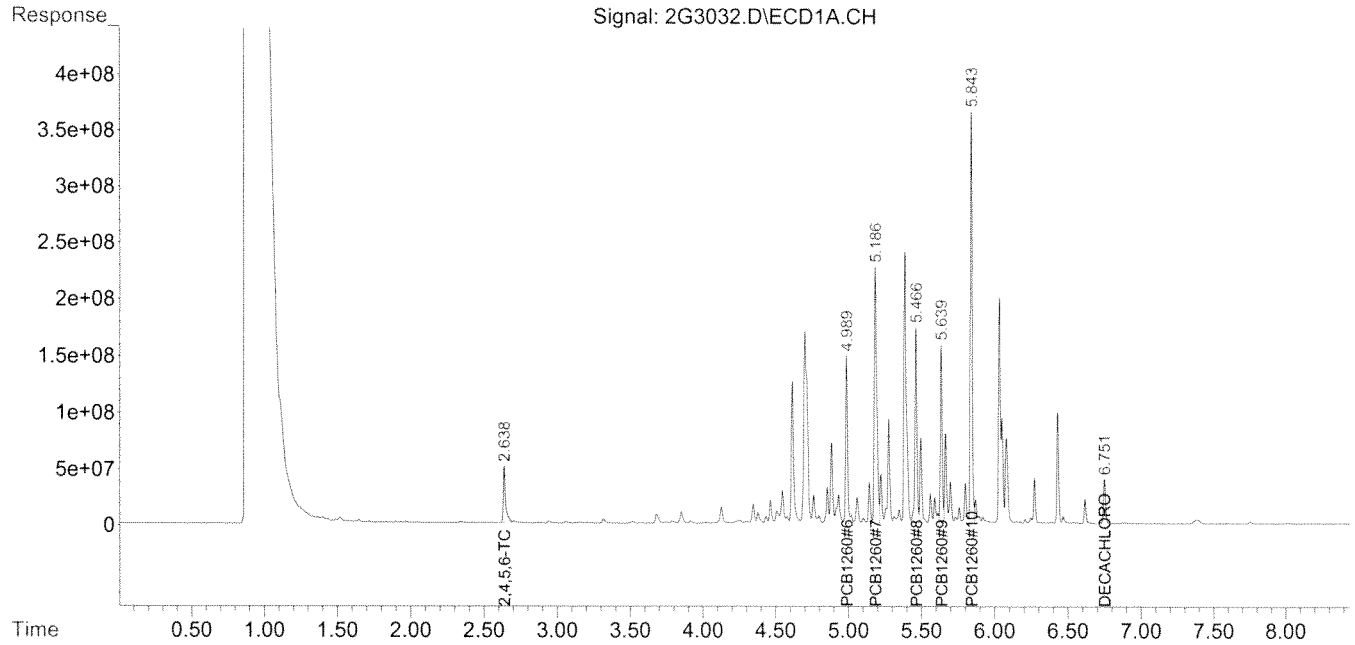
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

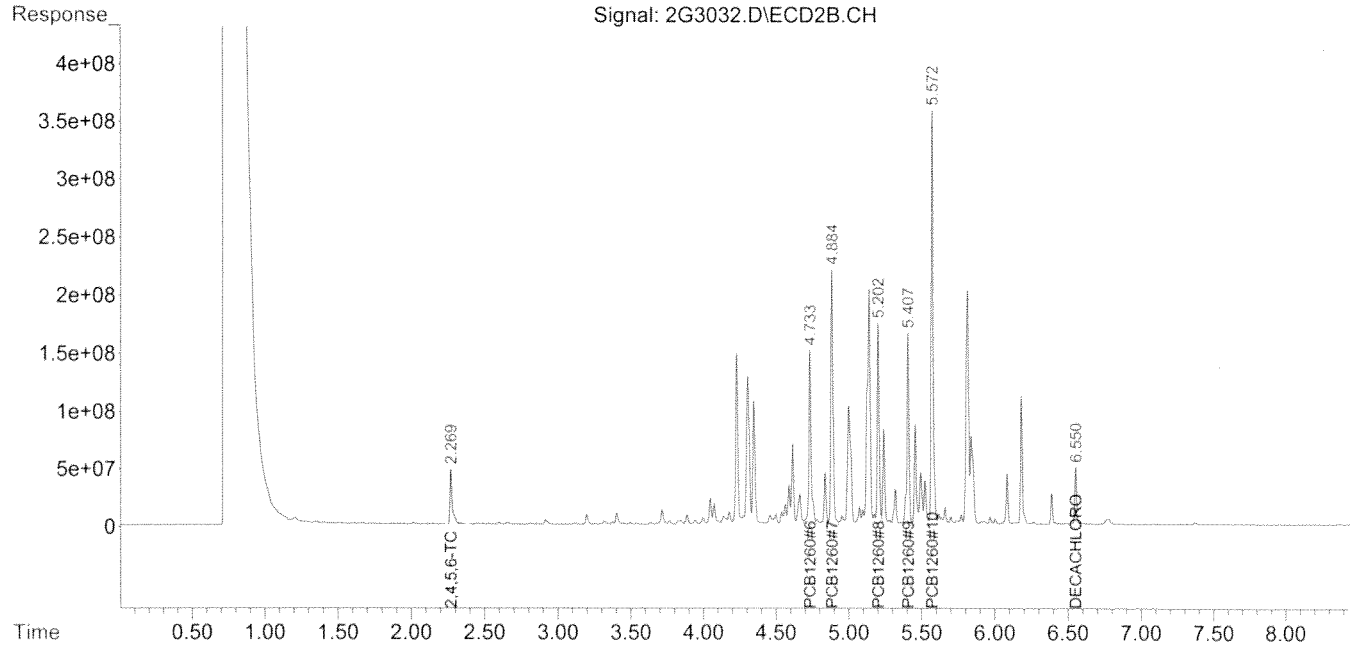
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:27
Operator : RC
Sample : A403770-14RE1@2X
Misc : 2X
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:03:45 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:39
Operator : RC
Sample : AA29477-CCV2
Misc : AA29459-CCV1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:00:29 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.648	2.276	1216.2E6	1069.2E6	0.0835	0.0896	
2)	PCB1016#1	2.916	2.603	201.5E6	175.2E6	0.7039	0.6956	
3)	PCB1016#2	3.195	2.888	417.0E6	392.5E6	0.8284	0.8290	
4)	PCB1016#3	3.579	3.498	574.7E6	172.4E6	1.0059	0.8287	
5)	PCB1016#4	3.693	3.535	334.5E6	182.8E6	0.9593	0.8406	
6)	PCB1016#5	3.748	3.568	210.3E6	148.6E6	0.8780	0.5907	#
7)	PCB1260#6	4.993	4.736	486.2E6	526.3E6	0.7863	0.7507	
8)	PCB1260#7	5.189	4.886	712.1E6	629.7E6	0.8453	0.9019	
9)	PCB1260#8	5.469	5.205	426.7E6	488.9E6	0.8237	0.8720	
10)	PCB1260#9	5.642	5.409	435.6E6	517.4E6	0.8447	0.8565	
11)	PCB1260#10	5.846	5.574	1002.1E6	1170.7E6	0.9228	1.0354	
12)	DECACHLOR...	6.753	6.551	758.0E6	816.2E6	0.1119	0.1099	

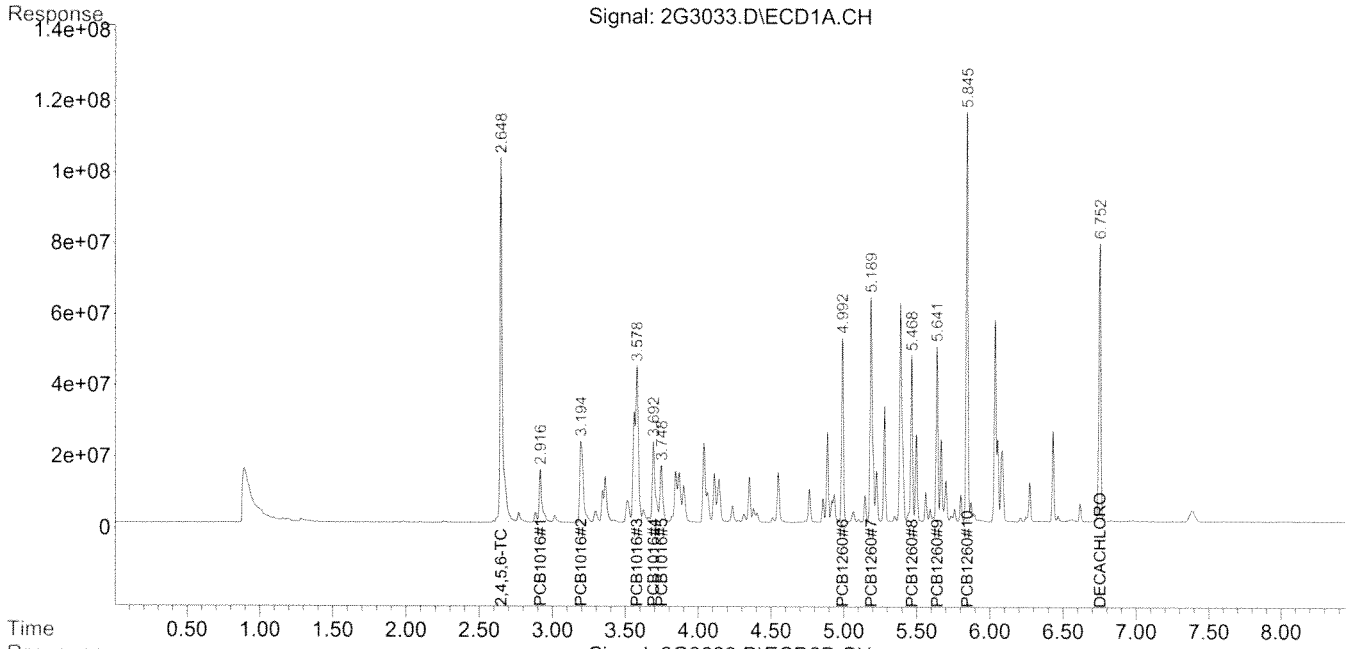
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

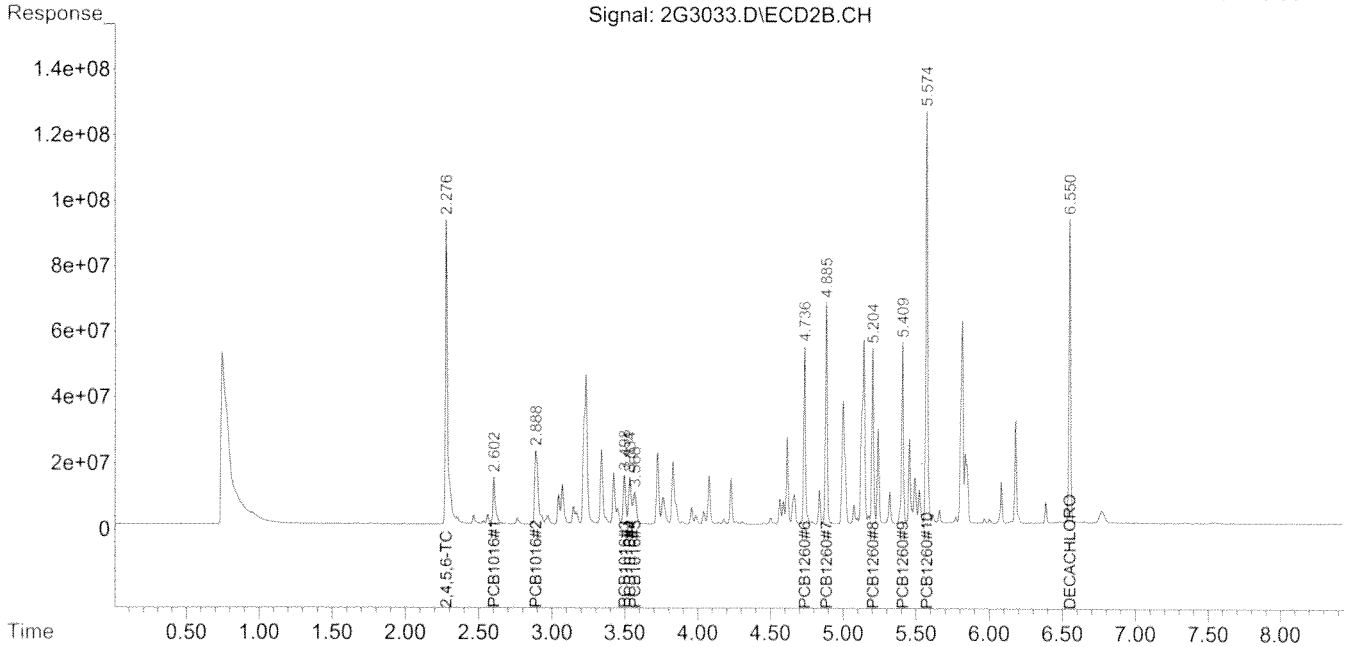
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G314\
Data File : 2G3033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Jul 2014 14:39
Operator : RC
Sample : AA29477-CCV2
Misc : AA29459-CCV1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 07 08:00:29 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Jul 03 08:06:25 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA29452

Instrument: OSVGCECD2

Calibration ID: 1407013

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29452-CAL1	QC		1		A4A0397		
AA29452-CAL2	QC		2		A4A0395		
AA29452-CAL3	QC		3		A4A0394		
AA29452-CAL4	QC		4		A4A0392		
AA29452-CAL5	QC		5		A4A0391		
AA29452-CAL6	QC		6		A4A0390		
AA29452-SCV1	QC		7		A4A0398		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB2G214.M
Title : PCB SOP SVGC-07; INST OSVGCECD2
Last Update : Wed Jul 02 13:31:18 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2G2011.D CAL2 =2G2012.D CAL3 =2G2013.D
CAL4 =2G2014.D CAL5 =2G2015.D CAL6 =2G2016.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	11.451	14.105	13.975	15.366	16.142	16.365	14.568	E9	12.52
2)	PCB1016#1	2.678	3.105	2.692	2.951	2.666	3.083	2.862	E8	7.28
3)	PCB1016#2	5.050	4.916	4.627	4.994	5.210	5.405	5.034	E8	5.26
4)	PCB1016#3	4.482	5.683	5.287	5.937	6.366	6.523	5.713	E8	13.17
5)	PCB1016#4	2.783	3.634	3.224	3.574	3.772	3.936	3.487	E8	12.01
6)	PCB1016#5	1.969	2.432	2.134	2.437	2.658	2.743	2.396	E8	12.42
7)	PCB1260#6	5.609	6.344	5.667	6.219	6.617	6.646	6.184	E8	7.33
8)	PCB1260#7	7.504	8.676	7.580	8.374	9.241	9.174	8.425	E8	8.97
9)	PCB1260#8	4.714	5.441	4.749	5.067	5.588	5.523	5.180	E8	7.57
10)	PCB1260#9	4.358	5.136	4.749	5.175	5.819	5.702	5.156	E8	10.77
11)	PCB1260#10	0.841	1.072	0.989	1.118	1.282	1.214	1.086	E9	14.60
12)	DECACHLOROBIP...	5.471	6.661	5.117	6.959	8.616	7.814	6.773	E9	19.77

Signal #2 Calibration Files
CAL1 =2G2011.D CAL2 =2G2012.D CAL3 =2G2013.D
CAL4 =2G2014.D CAL5 =2G2015.D CAL6 =2G2016.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	9.650	11.894	11.709	12.726	12.892	12.707	11.930	E9	10.20
2)	PCB1016#1	2.415	2.761	2.321	2.493	2.511	2.614	2.519	E8	6.11
3)	PCB1016#2	4.788	4.556	4.370	4.967	4.799	4.926	4.734	E8	4.84
4)	PCB1016#3	2.160	2.290	1.875	1.988	2.071	2.098	2.080	E8	6.83
5)	PCB1016#4	2.240	2.393	1.986	2.081	2.171	2.180	2.175	E8	6.37
6)	PCB1016#5	2.587	2.779	2.283	2.520	2.391	2.538	2.516	E8	6.76
7)	PCB1260#6	6.600	7.450	6.573	7.139	7.195	7.107	7.011	E8	4.99
8)	PCB1260#7	6.485	7.469	6.523	6.978	7.452	6.983	6.982	E8	6.13
9)	PCB1260#8	5.126	5.942	5.192	5.569	6.040	5.767	5.606	E8	6.82
10)	PCB1260#9	5.387	6.271	5.538	6.033	6.614	6.400	6.040	E8	8.08
11)	PCB1260#10	0.964	1.172	1.052	1.160	1.292	1.144	1.131	E9	9.90
12)	DECACHLOROBIP...	6.166	7.557	5.751	7.704	9.261	8.106	7.424	E9	17.37

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:19
Operator : RC
Sample : AA29452-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:29:35 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.641	2.269	57257225	48251327	0.0052	0.0044	
2)	PCB1016#1	2.909	2.596	13391263	12073066	0.0794	0.1164	#
3)	PCB1016#2	3.187	2.881	25251556	23941075	0.0774	0.1191	#
4)	PCB1016#3	3.572	3.492	22411237	10798116	0.0512	0.0101	#
5)	PCB1016#4	3.686	3.529	13917298	11200361	0.0477	0.1161	#
6)	PCB1016#5	3.741	3.567	9847164	12934067	0.0569	0.1296	#
7)	PCB1260#6	4.992	4.734	28043507	32999947	0.0665	0.0627	
8)	PCB1260#7	5.188	4.883	37519951	32426339	0.0602	0.0518	
9)	PCB1260#8	5.468	5.204	23569792	25628311	0.0625	0.0525	
10)	PCB1260#9	5.642	5.408	21788739	26933645	0.0566	0.0493	
11)	PCB1260#10	5.845	5.572	42035532	48212480	0.0500	0.0394	
12)	DECACHLOR...	6.752	6.548	27353567	30828891	0.0057	0.0028	#

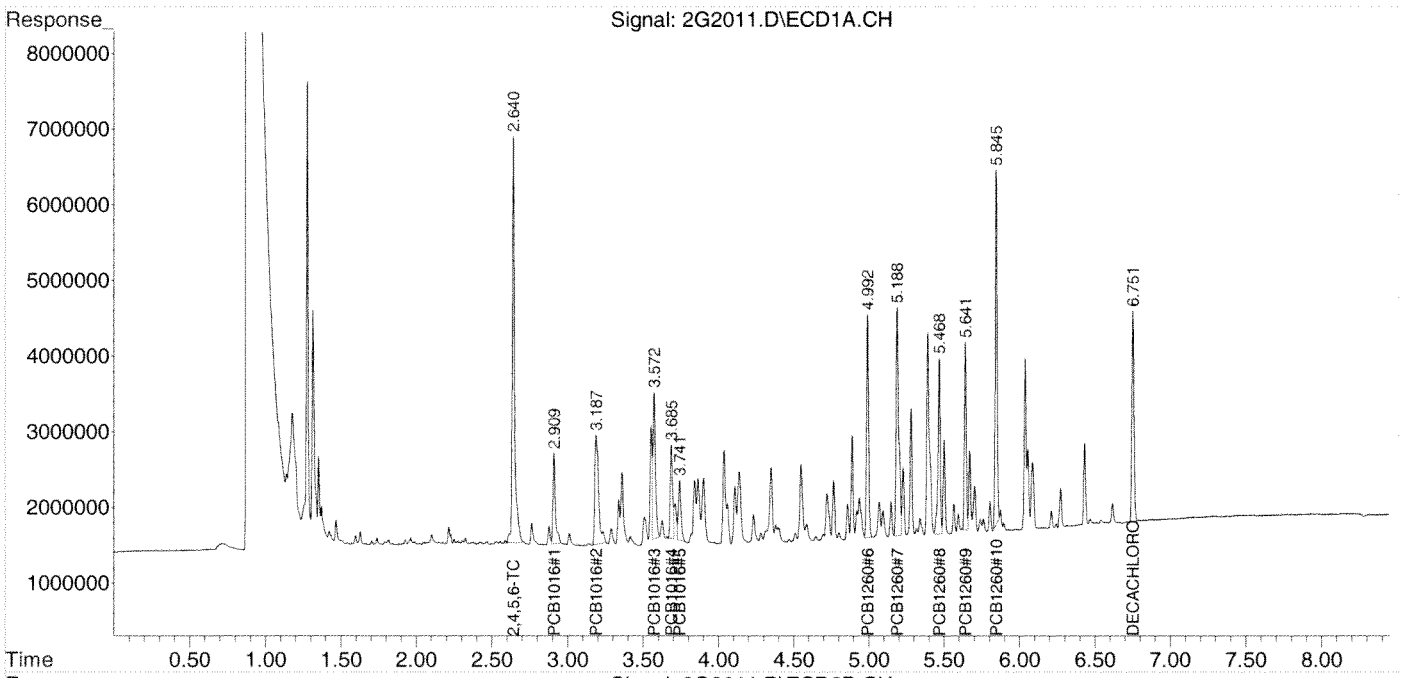
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

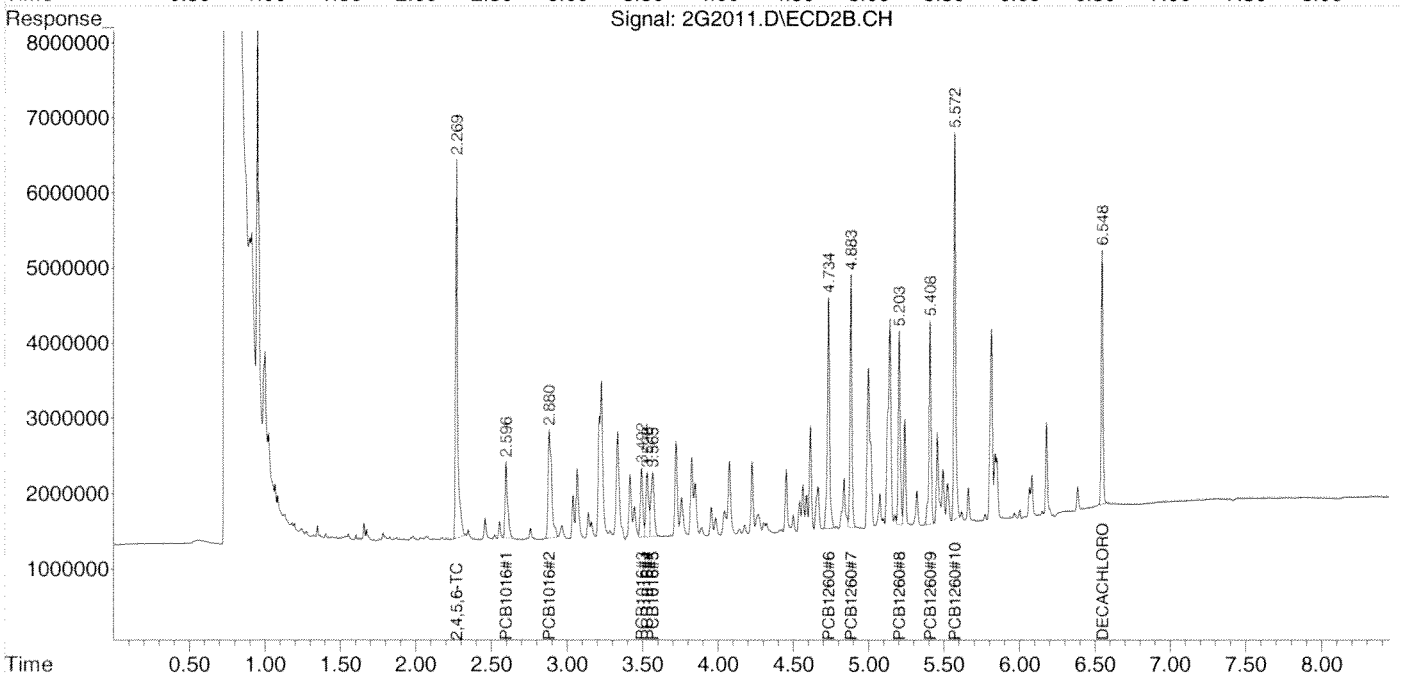
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:19
Operator : RC
Sample : AA29452-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:29:35 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:32
Operator : RC
Sample : AA29452-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:47:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.641	2.269	141.1E6	118.9E6	0.0127	0.0108	
2)	PCB1016#1	2.910	2.597	31049459	27612000	0.1841	0.2031	
3)	PCB1016#2	3.187	2.882	49157696	45561305	0.1507	0.1747	
4)	PCB1016#3	3.573	3.493	56829375	22897174	0.1300	0.0781	#
5)	PCB1016#4	3.687	3.529	36341542	23926808	0.1245	0.1865	#
6)	PCB1016#5	3.741	3.567	24321849	27790850	0.1407	0.2220	#
7)	PCB1260#6	4.993	4.735	63440146	74497615	0.1503	0.1416	
8)	PCB1260#7	5.188	4.884	86755159	74688866	0.1393	0.1193	
9)	PCB1260#8	5.468	5.204	54405320	59416969	0.1443	0.1218	
10)	PCB1260#9	5.642	5.409	51356537	62708291	0.1334	0.1148	
11)	PCB1260#10	5.845	5.572	107.2E6	117.2E6	0.1276	0.0958	
12)	DECACHLOR...	6.752	6.550	66613373	75571196	0.0111	0.0076	#

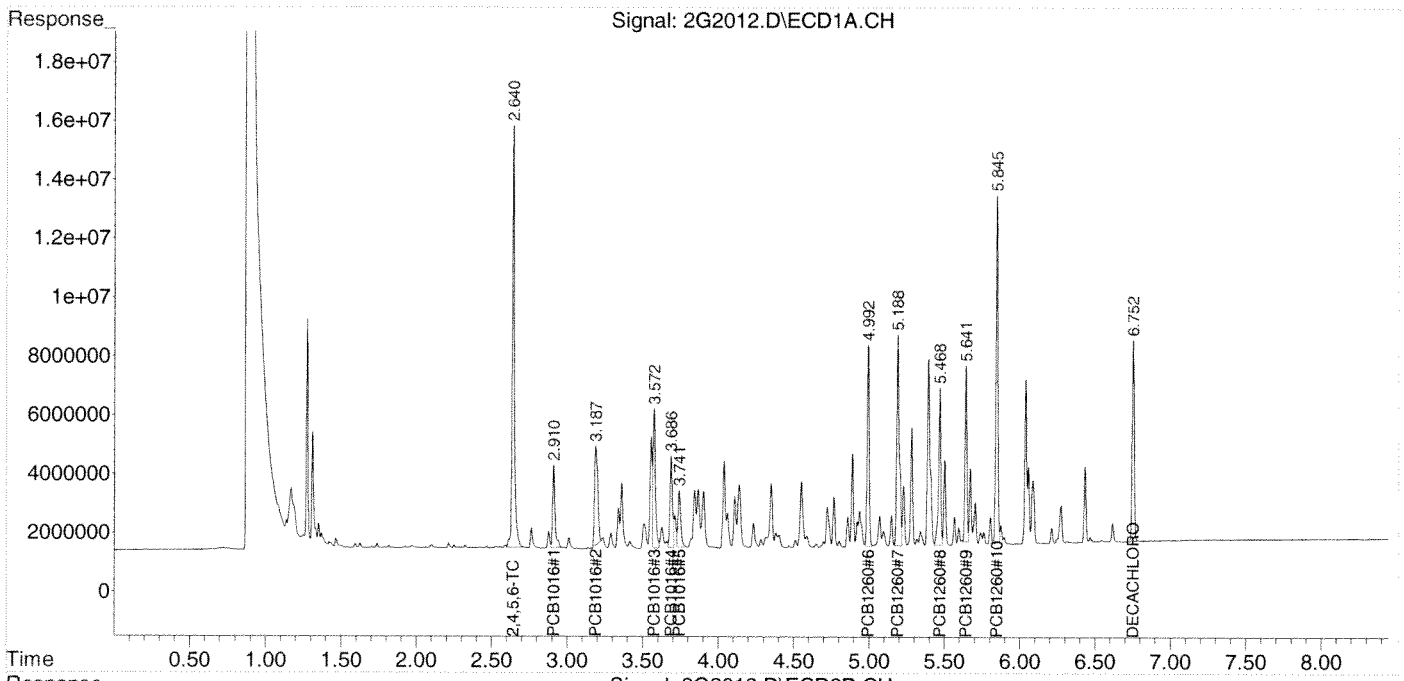
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

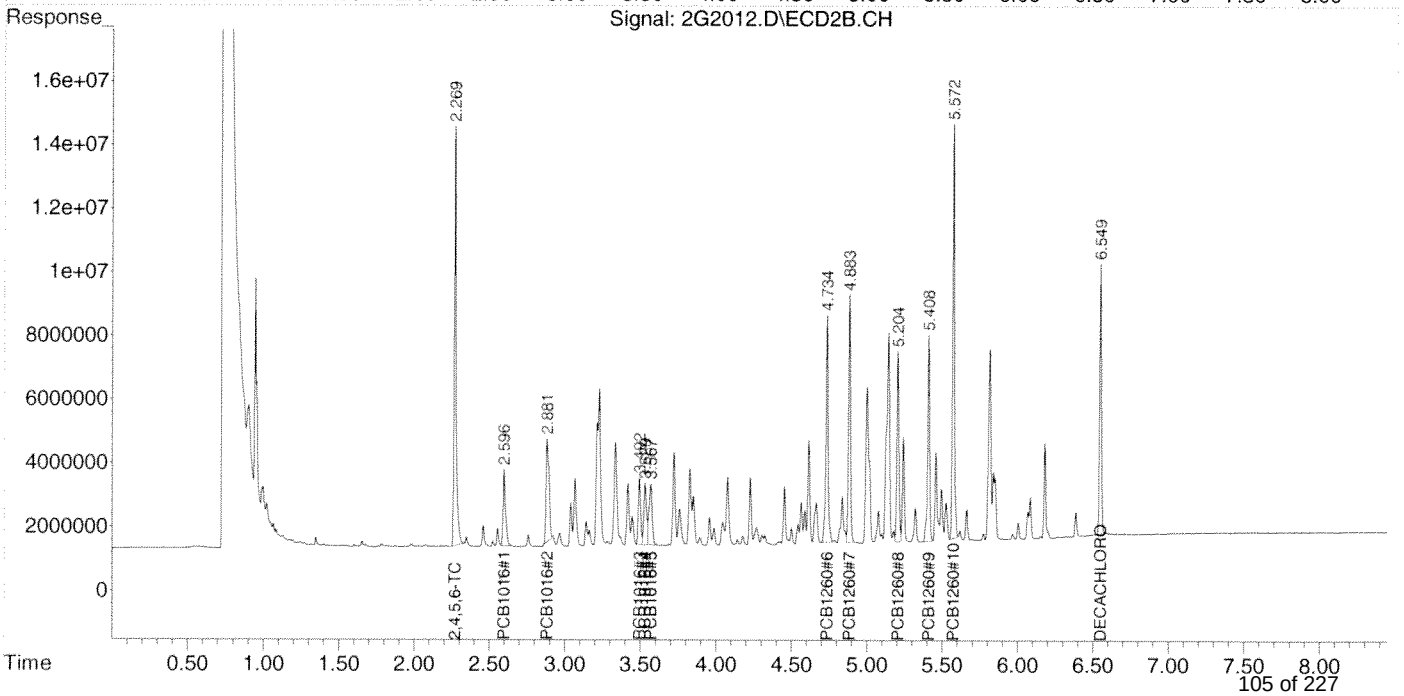
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:32
Operator : RC
Sample : AA29452-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:47:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:44
Operator : RC
Sample : AA29452-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:52:59 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.641	2.270	698.8E6	585.4E6	0.0631	0.0530	
2)	PCB1016#1	2.910	2.597	134.6E6	116.1E6	0.7980	0.6965	
3)	PCB1016#2	3.187	2.882	231.3E6	218.5E6	0.7092	0.6197	
4)	PCB1016#3	3.572	3.493	264.4E6	93767956	0.6046	0.4760	
5)	PCB1016#4	3.687	3.529	161.2E6	99320734	0.5521	0.6035	
6)	PCB1016#5	3.742	3.567	106.7E6	114.2E6	0.6172	0.7592	
7)	PCB1260#6	4.991	4.734	283.4E6	328.6E6	0.6714	0.6248	
8)	PCB1260#7	5.187	4.883	379.0E6	326.1E6	0.6084	0.5209	
9)	PCB1260#8	5.466	5.203	237.4E6	259.6E6	0.6299	0.5321	
10)	PCB1260#9	5.640	5.407	237.4E6	276.9E6	0.6168	0.5069	
11)	PCB1260#10	5.843	5.571	494.7E6	525.8E6	0.5889	0.4297	#
12)	DECACHLOR...	6.750	6.547	255.9E6	287.5E6	0.0369	0.0304	

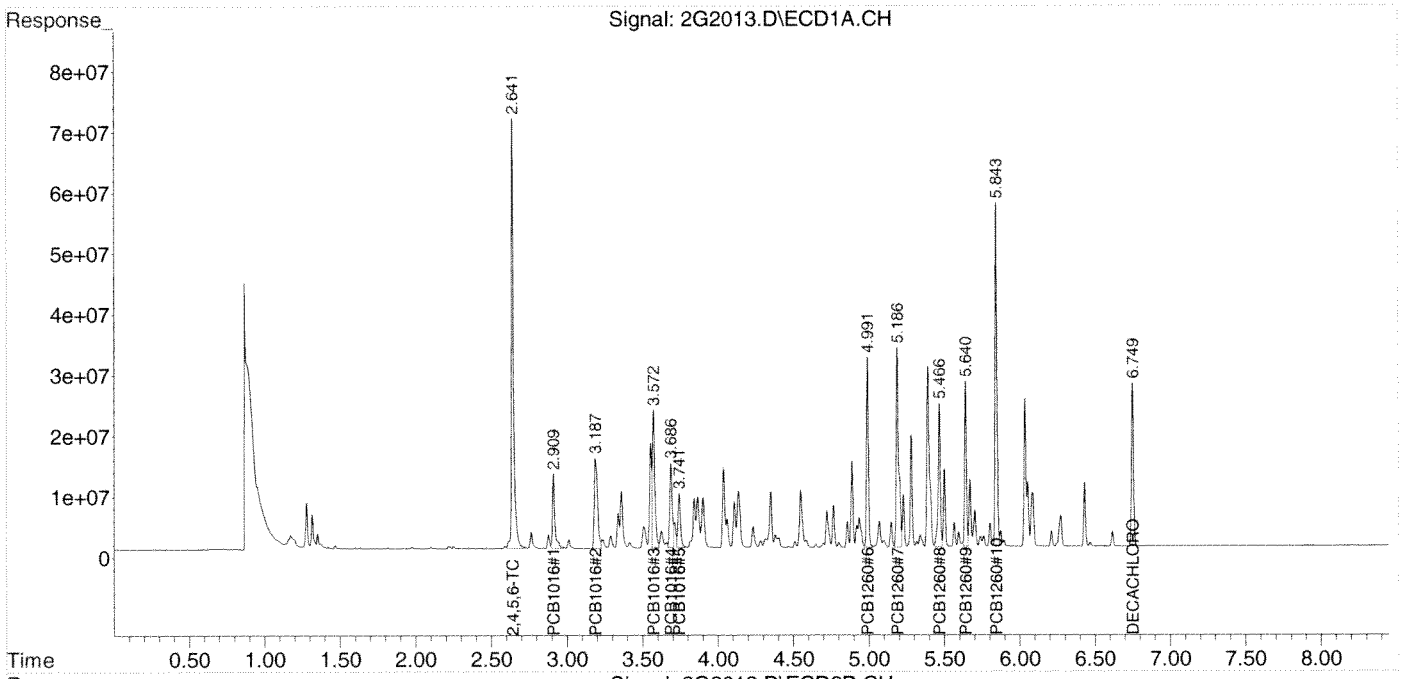
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

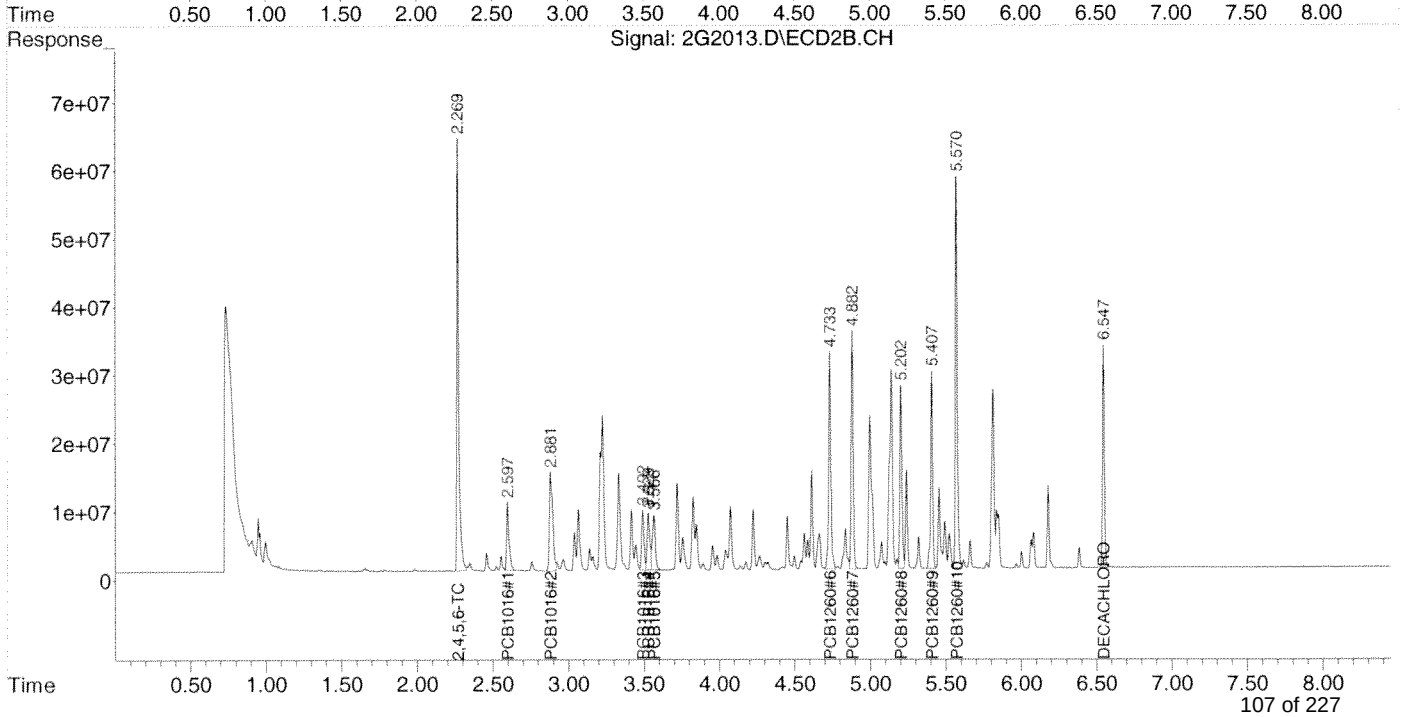
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:44
Operator : RC
Sample : AA29452-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 12:52:59 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:56
Operator : RC
Sample : AA29452-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:09:13 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.642	2.271	1536.6E6	1272.6E6	0.1387	0.1152	
2)	PCB1016#1	2.910	2.598	295.1E6	249.3E6	1.7496	1.4396	
3)	PCB1016#2	3.188	2.882	499.4E6	496.7E6	1.5310	1.3356	
4)	PCB1016#3	3.572	3.493	593.7E6	198.8E6	1.3577	1.0659	
5)	PCB1016#4	3.687	3.529	357.4E6	208.1E6	1.2242	1.2052	
6)	PCB1016#5	3.741	3.567	243.7E6	252.0E6	1.4092	1.6166	
7)	PCB1260#6	4.992	4.734	621.9E6	713.9E6	1.4736	1.3572	
8)	PCB1260#7	5.187	4.883	837.4E6	697.8E6	1.3443	1.1145	
9)	PCB1260#8	5.467	5.203	506.7E6	556.9E6	1.3443	1.1415	
10)	PCB1260#9	5.641	5.408	517.5E6	603.3E6	1.3443	1.1044	
11)	PCB1260#10	5.844	5.572	1118.0E6	1160.0E6	1.3309	0.9480	#
12)	DECACHLOR...	6.750	6.548	695.9E6	770.4E6	0.0971	0.0823	

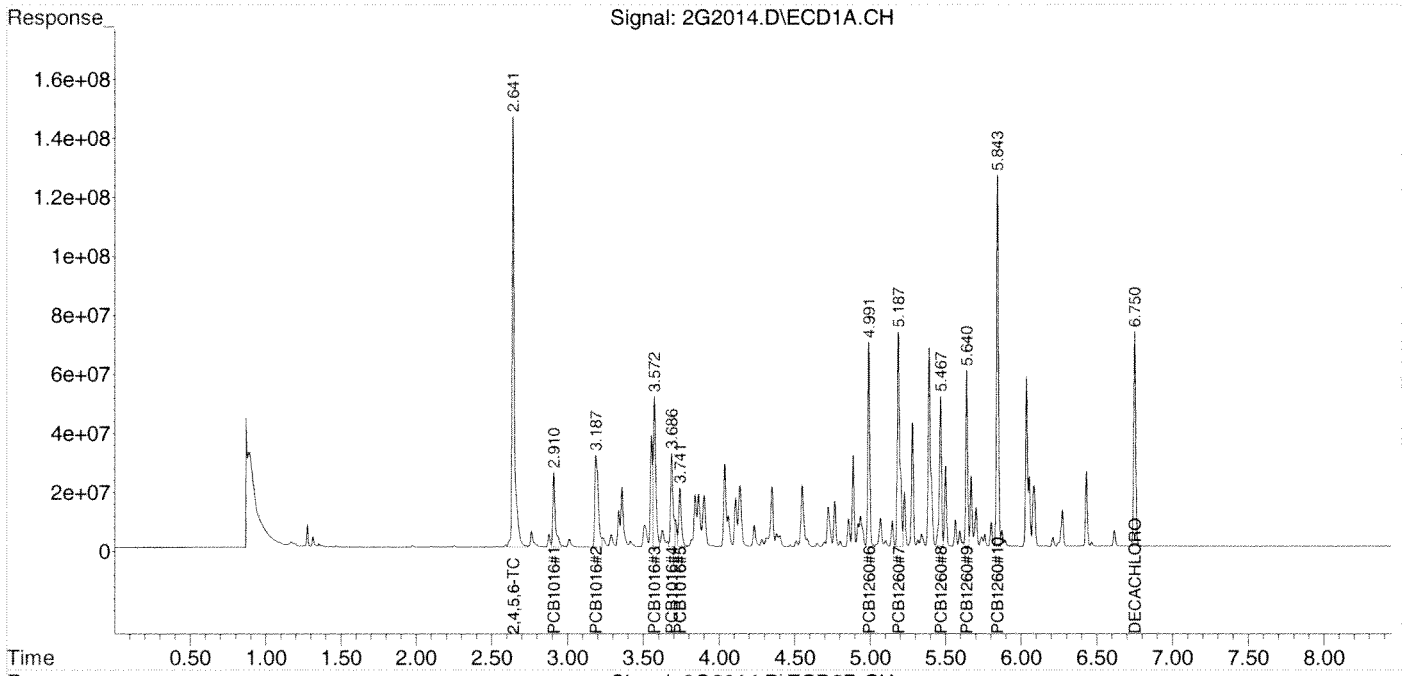
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

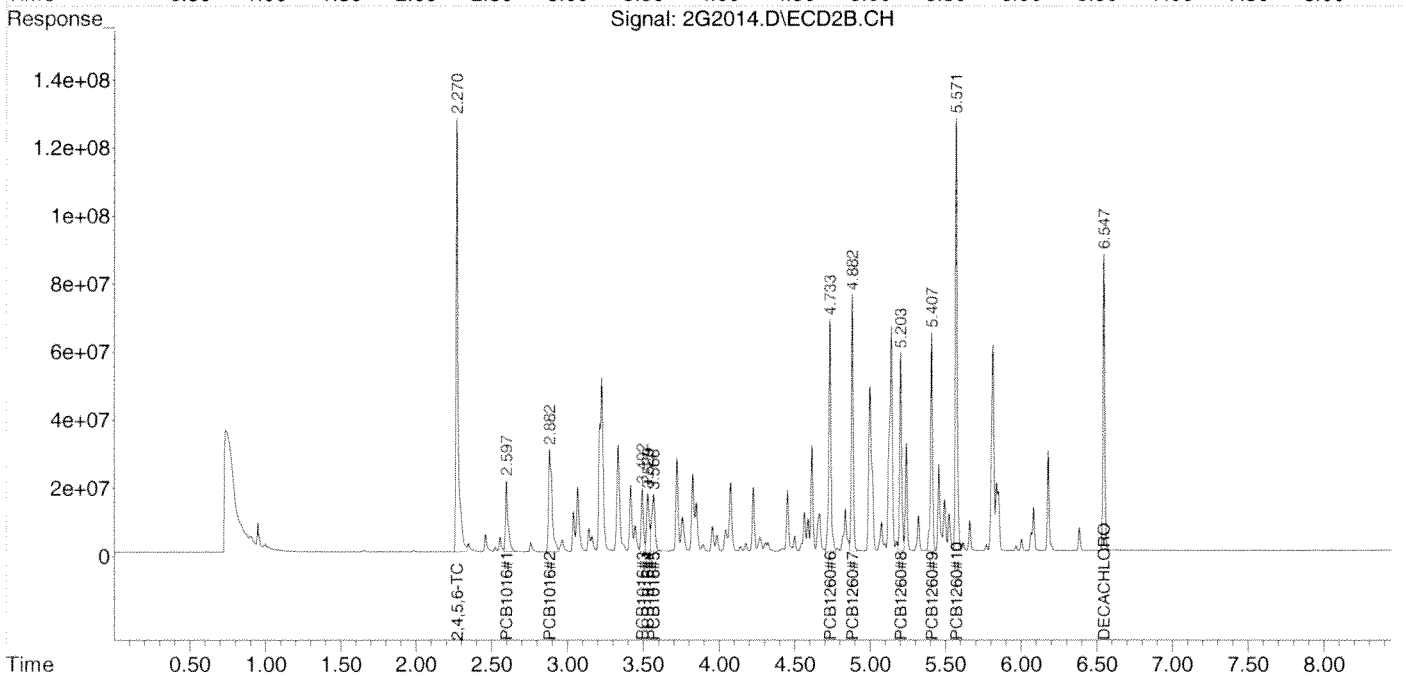
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 12:56
Operator : RC
Sample : AA29452-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:09:13 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:08
Operator : RC
Sample : AA29452-CAL5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:25:47 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.642	2.271	3228.3E6	2578.4E6	0.2914	0.2334	
2)	PCB1016#1	2.911	2.598	533.2E6	502.2E6	3.1611	2.8503	
3)	PCB1016#2	3.188	2.882	1042.0E6	959.8E6	3.1944	2.5273	
4)	PCB1016#3	3.573	3.493	1273.3E6	414.2E6	2.9117	2.2753	
5)	PCB1016#4	3.687	3.529	754.4E6	434.2E6	2.5841	2.4556	
6)	PCB1016#5	3.742	3.566	531.7E6	478.3E6	3.0747	3.0243	
7)	PCB1260#6	4.991	4.733	1323.4E6	1439.0E6	3.1359	2.7357	
8)	PCB1260#7	5.186	4.882	1848.1E6	1490.5E6	2.9667	2.3805	
9)	PCB1260#8	5.466	5.202	1117.6E6	1208.0E6	2.9649	2.4759	
10)	PCB1260#9	5.640	5.407	1163.8E6	1322.8E6	3.0233	2.4217	
11)	PCB1260#10	5.843	5.571	2565.0E6	2583.5E6	3.0534	2.1113	#
12)	DECACHLOR...	6.749	6.548	1723.3E6	1852.2E6	0.2375	0.1987	

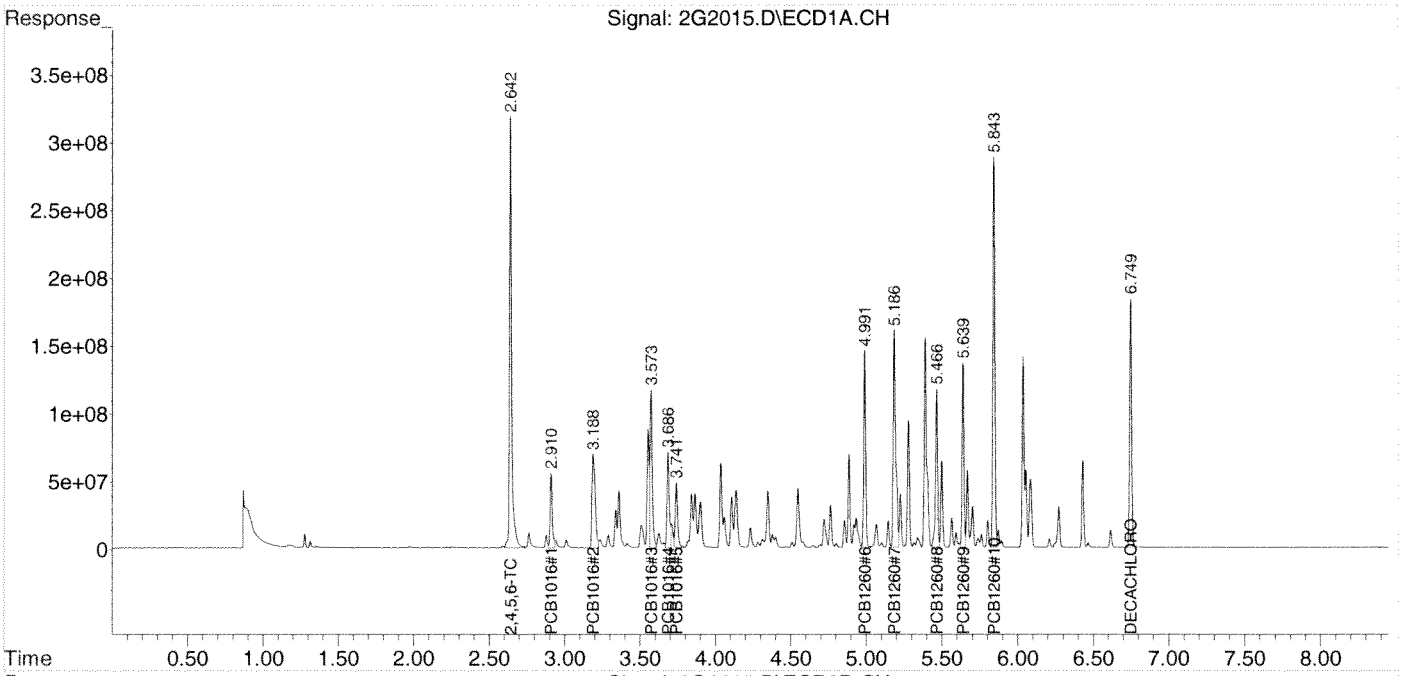
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

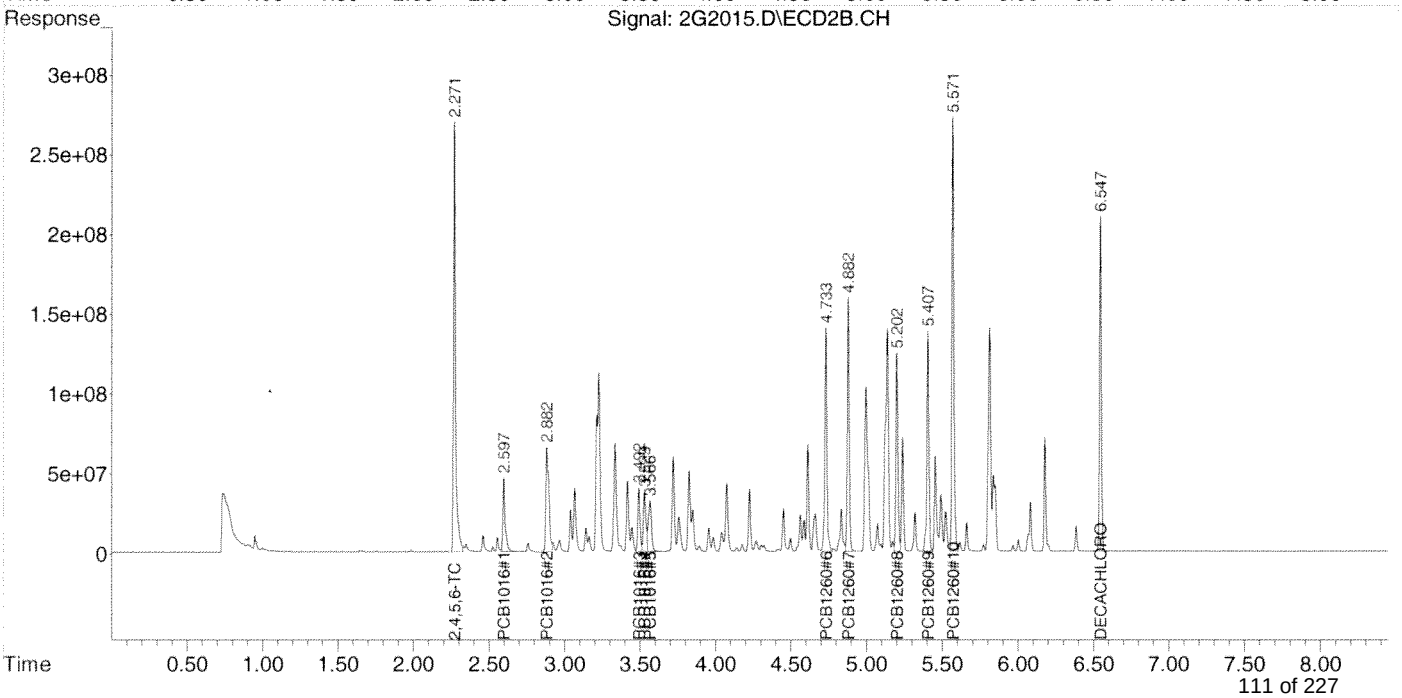
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:08
Operator : RC
Sample : AA29452-CAL5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:25:47 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:20
Operator : RC
Sample : AA29452-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:29:13 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.643	2.271	6546.1E6	5082.8E6	0.5909	0.4600	
2)	PCB1016#1	2.911	2.598	1233.1E6	1045.5E6	7.3108	5.8804	
3)	PCB1016#2	3.188	2.883	2162.0E6	1970.3E6	6.6277	5.1277	
4)	PCB1016#3	3.573	3.493	2609.3E6	839.3E6	5.9669	4.6626	
5)	PCB1016#4	3.687	3.530	1574.5E6	872.0E6	5.3937	4.8772	
6)	PCB1016#5	3.742	3.567	1097.2E6	1015.2E6	6.3449	6.3643	
7)	PCB1260#6	4.990	4.733	2658.4E6	2842.7E6	6.2992	5.4043	
8)	PCB1260#7	5.186	4.882	3669.7E6	2793.0E6	5.8909	4.4610	
9)	PCB1260#8	5.466	5.202	2209.3E6	2307.0E6	5.8610	4.7286	
10)	PCB1260#9	5.639	5.407	2281.0E6	2559.9E6	5.9255	4.6863	
11)	PCB1260#10	5.843	5.571	4856.0E6	4576.6E6	5.7807	3.7401	#
12)	DECACHLOR...	6.750	6.548	3125.7E6	3242.5E6	0.4292	0.3484	

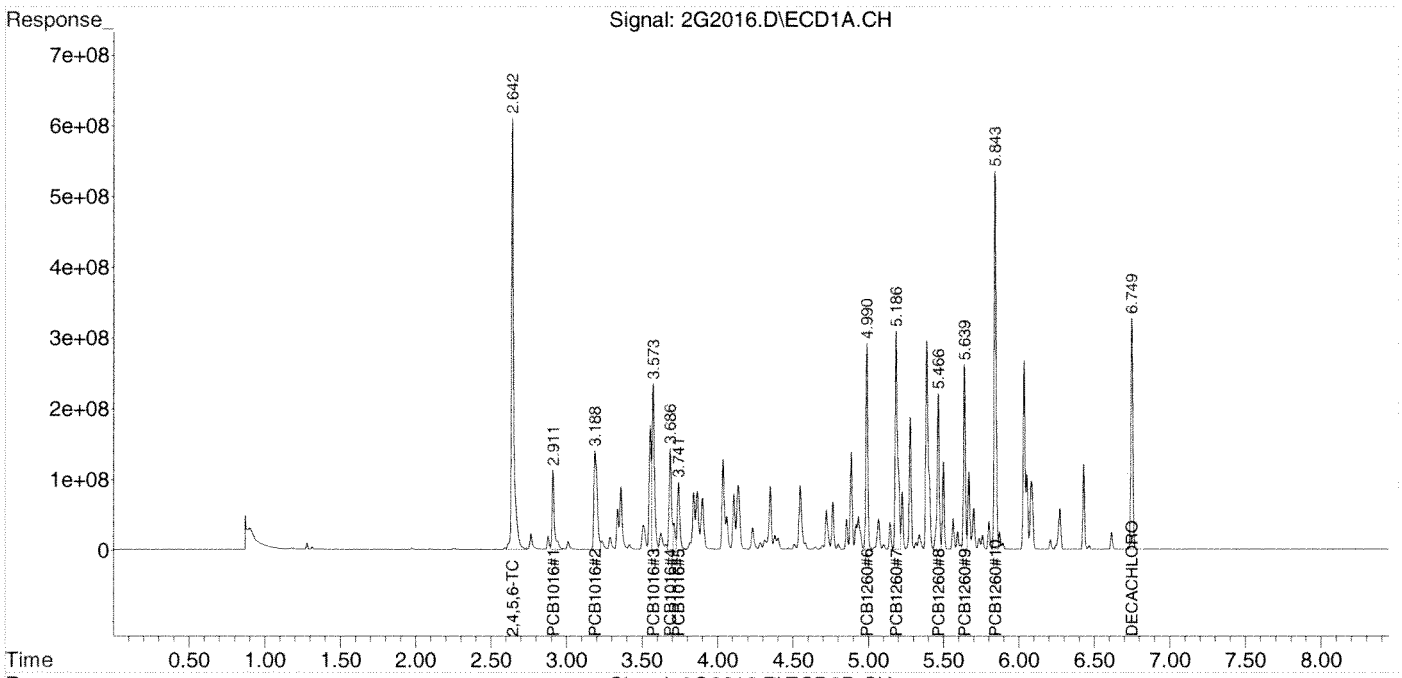
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

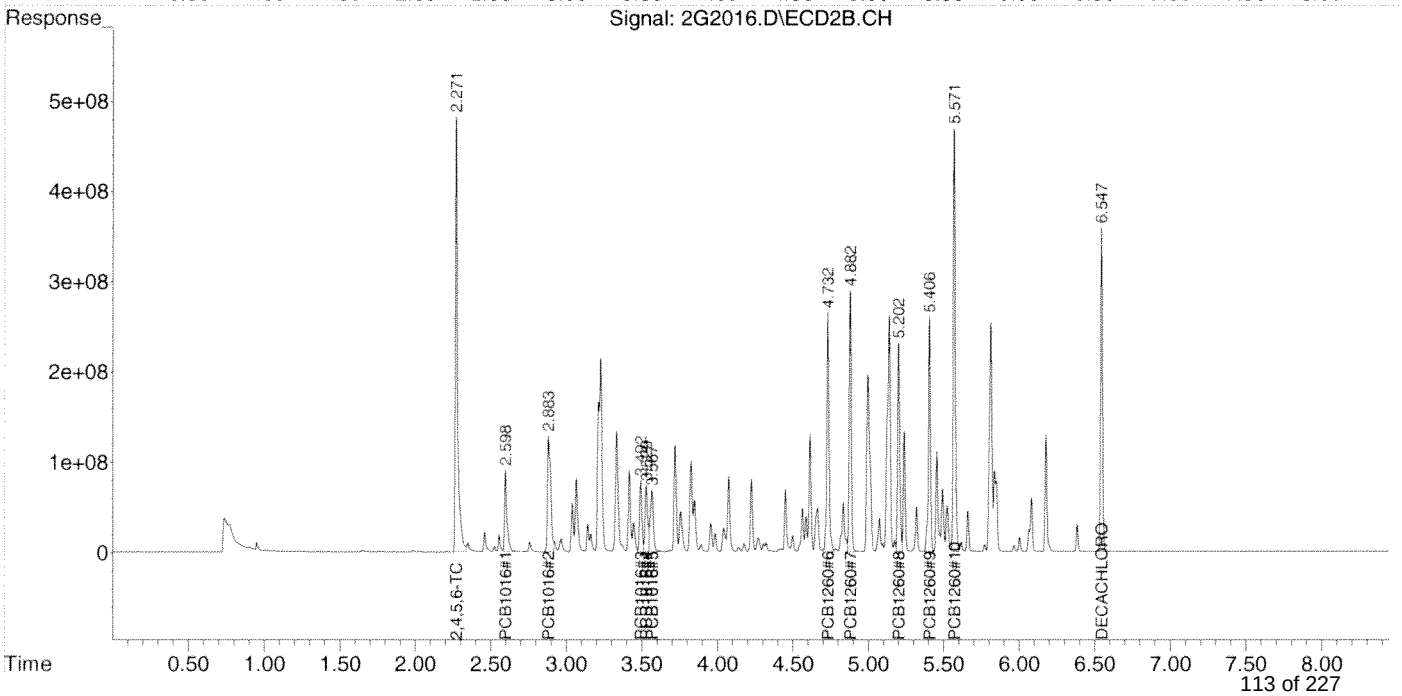
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:20
Operator : RC
Sample : AA29452-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:29:13 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 12:04:19 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:32
Operator : RC
Sample : AA29452-SCV1
Misc : AA29428-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:41:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.643	2.271	2781.1E6	2237.1E6	0.1909	0.1875
2)	PCB1016#1	2.911	2.598	480.3E6	451.1E6	1.6779	1.7907
3)	PCB1016#2	3.188	2.883	914.0E6	851.9E6	1.8158	1.7995
4)	PCB1016#3	3.573	3.493	1043.4E6	353.0E6	1.8263	1.6967
5)	PCB1016#4	3.687	3.530	635.0E6	368.4E6	1.8209	1.6934
6)	PCB1016#5	3.742	3.568	434.5E6	436.8E6	1.8135	1.7358
7)	PCB1260#6	4.991	4.733	1102.1E6	1236.8E6	1.7823	1.7642
8)	PCB1260#7	5.187	4.883	1492.6E6	1212.7E6	1.7717	1.7371
9)	PCB1260#8	5.467	5.203	913.4E6	995.5E6	1.7632	1.7758
10)	PCB1260#9	5.640	5.407	944.0E6	1090.9E6	1.8308	1.8060
11)	PCB1260#10	5.844	5.572	2014.1E6	2038.8E6	1.8546	1.8033
12)	DECACHLOR...	6.751	6.548	1212.8E6	1334.5E6	0.1791	0.1798

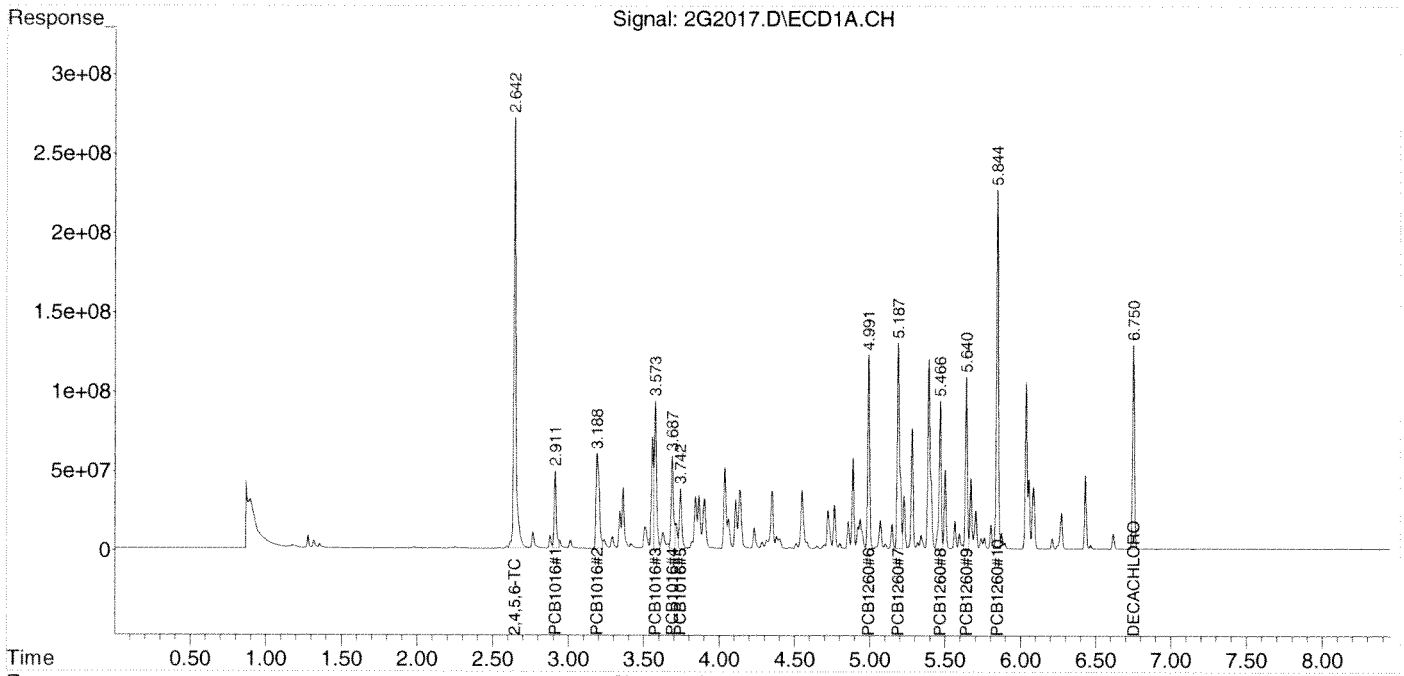
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

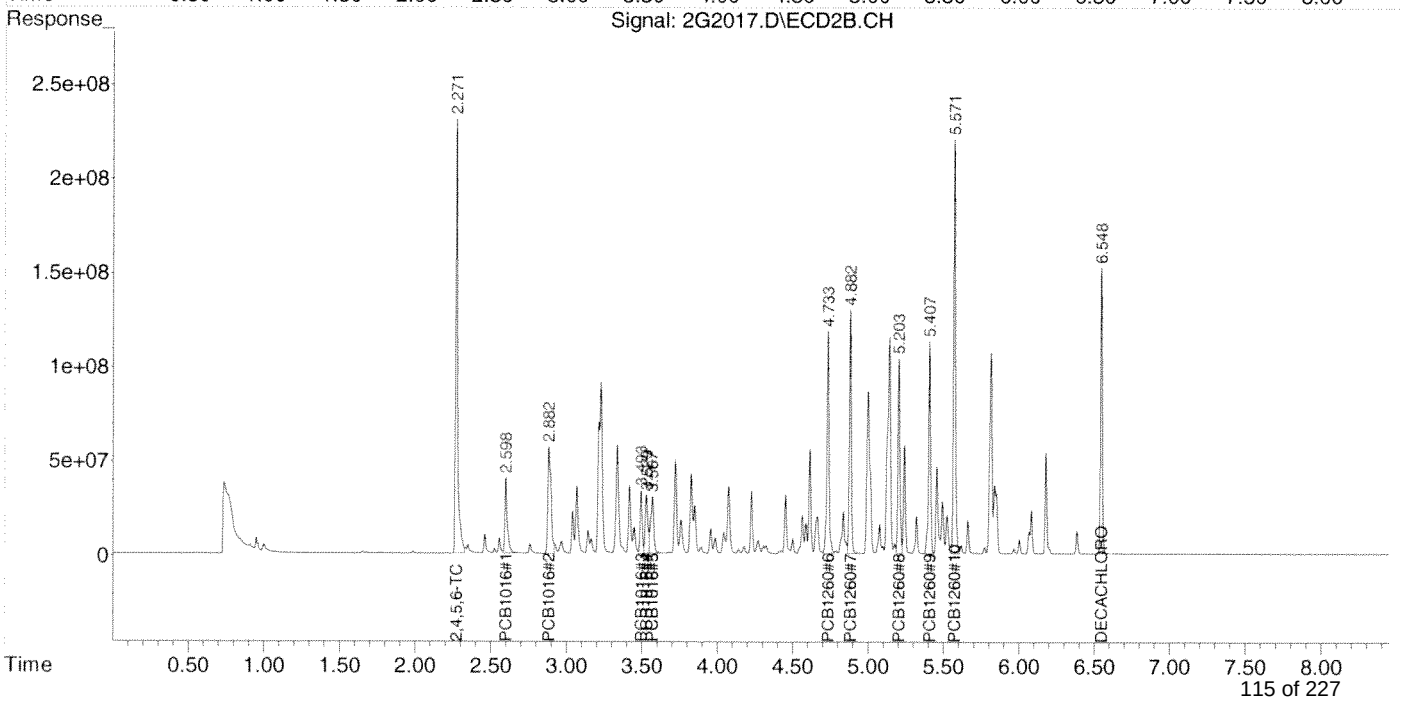
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2G214\
Data File : 2G2017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 02 Jul 2014 13:32
Operator : RC
Sample : AA29452-SCV1
Misc : AA29428-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jul 02 13:41:27 2014
Quant Method : Z:\2\METHODS\PCB2G214.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Wed Jul 02 13:31:18 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA27516 1221

Instrument: OSVGCECD2

Calibration ID: 1402050

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA27516-CAL1	QC		1		A4A0434		
AA27516-CAL2	QC		2		A4A0433		
AA27516-CAL3	QC		3		A4A0432		
AA27516-CAL4	QC		4		A4A0431		
AA27516-CAL5	QC		5		A4A0430		
AA27516-CAL6	QC		6		A4A0429		
AA27516-SCV1	QC		7		A4A0428		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1221BH14.M
Title : PCB; INST OSVGCECD2
Last Update : Fri Feb 14 10:06:22 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2BH009.D CAL2 =2BH010.D CAL3 =2BH011.D
CAL4 =2BH012.D CAL5 =2BH013.D CAL6 =2BH014.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	13.473	13.358	15.517	15.729	15.912	15.307	14.883	E9	7.76
2)	PCB1221#1	1.126	1.062	1.006	0.919	0.821	0.801	0.956	E8	13.74
3)	PCB1221#2	1.452	1.429	1.484	1.482	1.427	1.471	1.457	E8	1.76
4)	PCB1221#3	9.450	8.712	8.802	8.402	7.705	7.205	8.379	E7	9.65
5)	PCB1221#4	3.500	3.581	3.258	3.225	2.970	2.873	3.234	E8	8.65
6)	PCB1221#5	6.866	5.558	5.309	5.029	4.494	4.364	5.270	E7	17.21
7)	DECACHLOROBIP...	14.454	7.658	8.026	9.124	8.901	9.450	9.602	E9	25.74

Signal #2 Calibration Files
CAL1 =2BH009.D CAL2 =2BH010.D CAL3 =2BH011.D
CAL4 =2BH012.D CAL5 =2BH013.D CAL6 =2BH014.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	8.910	9.050	10.068	10.435	9.905	9.266	9.606	E9	6.41
2)	PCB1221#1	8.617	7.289	6.373	6.147	5.431	5.505	6.560	E7	18.49
3)	PCB1221#2	1.005	0.972	0.923	0.936	0.881	0.886	0.934	E8	5.20
4)	PCB1221#3	6.602	6.426	6.073	5.973	5.475	5.370	5.987	E7	8.26
5)	PCB1221#4	2.430	2.333	2.232	2.231	2.076	2.065	2.228	E8	6.40
6)	PCB1221#5	4.211	3.555	3.195	3.109	2.744	2.712	3.254	E7	17.29
7)	DECACHLOROBIP...	11.508	5.960	6.020	6.761	6.479	6.642	7.228	E9	29.35

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:08
Operator : RC
Sample : AA27516-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:37 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.424	2.492	67364104	44551919	0.0077	0.0080
2)	PCB1221#1	2.050	2.174	5632486	4308602	0.0988	0.1118
3)	PCB1221#2	2.541	2.697	7260023	5026801	0.0981	0.1028
4)	PCB1221#3	2.650	2.801	4724828	3301220	0.1104	0.1045
5)	PCB1221#4	2.681	2.847	17498754	12148153	0.0948	0.1015
6)	PCB1221#5	3.046	3.199	3433000	2105288	0.1366	0.1346
7)	DECACHLOR...	6.518	6.855	72267707	57540622	0.0132	0.0140

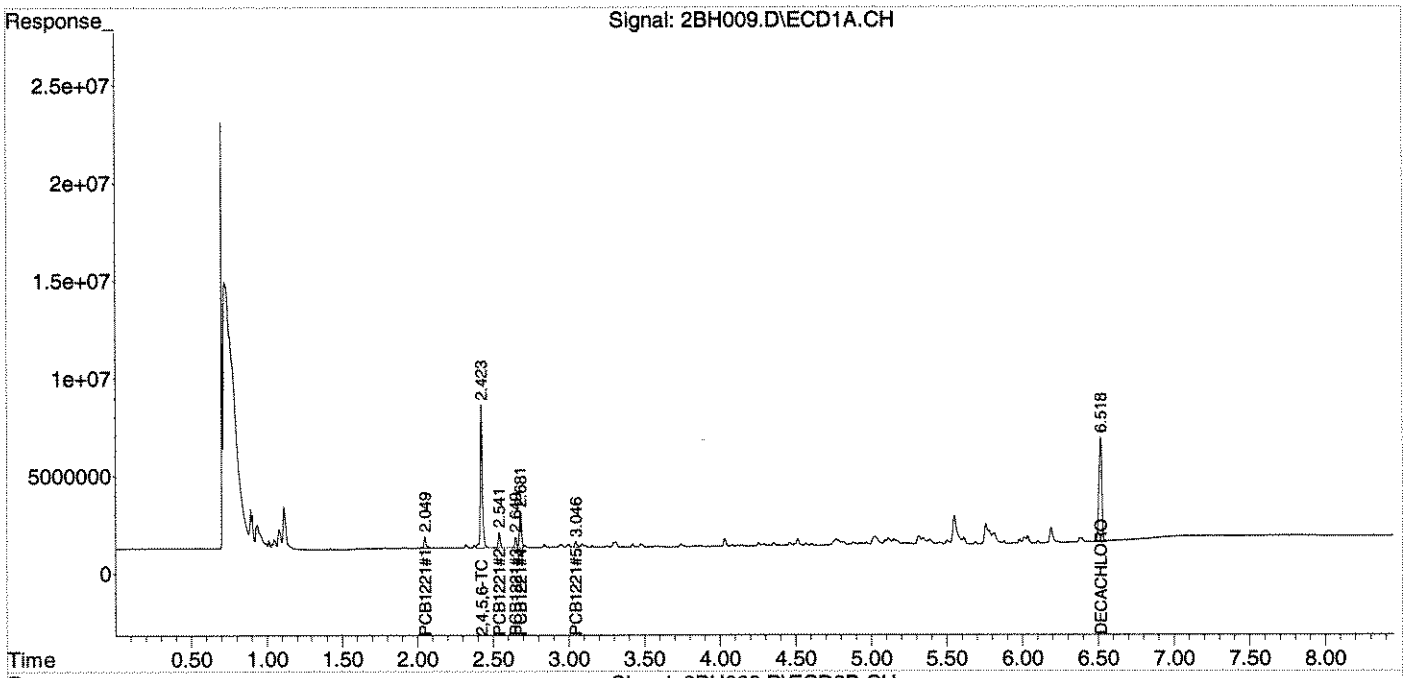
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

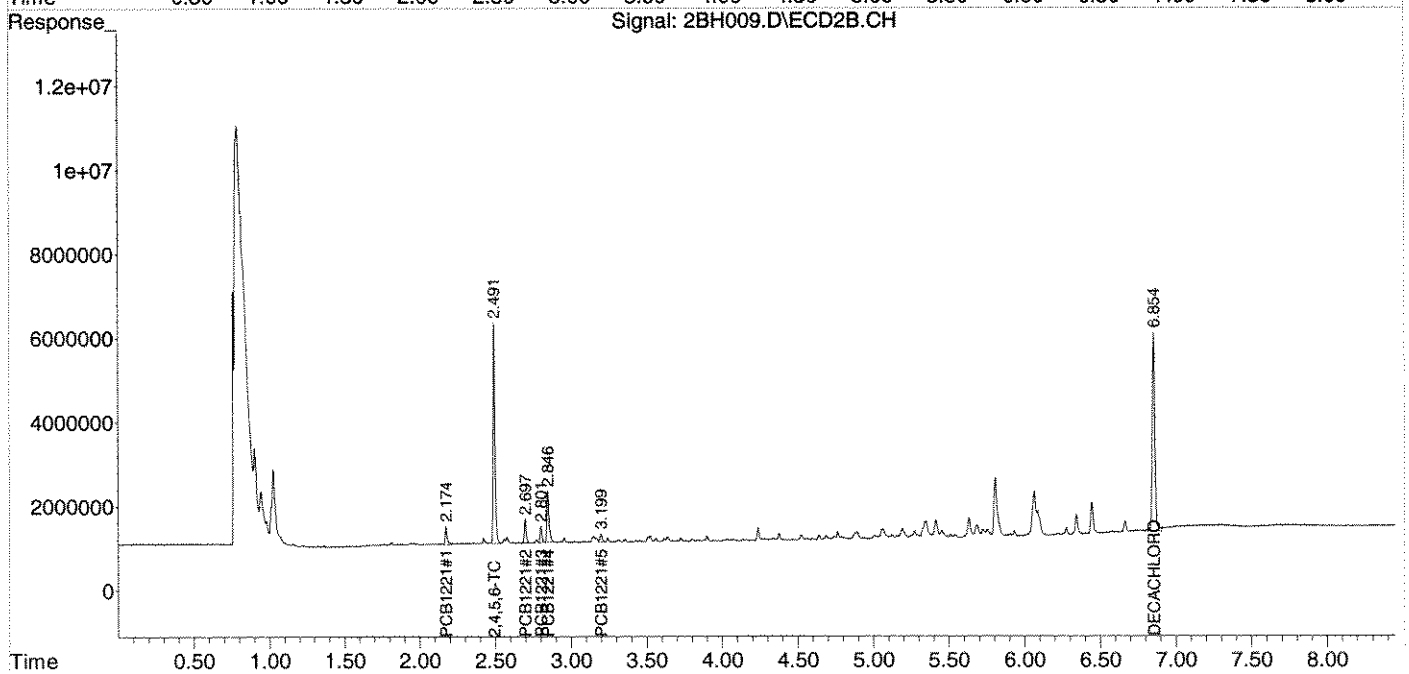
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:08
Operator : RC
Sample : AA27516-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:37 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:20
Operator : RC
Sample : AA27516-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:40 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.416	2.490	133.6E6	90501065	0.0154	0.0162
2)	PCB1221#1	2.043	2.172	10615125	7288724	0.1862	0.1891
3)	PCB1221#2	2.534	2.695	14288413	9719179	0.1930	0.1988
4)	PCB1221#3	2.642	2.799	8712248	6426139	0.2036	0.2034
5)	PCB1221#4	2.673	2.845	35805625	23333779	0.1940	0.1949
6)	PCB1221#5	3.037	3.198	5557523	3554881	0.2212	0.2273
7)	DECACHLOR...	6.504	6.844	76580138	59602051	0.0140	0.0145

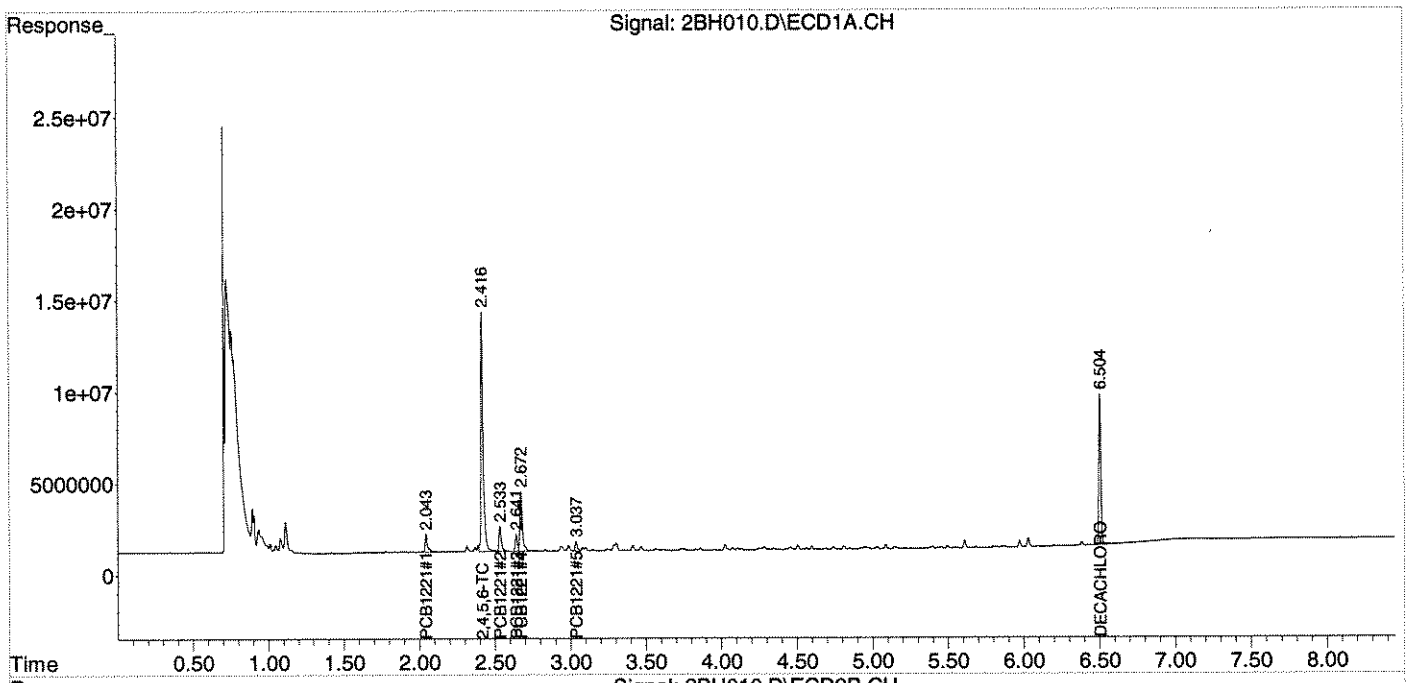
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

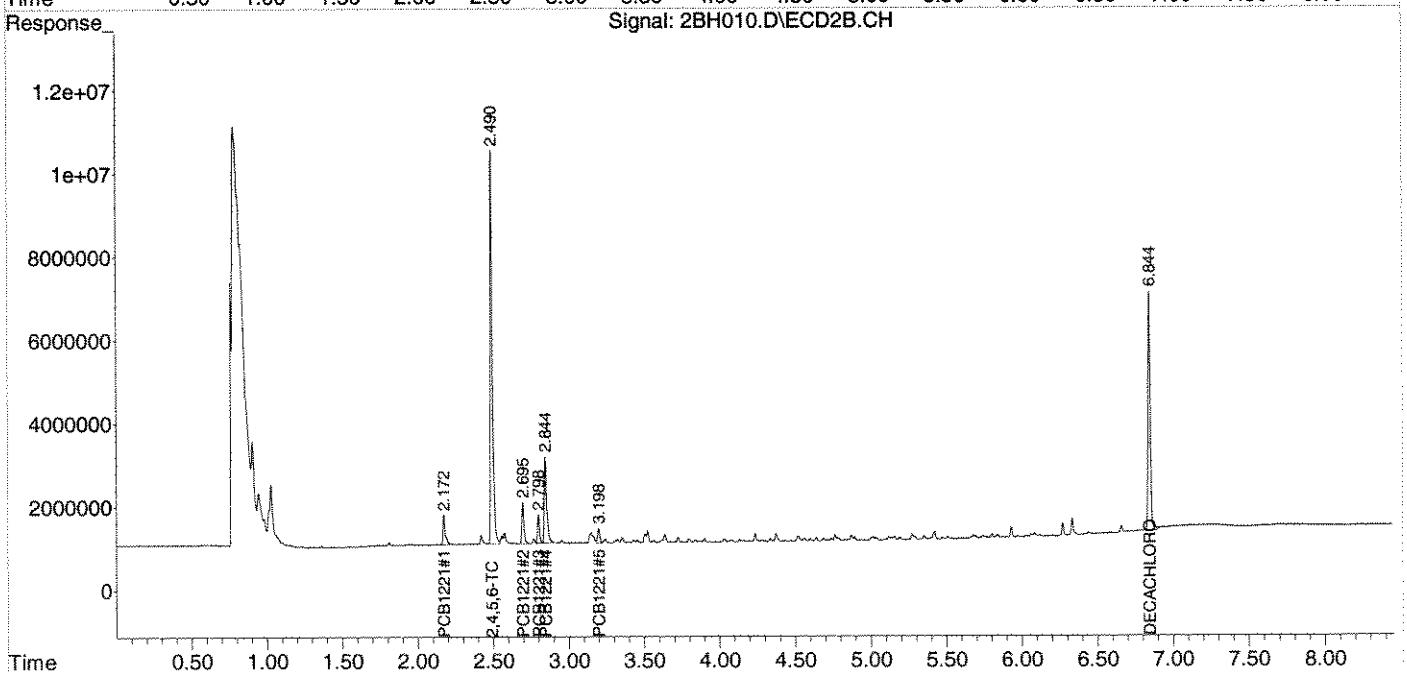
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:20
Operator : RC
Sample : AA27516-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:40 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:32
Operator : RC
Sample : AA27516-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:43 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.416	2.491	775.9E6	503.4E6	0.0892	0.0901
2)	PCB1221#1	2.043	2.173	50297657	31862956	0.8821	0.8267
3)	PCB1221#2	2.534	2.695	74191878	46133502	1.0021	0.9438
4)	PCB1221#3	2.642	2.799	44008360	30363254	1.0283	0.9610
5)	PCB1221#4	2.673	2.845	162.9E6	111.6E6	0.8827	0.9322
6)	PCB1221#5	3.037	3.198	26543907	15973442	1.0564	1.0211
7)	DECACHLOR...	6.503	6.843	401.3E6	301.0E6	0.0733	0.0732

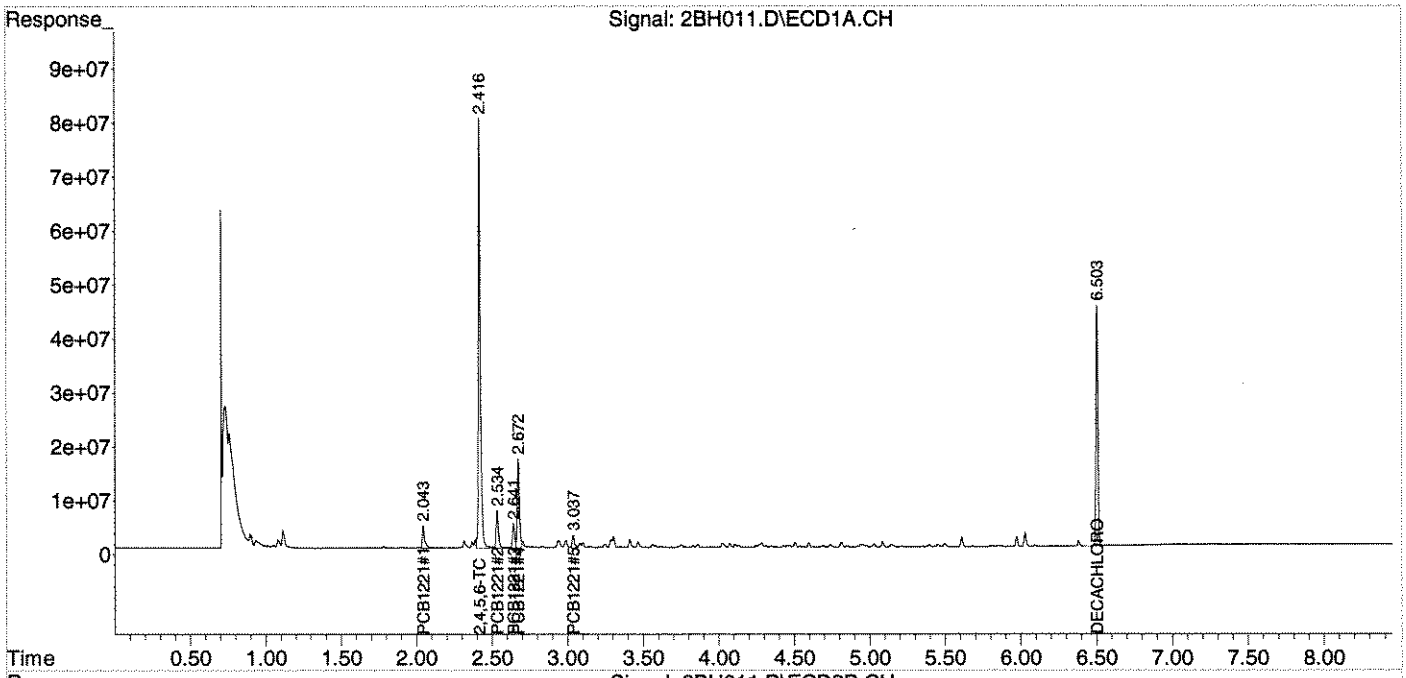
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

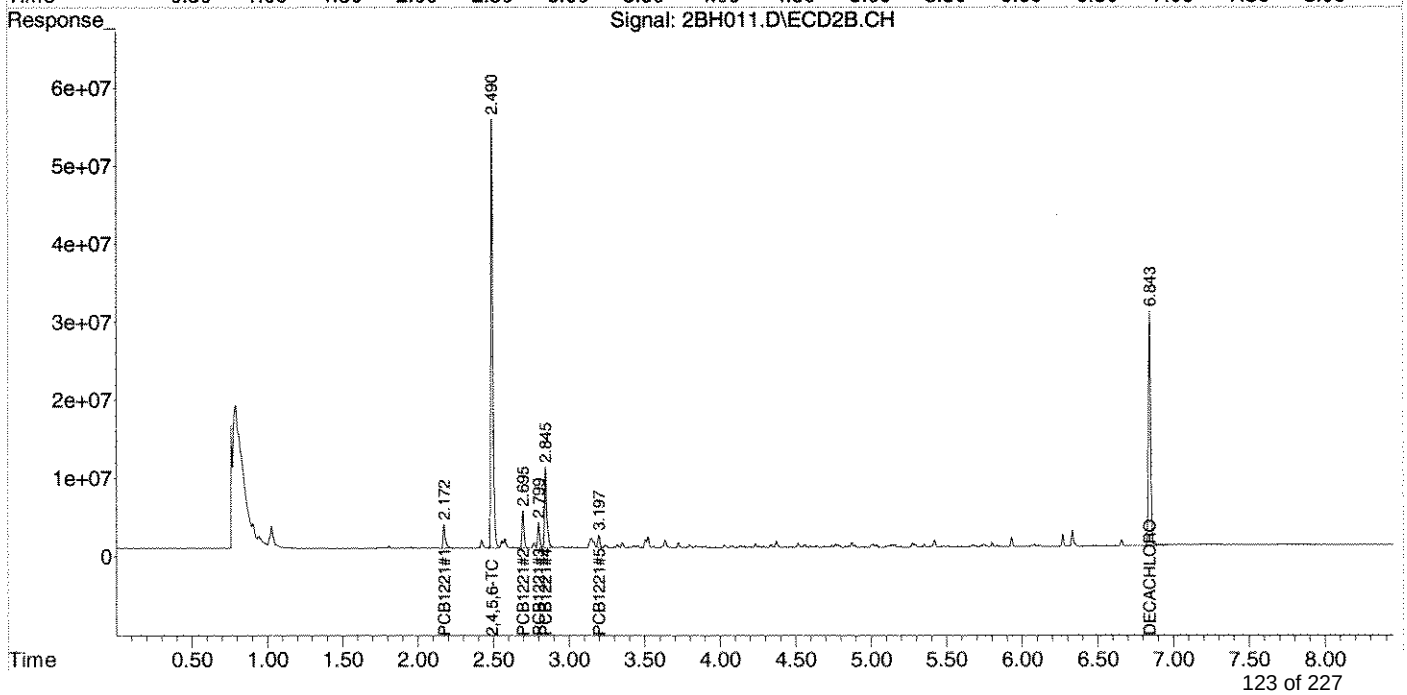
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:32
Operator : RC
Sample : AA27516-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:43 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:44
Operator : RC
Sample : AA27516-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:46 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.417	2.492	1572.9E6	1043.5E6	0.1809	0.1867
2)	PCB1221#1	2.044	2.173	91932942	61471119	1.6123	1.5949
3)	PCB1221#2	2.534	2.696	148.2E6	93562241	2.0021	1.9140
4)	PCB1221#3	2.642	2.800	84019242	59732827	1.9632	1.8905
5)	PCB1221#4	2.673	2.846	322.5E6	223.1E6	1.7472	1.8636
6)	PCB1221#5	3.037	3.198	50288192	31094864	2.0014	1.9878
7)	DECACHLOR...	6.502	6.844	912.4E6	676.1E6	0.1666	0.1645

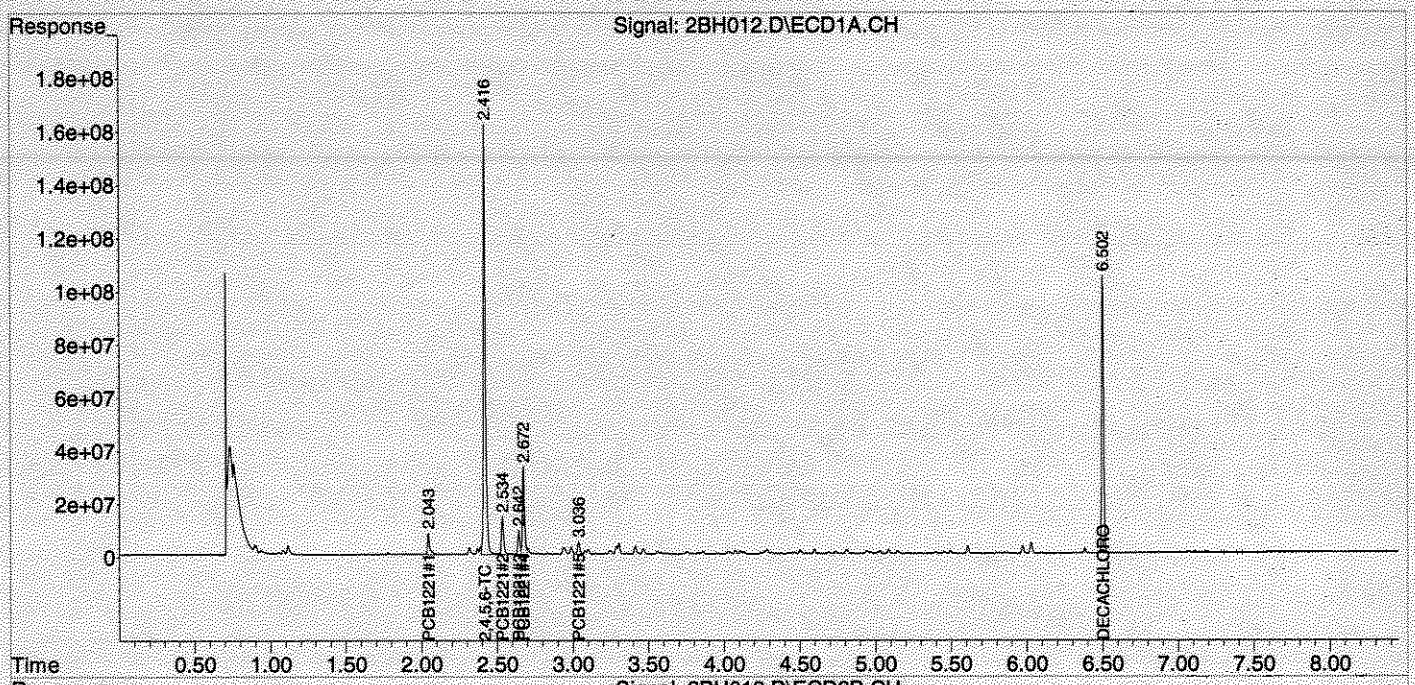
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

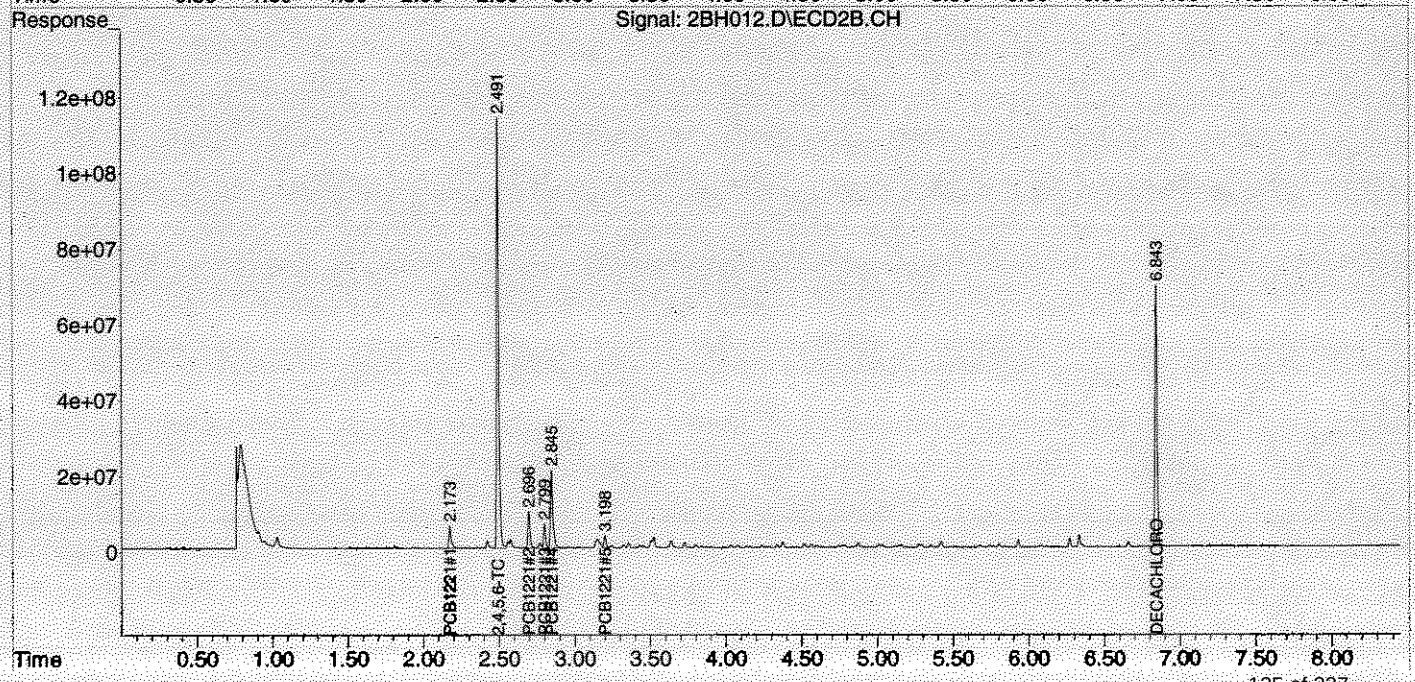
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:44
Operator : RC
Sample : AA27516-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:46 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:56
Operator : RC
Sample : AA27516-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:49 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.418	2.493	3182.5E6	1981.1E6	0.3659	0.3544
2)	PCB1221#1	2.044	2.174	164.2E6	108.6E6	2.8804	2.8180
3)	PCB1221#2	2.535	2.697	285.4E6	176.1E6	3.8544	3.6035
4)	PCB1221#3	2.643	2.801	154.1E6	109.5E6	3.6007	3.4653
5)	PCB1221#4	2.674	2.847	593.9E6	415.2E6	3.2180	3.4687
6)	PCB1221#5	3.038	3.200	89877669	54873978	3.5770	3.5080
7)	DECACHLOR...	6.503	6.844	1780.1E6	1295.8E6	0.3252	0.3152

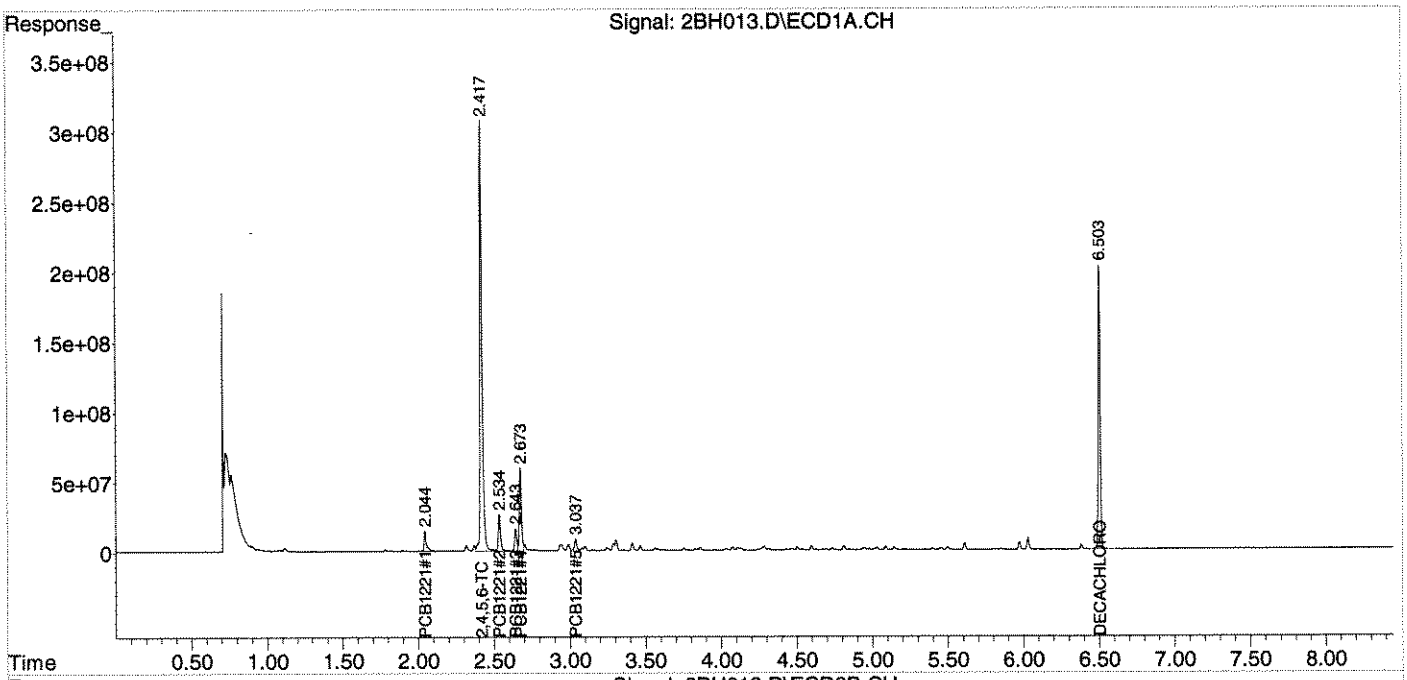
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

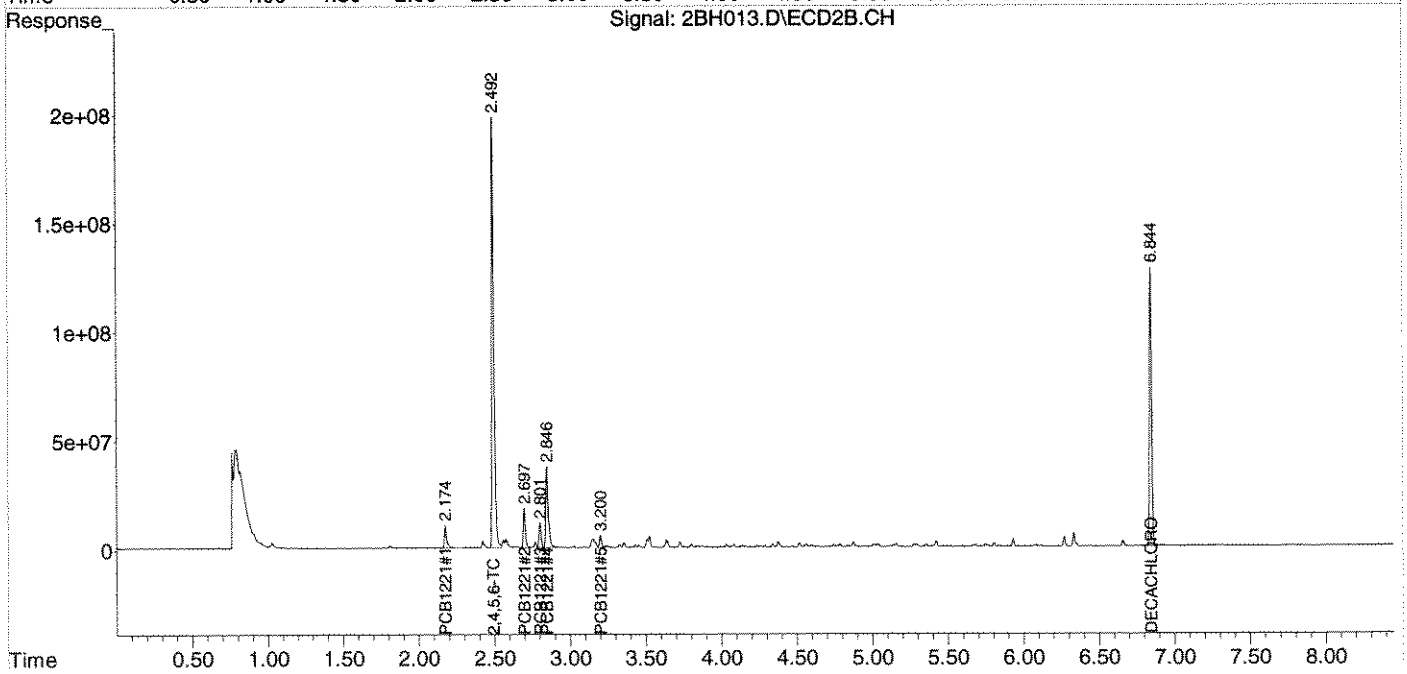
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 15:56
Operator : RC
Sample : AA27516-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:49 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 16:08
Operator : RC
Sample : AA27516-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:52 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.418	2.493	6122.7E6	3706.6E6	0.7040	0.6632
2)	PCB1221#1	2.045	2.175	320.4E6	220.2E6	5.6187	5.7126
3)	PCB1221#2	2.536	2.697	588.4E6	354.5E6	7.9475	7.2518
4)	PCB1221#3	2.643	2.801	288.2E6	214.8E6	6.7343	6.7990
5)	PCB1221#4	2.674	2.847	1149.4E6	825.8E6	6.2275	6.8993
6)	PCB1221#5	3.038	3.200	174.6E6	108.5E6	6.9472	6.9361
7)	DECACHLOR...	6.503	6.845	3779.9E6	2656.9E6	0.6904	0.6463

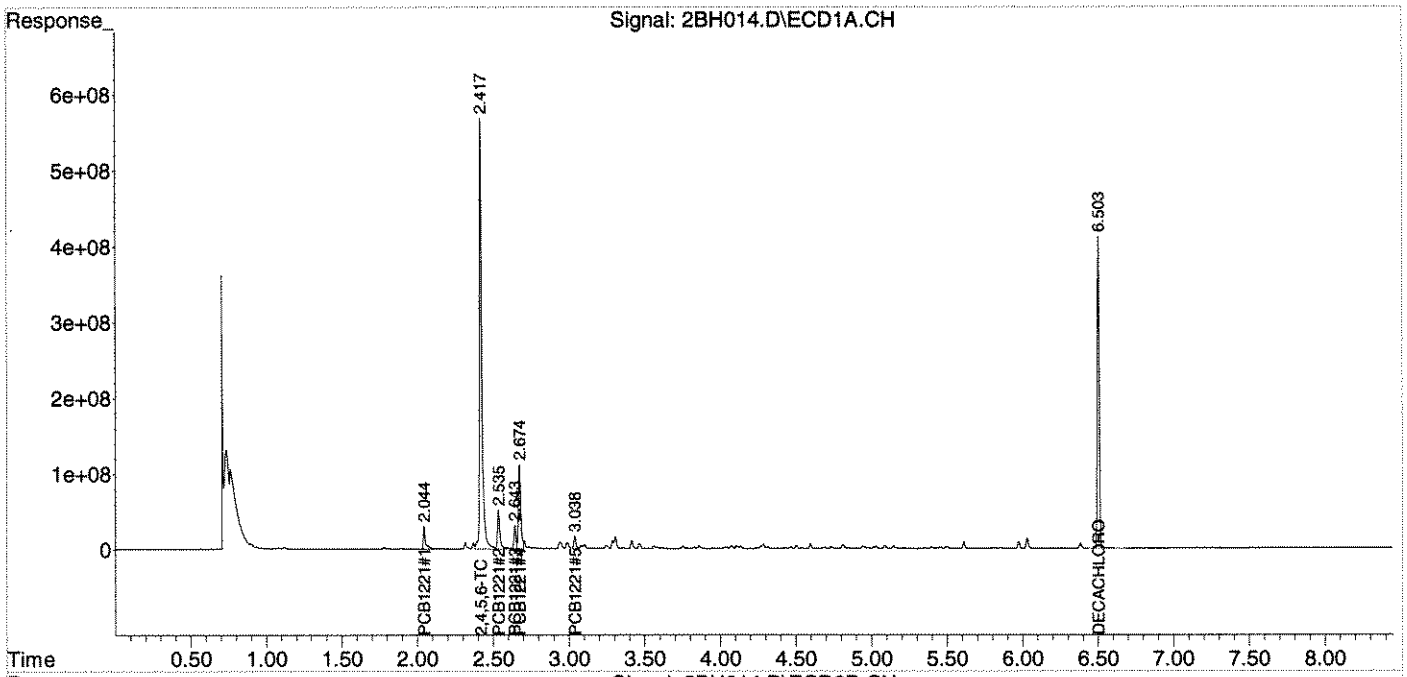
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

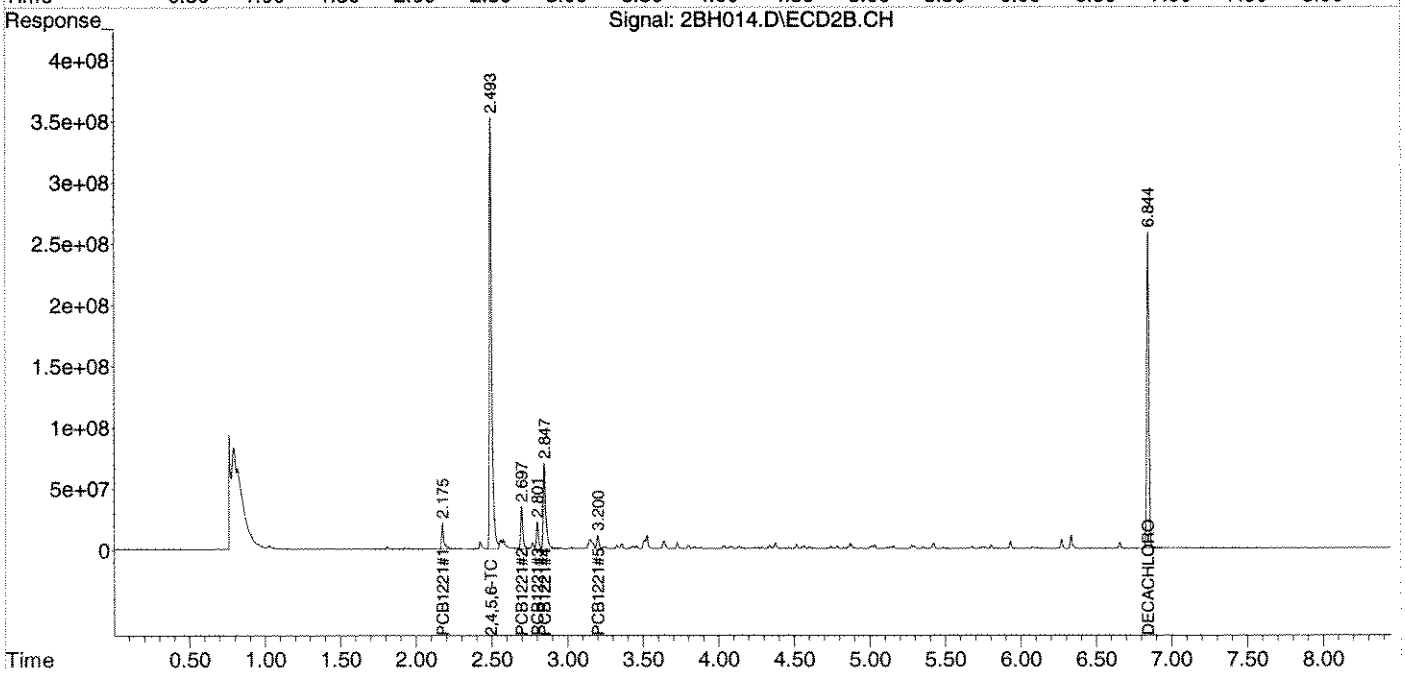
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 16:08
Operator : RC
Sample : AA27516-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:03:52 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Feb 13 09:13:55 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH111.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Feb 2014 11:28
Operator : RC
Sample : AA27516-SCV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 11:38:27 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:06:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.419	2.494	3484.0E6	2253.2E6	0.2341	0.2346
2)	PCB1221#1	2.045	2.176	208.1E6	138.0E6	2.1769	2.1035
3)	PCB1221#2	2.536	2.699	318.1E6	206.9E6	2.1828	2.2155
4)	PCB1221#3	2.644	2.803	188.1E6	130.3E6	2.2453	2.1759
5)	PCB1221#4	2.675	2.848	759.9E6	506.1E6	2.3494	2.2721
6)	PCB1221#5	3.039	3.201	90879429	57552279	1.7245	1.7685
7)	DECACHLOR...	6.504	6.845	1934.7E6	1394.3E6	0.2015	0.1929

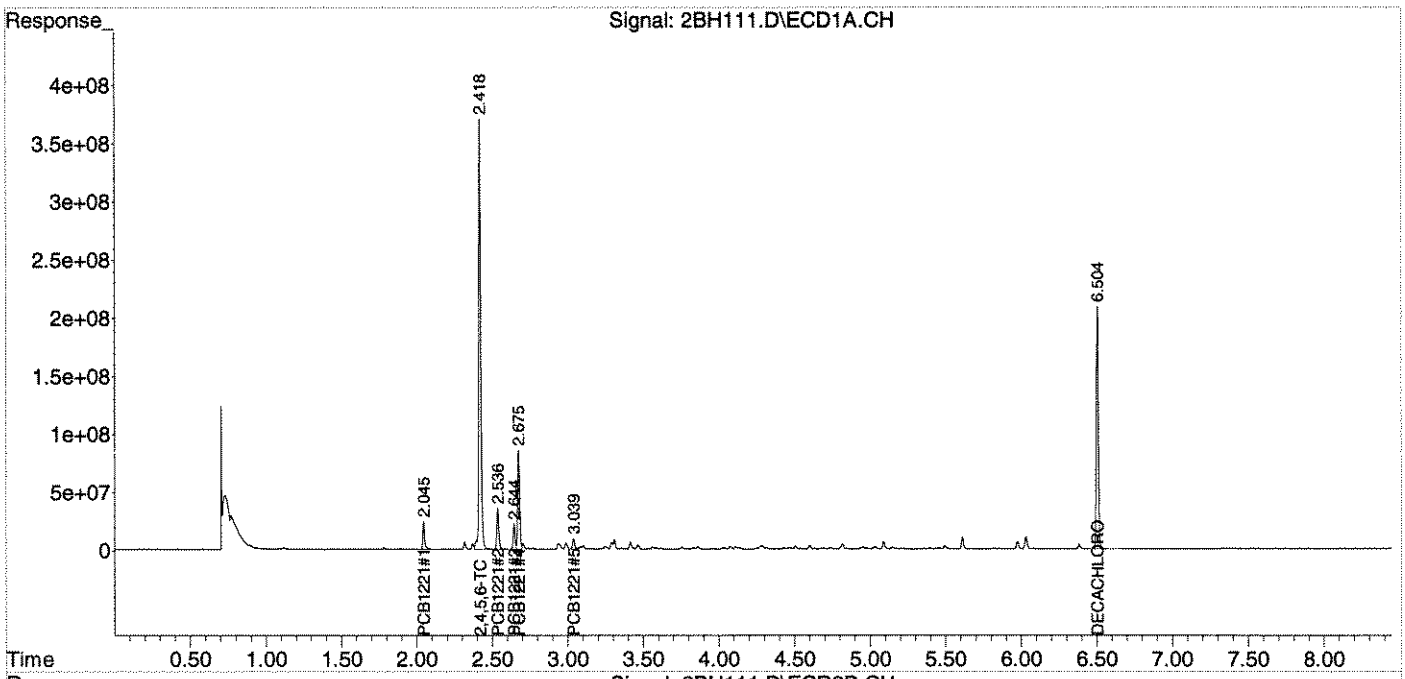
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

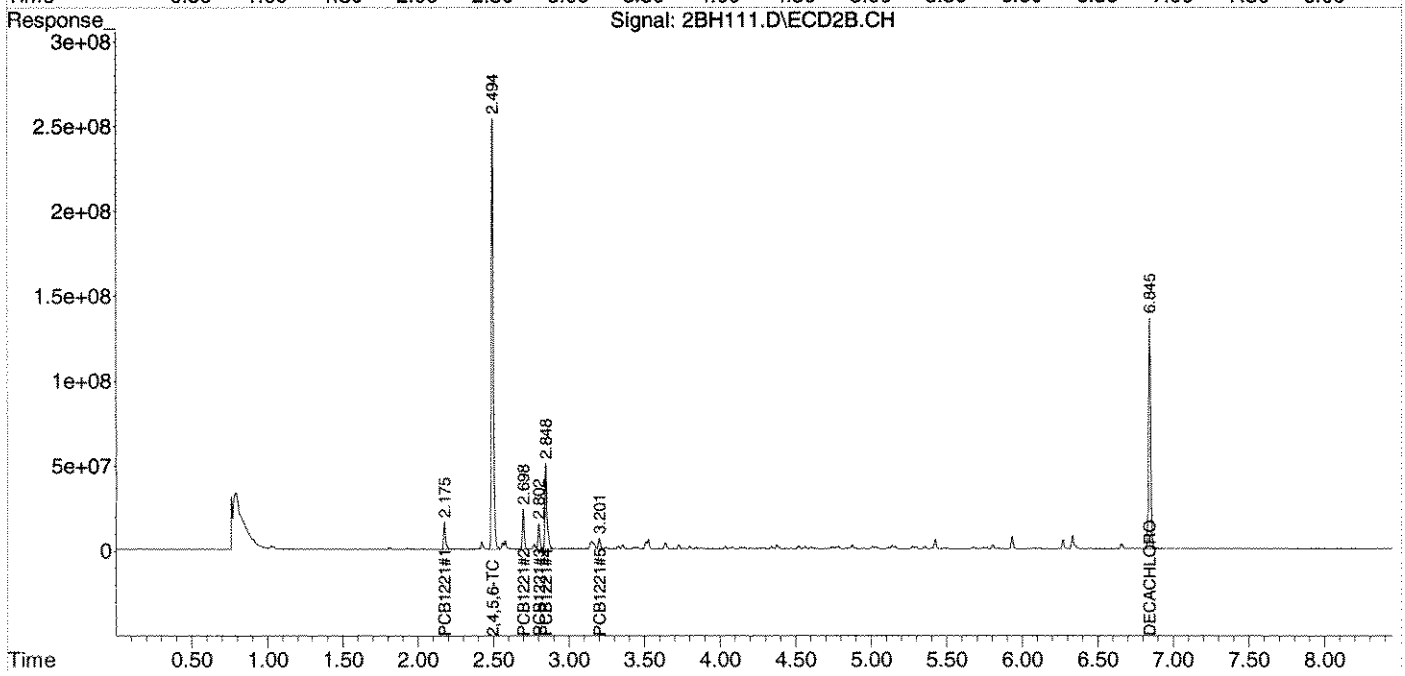
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH111.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Feb 2014 11:28
Operator : RC
Sample : AA27516-SCV1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 11:38:27 2014
Quant Method : Z:\2\METHODS\PCB1221BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:06:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA27519

1262

Instrument: OSVGCECD2

Calibration ID: 1402050

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA27519-CAL1	QC		1		A4B0254		
AA27519-CAL2	QC		2		A4B0253		
AA27519-CAL3	QC		3		A4B0252		
AA27519-CAL4	QC		4		A4B0251		
AA27519-CAL5	QC		5		A4B0250		
AA27519-CAL6	QC		6		A4B0249		
AA27519-SCV1	QC		7		A4B0255		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1262BH14.M
Title : PCB; INST OSVGCECD2
Last Update : Fri Feb 14 10:19:22 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2BH023.D CAL2 =2BH024.D CAL3 =2BH025.D
CAL4 =2BH026.D CAL5 =2BH027.D CAL6 =2BH028.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	13.023	14.915	15.572	16.545	16.918	16.082	15.509	E9	9.08
2)	PCB1262#1	3.726	3.703	3.546	3.770	3.914	3.778	3.739	E8	3.21
3)	PCB1262#2	8.509	8.075	7.767	8.171	8.344	7.783	8.108	E8	3.68
4)	PCB1262#3	0.984	0.977	0.962	1.006	1.021	0.939	0.981	E9	3.01
5)	PCB1262#4	8.657	8.591	8.551	8.980	9.228	8.577	8.764	E8	3.16
6)	PCB1262#5	1.489	1.561	1.615	1.651	1.686	1.505	1.584	E9	5.03
7)	DECACHLOROBIP...	11.415	9.304	8.728	8.646	9.538	8.580	9.368	E9	11.47

Signal #2 Calibration Files
CAL1 =2BH023.D CAL2 =2BH024.D CAL3 =2BH025.D
CAL4 =2BH026.D CAL5 =2BH027.D CAL6 =2BH028.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	9.215	9.825	10.395	10.808	10.560	9.694	10.083	E9	5.99
2)	PCB1262#1	5.153	4.615	4.353	4.543	4.493	4.199	4.559	E8	7.16
3)	PCB1262#2	4.769	4.867	4.527	4.691	4.712	4.338	4.651	E8	4.07
4)	PCB1262#3	6.729	6.573	6.282	6.482	6.429	5.756	6.375	E8	5.30
5)	PCB1262#4	6.309	6.050	5.789	5.998	6.020	5.474	5.940	E8	4.75
6)	PCB1262#5	1.043	1.064	1.068	1.070	1.060	0.907	1.035	E9	6.14
7)	DECACHLOROBIP...	8.865	7.193	6.547	6.384	6.909	6.055	6.992	E9	14.30

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 17:55
Operator : RC
Sample : AA27519-CAL1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:07 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	65113390	46075284	0.0060	0.0083	#
2)	PCB1262#1	4.630	5.014	18627638	25765599	0.0825	0.1131	#
3)	PCB1262#2	4.939	5.158	42547271	23843107	0.0895	0.1165	#
4)	PCB1262#3	5.222	5.474	49195485	33644186	0.0820	0.1097	#
5)	PCB1262#4	5.397	5.679	43283142	31543769	0.0773	0.1075	#
6)	PCB1262#5	5.607	5.839	74430699	52140513	0.0754	0.1105	#
7)	DECACHLOR...	6.503	6.844	57073283	44323739	0.0095	0.0144	#

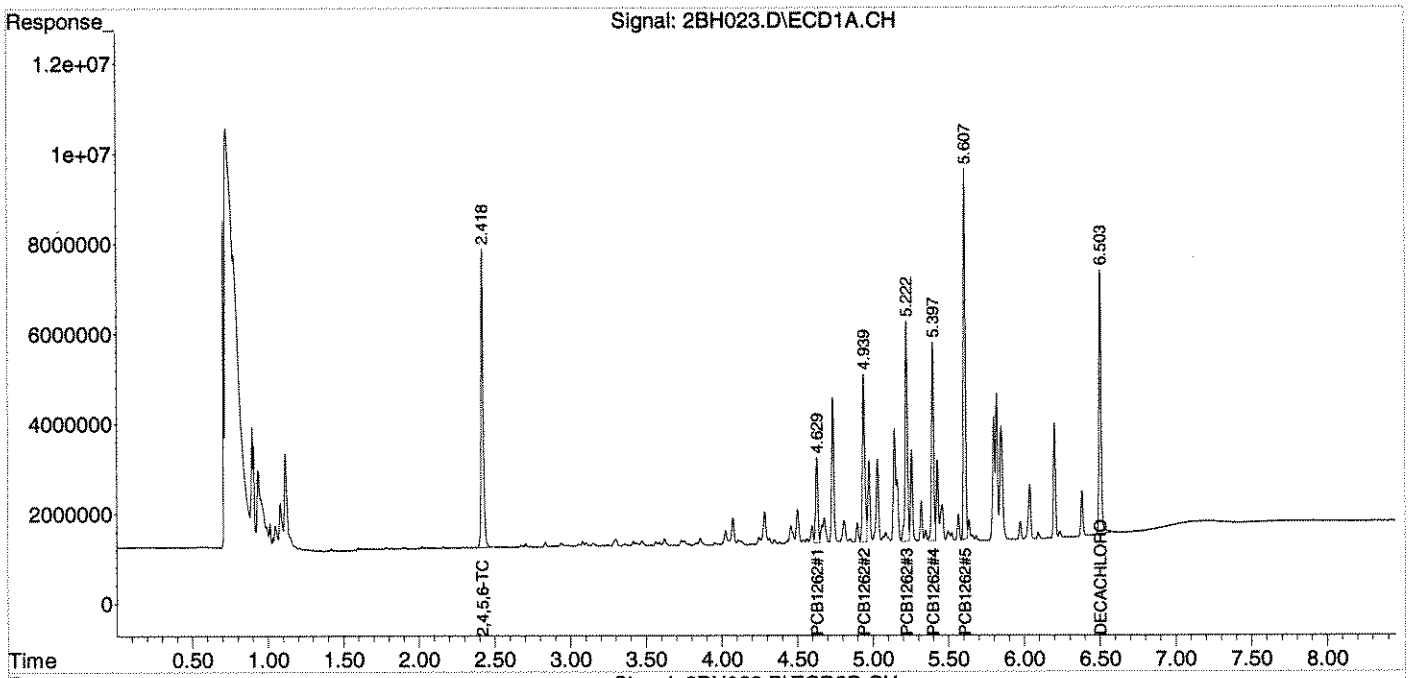
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

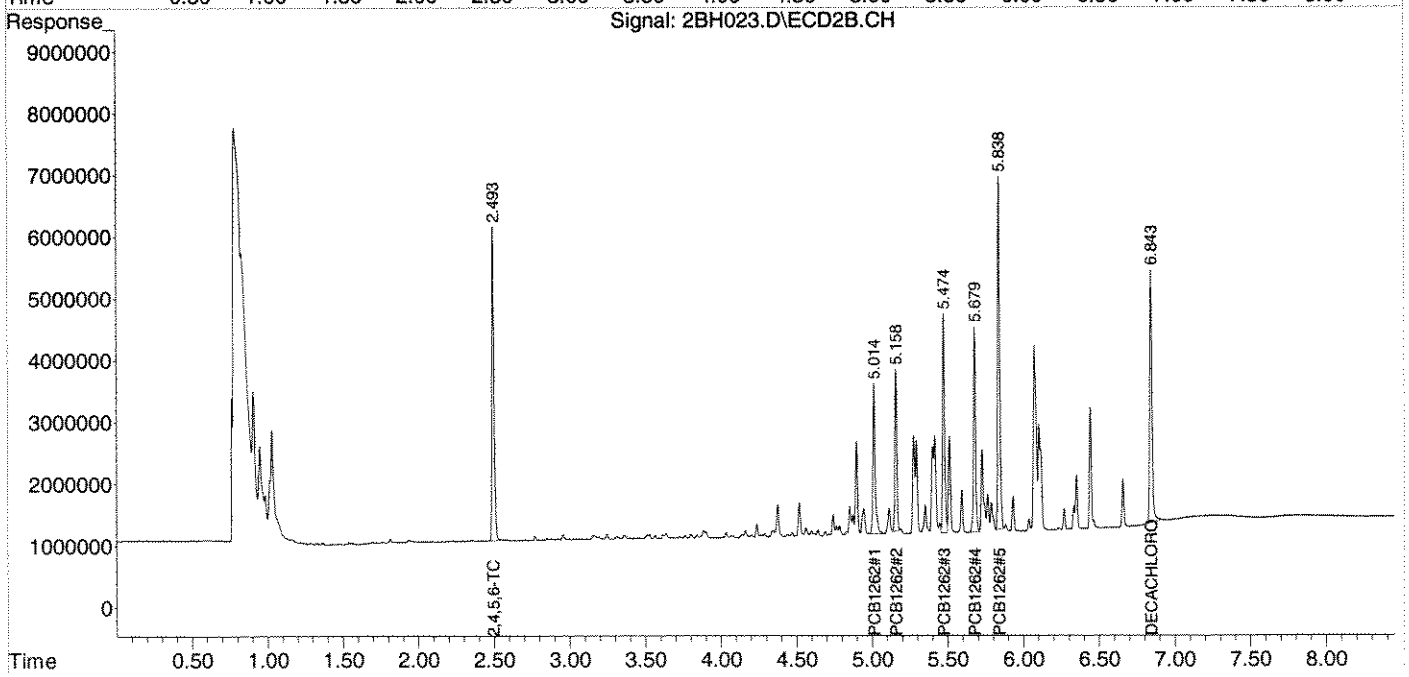
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 17:55
Operator : RC
Sample : AA27519-CAL1
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:07 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:07
Operator : RC
Sample : AA27519-CAL2
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:10 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	149.2E6	98249258	0.0137	0.0177	#
2)	PCB1262#1	4.630	5.014	37028944	46149562	0.1641	0.2026	
3)	PCB1262#2	4.939	5.158	80751955	48674271	0.1699	0.2378	#
4)	PCB1262#3	5.223	5.474	97705705	65734296	0.1629	0.2143	#
5)	PCB1262#4	5.398	5.679	85906004	60496415	0.1535	0.2062	#
6)	PCB1262#5	5.607	5.839	156.1E6	106.4E6	0.1580	0.2255	#
7)	DECACHLOR...	6.503	6.844	93042099	71925741	0.0155	0.0234	#

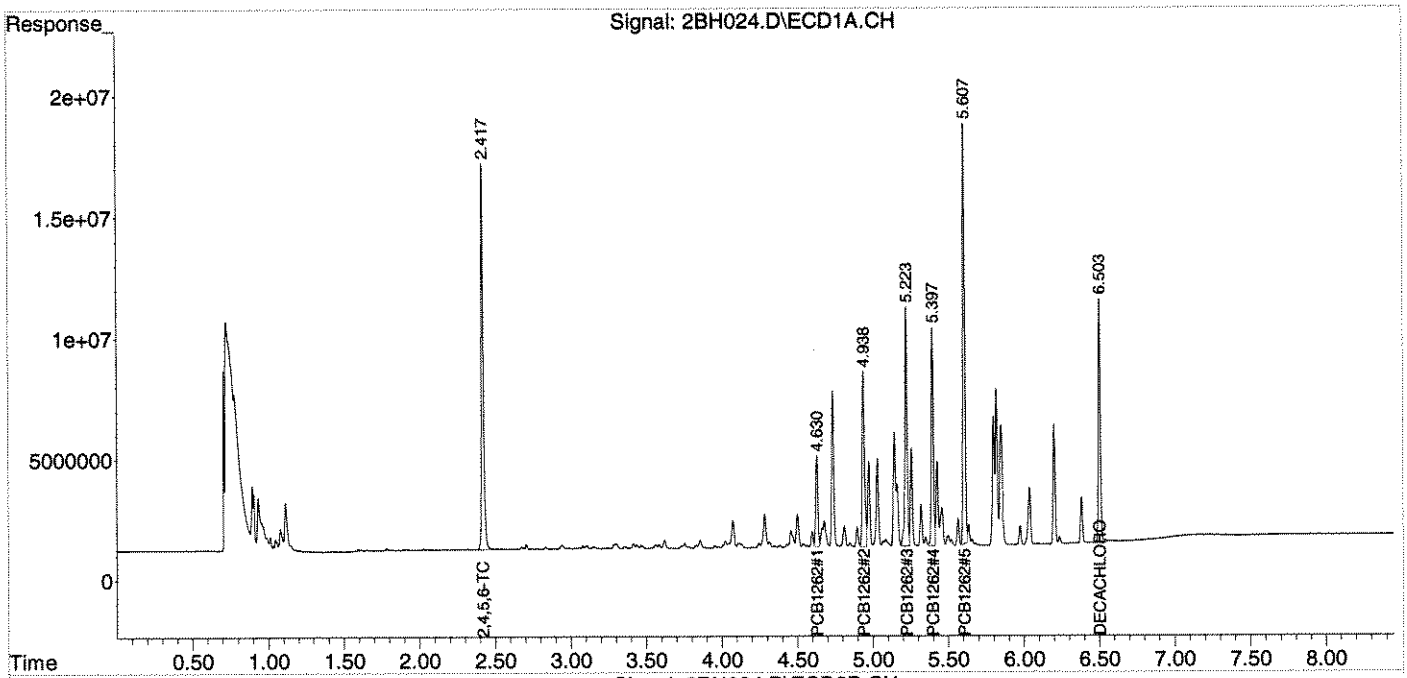
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

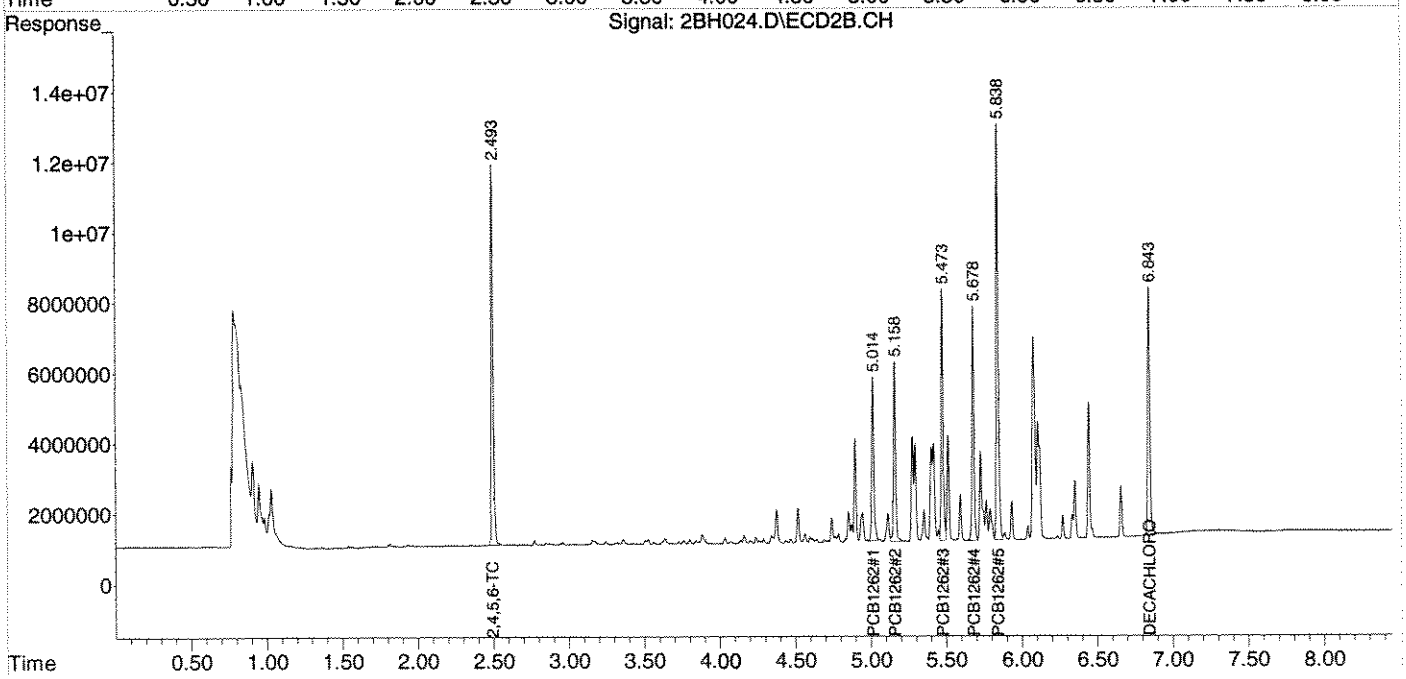
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:07
Operator : RC
Sample : AA27519-CAL2
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:10 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:19
Operator : RC
Sample : AA27519-CAL3
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:13 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	778.6E6	519.7E6	0.0717	0.0939	#
2)	PCB1262#1	4.630	5.014	177.3E6	217.7E6	0.7855	0.9557	
3)	PCB1262#2	4.939	5.158	388.3E6	226.4E6	0.8169	1.1057	#
4)	PCB1262#3	5.223	5.474	480.8E6	314.1E6	0.8015	1.0240	#
5)	PCB1262#4	5.397	5.678	427.6E6	289.4E6	0.7640	0.9867	#
6)	PCB1262#5	5.607	5.839	807.5E6	533.8E6	0.8176	1.1314	#
7)	DECACHLOR...	6.503	6.844	436.4E6	327.4E6	0.0726	0.1063	#

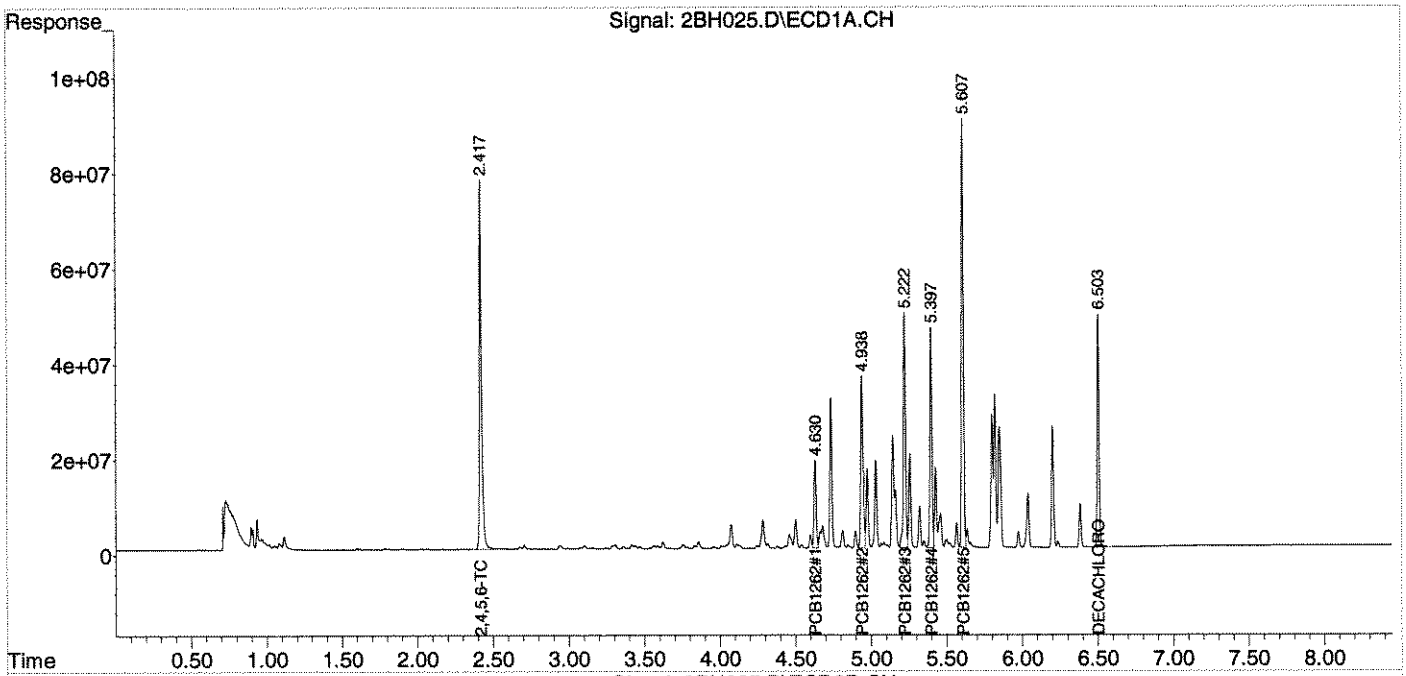
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

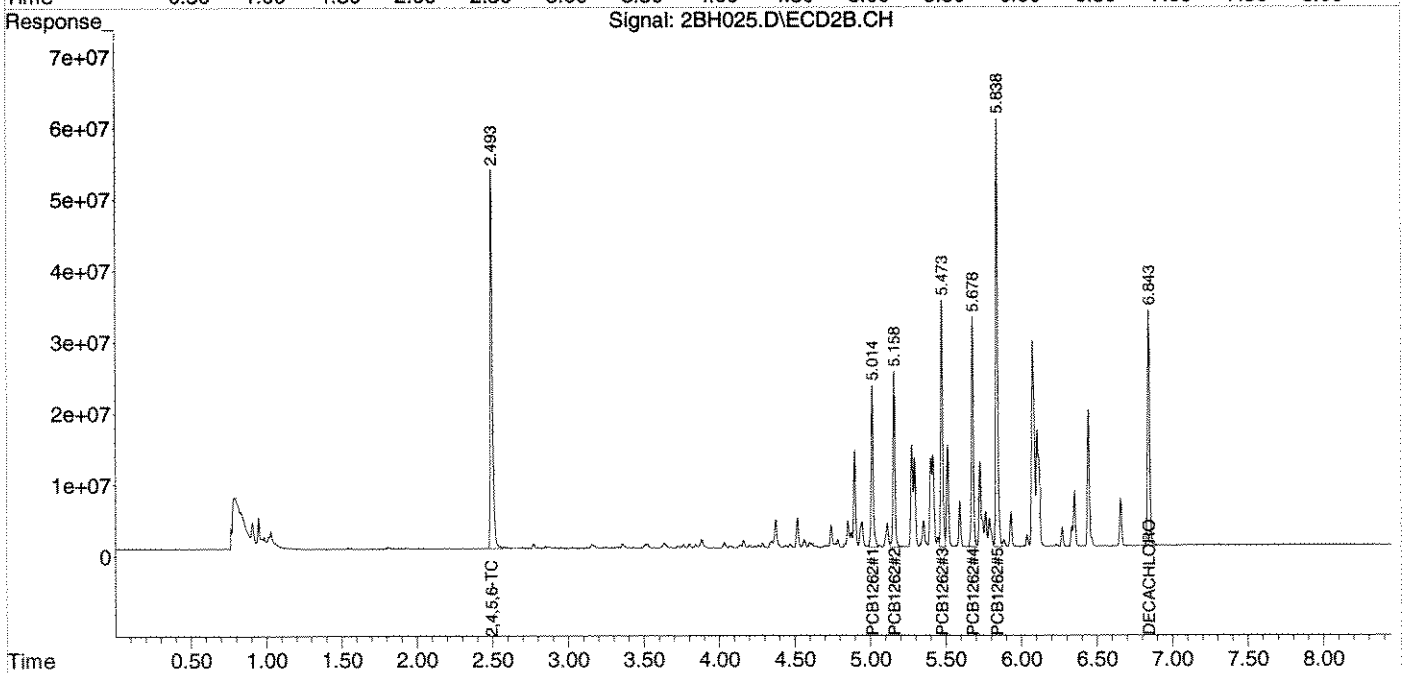
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:19
Operator : RC
Sample : AA27519-CAL3
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:13 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:31
Operator : RC
Sample : AA27519-CAL4
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:16 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	1654.5E6	1080.8E6	0.1524	0.1952	#
2)	PCB1262#1	4.631	5.015	377.0E6	454.3E6	1.6705	1.9950	
3)	PCB1262#2	4.939	5.158	817.1E6	469.1E6	1.7188	2.2914	#
4)	PCB1262#3	5.223	5.475	1006.3E6	648.2E6	1.6777	2.1133	#
5)	PCB1262#4	5.398	5.679	898.0E6	599.8E6	1.6047	2.0446	#
6)	PCB1262#5	5.608	5.839	1650.9E6	1070.4E6	1.6716	2.2688	#
7)	DECACHLOR...	6.504	6.845	864.6E6	638.4E6	0.1439	0.2073	#

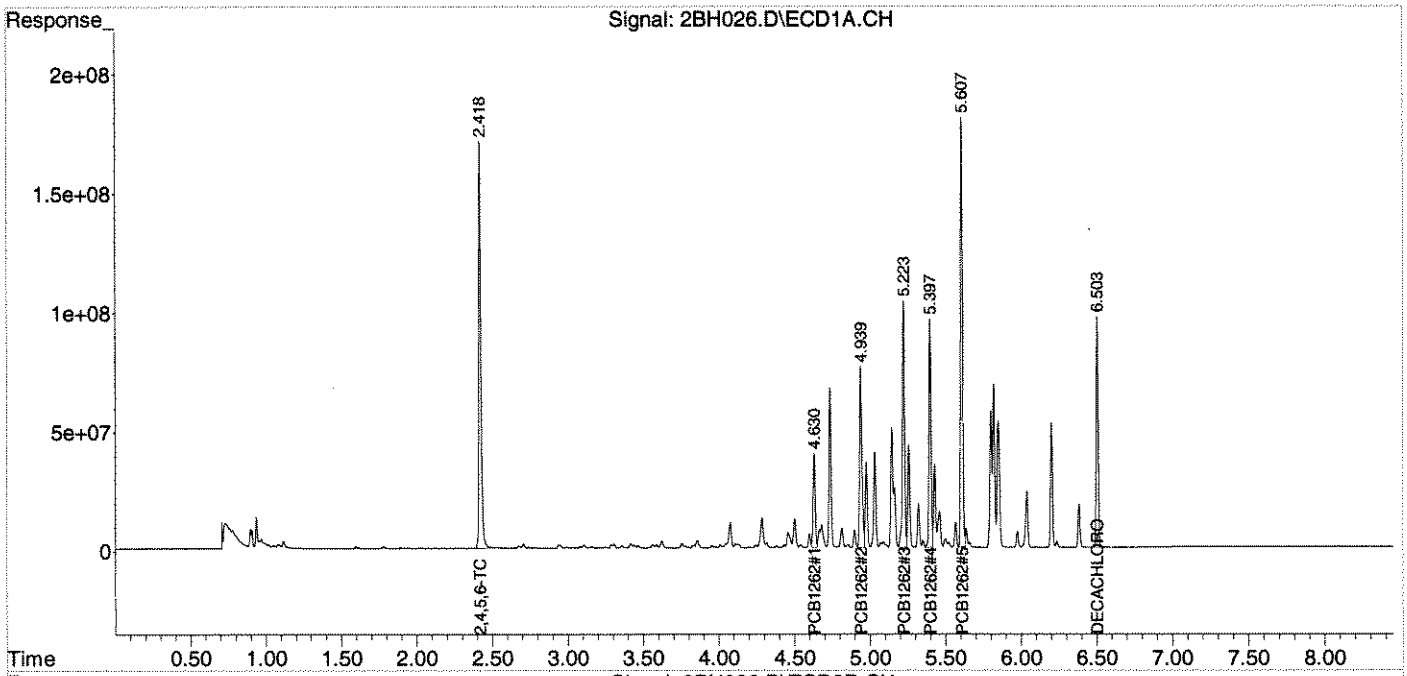
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

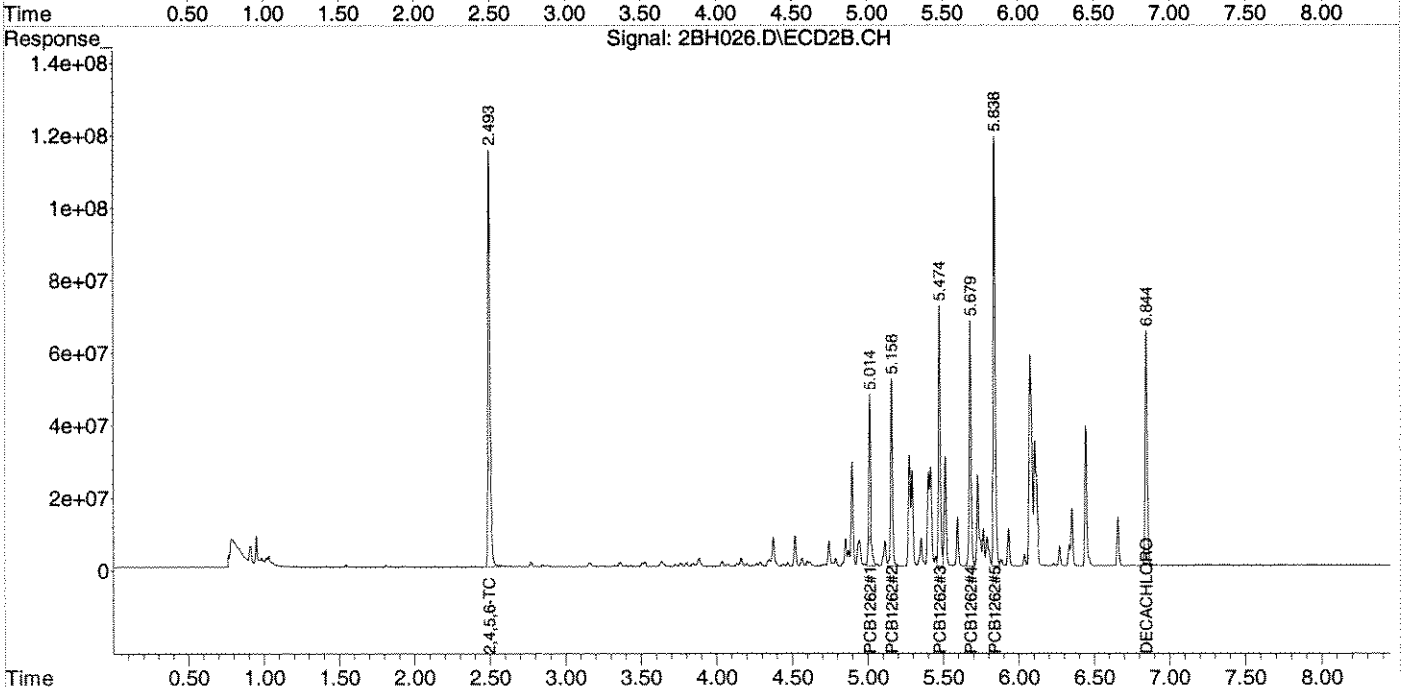
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:31
Operator : RC
Sample : AA27519-CAL4
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:16 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:43
Operator : RC
Sample : AA27519-CAL5
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:19 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	3383.6E6	2112.0E6	0.3116	0.3815	
2)	PCB1262#1	4.630	5.014	782.7E6	898.6E6	3.4680	3.9455	
3)	PCB1262#2	4.939	5.158	1668.8E6	942.5E6	3.5103	4.6039	#
4)	PCB1262#3	5.222	5.474	2041.4E6	1285.8E6	3.4033	4.1917	
5)	PCB1262#4	5.397	5.678	1845.6E6	1204.0E6	3.2977	4.1046	
6)	PCB1262#5	5.607	5.838	3372.3E6	2119.4E6	3.4146	4.4922	#
7)	DECACHLOR...	6.503	6.844	1907.7E6	1381.7E6	0.3175	0.4487	#

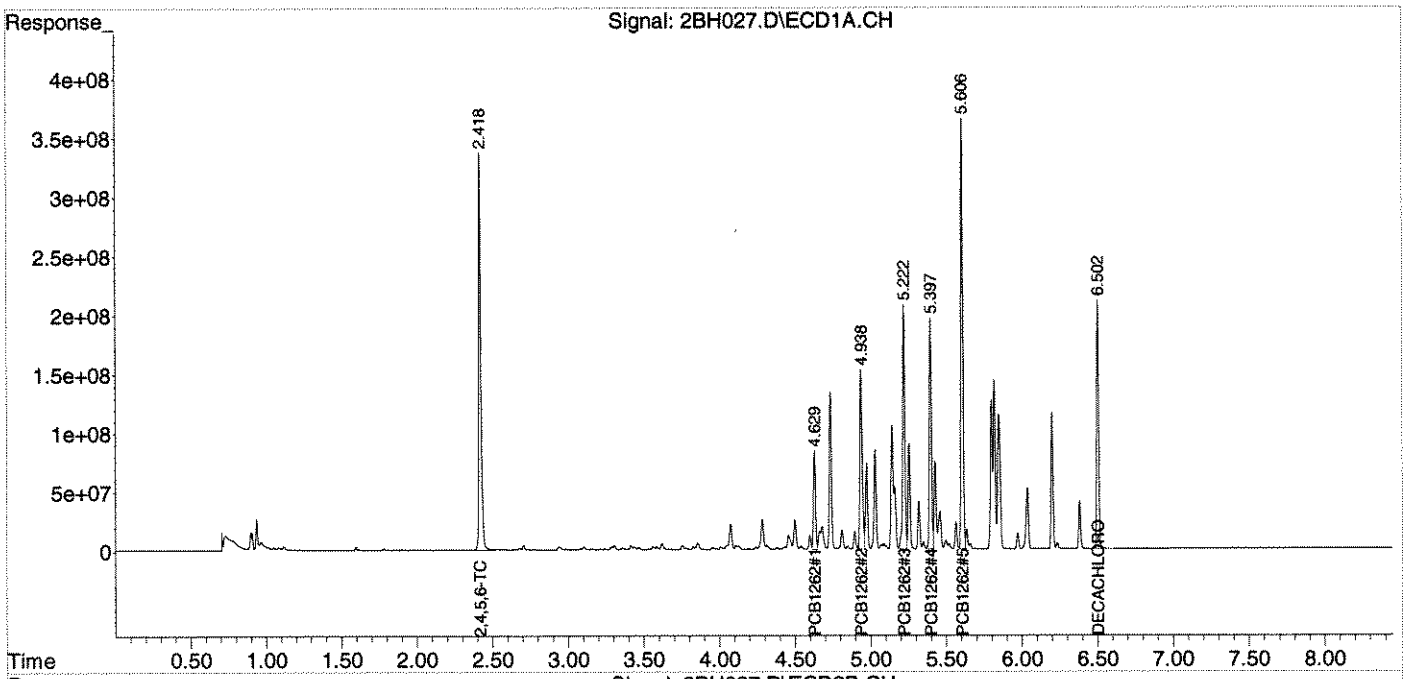
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

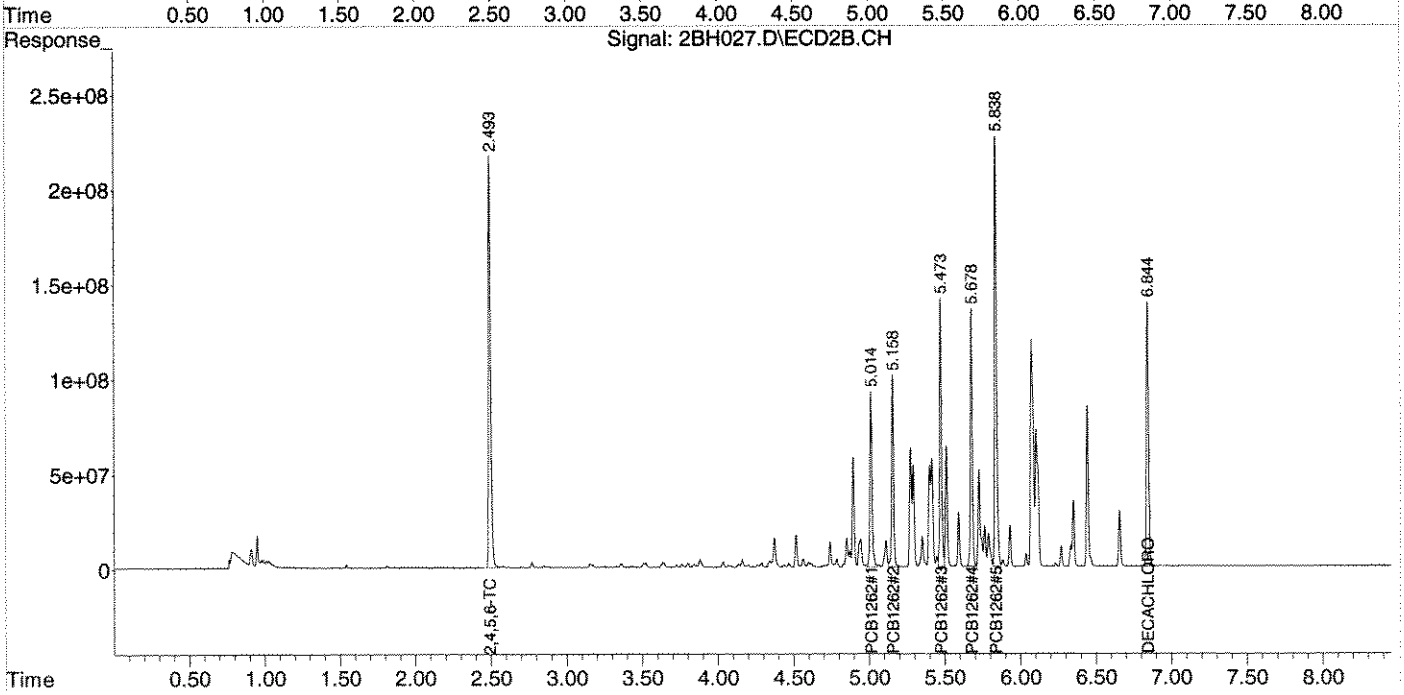
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:43
Operator : RC
Sample : AA27519-CAL5
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:19 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH028.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:55
Operator : RC
Sample : AA27519-CAL6
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:22 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.494	6432.9E6	3877.5E6	0.5925	0.7004	
2)	PCB1262#1	4.630	5.014	1511.2E6	1679.5E6	6.6958	7.3747	
3)	PCB1262#2	4.939	5.158	3113.1E6	1735.3E6	6.5482	8.4765	#
4)	PCB1262#3	5.223	5.474	3756.9E6	2302.4E6	6.2633	7.5058	
5)	PCB1262#4	5.398	5.679	3430.9E6	2189.5E6	6.1305	7.4639	
6)	PCB1262#5	5.608	5.839	6018.8E6	3627.9E6	6.0943	7.6897	#
7)	DECACHLOR...	6.504	6.844	3431.8E6	2422.1E6	0.5712	0.7865	#

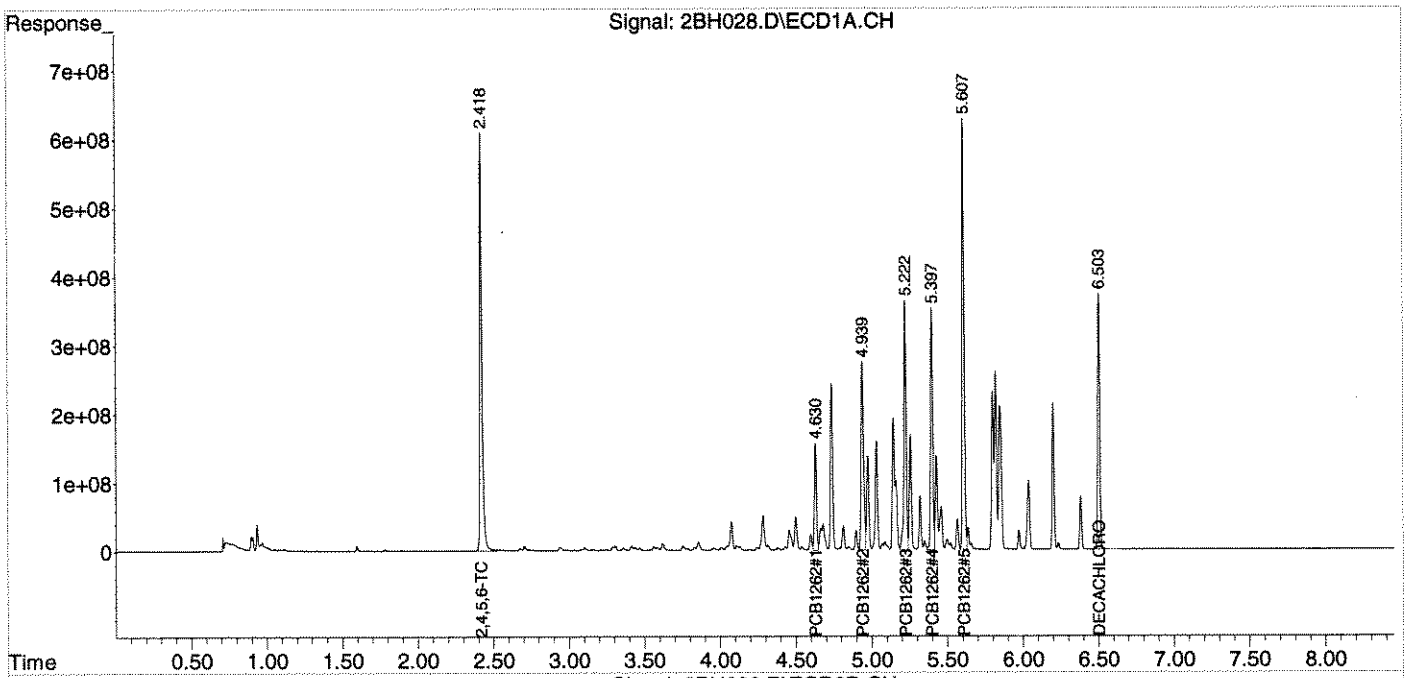
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

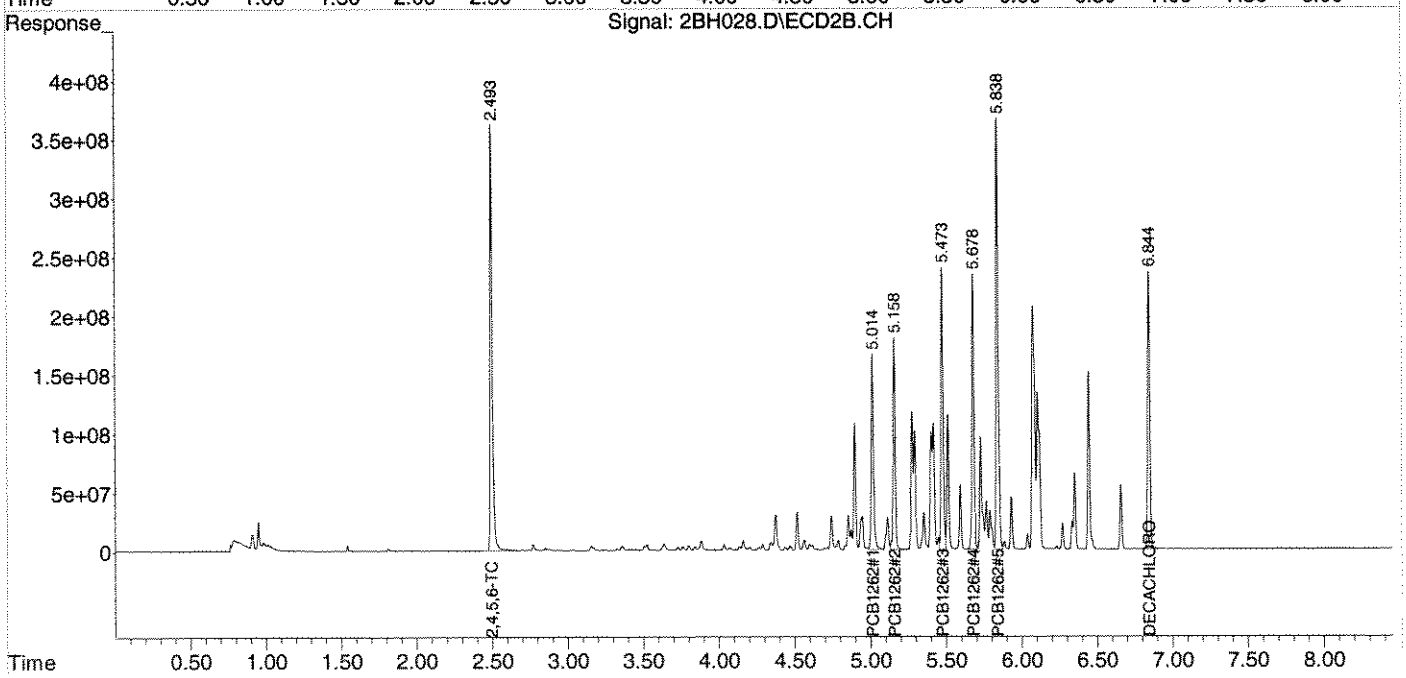
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH028.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 18:55
Operator : RC
Sample : AA27519-CAL6
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:16:22 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:15:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:07
Operator : RC
Sample : AA27519-SCV1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:19:41 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:19:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.418	2.494	3398.6E6	2136.1E6	0.2191	0.2119
2)	PCB1262#1	4.631	5.015	691.5E6	793.2E6	1.8494	1.7397
3)	PCB1262#2	4.940	5.159	1465.2E6	834.4E6	1.8070	1.7941
4)	PCB1262#3	5.224	5.475	1807.9E6	1146.4E6	1.8420	1.7983
5)	PCB1262#4	5.398	5.679	1634.2E6	1074.3E6	1.8647	1.8087
6)	PCB1262#5	5.608	5.839	2998.8E6	1892.4E6	1.8928	1.8281
7)	DECACHLOR...	6.503	6.845	1856.0E6	1349.2E6	0.1981	0.1930

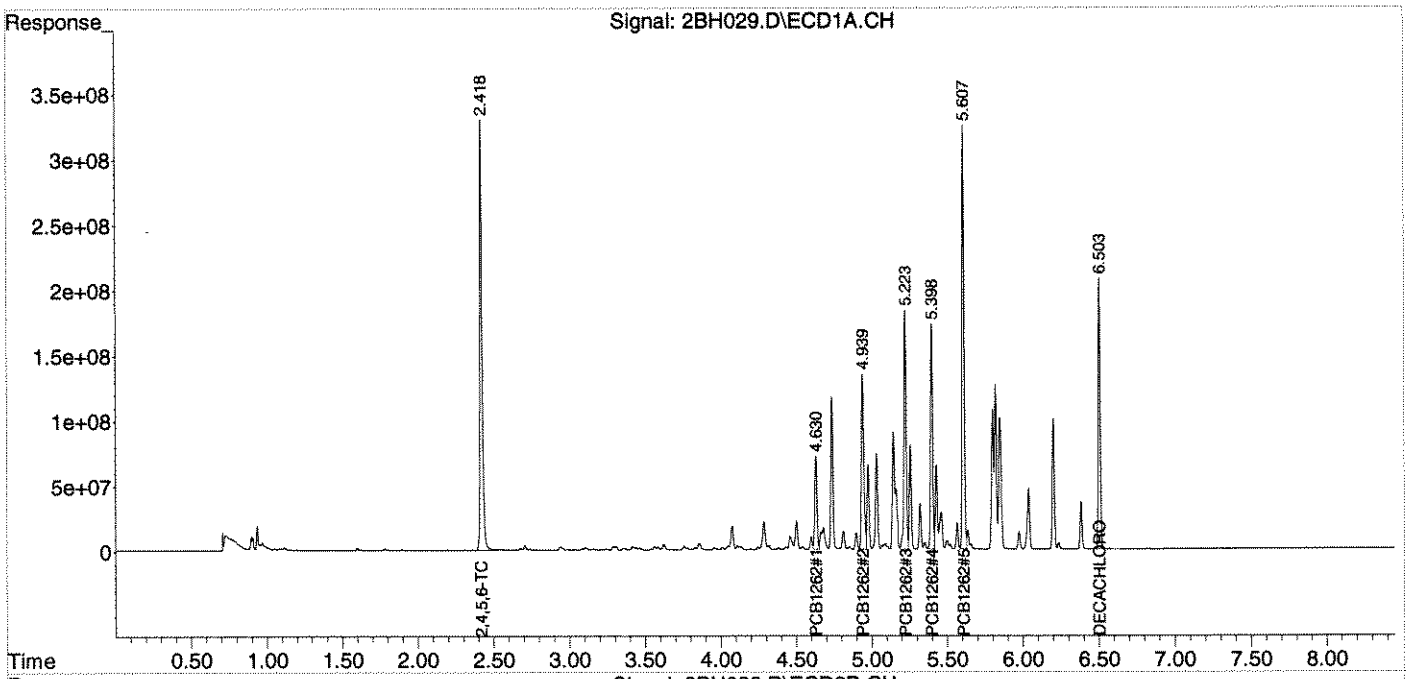
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

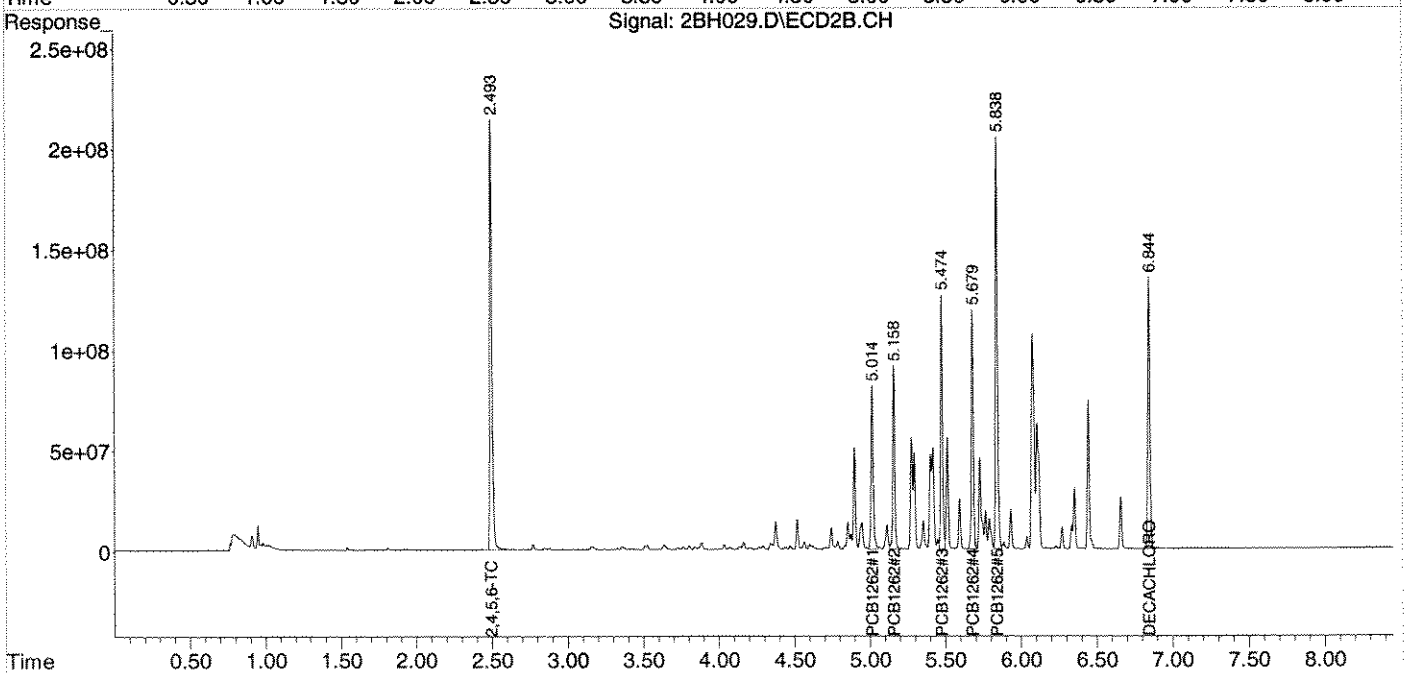
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:07
Operator : RC
Sample : AA27519-SCV1
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:19:41 2014
Quant Method : Z:\2\METHODS\PCB1262BH13.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:19:22 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA27520

1268

Instrument: OSVGCECD2

Calibration ID: 1402050

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA27520-CAL1	QC		1		A4B0265		
AA27520-CAL2	QC		2		A4B0264		
AA27520-CAL3	QC		3		A4B0263		
AA27520-CAL4	QC		4		A4B0261		
AA27520-CAL5	QC		5		A4B0258		
AA27520-CAL6	QC		6		A4B0256		
AA27520-SCV1	QC		7		A4B0266		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1268BH14.M
Title : PCB; INST OSVGCECD2
Last Update : Fri Feb 14 10:26:38 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2BH030.D CAL2 =2BH031.D CAL3 =2BH032.D
CAL4 =2BH033.D CAL5 =2BH034.D CAL6 =2BH035.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	13.584	14.115	14.744	15.225	14.807	14.223	14.450	E9	4.07
2)	PCB1268#1	7.351	6.412	5.867	6.420	6.464	6.502	6.503	E8	7.34
3)	PCB1268#2	1.755	1.794	1.649	1.788	1.598	1.559	1.691	E9	6.04
4)	PCB1268#3	1.718	1.807	1.681	1.823	1.617	1.592	1.706	E9	5.60
5)	PCB1268#4	1.028	1.121	1.049	1.145	1.032	1.042	1.069	E9	4.70
6)	PCB1268#5	2.505	2.976	2.747	2.944	2.414	2.341	2.654	E9	10.29
7)	DECACHLOROBIP...	13.756	14.111	12.169	13.178	11.008	11.321	12.590	E9	10.24

Signal #2 Calibration Files
CAL1 =2BH030.D CAL2 =2BH031.D CAL3 =2BH032.D
CAL4 =2BH033.D CAL5 =2BH034.D CAL6 =2BH035.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	8.963	9.500	9.576	10.055	9.386	8.788	9.378	E9	4.85
2)	PCB1268#1	5.425	4.643	4.081	4.379	4.312	4.199	4.506	E8	10.83
3)	PCB1268#2	1.237	1.248	1.109	1.169	1.009	0.933	1.118	E9	11.33
4)	PCB1268#3	1.302	1.326	1.182	1.258	1.095	1.045	1.201	E9	9.48
5)	PCB1268#4	7.834	8.452	7.626	8.228	7.217	7.033	7.732	E8	7.18
6)	PCB1268#5	1.892	2.206	1.987	2.055	1.640	1.509	1.881	E9	13.93
7)	DECACHLOROBIP...	10.727	10.785	9.083	9.650	7.935	7.892	9.345	E9	13.74

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:19
Operator : RC
Sample : AA27520-CAL1
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:05 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	67918728	44813657	0.0060	0.0078	#
2)	PCB1268#1	5.395	5.679	36752860	27122731	0.0776	0.1095	#
3)	PCB1268#2	5.820	6.075	87740612	61852230	0.0851	0.1190	#
4)	PCB1268#3	5.846	6.106	85894693	65110334	0.0761	0.1150	#
5)	PCB1268#4	5.975	6.271	51387797	39168205	0.0696	0.1041	#
6)	PCB1268#5	6.383	6.658	125.3E6	94610934	0.0706	0.1047	#
7)	DECACHLOR...	6.504	6.844	68777612	53633792	0.0109	0.0141	#

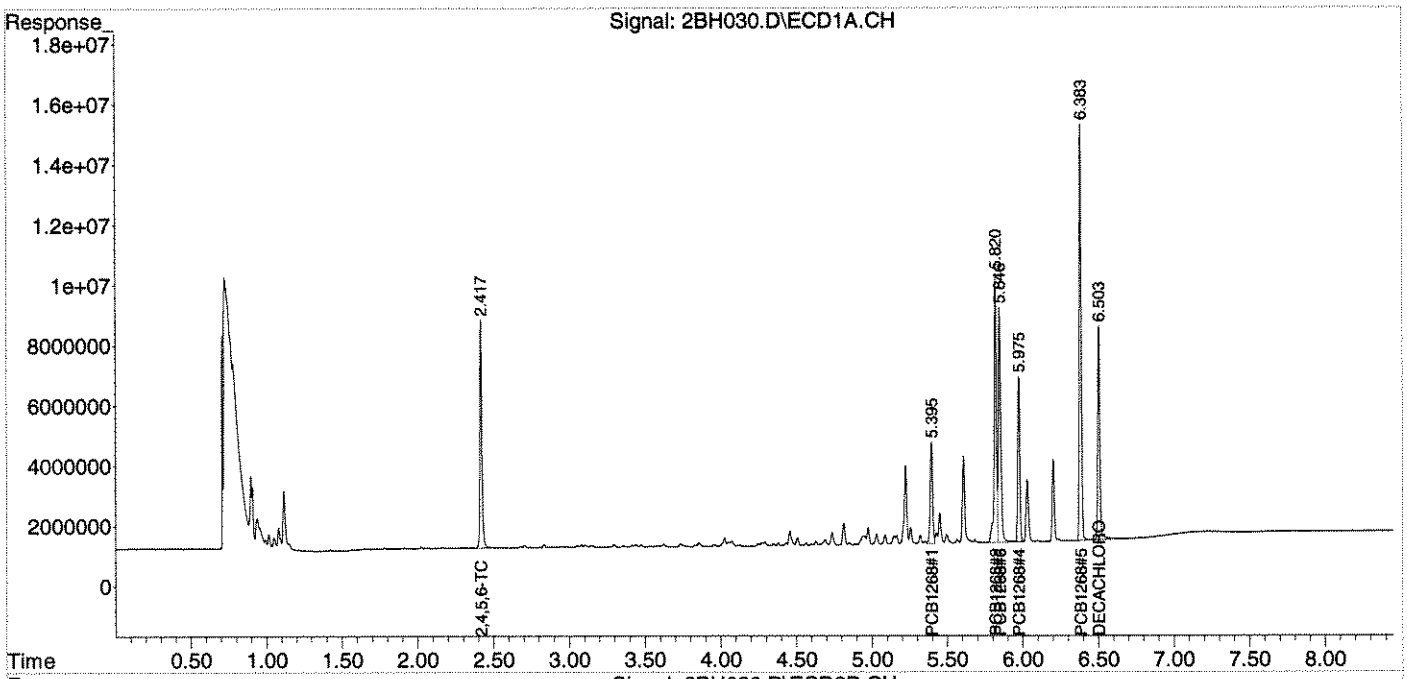
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

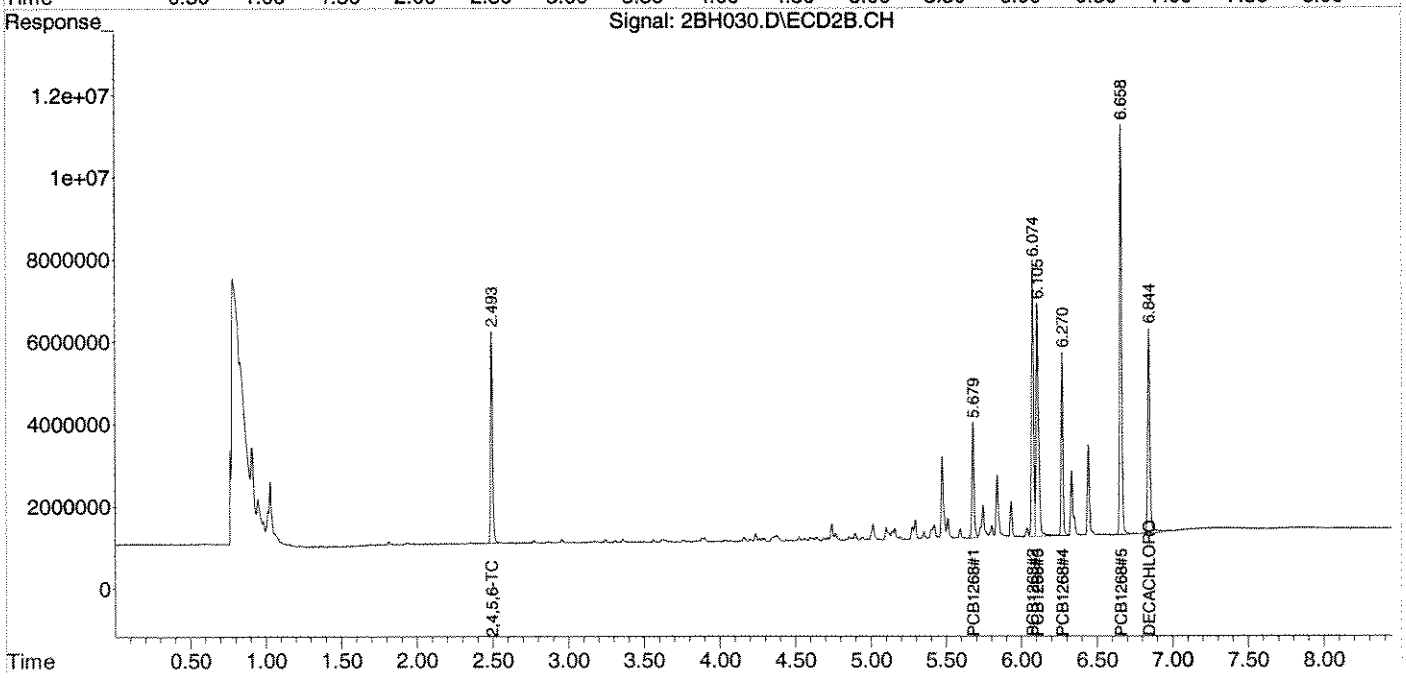
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:19
Operator : RC
Sample : AA27520-CAL1
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:05 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:31
Operator : RC
Sample : AA27520-CAL2
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:07 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	141.1E6	94996026	0.0124	0.0166	#
2)	PCB1268#1	5.394	5.679	64123508	46433594	0.1353	0.1874	#
3)	PCB1268#2	5.820	6.075	179.4E6	124.8E6	0.1740	0.2402	#
4)	PCB1268#3	5.846	6.106	180.7E6	132.6E6	0.1601	0.2342	#
5)	PCB1268#4	5.975	6.271	112.1E6	84523899	0.1518	0.2246	#
6)	PCB1268#5	6.383	6.659	297.6E6	220.6E6	0.1677	0.2442	#
7)	DECACHLOR...	6.504	6.845	141.1E6	107.8E6	0.0185	0.0257	#

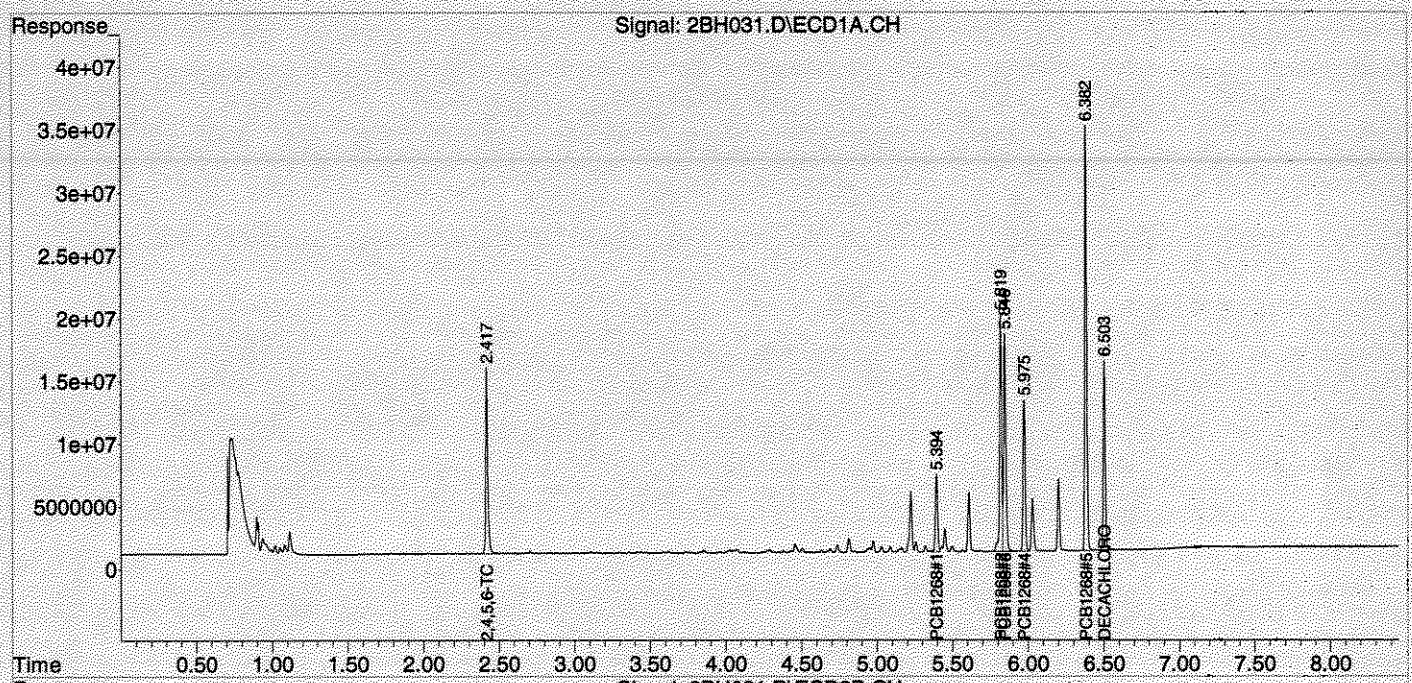
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

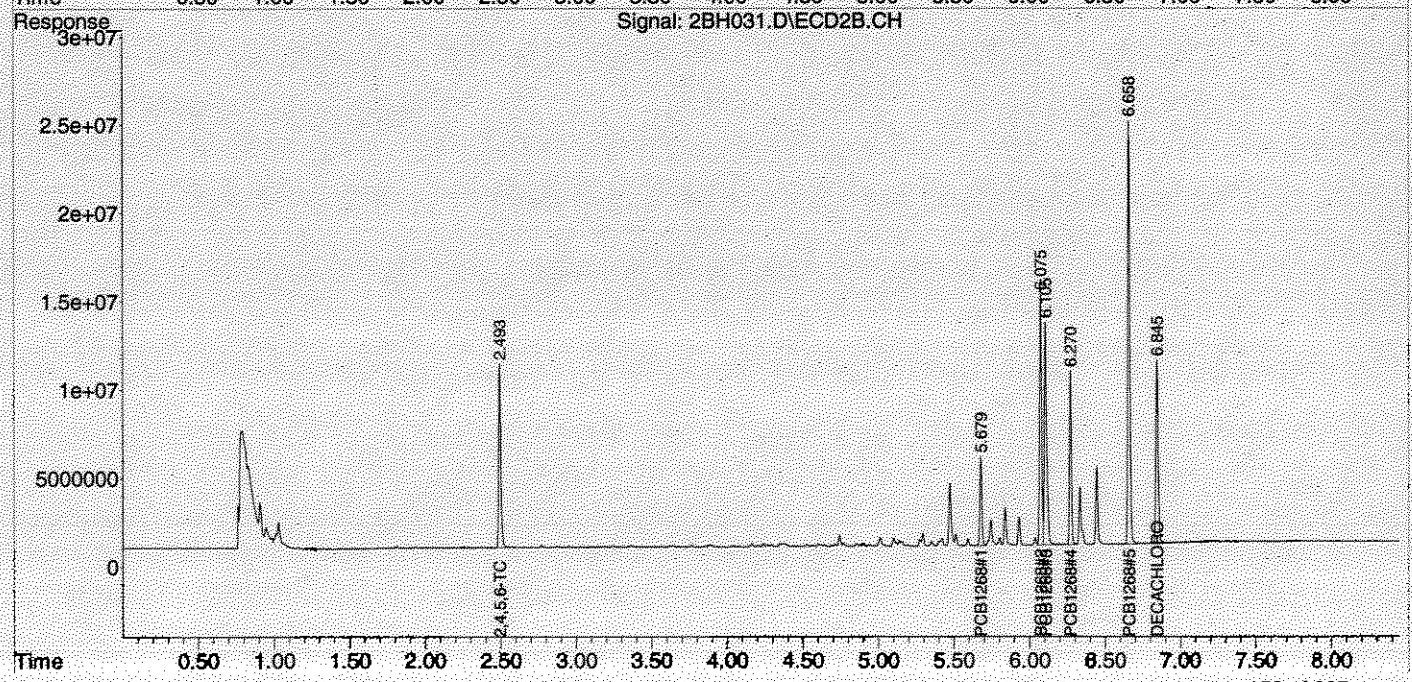
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:31
Operator : RC
Sample : AA27520-CAL2
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:07 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:43
Operator : RC
Sample : AA27520-CAL3
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:10 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	737.2E6	478.8E6	0.0650	0.0836	#
2)	PCB1268#1	5.394	5.679	293.3E6	204.1E6	0.6191	0.8236	#
3)	PCB1268#2	5.820	6.075	824.5E6	554.7E6	0.7993	1.0673	#
4)	PCB1268#3	5.847	6.105	840.4E6	591.0E6	0.7447	1.0442	#
5)	PCB1268#4	5.975	6.270	524.5E6	381.3E6	0.7107	1.0134	#
6)	PCB1268#5	6.383	6.658	1373.4E6	993.6E6	0.7740	1.0997	#
7)	DECACHLOR...	6.503	6.844	608.4E6	454.1E6	0.0679	0.0997	#

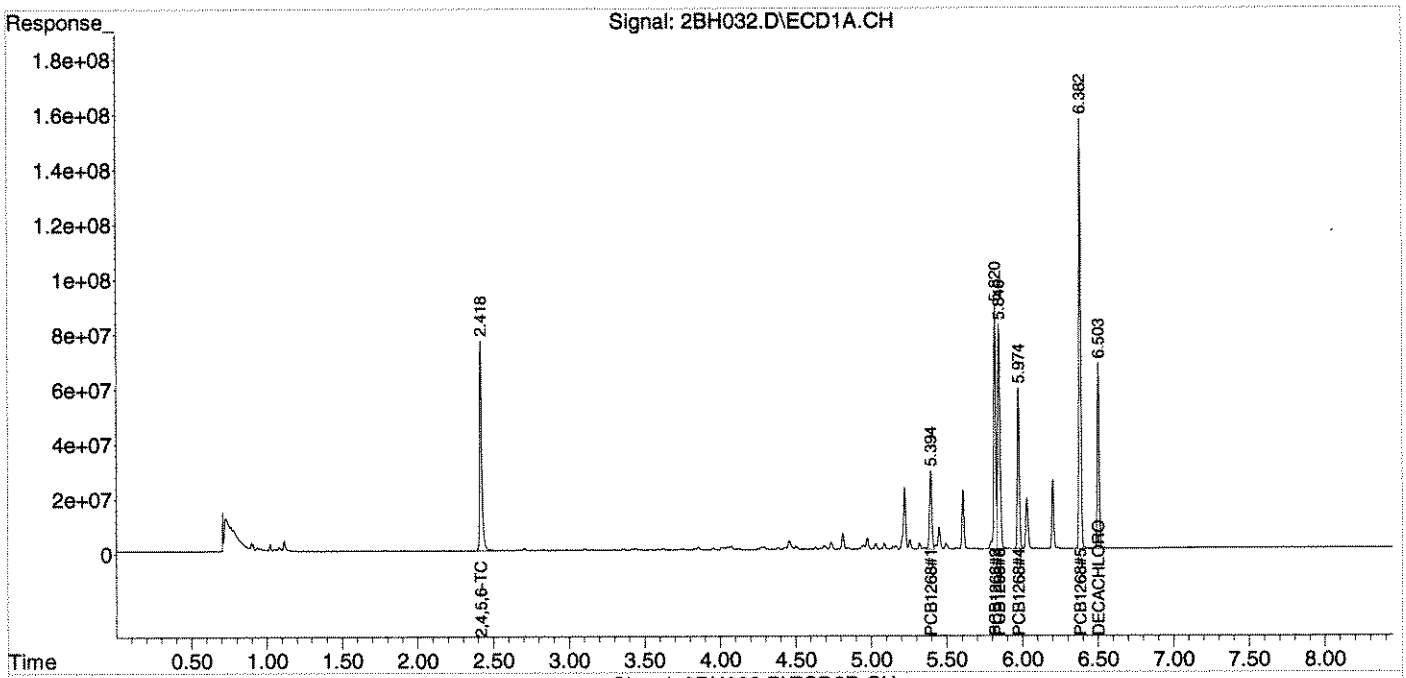
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

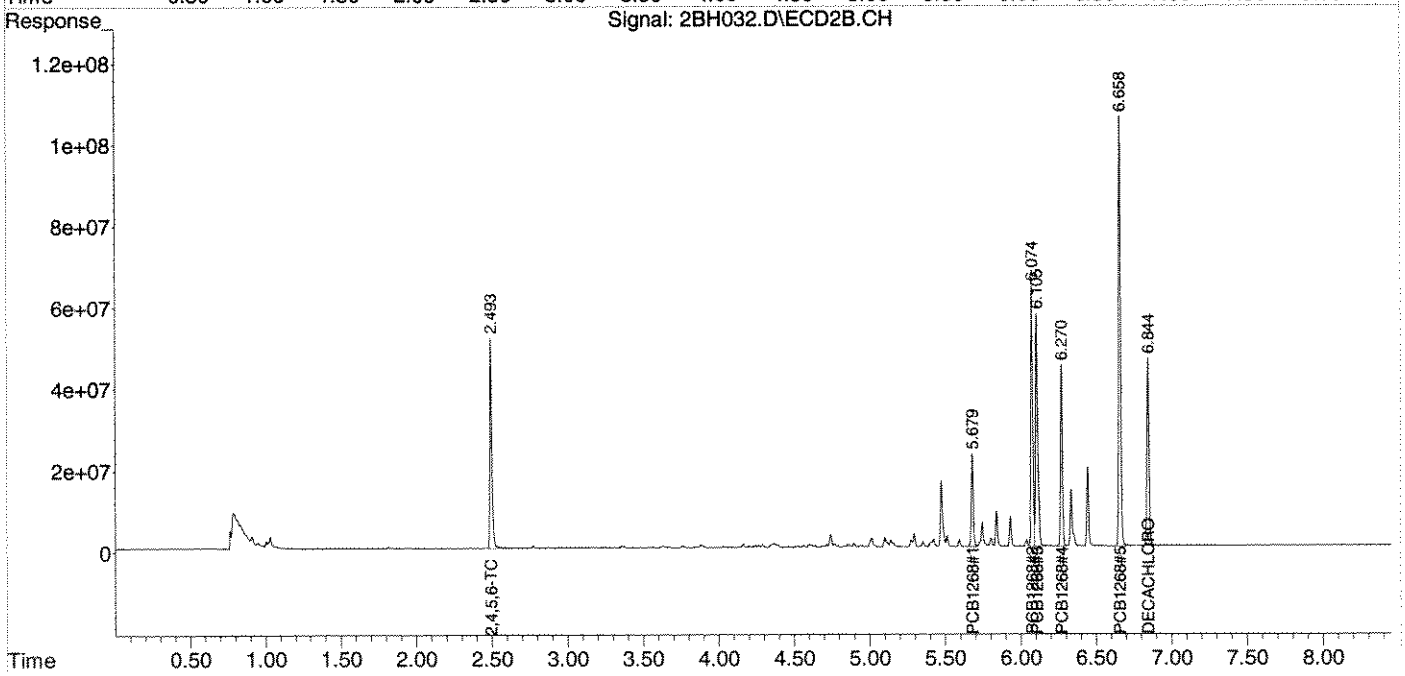
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:43
Operator : RC
Sample : AA27520-CAL3
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:10 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:55
Operator : RC
Sample : AA27520-CAL4
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:13 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	1522.5E6	1005.5E6	0.1343	0.1756	#
2)	PCB1268#1	5.394	5.679	642.0E6	437.9E6	1.3550	1.7672	#
3)	PCB1268#2	5.820	6.074	1788.1E6	1169.3E6	1.7335	2.2498	#
4)	PCB1268#3	5.846	6.105	1823.4E6	1258.4E6	1.6158	2.2233	#
5)	PCB1268#4	5.974	6.270	1144.8E6	822.8E6	1.5512	2.1870	#
6)	PCB1268#5	6.383	6.658	2943.7E6	2054.5E6	1.6589	2.2740	#
7)	DECACHLOR...	6.503	6.844	1317.8E6	965.0E6	0.1429	0.2089	#

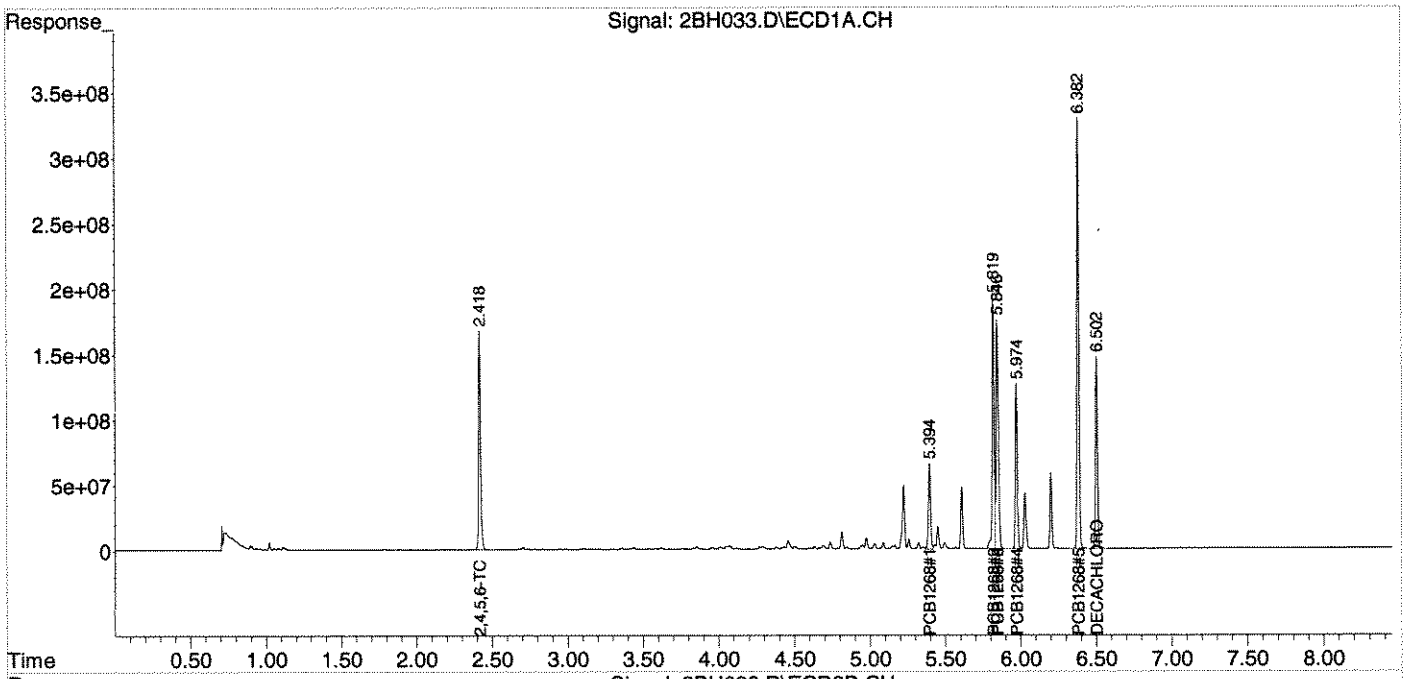
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

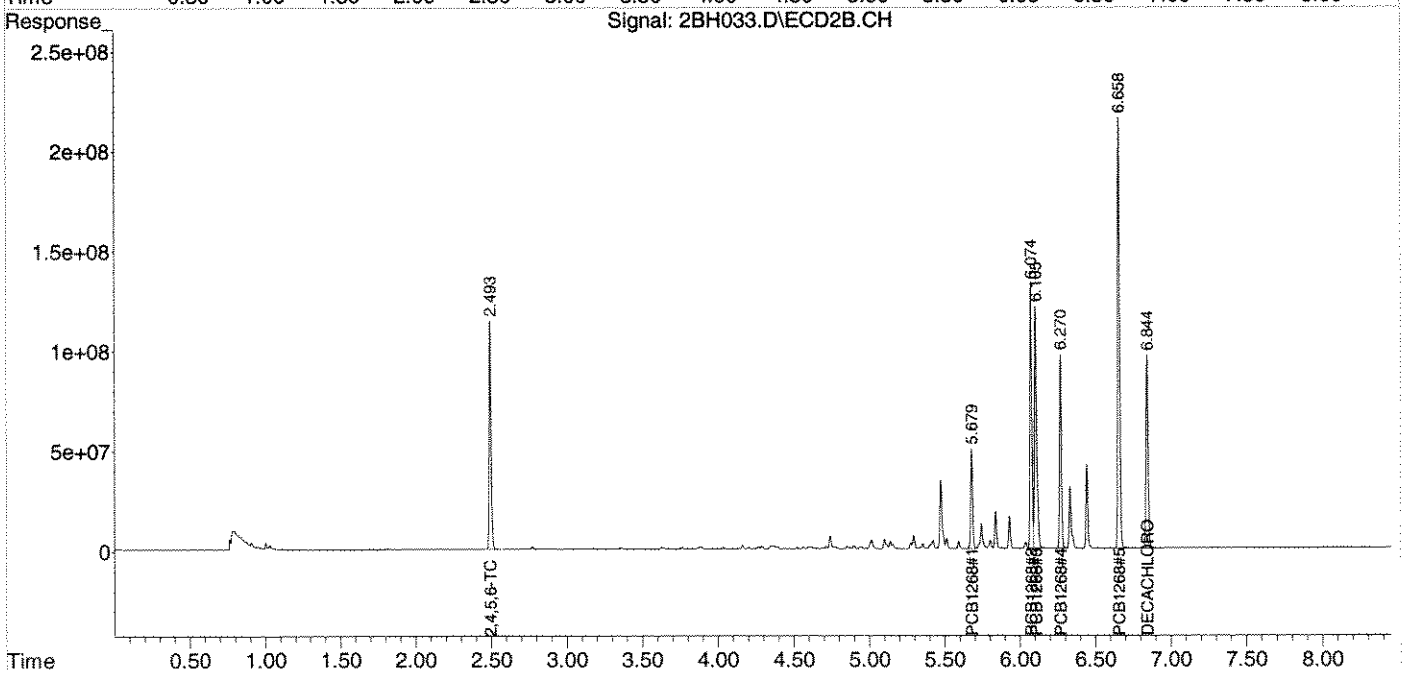
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 19:55
Operator : RC
Sample : AA27520-CAL4
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:13 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:07
Operator : RC
Sample : AA27520-CAL5
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:16 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.494	2961.3E6	1877.1E6	0.2611	0.3278	#
2)	PCB1268#1	5.395	5.680	1292.8E6	862.4E6	2.7285	3.4806	#
3)	PCB1268#2	5.820	6.076	3196.7E6	2017.0E6	3.0989	3.8810	#
4)	PCB1268#3	5.847	6.106	3234.1E6	2189.6E6	2.8659	3.8686	#
5)	PCB1268#4	5.975	6.271	2064.1E6	1443.3E6	2.7969	3.8361	#
6)	PCB1268#5	6.384	6.659	4828.1E6	3280.8E6	2.7209	3.6313	#
7)	DECACHLOR...	6.504	6.845	2201.6E6	1587.0E6	0.2363	0.3418	#

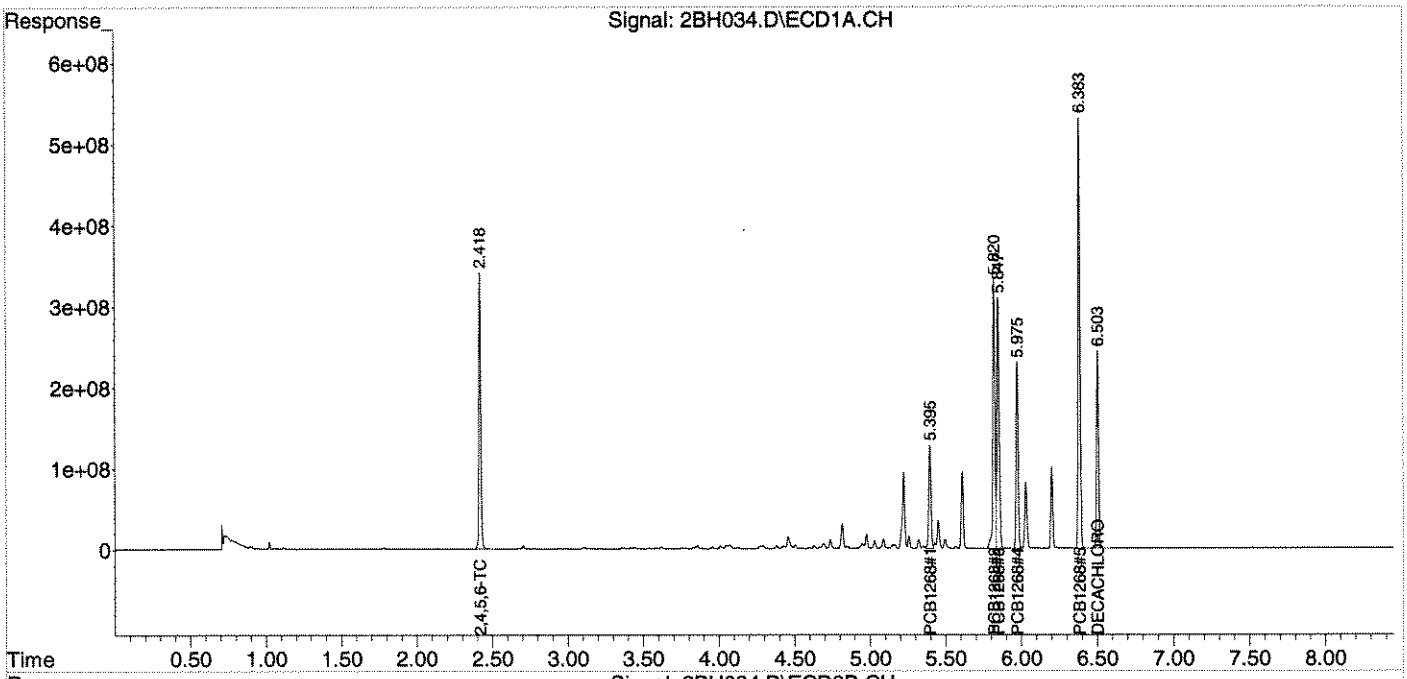
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

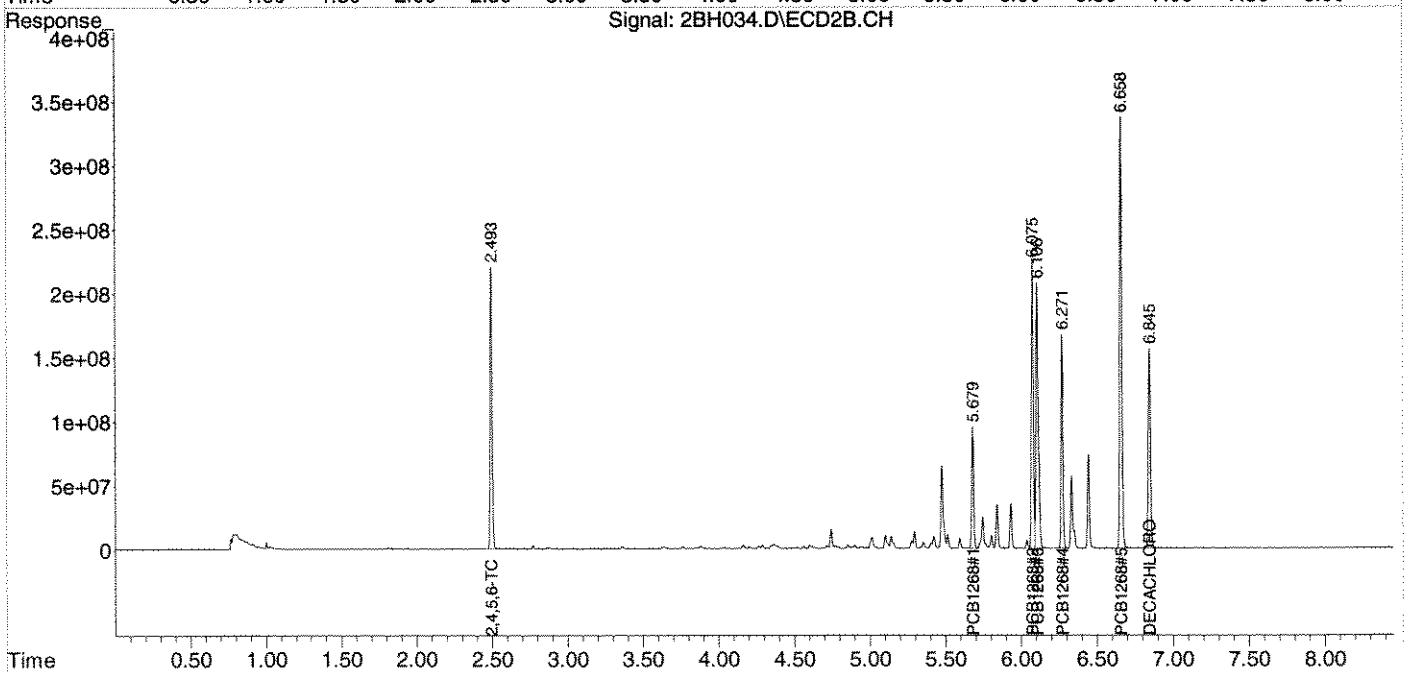
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:07
Operator : RC
Sample : AA27520-CAL5
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:16 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:19
Operator : RC
Sample : AA27520-CAL6
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:19 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.418	2.493	5689.2E6	3515.1E6	0.5016	0.6139	
2)	PCB1268#1	5.395	5.679	2600.7E6	1679.5E6	5.4889	6.7784	
3)	PCB1268#2	5.820	6.075	6234.0E6	3730.9E6	6.0435	7.1788	
4)	PCB1268#3	5.846	6.106	6366.7E6	4181.5E6	5.6418	7.3880	#
5)	PCB1268#4	5.975	6.271	4166.5E6	2813.0E6	5.6457	7.4765	#
6)	PCB1268#5	6.383	6.659	9366.0E6	6034.0E6	5.2783	6.6785	#
7)	DECACHLOR...	6.503	6.845	4528.4E6	3156.7E6	0.4822	0.6773	#

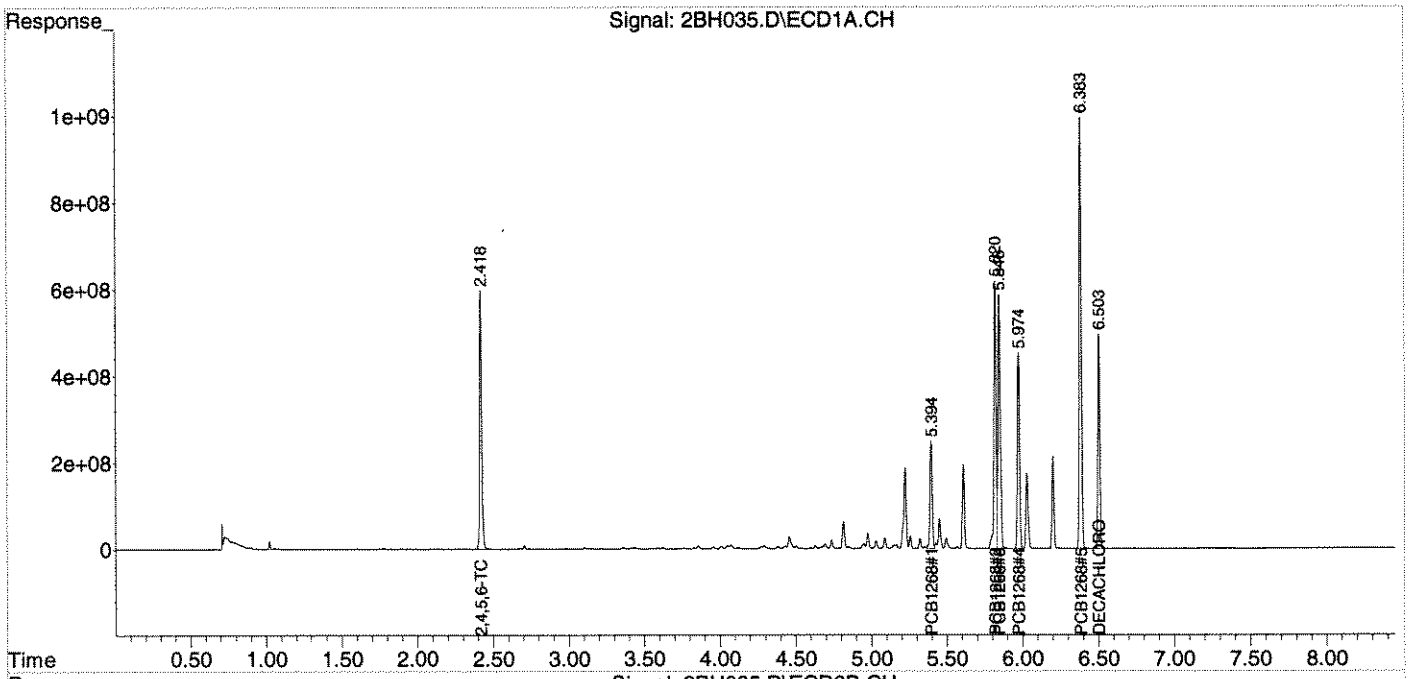
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

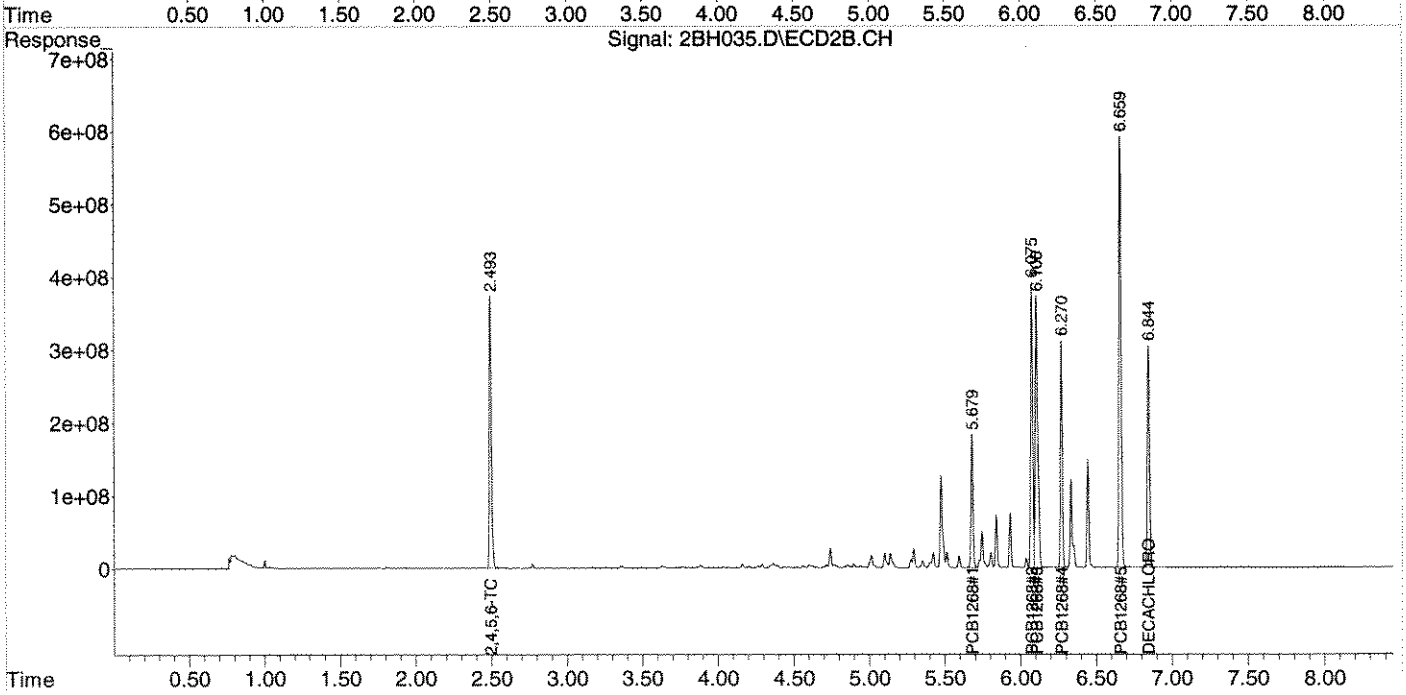
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:19
Operator : RC
Sample : AA27520-CAL6
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:24:19 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:23:29 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:31
Operator : RC
Sample : AA27520-SCV1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:26:46 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:26:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.418	2.493	3392.9E6	2114.7E6	0.2348	0.2255
2)	PCB1268#1	5.395	5.679	1249.1E6	834.5E6	1.9210	1.8518
3)	PCB1268#2	5.820	6.075	3332.5E6	2099.9E6	1.9713	1.8790
4)	PCB1268#3	5.847	6.106	3411.6E6	2316.6E6	1.9995	1.9282
5)	PCB1268#4	5.975	6.271	2228.4E6	1543.2E6	2.0840	1.9960
6)	PCB1268#5	6.383	6.658	5273.9E6	3564.1E6	1.9868	1.8944
7)	DECACHLOR...	6.503	6.844	2602.6E6	1857.5E6	0.2067	0.1988

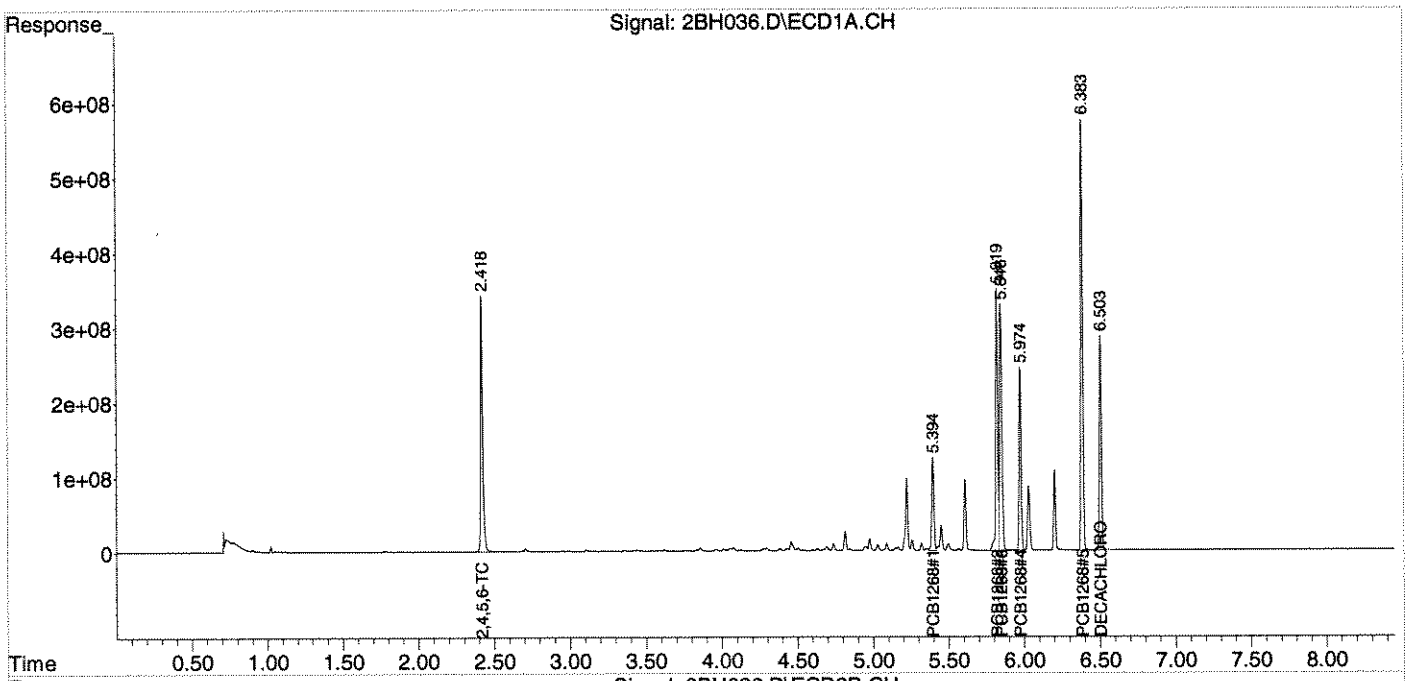
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

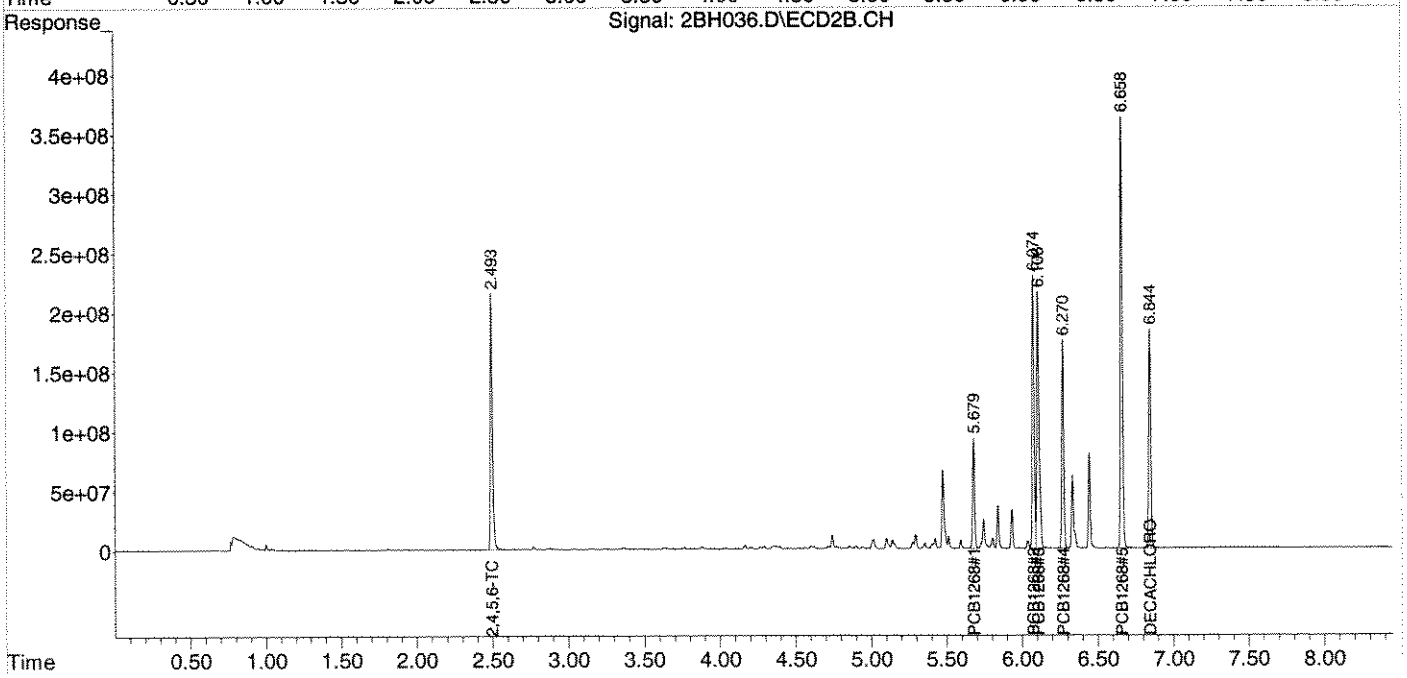
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2BH14\
Data File : 2BH036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Feb 2014 20:31
Operator : RC
Sample : AA27520-SCV1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 14 10:26:46 2014
Quant Method : Z:\2\METHODS\PCB1268BH14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Feb 14 10:26:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA28377

1254

Instrument: OSVGCECD2

Calibration ID: 1404077

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA28377-CAL1	QC		1		A4B0246		
AA28377-CAL2	QC		2		A4B0243		
AA28377-CAL3	QC		3		A4B0242		
AA28377-CAL4	QC		4		A4B0240		
AA28377-CAL5	QC		5		A4B0239		
AA28377-CAL6	QC		6		A4B0238		
AA28377-SCV1	QC		7		A4B0248		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1254DL14.M
Title : PCB; INST OSVGCECD2
Last Update : Thu Apr 17 13:52:38 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2DL012.D CAL2 =2DL013.D CAL3 =2DL014.D
CAL4 =2DL015.D CAL5 =2DL016.D CAL6 =2DL017.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	6.075	6.534	6.713	7.579	7.890	9.073	7.311	E9	14.98
2)	PCB1254#1	3.557	3.498	3.047	3.408	3.585	3.823	3.486	E8	7.34
3)	PCB1254#2	6.114	5.867	5.259	5.889	6.210	6.512	5.975	E8	7.08
4)	PCB1254#3	3.359	3.261	2.959	3.328	3.599	3.775	3.380	E8	8.35
5)	PCB1254#4	5.552	5.411	5.020	5.659	6.105	6.237	5.664	E8	7.95
6)	PCB1254#5	3.875	3.854	3.480	3.904	4.296	4.406	3.969	E8	8.45
7)	DECACHLOROBIP...	5.956	4.765	3.751	4.149	5.212	4.818	4.775	E9	16.30

Signal #2 Calibration Files
CAL1 =2DL012.D CAL2 =2DL013.D CAL3 =2DL014.D
CAL4 =2DL015.D CAL5 =2DL016.D CAL6 =2DL017.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	8.689	9.198	9.489	10.264	10.452	10.343	9.739	E9	7.42
2)	PCB1254#1	3.973	3.998	3.581	3.873	4.028	4.140	3.932	E8	4.89
3)	PCB1254#2	4.766	4.609	4.048	4.392	4.574	4.632	4.503	E8	5.63
4)	PCB1254#3	3.661	3.571	3.136	3.453	3.665	3.782	3.545	E8	6.44
5)	PCB1254#4	6.135	6.304	6.100	6.668	6.948	6.907	6.510	E8	5.85
6)	PCB1254#5	3.092	3.040	2.638	2.873	3.047	3.068	2.960	E8	5.93
7)	DECACHLOROBIP...	7.869	6.230	4.924	5.345	6.563	5.826	6.126	E9	16.94

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 12:42
Operator : RC
Sample : AA28377-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:47 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.484	2.436	30376241	43443334	0.0020	0.0045	#
2)	PCB1254#1	4.157	4.298	17786049	19866939	0.0400	0.0579	#
3)	PCB1254#2	4.364	4.441	30571454	23829467	0.0391	0.0622	#
4)	PCB1254#3	4.584	4.711	16794424	18304895	0.0354	0.0617	#
5)	PCB1254#4	4.677	4.798	27759014	30673704	0.0353	0.0566	#
6)	PCB1254#5	4.885	5.084	19377232	15459074	0.0334	0.0621	#
7)	DECACHLOR...	6.578	6.765	29778230	39344860	0.0033	0.0059	#

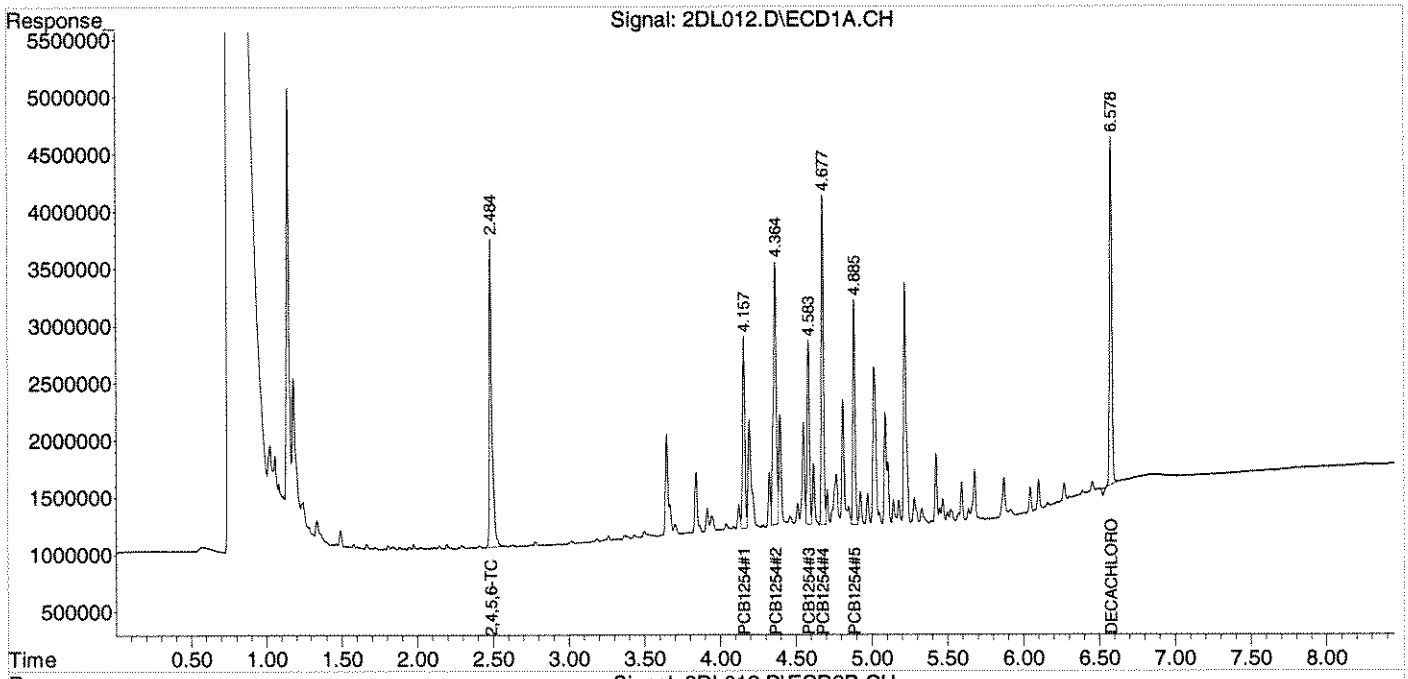
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

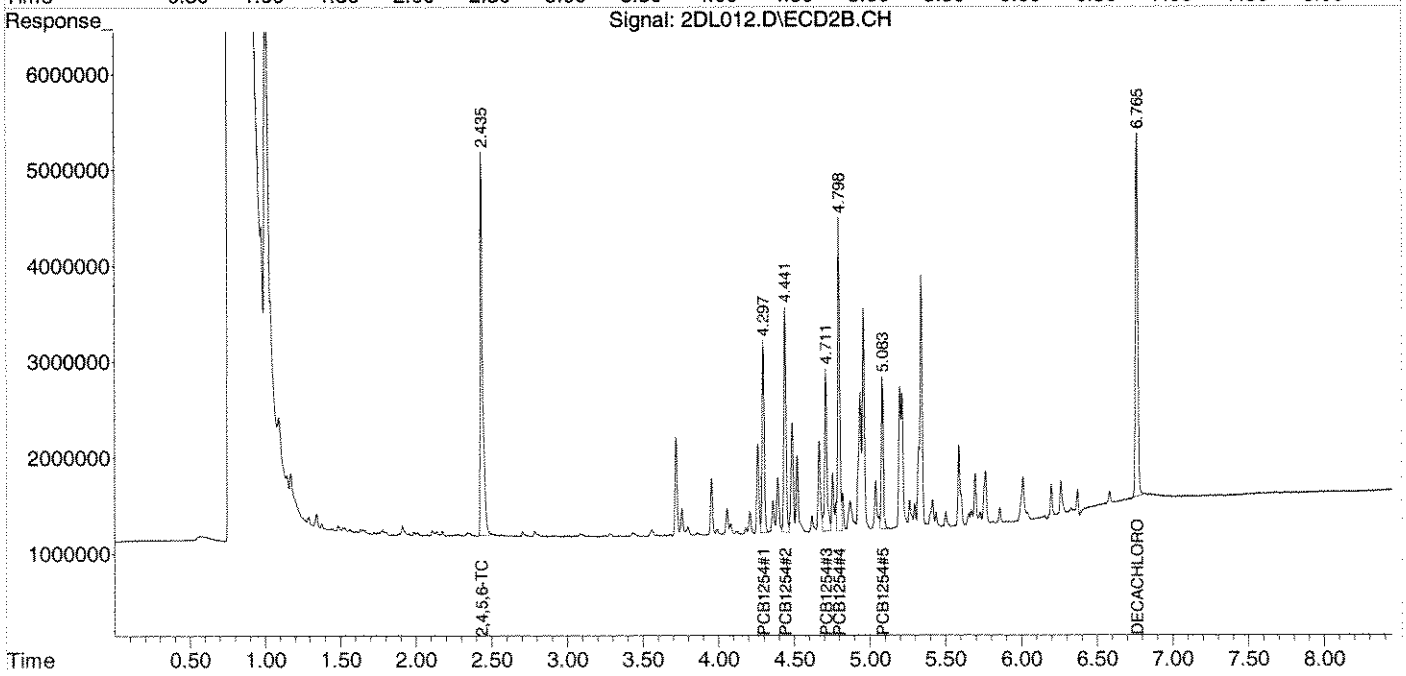
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 12:42
Operator : RC
Sample : AA28377-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:47 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 12:54
Operator : RC
Sample : AA28377-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:50 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.477	2.433	65337660	91975234	0.0044	0.0095	#
2)	PCB1254#1	4.148	4.296	34981325	39979836	0.0787	0.1165	#
3)	PCB1254#2	4.356	4.440	58667652	46086593	0.0751	0.1203	#
4)	PCB1254#3	4.576	4.710	32608734	35714794	0.0687	0.1205	#
5)	PCB1254#4	4.669	4.797	54111663	63036406	0.0689	0.1162	#
6)	PCB1254#5	4.878	5.083	38539197	30395875	0.0664	0.1221	#
7)	DECACHLOR...	6.569	6.761	47653861	62298117	0.0053	0.0093	#

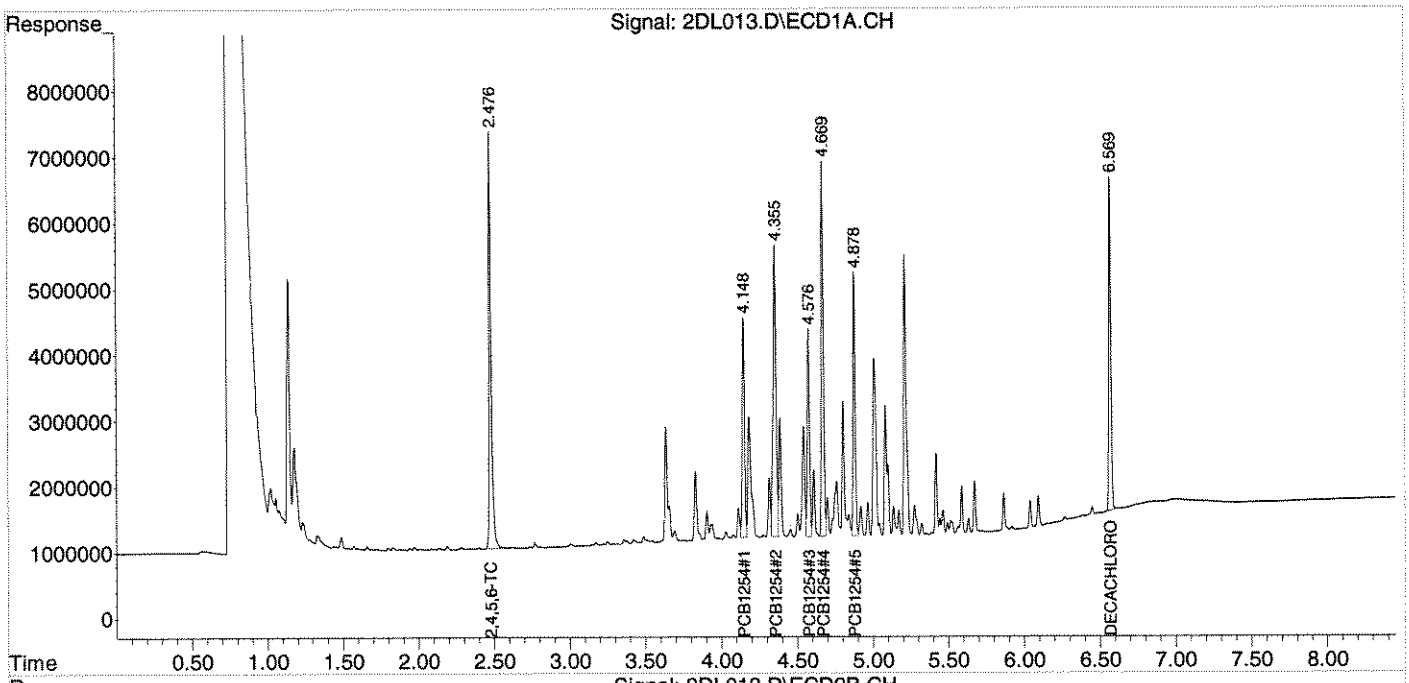
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

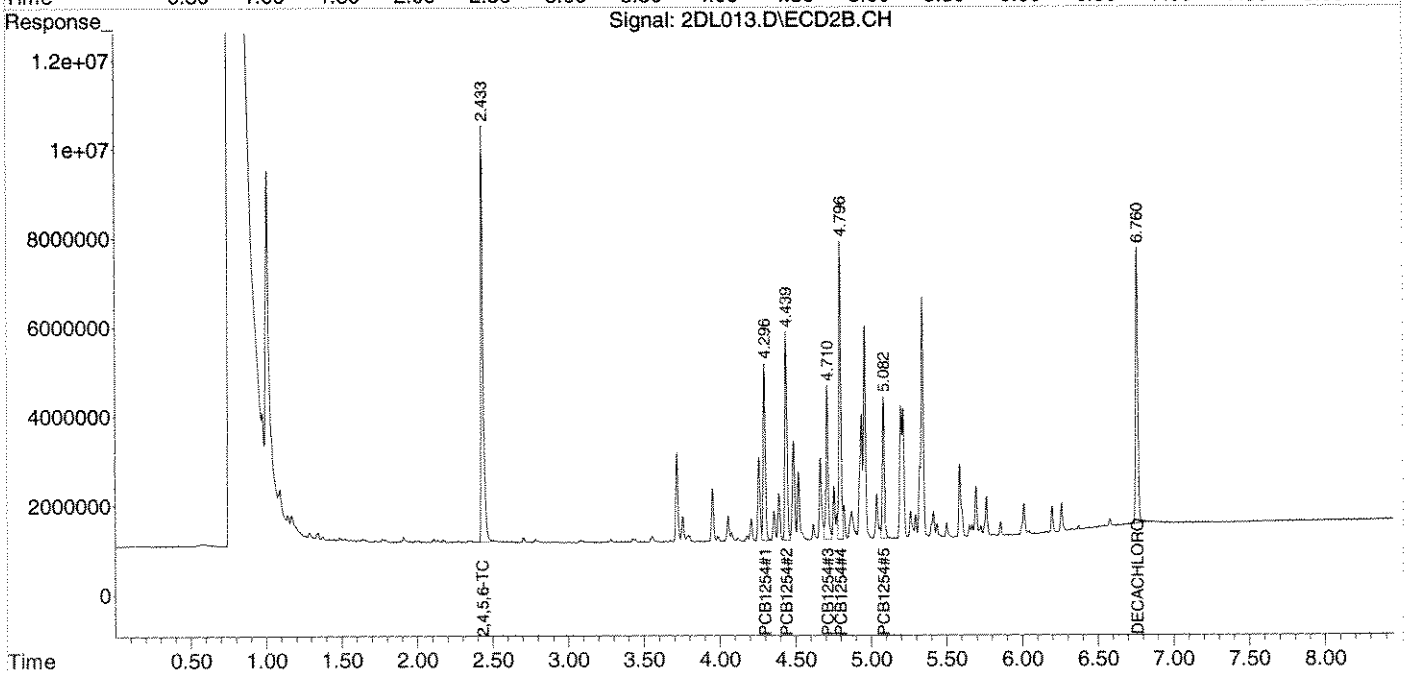
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 12:54
Operator : RC
Sample : AA28377-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:50 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:06
Operator : RC
Sample : AA28377-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:53 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.477	2.434	335.6E6	474.5E6	0.0224	0.0490	#
2)	PCB1254#1	4.148	4.296	152.3E6	179.1E6	0.3427	0.5219	#
3)	PCB1254#2	4.355	4.440	263.0E6	202.4E6	0.3365	0.5284	#
4)	PCB1254#3	4.576	4.710	148.0E6	156.8E6	0.3117	0.5289	#
5)	PCB1254#4	4.669	4.797	251.0E6	305.0E6	0.3196	0.5625	#
6)	PCB1254#5	4.878	5.083	174.0E6	131.9E6	0.2999	0.5298	#
7)	DECACHLOR...	6.568	6.759	187.5E6	246.2E6	0.0210	0.0369	#

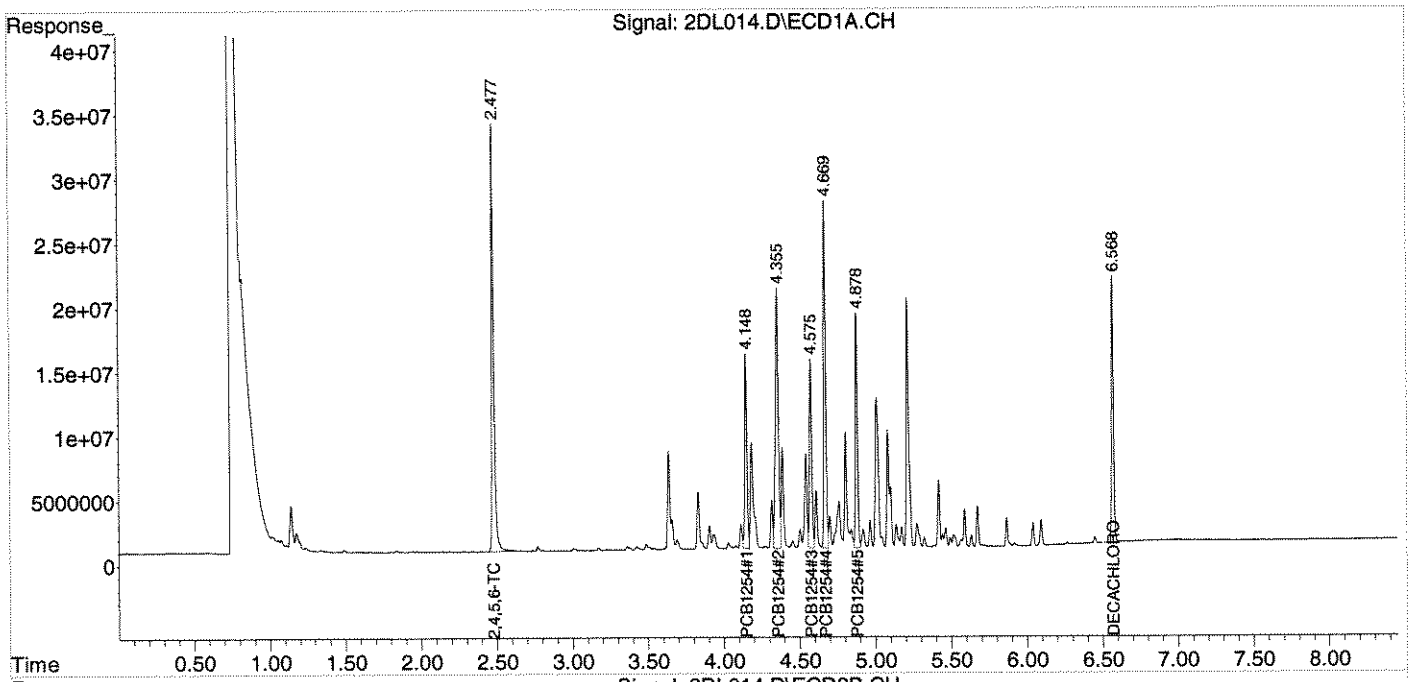
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

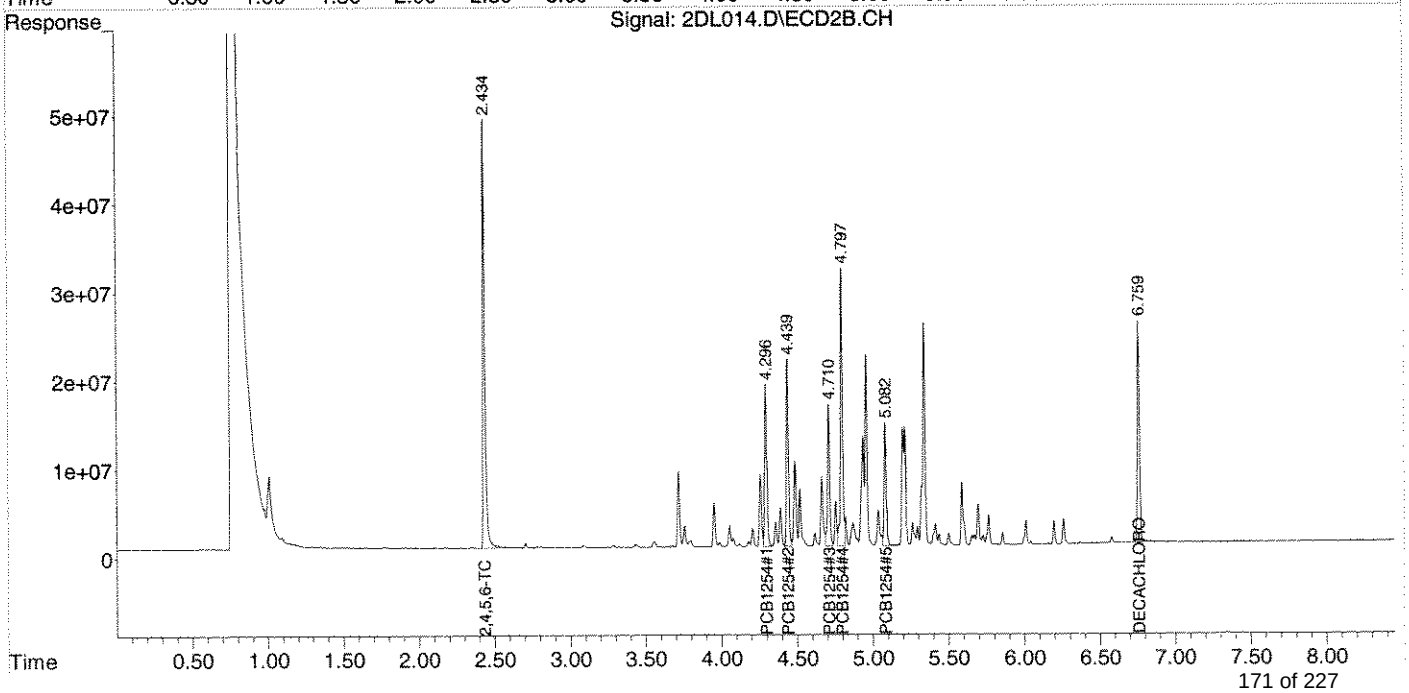
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:06
Operator : RC
Sample : AA28377-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:53 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:18
Operator : RC
Sample : AA28377-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:56 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.477	2.435	757.9E6	1026.4E6	0.0507	0.1061	#
2)	PCB1254#1	4.148	4.296	340.8E6	387.3E6	0.7667	1.1288	#
3)	PCB1254#2	4.355	4.440	588.9E6	439.2E6	0.7536	1.1465	#
4)	PCB1254#3	4.576	4.710	332.8E6	345.3E6	0.7012	1.1645	#
5)	PCB1254#4	4.669	4.797	565.9E6	666.8E6	0.7206	1.2296	#
6)	PCB1254#5	4.877	5.083	390.4E6	287.3E6	0.6728	1.1539	#
7)	DECACHLOR...	6.568	6.759	414.9E6	534.5E6	0.0465	0.0801	#

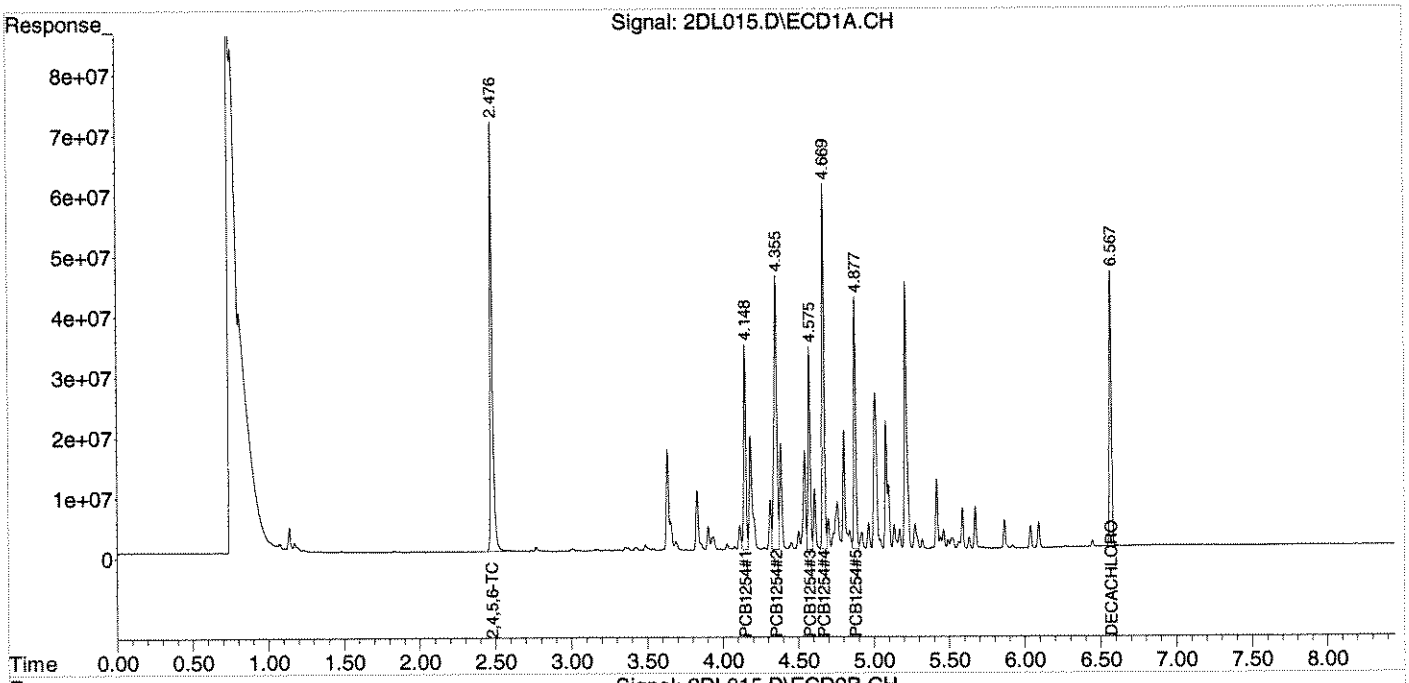
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

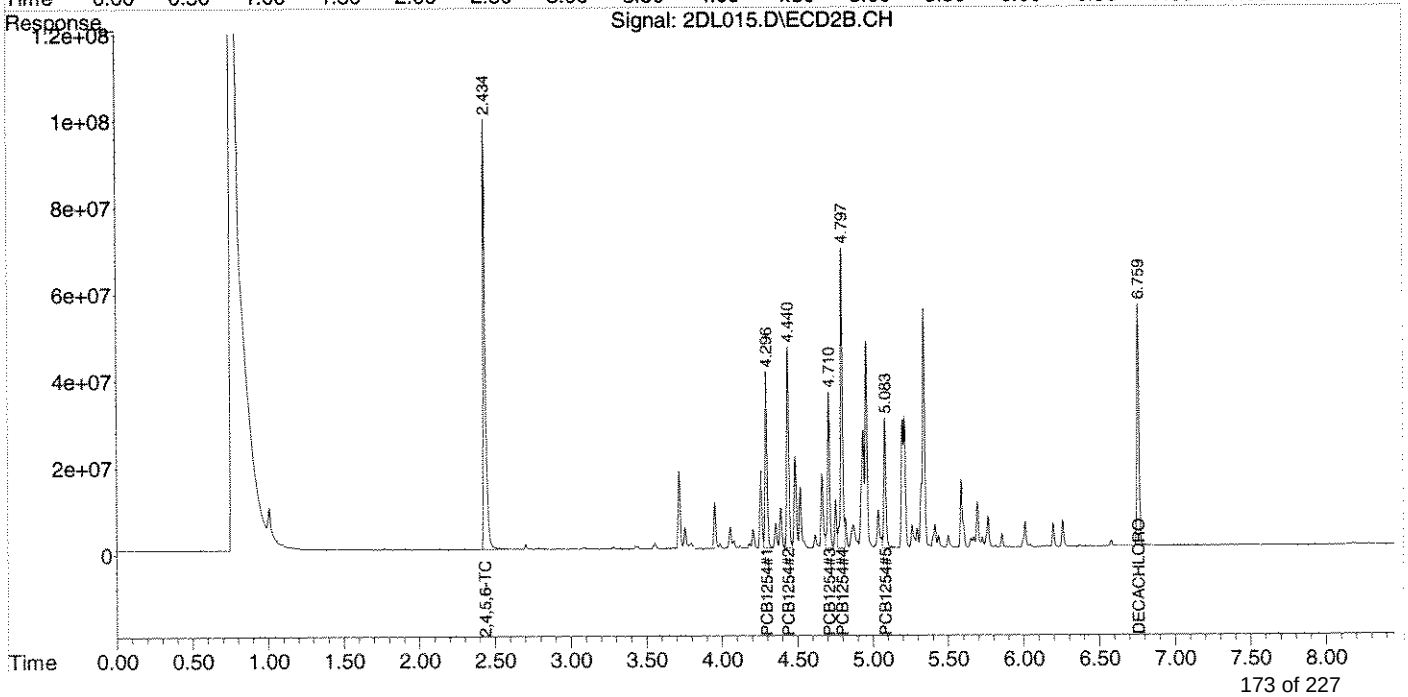
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:18
Operator : RC
Sample : AA28377-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:38:56 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:31
Operator : RC
Sample : AA28377-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:40:29 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.477	2.434	1578.0E6	2090.4E6	0.1055	0.2161	#
2)	PCB1254#1	4.148	4.297	717.0E6	805.5E6	1.6129	2.3476	#
3)	PCB1254#2	4.356	4.440	1241.9E6	914.9E6	1.5893	2.3883	#
4)	PCB1254#3	4.575	4.710	719.8E6	733.1E6	1.5165	2.4725	#
5)	PCB1254#4	4.669	4.798	1221.0E6	1389.6E6	1.5548	2.5624	#
6)	PCB1254#5	4.878	5.083	859.2E6	609.4E6	1.4807	2.4476	#
7)	DECACHLOR...	6.568	6.760	1042.5E6	1312.7E6	0.1168	0.1968	#

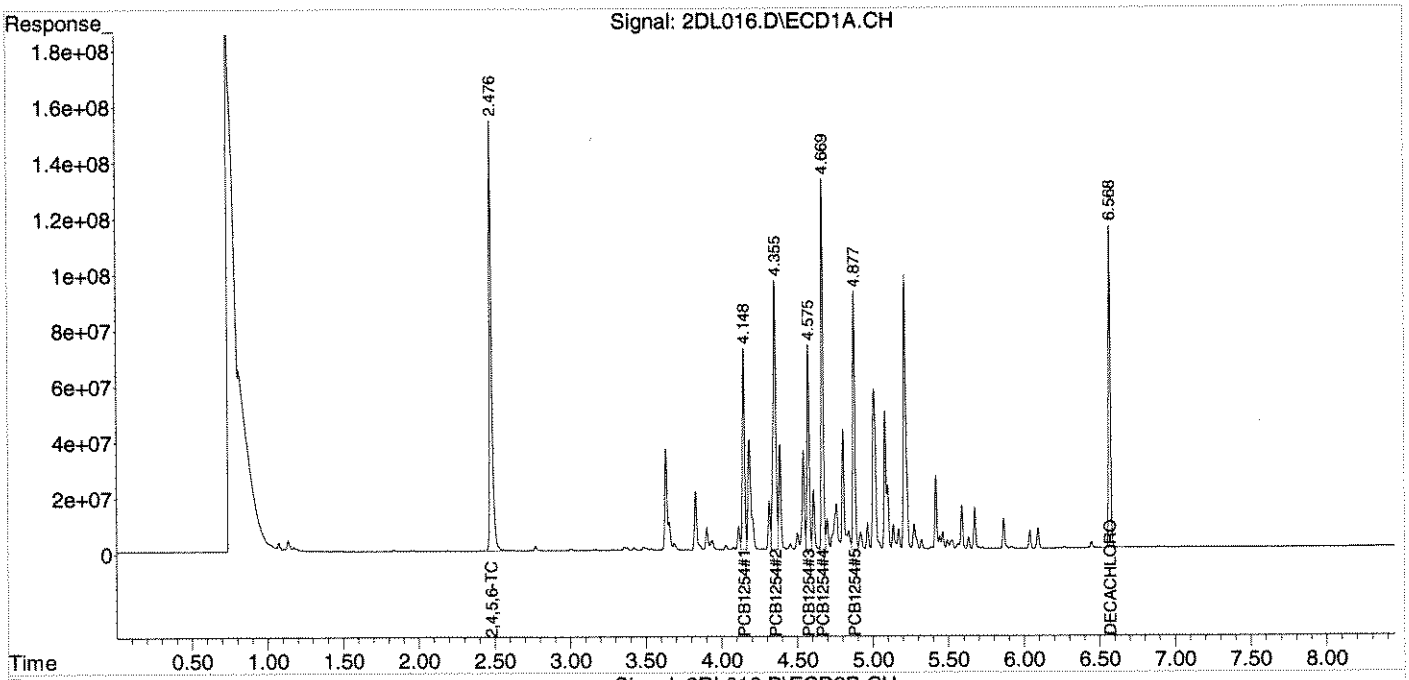
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

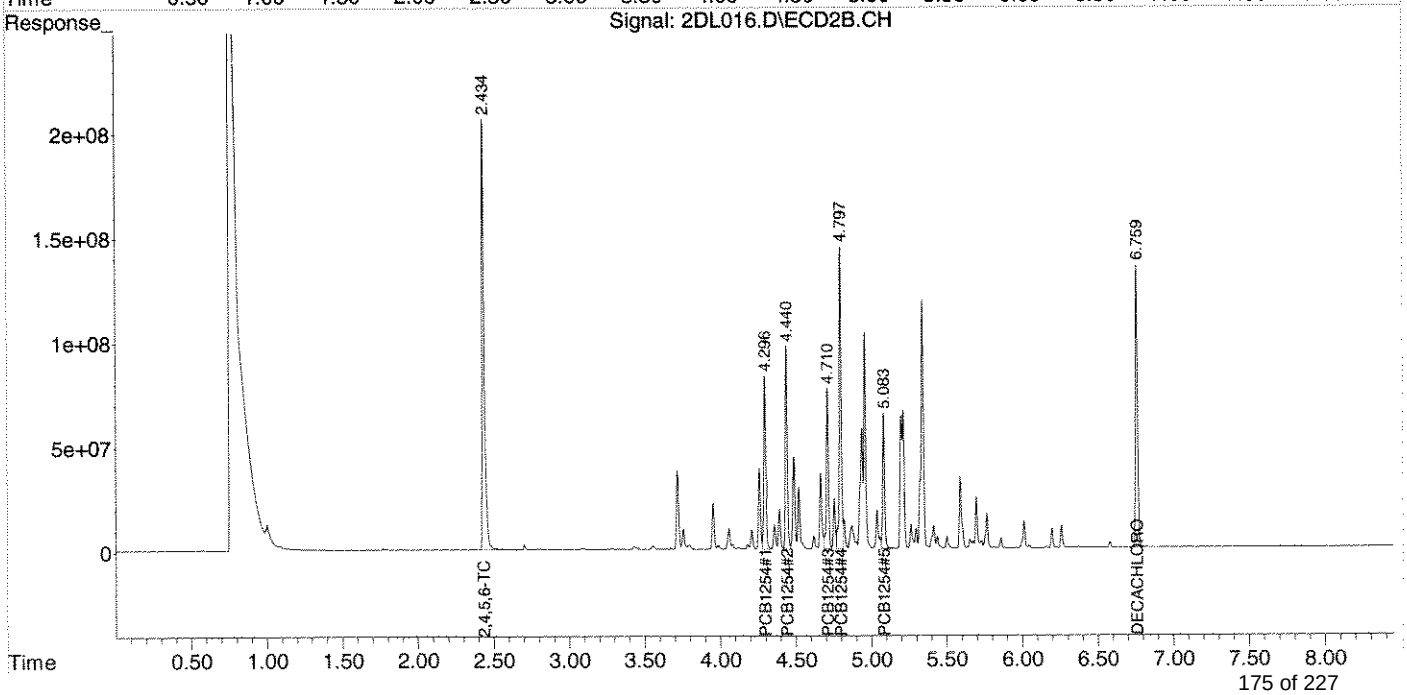
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:31
Operator : RC
Sample : AA28377-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:40:29 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:43
Operator : RC
Sample : AA28377-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:51:45 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.476	2.434	3629.1E6	4137.1E6	0.2426	0.4276	#
2)	PCB1254#1	4.148	4.296	1529.0E6	1655.8E6	3.4396	4.8258	#
3)	PCB1254#2	4.355	4.440	2604.7E6	1852.6E6	3.3333	4.8363	#
4)	PCB1254#3	4.575	4.710	1510.1E6	1512.6E6	3.1813	5.1018	#
5)	PCB1254#4	4.669	4.797	2494.6E6	2762.9E6	3.1767	5.0948	#
6)	PCB1254#5	4.877	5.083	1762.3E6	1227.2E6	3.0371	4.9286	#
7)	DECACHLOR...	6.568	6.760	1927.0E6	2330.6E6	0.2159	0.3494	#

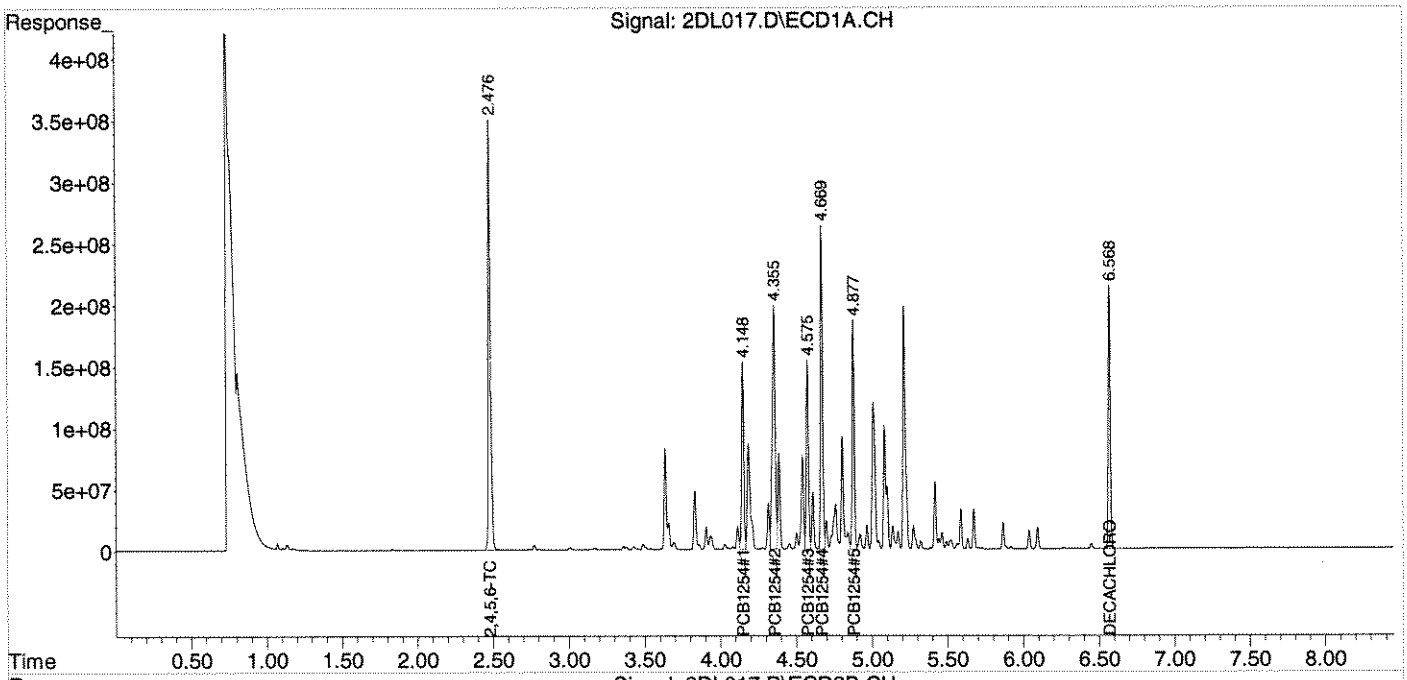
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

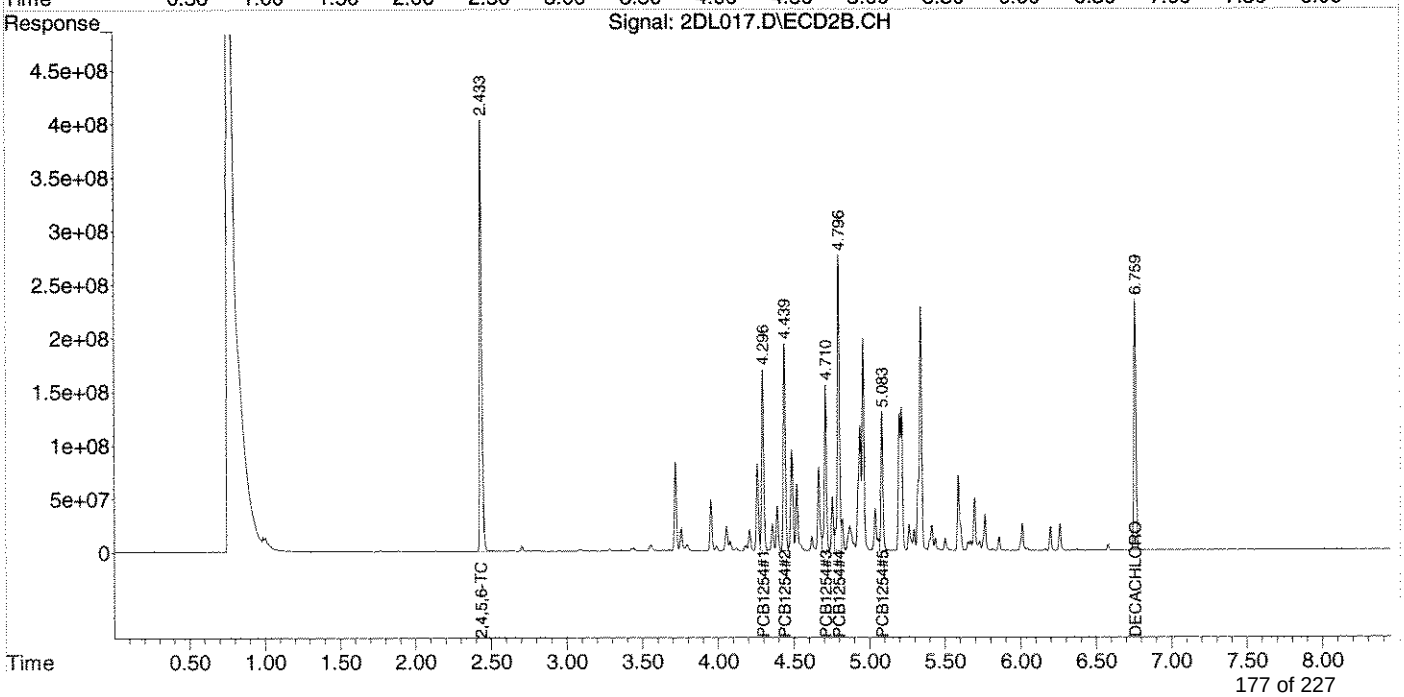
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:43
Operator : RC
Sample : AA28377-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 13:51:45 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:38:36 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:55
Operator : RC
Sample : AA28377-SCV1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 14:03:56 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:52:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.478	2.435	2683.5E6	2406.1E6	0.3671	0.2471	#
2)	PCB1254#1	4.149	4.297	679.0E6	798.5E6	1.9477	2.0306	
3)	PCB1254#2	4.356	4.441	1174.7E6	896.7E6	1.9660	1.9911	
4)	PCB1254#3	4.576	4.711	682.7E6	717.8E6	2.0197	2.0249	
5)	PCB1254#4	4.670	4.798	1154.7E6	1350.3E6	2.0388	2.0741	
6)	PCB1254#5	4.878	5.084	814.9E6	593.8E6	2.0531	2.0064	
7)	DECACHLOR...	6.569	6.760	1012.4E6	1283.6E6	0.2120	0.2095	

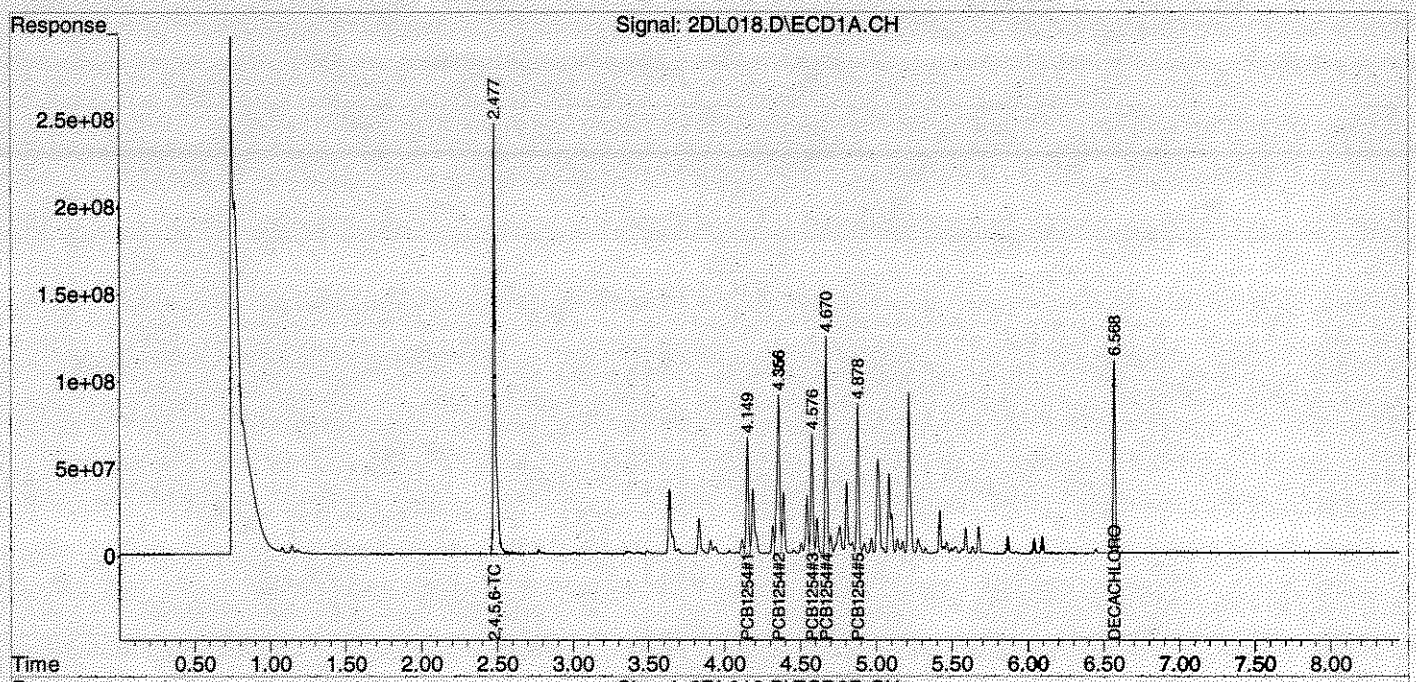
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

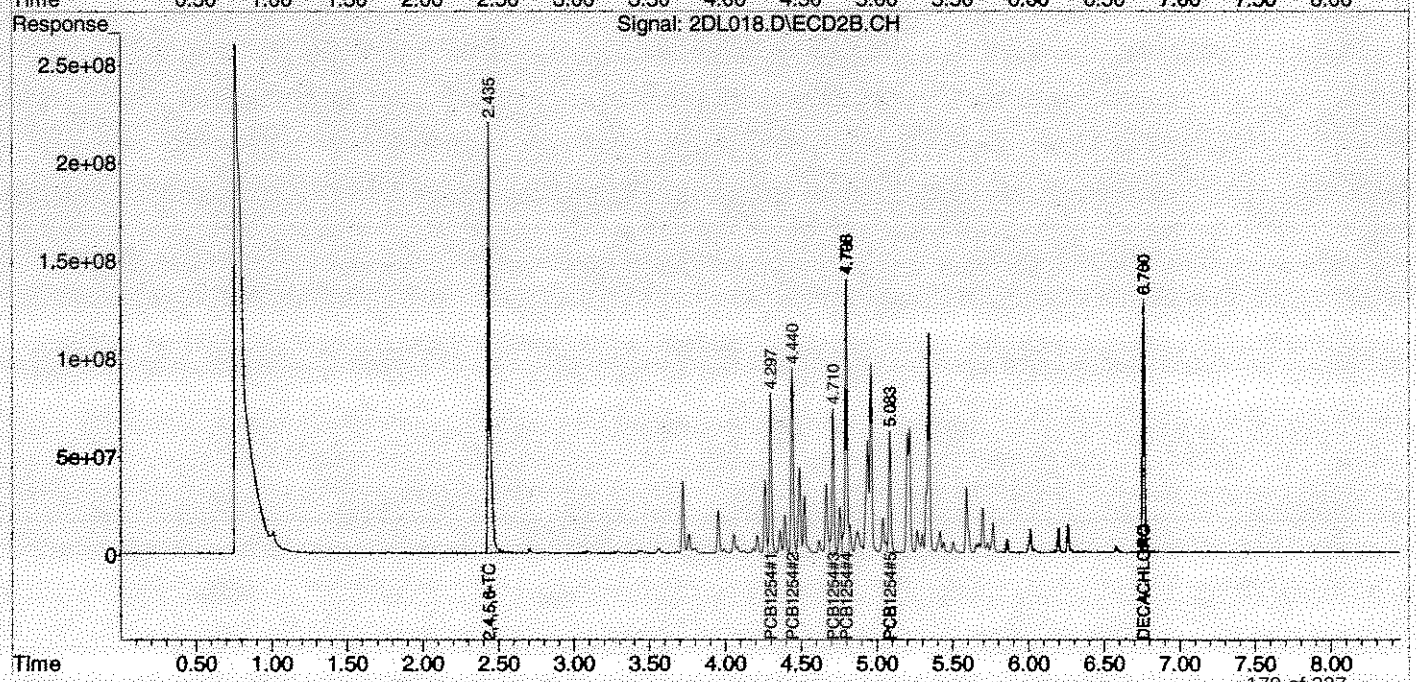
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DL14\
Data File : 2DL018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 17 Apr 2014 13:55
Operator : RC
Sample : AA28377-SCV1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 17 14:03:56 2014
Quant Method : Z:\2\METHODS\PCB1254DL14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Apr 17 13:52:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE 1232

AA28395

Instrument: OSVGCECD2

Calibration ID: 1404077

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA28395-CAL1	QC		1		A4C0198		
AA28395-CAL2	QC		2		A4C0197		
AA28395-CAL3	QC		3		A4C0196		
AA28395-CAL4	QC		4		A4C0195		
AA28395-CAL5	QC		5		A4C0194		
AA28395-CAL6	QC		6		A4C0193		
AA28395-SCV1	QC		7		A4C0200		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1232DM14.M
Title : PCB; INST OSVGCECD2
Last Update : Fri Apr 18 09:58:51 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2DM002.D CAL2 =2DM003.D CAL3 =2DM004.D
CAL4 =2DM005.D CAL5 =2DM006.D CAL6 =2DM007.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	7.049	7.159	7.993	8.797	8.803	8.988	8.131	E9	10.67
2)	PCB1232#1	1.332	1.180	1.310	1.438	1.350	1.433	1.340	E8	7.08
3)	PCB1232#2	1.508	1.399	1.253	1.345	1.303	1.345	1.359	E8	6.47
4)	PCB1232#3	1.749	1.689	1.678	1.909	1.777	2.034	1.806	E8	7.71
5)	PCB1232#4	1.434	1.358	1.258	1.366	1.270	1.435	1.353	E8	5.67
6)	PCB1232#5	7.800	7.552	7.409	8.173	7.657	8.820	7.902	E7	6.58
7)	DECACHLOROBIP...	3.482	2.741	3.610	3.634	3.528	3.795	3.465	E9	10.70

Signal #2 Calibration Files
CAL1 =2DM002.D CAL2 =2DM003.D CAL3 =2DM004.D
CAL4 =2DM005.D CAL5 =2DM006.D CAL6 =2DM007.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	9.158	9.345	10.263	11.279	10.819	10.756	10.270	E9	8.32
2)	PCB1232#1	1.852	1.743	1.614	1.703	1.678	1.795	1.731	E8	4.91
3)	PCB1232#2	1.726	1.669	1.511	1.578	1.523	1.625	1.605	E8	5.23
4)	PCB1232#3	7.121	6.871	6.244	6.382	6.075	6.406	6.517	E7	6.10
5)	PCB1232#4	6.730	6.636	6.188	6.285	6.022	6.388	6.375	E7	4.22
6)	PCB1232#5	6.000	5.973	5.558	5.691	5.389	5.663	5.712	E7	4.16
7)	DECACHLOROBIP...	4.680	3.017	3.902	3.931	3.783	3.983	3.883	E9	13.66

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 8:47
Operator : RC
Sample : AA28395-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:09 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.428	35245497	45787881	0.0025	0.0055	#
2)	PCB1232#1	2.731	2.776	6659038	9259281	0.0279	0.0641	#
3)	PCB1232#2	2.997	3.077	7539796	8629530	0.0406	0.0689	#
4)	PCB1232#3	3.372	3.713	8746892	3560509	0.0356	0.0668	#
5)	PCB1232#4	3.481	3.751	7168491	3364911	0.0446	0.0643	#
6)	PCB1232#5	3.534	3.786	3899822	3000041	0.0374	0.0593	#
7)	DECACHLOR...	6.564	6.756	17411694	23397717	0.0018	0.0033	#

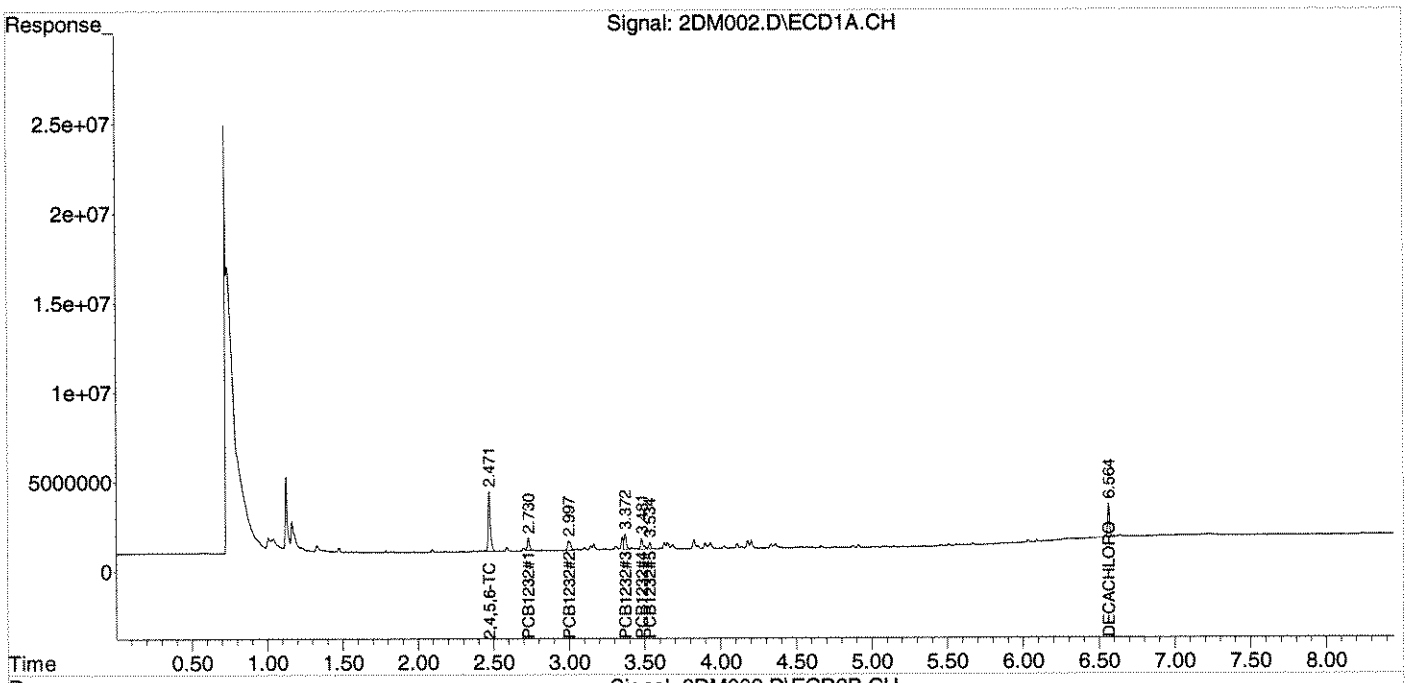
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

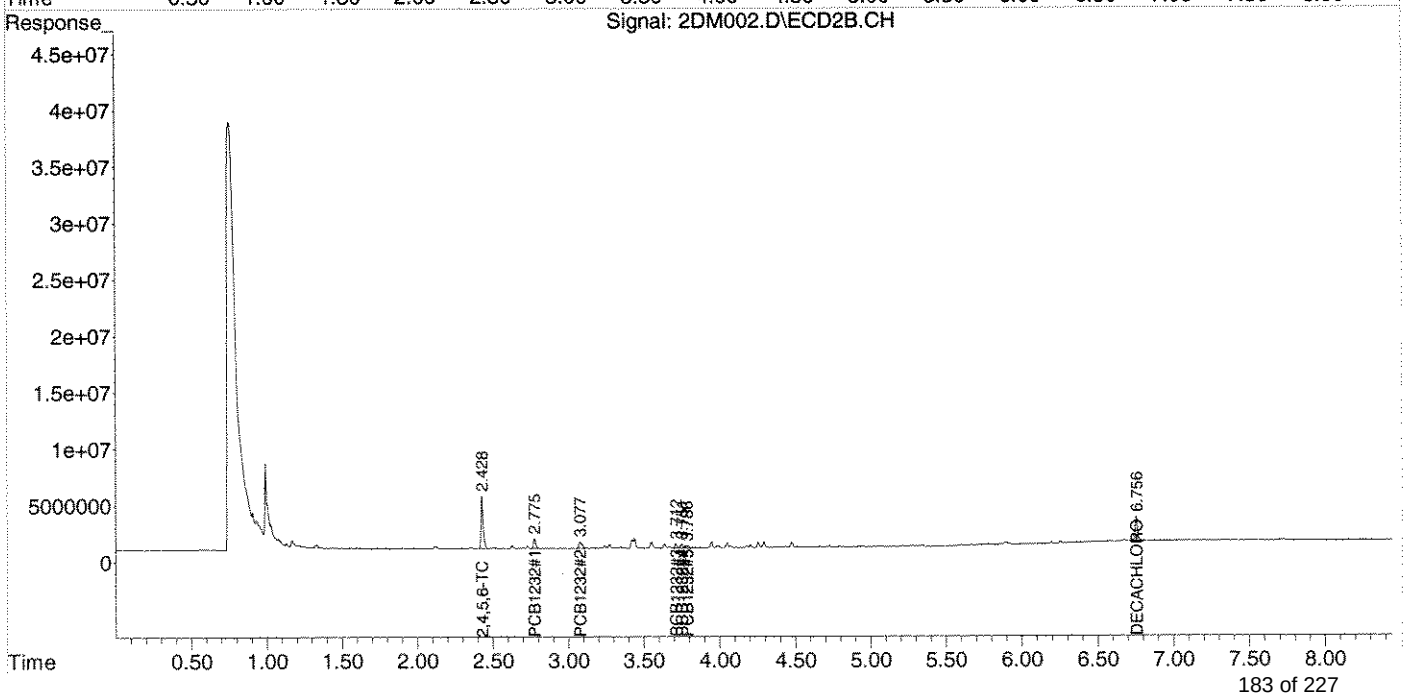
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 8:47
Operator : RC
Sample : AA28395-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:09 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 8:59
Operator : RC
Sample : AA28395-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:12 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	71586999	93445438	0.0051	0.0112	#
2)	PCB1232#1	2.729	2.777	11797448	17427265	0.0493	0.1207	#
3)	PCB1232#2	2.996	3.078	13985716	16688914	0.0753	0.1333	#
4)	PCB1232#3	3.369	3.713	16886471	6871113	0.0688	0.1289	#
5)	PCB1232#4	3.479	3.752	13578926	6636285	0.0844	0.1269	#
6)	PCB1232#5	3.532	3.789	7552474	5972848	0.0724	0.1181	#
7)	DECACHLOR...	6.562	6.755	27405285	30174304	0.0028	0.0043	#

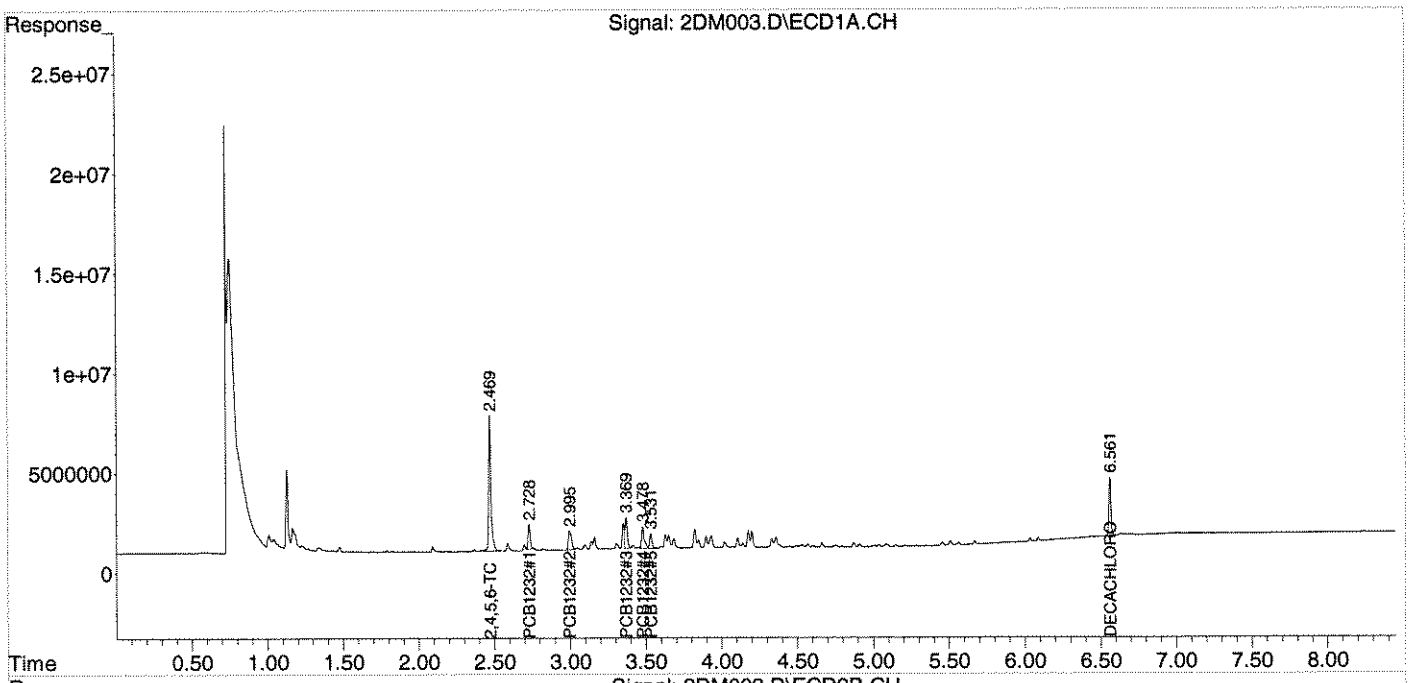
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

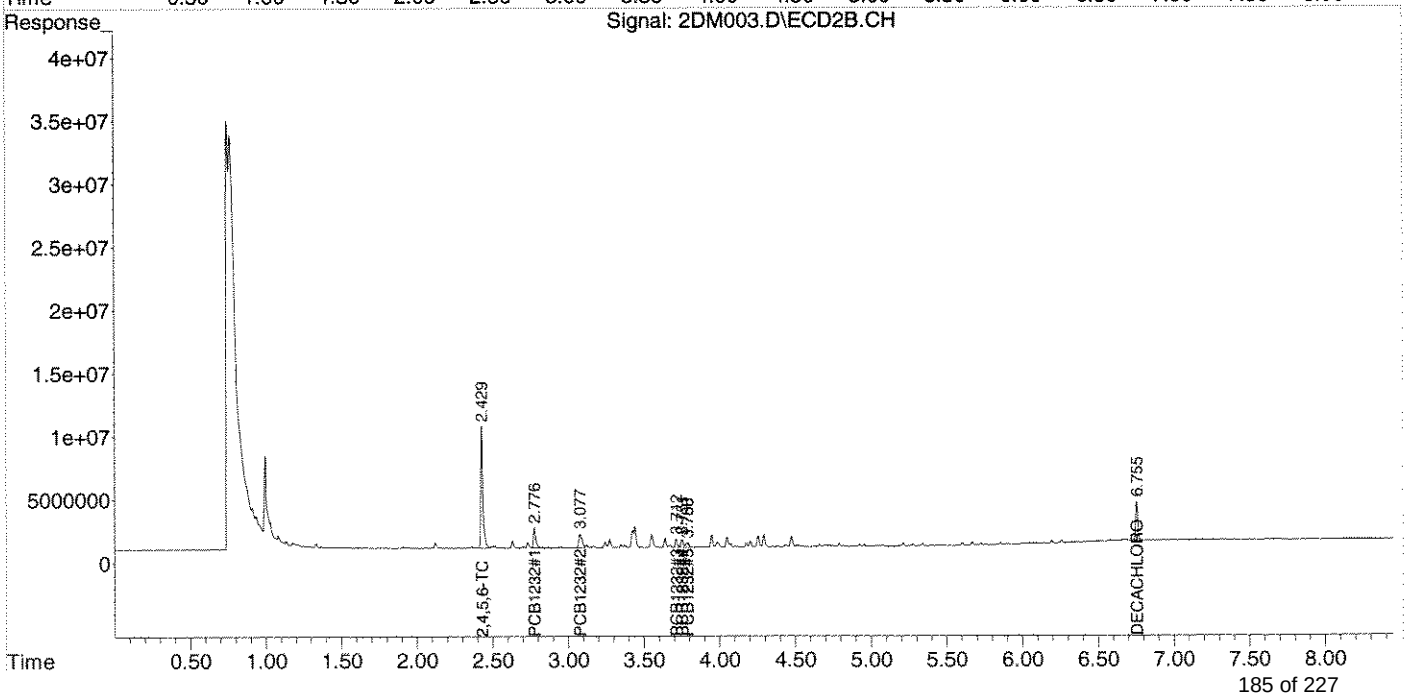
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 8:59
Operator : RC
Sample : AA28395-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:12 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:11
Operator : RC
Sample : AA28395-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:15 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	399.7E6	513.2E6	0.0283	0.0615	#
2)	PCB1232#1	2.729	2.777	65513164	80703967	0.2740	0.5590	#
3)	PCB1232#2	2.996	3.079	62631596	75554289	0.3373	0.6035	#
4)	PCB1232#3	3.370	3.714	83890919	31222167	0.3418	0.5856	#
5)	PCB1232#4	3.479	3.752	62876535	30938825	0.3908	0.5916	#
6)	PCB1232#5	3.532	3.788	37044140	27790680	0.3552	0.5495	#
7)	DECACHLOR...	6.562	6.756	180.5E6	195.1E6	0.0185	0.0278	#

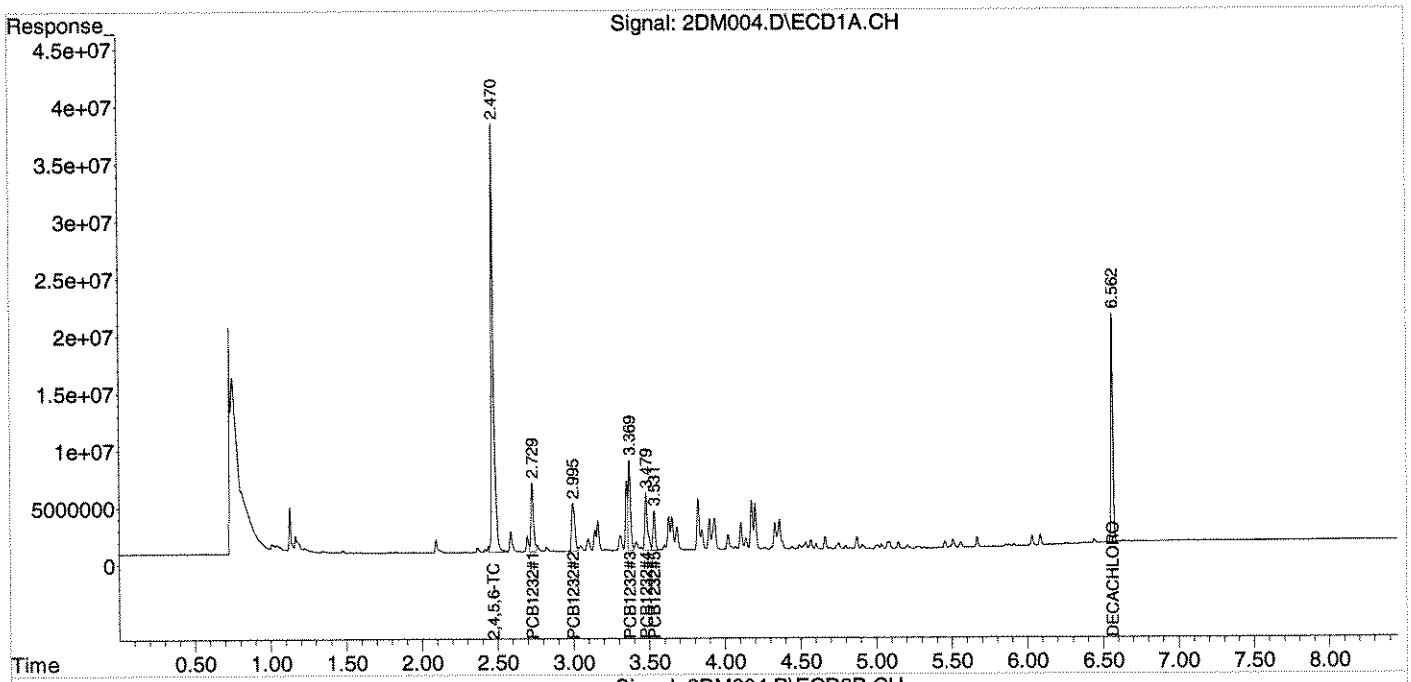
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

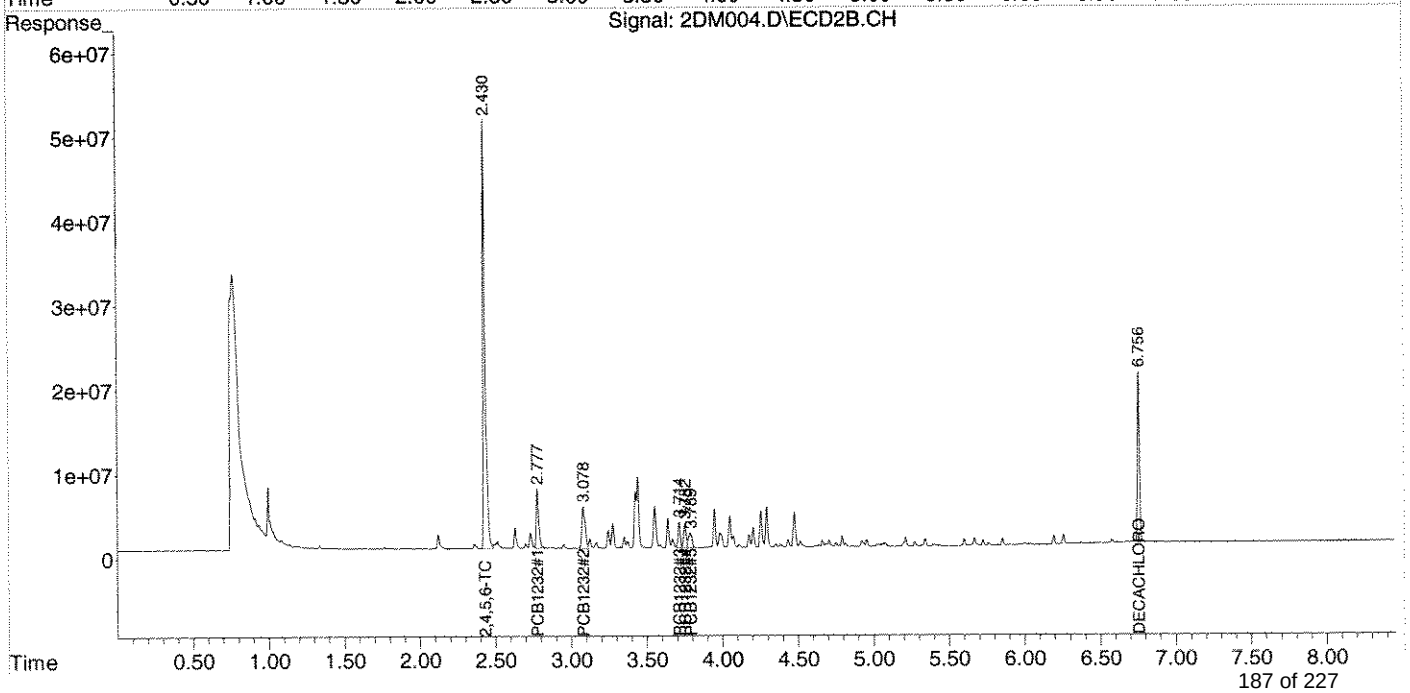
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:11
Operator : RC
Sample : AA28395-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:15 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:23
Operator : RC
Sample : AA28395-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:18 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	879.7E6	1127.9E6	0.0622	0.1351	#
2)	PCB1232#1	2.729	2.777	143.8E6	170.3E6	0.6015	1.1794	#
3)	PCB1232#2	2.996	3.078	134.5E6	157.8E6	0.7243	1.2606	#
4)	PCB1232#3	3.370	3.714	190.9E6	63822142	0.7777	1.1970	#
5)	PCB1232#4	3.479	3.752	136.6E6	62851431	0.8492	1.2018	#
6)	PCB1232#5	3.532	3.788	81726281	56908372	0.7836	1.1252	#
7)	DECACHLOR...	6.561	6.755	363.4E6	393.1E6	0.0372	0.0560	#

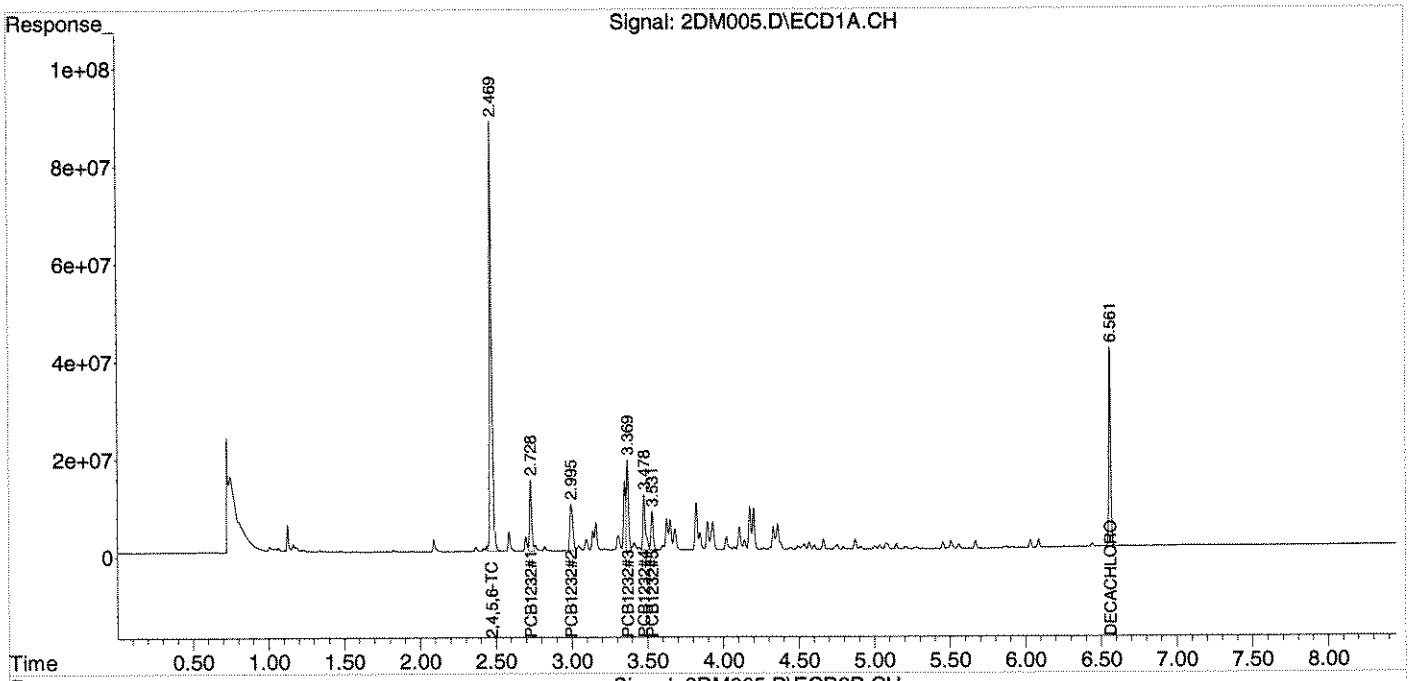
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

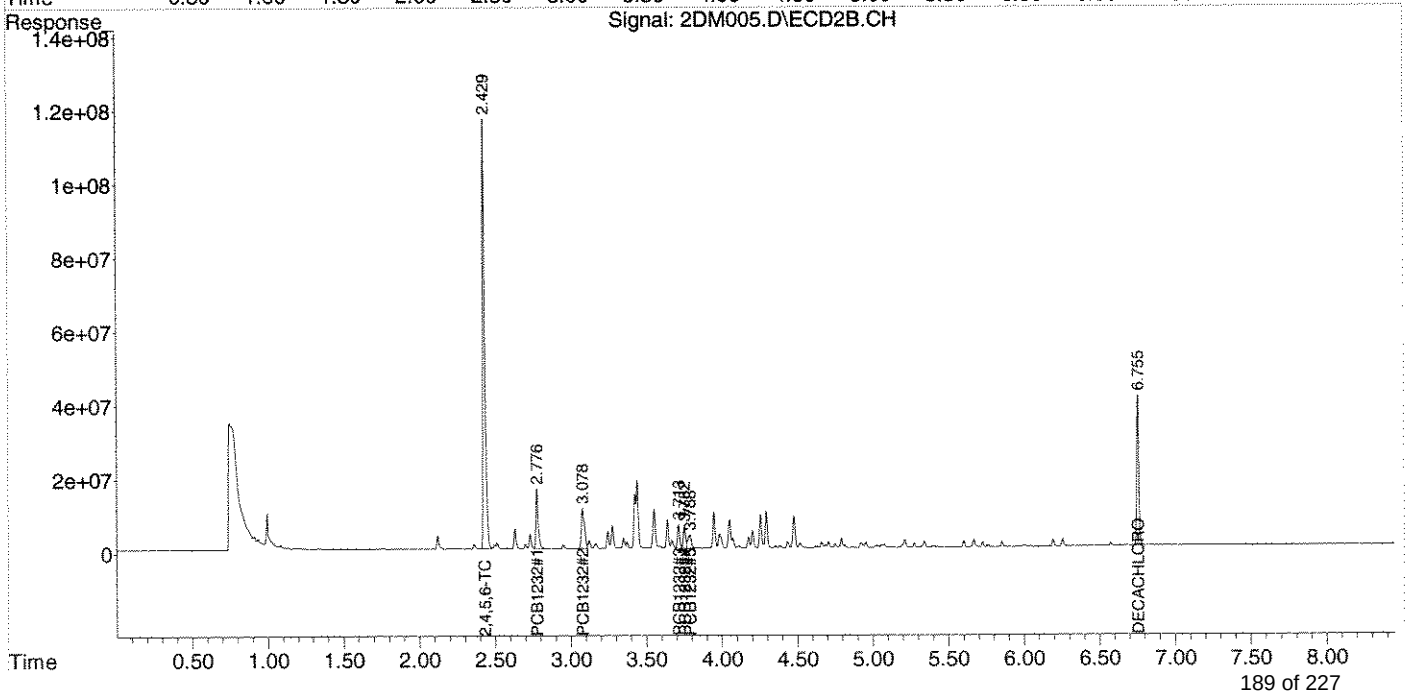
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:23
Operator : RC
Sample : AA28395-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:18 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:35
Operator : RC
Sample : AA28395-CAL5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:21 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	1760.5E6	2163.8E6	0.1245	0.2592	#
2)	PCB1232#1	2.729	2.777	269.9E6	335.5E6	1.1289	2.3241	#
3)	PCB1232#2	2.996	3.078	260.7E6	304.7E6	1.4038	2.4337	#
4)	PCB1232#3	3.370	3.714	355.5E6	121.5E6	1.4484	2.2786	#
5)	PCB1232#4	3.479	3.753	254.0E6	120.4E6	1.5790	2.3030	#
6)	PCB1232#5	3.532	3.789	153.1E6	107.8E6	1.4684	2.1311	#
7)	DECACHLOR...	6.563	6.758	705.6E6	756.5E6	0.0722	0.1079	#

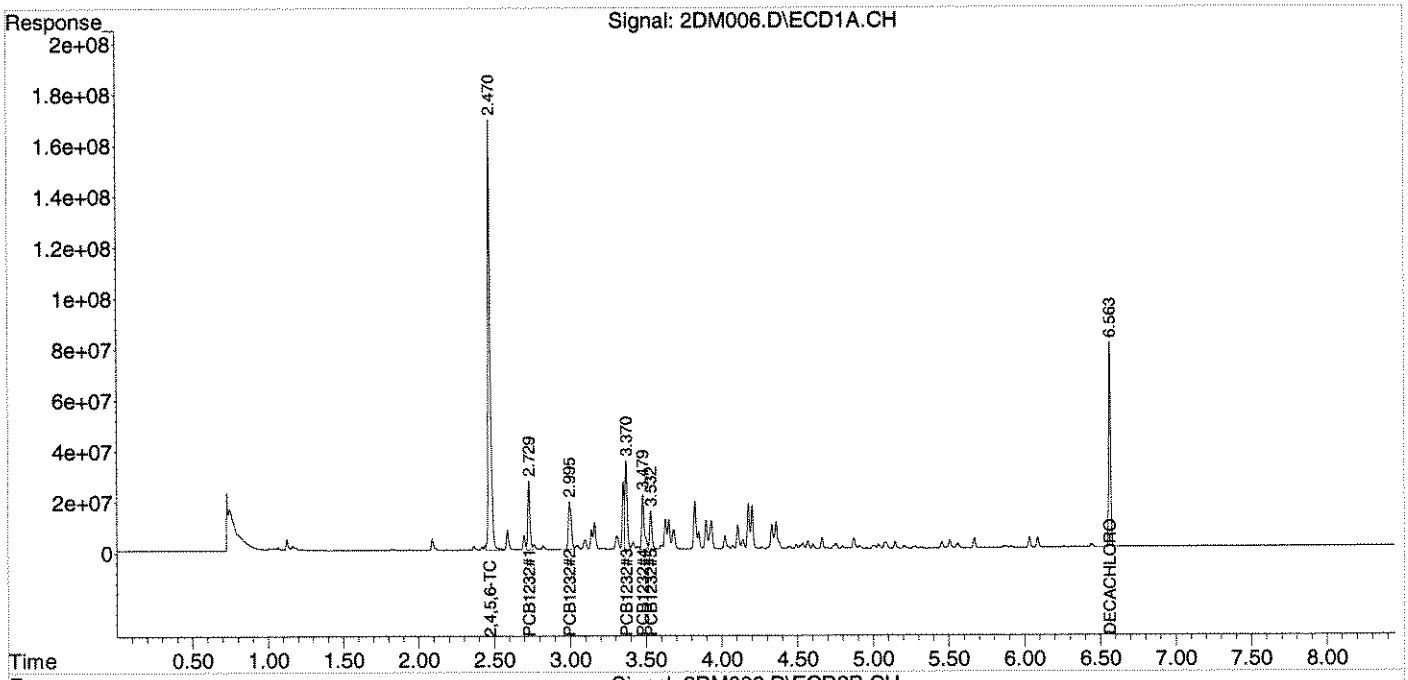
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

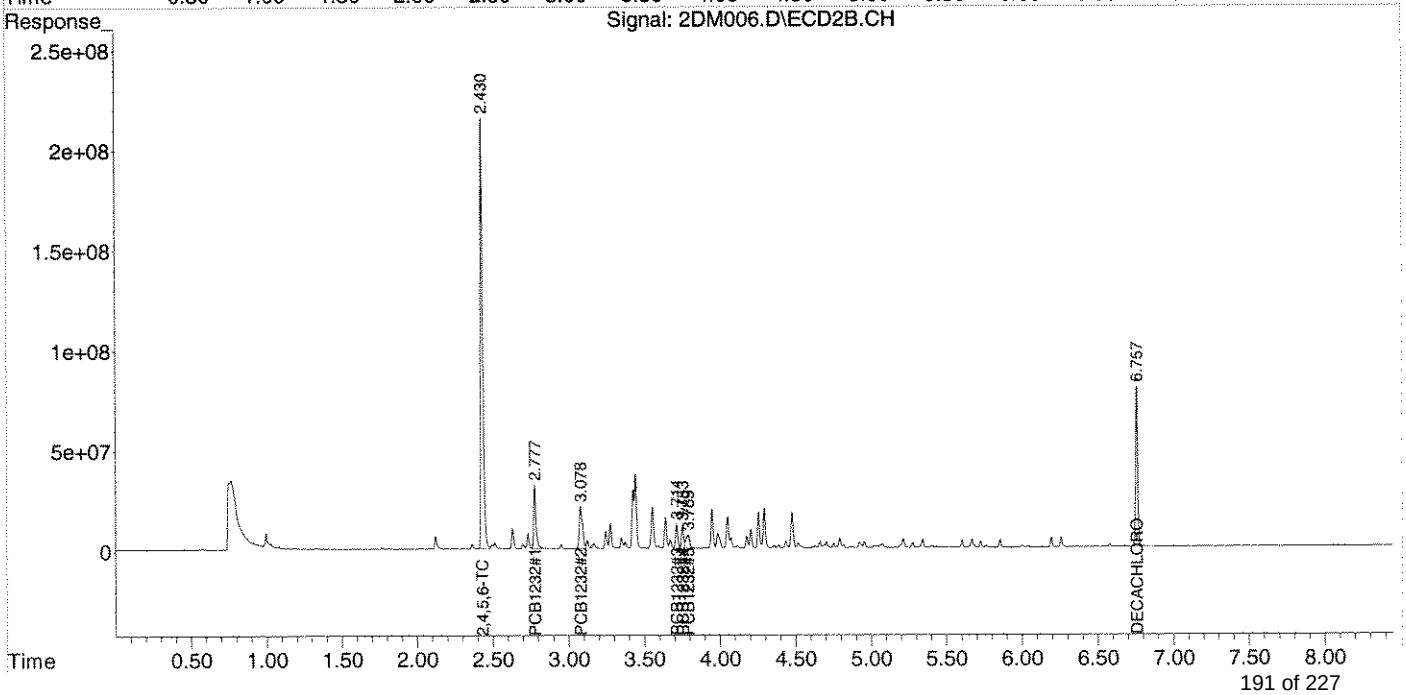
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:35
Operator : RC
Sample : AA28395-CAL5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:21 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:47
Operator : RC
Sample : AA28395-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:40 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.430	3595.1E6	4302.3E6	0.2541	0.5153	#
2)	PCB1232#1	2.729	2.778	573.3E6	717.9E6	2.3977	4.9728	#
3)	PCB1232#2	2.996	3.079	537.8E6	649.9E6	2.8964	5.1915	#
4)	PCB1232#3	3.371	3.715	813.8E6	256.3E6	3.3155	4.8060	#
5)	PCB1232#4	3.480	3.754	574.1E6	255.5E6	3.5679	4.8855	#
6)	PCB1232#5	3.533	3.789	352.8E6	226.5E6	3.3828	4.4784	#
7)	DECACHLOR...	6.563	6.757	1518.0E6	1593.3E6	0.1553	0.2272	#

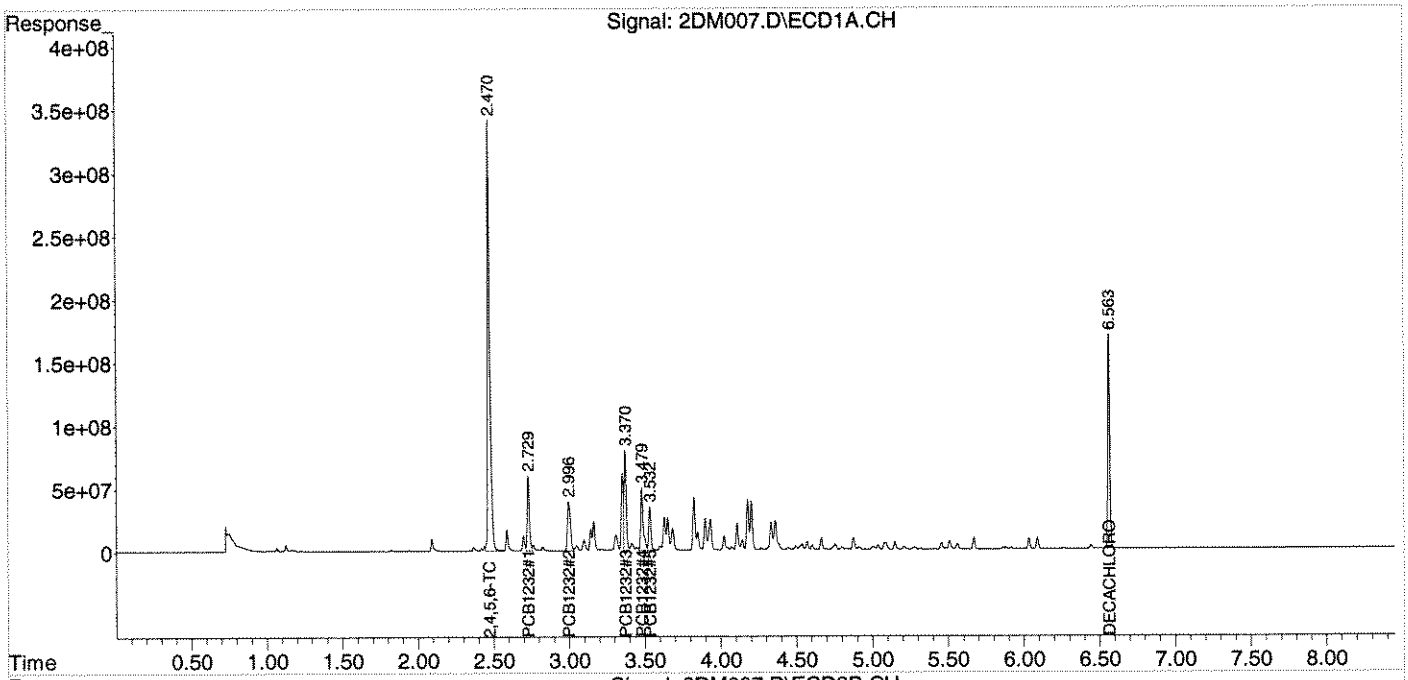
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

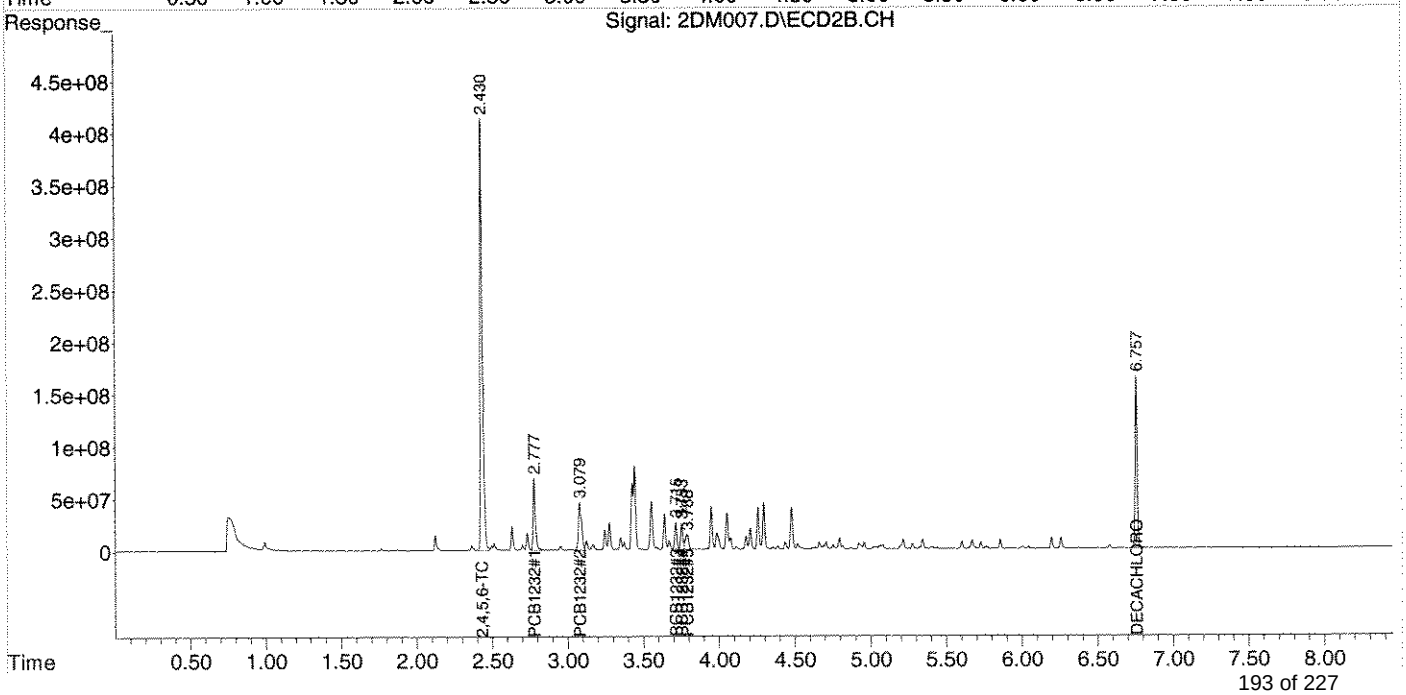
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 9:47
Operator : RC
Sample : AA28395-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 09:56:40 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:55:41 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:00
Operator : RC
Sample : AA28395-SCV1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:09:04 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:58:51 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.472	2.431	1884.8E6	2336.8E6	0.2318	0.2275
2)	PCB1232#1	2.731	2.778	283.1E6	361.7E6	2.1120	2.0898
3)	PCB1232#2	2.998	3.079	269.6E6	330.4E6	1.9846	2.0582
4)	PCB1232#3	3.372	3.715	387.0E6	131.8E6	2.1426	2.0223
5)	PCB1232#4	3.481	3.754	282.9E6	130.9E6	2.0902	2.0533
6)	PCB1232#5	3.534	3.790	168.2E6	119.1E6	2.1285	2.0845
7)	DECACHLOR...	6.564	6.758	580.0E6	625.3E6	0.1674	0.1611

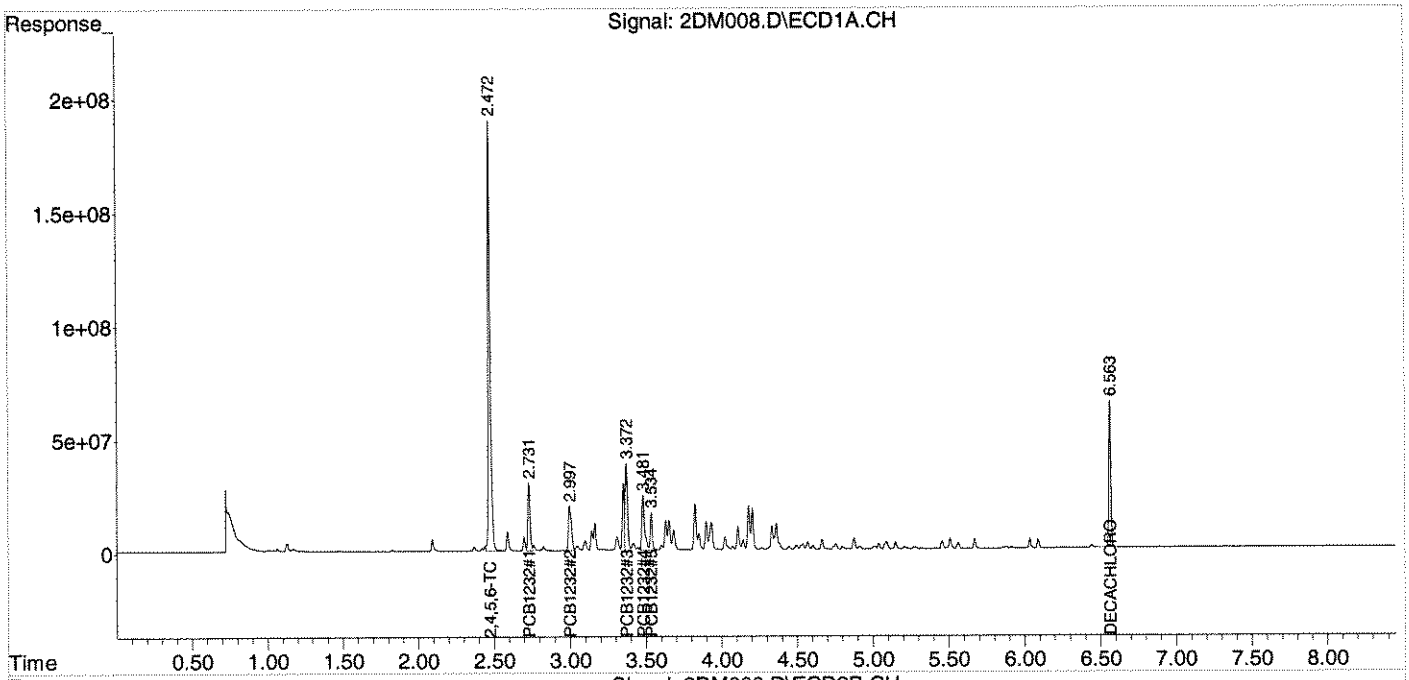
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

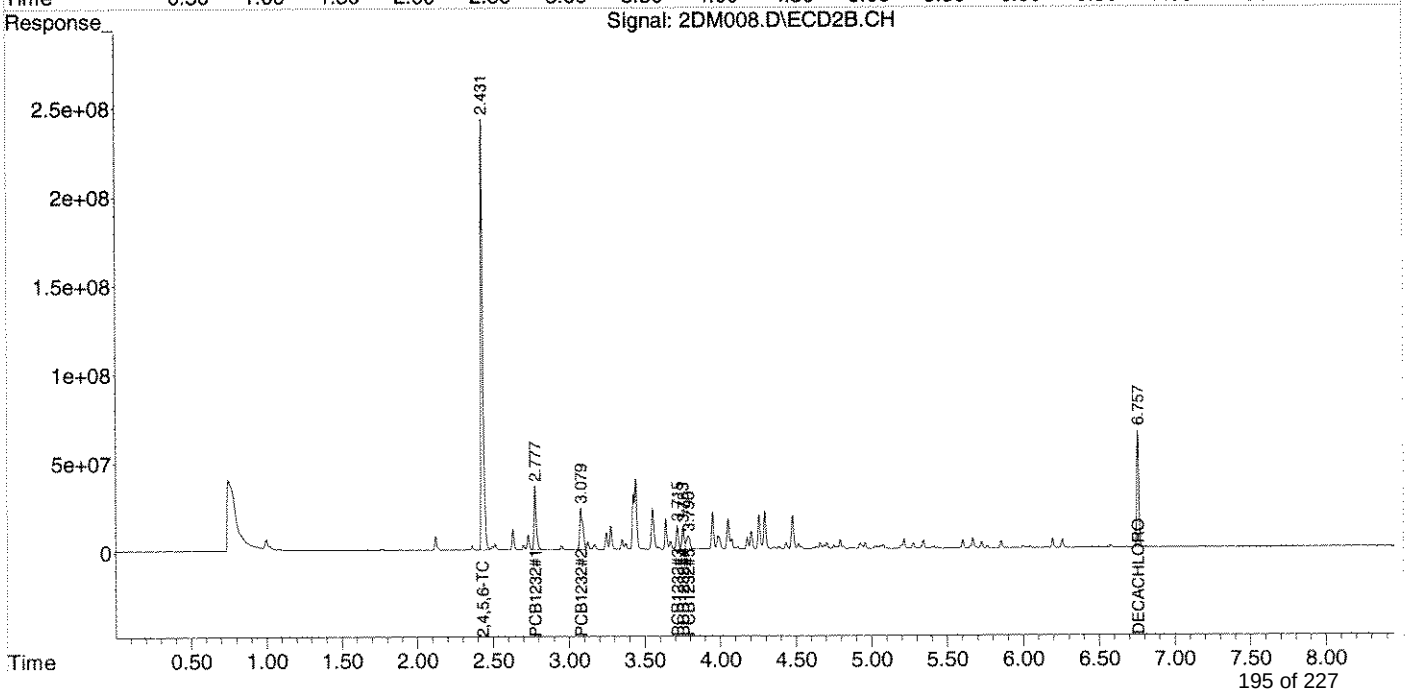
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:00
Operator : RC
Sample : AA28395-SCV1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:09:04 2014
Quant Method : Z:\2\METHODS\PCB1232DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 09:58:51 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA28396

1242

Instrument: OSVGCECD2

Calibration ID: 1404077

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA28396-CAL1	QC		1		A4B0085		
AA28396-CAL2	QC		2		A4B0084		
AA28396-CAL3	QC		3		A4B0083		
AA28396-CAL4	QC		4		A4B0082		
AA28396-CAL5	QC		5		A4B0081		
AA28396-CAL6	QC		6		A4B0080		
AA28396-SCV1	QC		7		A4B0086		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1242DM14.M
Title : PCB SOP SVGC-07; INST OSVGCECD2
Last Update : Fri Apr 18 11:23:13 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2DM009.D CAL2 =2DM010.D CAL3 =2DM011.D
CAL4 =2DM012.D CAL5 =2DM013.D CAL6 =2DM014.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg	%RSD
1)	2,4,5,6-TCMX	6.604	6.981	7.876	8.751	9.084	8.722	8.003 E9	12.82
2)	PCB1242#1	0.915	0.909	0.964	1.009	1.022	1.011	0.972 E8	5.20
3)	PCB1242#2	2.332	2.333	2.285	2.423	2.491	2.411	2.379 E8	3.19
4)	PCB1242#3	2.854	3.175	3.227	3.395	3.551	3.491	3.282 E8	7.78
5)	PCB1242#4	2.440	2.568	2.397	2.490	2.524	2.498	2.486 E8	2.44
6)	PCB1242#5	1.321	1.398	1.376	1.442	1.496	1.505	1.423 E8	5.03
7)	DECACHLOROBIP...	3.370	3.253	3.218	3.375	3.694	3.377	3.381 E9	4.96

Signal #2 Calibration Files
CAL1 =2DM009.D CAL2 =2DM010.D CAL3 =2DM011.D
CAL4 =2DM012.D CAL5 =2DM013.D CAL6 =2DM014.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg	%RSD
1)	2,4,5,6-TCMX	9.013	9.545	10.471	11.084	11.294	10.625	10.339 E9	8.60
2)	PCB1242#1	1.685	1.522	1.267	1.276	1.330	1.318	1.400 E8	11.99
3)	PCB1242#2	2.958	2.884	2.668	2.747	2.842	2.831	2.822 E8	3.62
4)	PCB1242#3	1.480	1.447	1.316	1.331	1.359	1.346	1.380 E8	4.85
5)	PCB1242#4	1.387	1.377	1.274	1.287	1.316	1.309	1.325 E8	3.53
6)	PCB1242#5	1.227	1.262	1.137	1.152	1.176	1.166	1.187 E8	4.04
7)	DECACHLOROBIP...	3.729	3.579	3.526	3.739	3.951	3.581	3.684 E9	4.26

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:12
Operator : RC
Sample : AA28396-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:38 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.431	33017788	45067370	0.0033	0.0071	#
2)	PCB1242#1	2.731	2.778	4572886	8425072	0.0294	0.0825	#
3)	PCB1242#2	2.997	3.079	11660422	14790549	0.0373	0.0690	#
4)	PCB1242#3	3.371	3.714	14268232	7398131	0.0341	0.0694	#
5)	PCB1242#4	3.480	3.753	12201689	6934482	0.0441	0.0685	#
6)	PCB1242#5	3.533	3.790	6607101	6136193	0.0387	0.0641	#
7)	DECACHLOR...	6.562	6.756	16848663	18645472	0.0030	0.0043	#

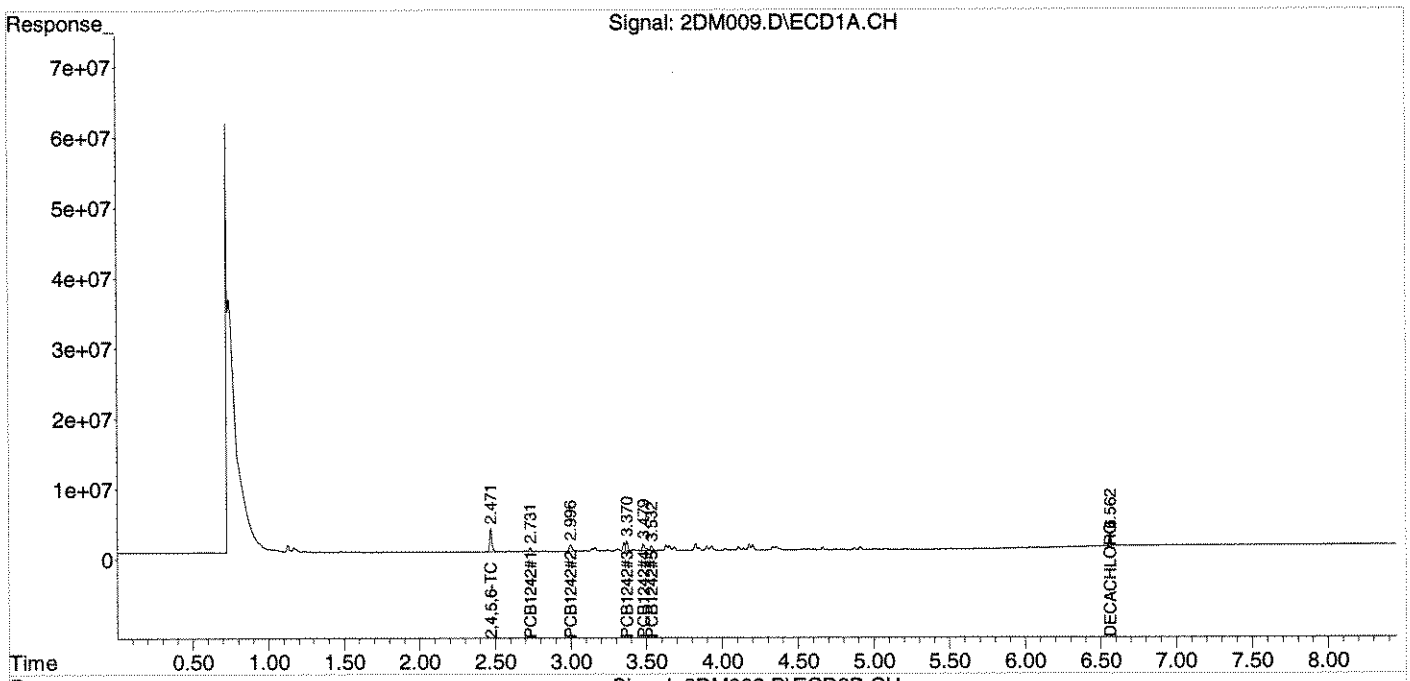
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

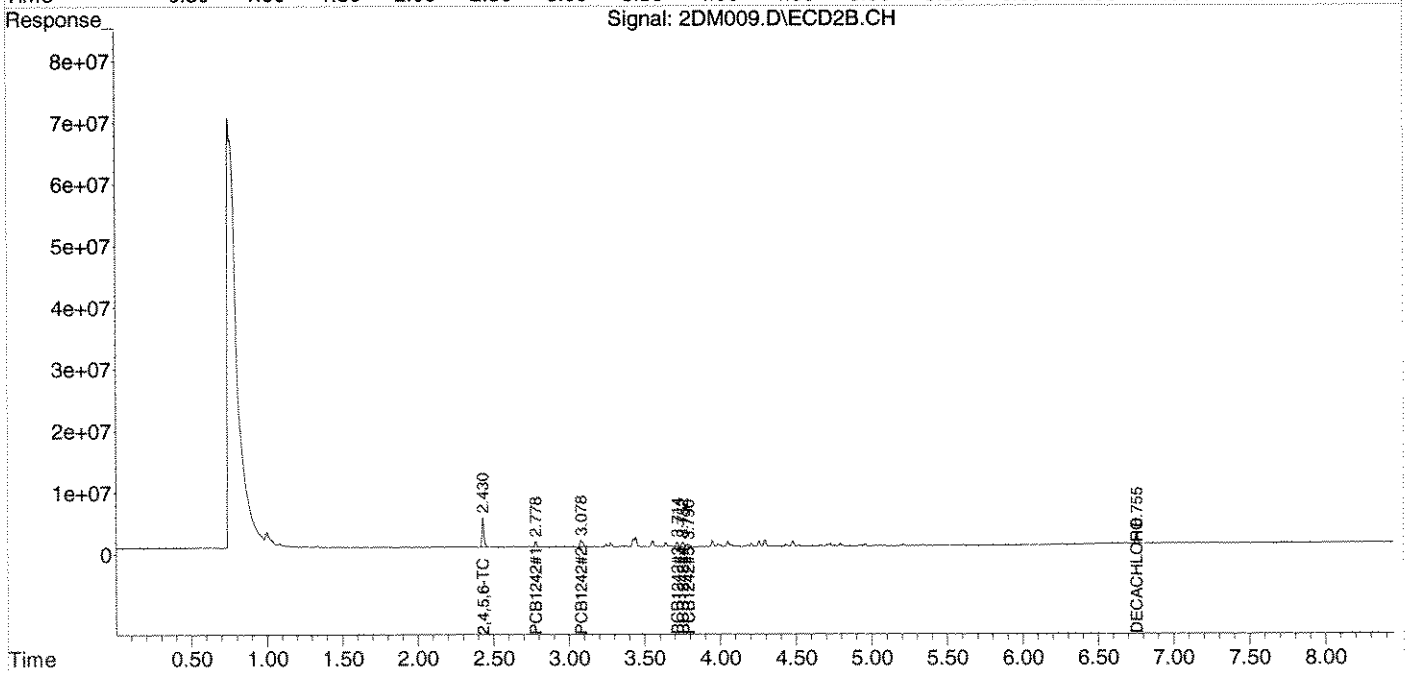
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:12
Operator : RC
Sample : AA28396-CAL1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:38 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:24
Operator : RC
Sample : AA28396-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:41 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.472	2.431	69808186	95452446	0.0070	0.0149	#
2)	PCB1242#1	2.731	2.779	9086469	15220320	0.0583	0.1490	#
3)	PCB1242#2	2.998	3.080	23326235	28841905	0.0746	0.1346	#
4)	PCB1242#3	3.372	3.716	31752826	14467956	0.0759	0.1356	#
5)	PCB1242#4	3.481	3.754	25681304	13768966	0.0927	0.1360	#
6)	PCB1242#5	3.534	3.792	13984586	12622041	0.0819	0.1318	#
7)	DECACHLOR...	6.564	6.758	32527863	35790517	0.0058	0.0083	#

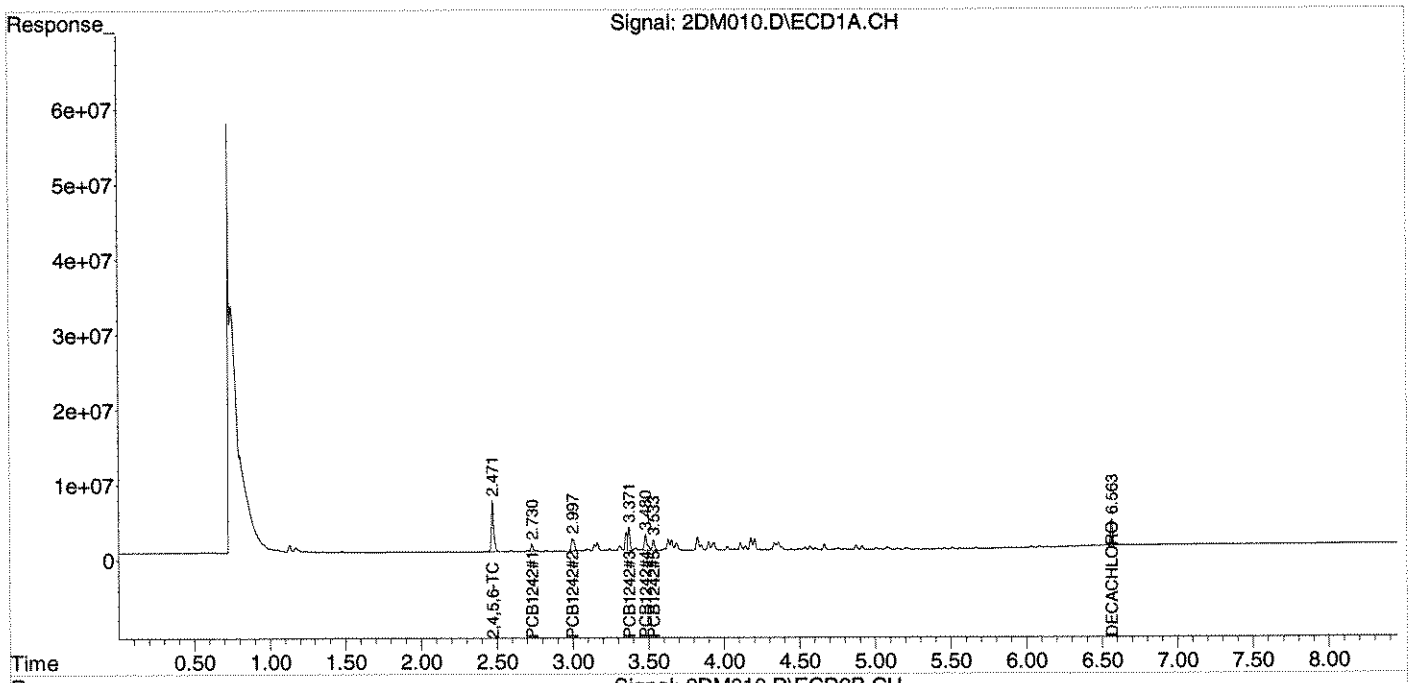
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

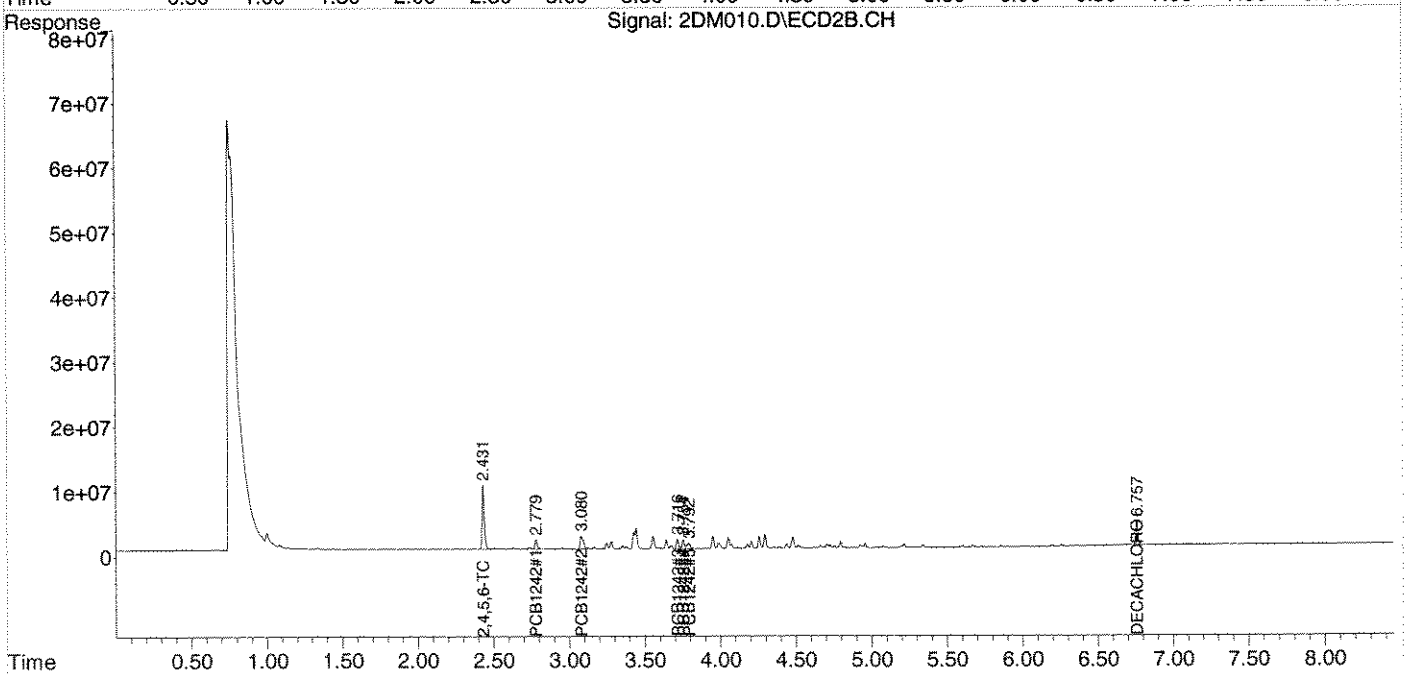
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:24
Operator : RC
Sample : AA28396-CAL2
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:41 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:36
Operator : RC
Sample : AA28396-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:44 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.431	393.8E6	523.6E6	0.0396	0.0819	#
2)	PCB1242#1	2.730	2.778	48190307	63330193	0.3094	0.6199	#
3)	PCB1242#2	2.997	3.079	114.3E6	133.4E6	0.3653	0.6225	#
4)	PCB1242#3	3.371	3.714	161.4E6	65798244	0.3856	0.6169	#
5)	PCB1242#4	3.480	3.753	119.9E6	63689706	0.4328	0.6289	#
6)	PCB1242#5	3.533	3.789	68780228	56846330	0.4026	0.5934	#
7)	DECACHLOR...	6.562	6.756	160.9E6	176.3E6	0.0289	0.0407	#

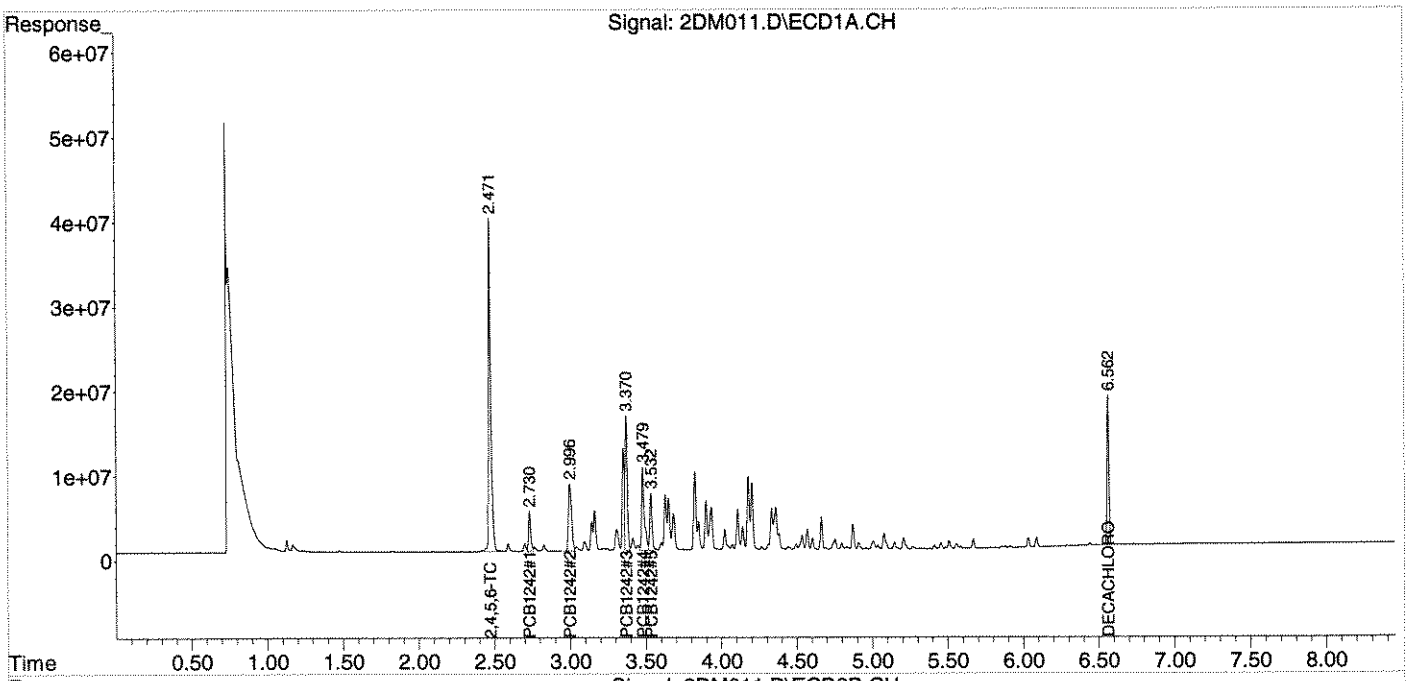
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

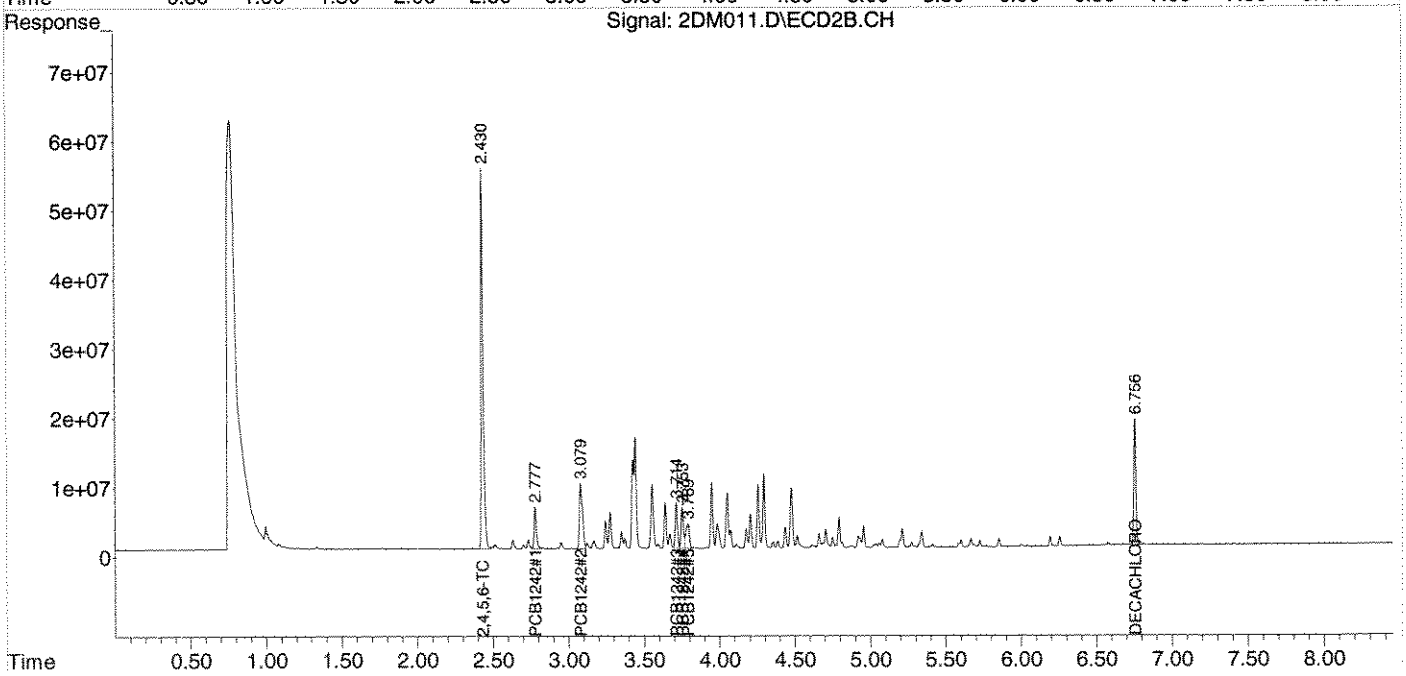
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:36
Operator : RC
Sample : AA28396-CAL3
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:44 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:48
Operator : RC
Sample : AA28396-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:47 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.431	875.1E6	1108.4E6	0.0879	0.1735	#
2)	PCB1242#1	2.730	2.778	100.9E6	127.6E6	0.6481	1.2491	#
3)	PCB1242#2	2.997	3.080	242.3E6	274.7E6	0.7745	1.2816	#
4)	PCB1242#3	3.371	3.715	339.5E6	133.1E6	0.8112	1.2483	#
5)	PCB1242#4	3.480	3.754	249.0E6	128.7E6	0.8991	1.2709	#
6)	PCB1242#5	3.533	3.790	144.2E6	115.2E6	0.8443	1.2031	#
7)	DECACHLOR...	6.563	6.757	337.5E6	373.9E6	0.0606	0.0862	#

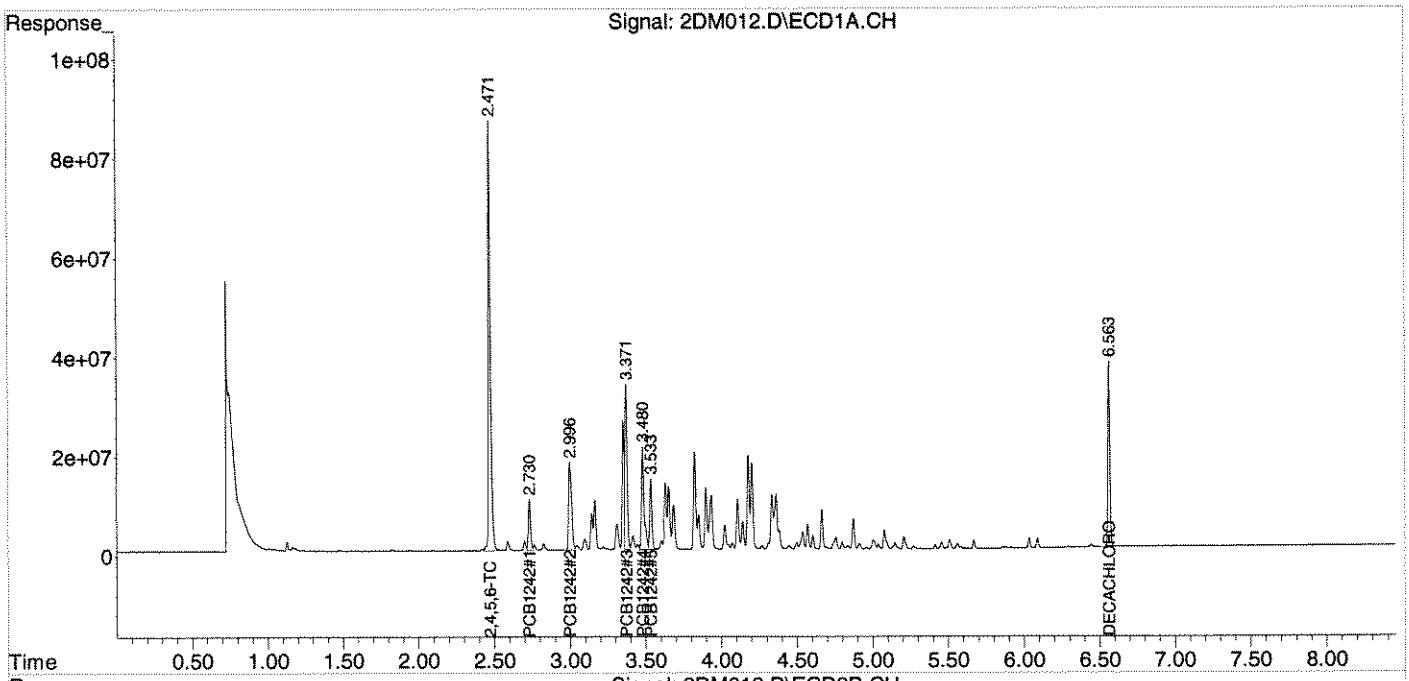
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

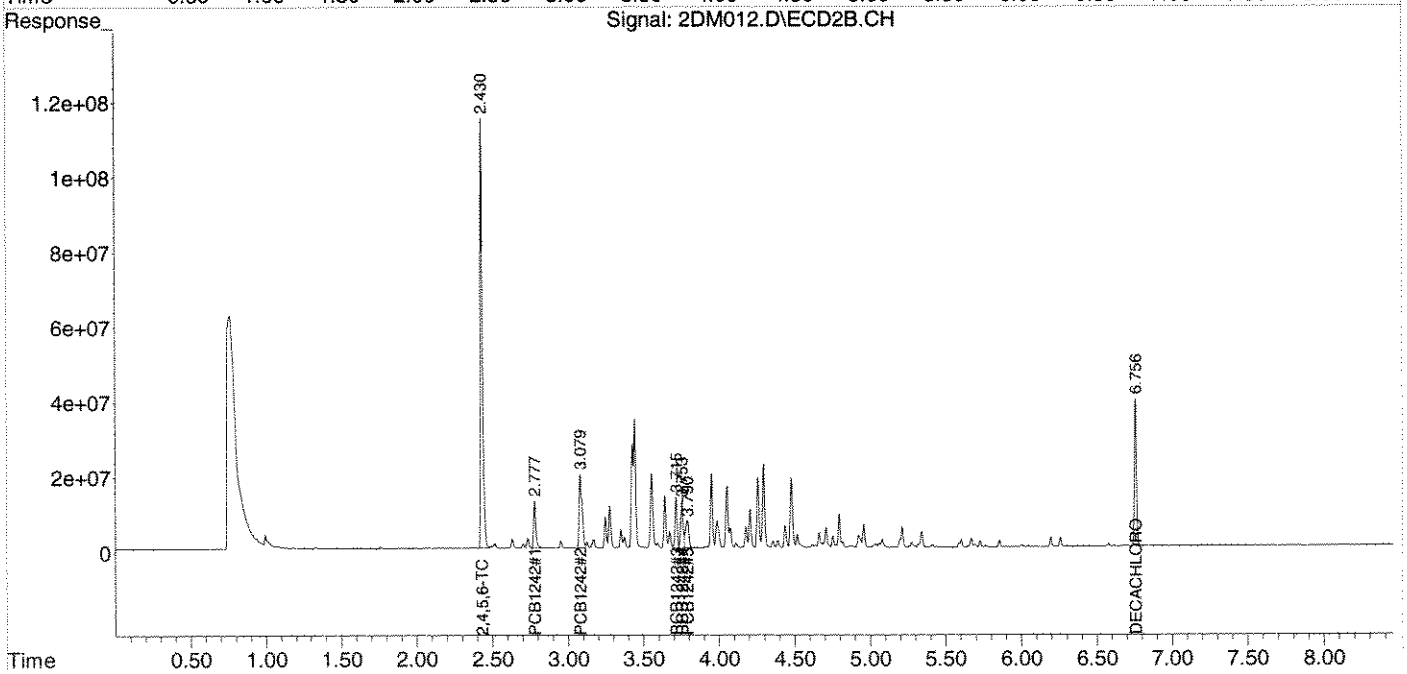
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 10:48
Operator : RC
Sample : AA28396-CAL4
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:47 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:00
Operator : RC
Sample : AA28396-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:50 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.472	2.432	1816.9E6	2258.8E6	0.1826	0.3535	#
2)	PCB1242#1	2.731	2.779	204.4E6	265.9E6	1.3125	2.6028	#
3)	PCB1242#2	2.999	3.081	498.3E6	568.5E6	1.5929	2.6524	#
4)	PCB1242#3	3.372	3.716	710.1E6	271.8E6	1.6969	2.5487	#
5)	PCB1242#4	3.481	3.755	504.9E6	263.2E6	1.8230	2.5991	#
6)	PCB1242#5	3.534	3.791	299.2E6	235.2E6	1.7515	2.4554	#
7)	DECACHLOR...	6.563	6.757	738.7E6	790.2E6	0.1326	0.1823	#

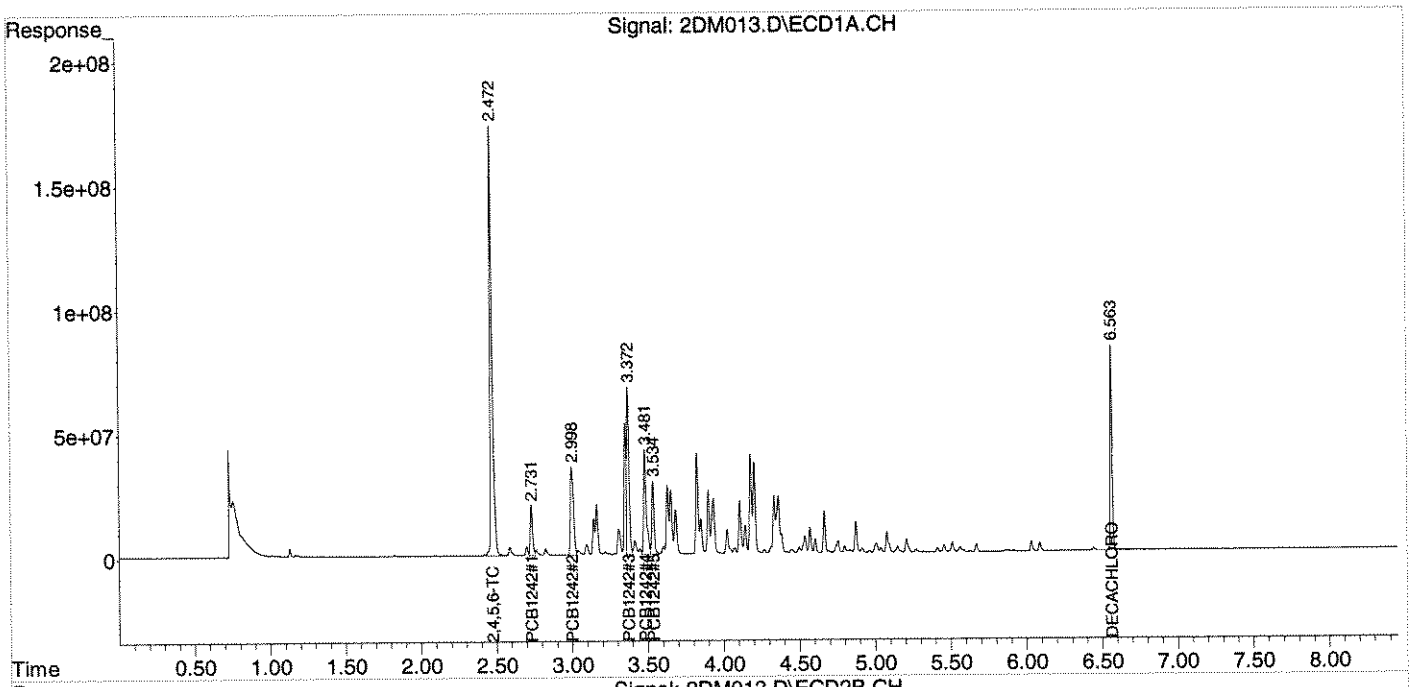
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

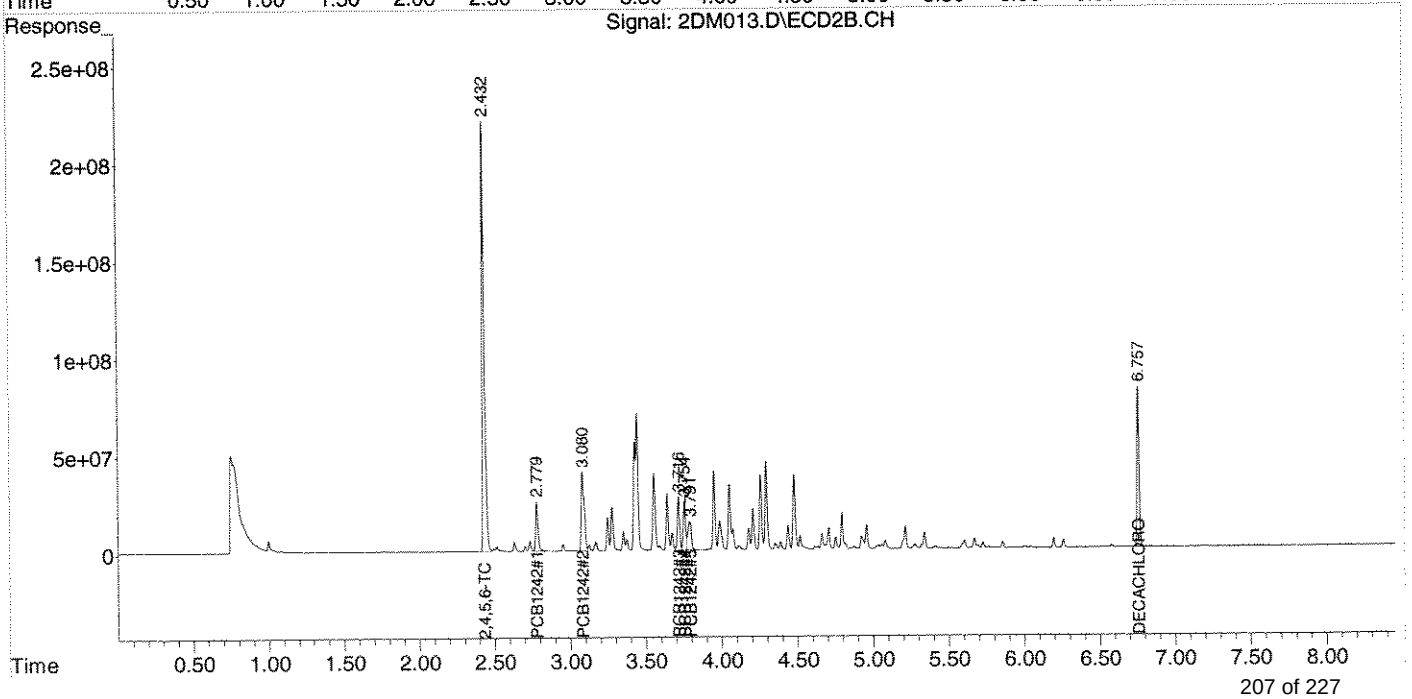
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:00
Operator : RC
Sample : AA28396-CAL5
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:10:50 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:12
Operator : RC
Sample : AA28396-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:22:05 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.472	2.432	3488.8E6	4250.1E6	0.3506	0.6651	#
2)	PCB1242#1	2.731	2.779	404.2E6	527.3E6	2.5951	5.1607	#
3)	PCB1242#2	2.998	3.080	964.6E6	1132.5E6	3.0838	5.2839	#
4)	PCB1242#3	3.372	3.716	1396.3E6	538.4E6	3.3365	5.0482	#
5)	PCB1242#4	3.481	3.754	999.1E6	523.4E6	3.6076	5.1683	#
6)	PCB1242#5	3.534	3.790	602.1E6	466.6E6	3.5249	4.8707	#
7)	DECACHLOR...	6.562	6.757	1350.9E6	1432.4E6	0.2424	0.3304	#

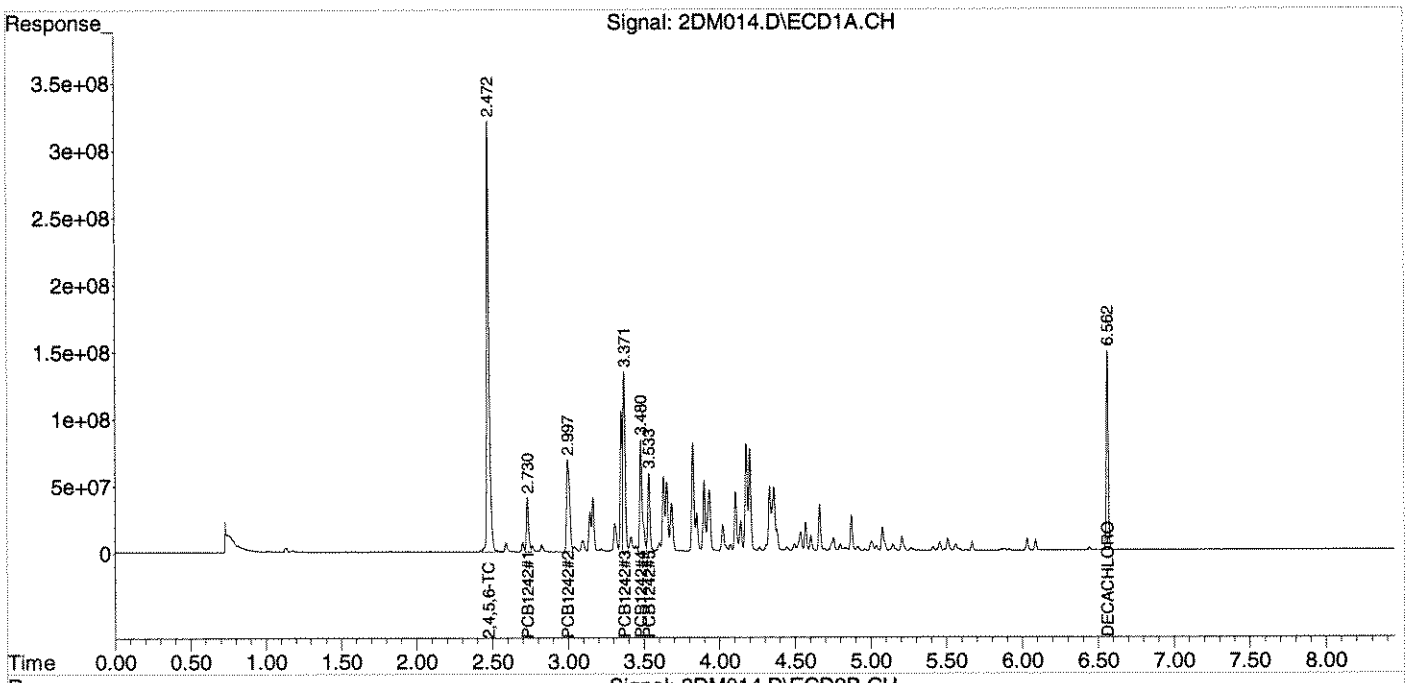
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

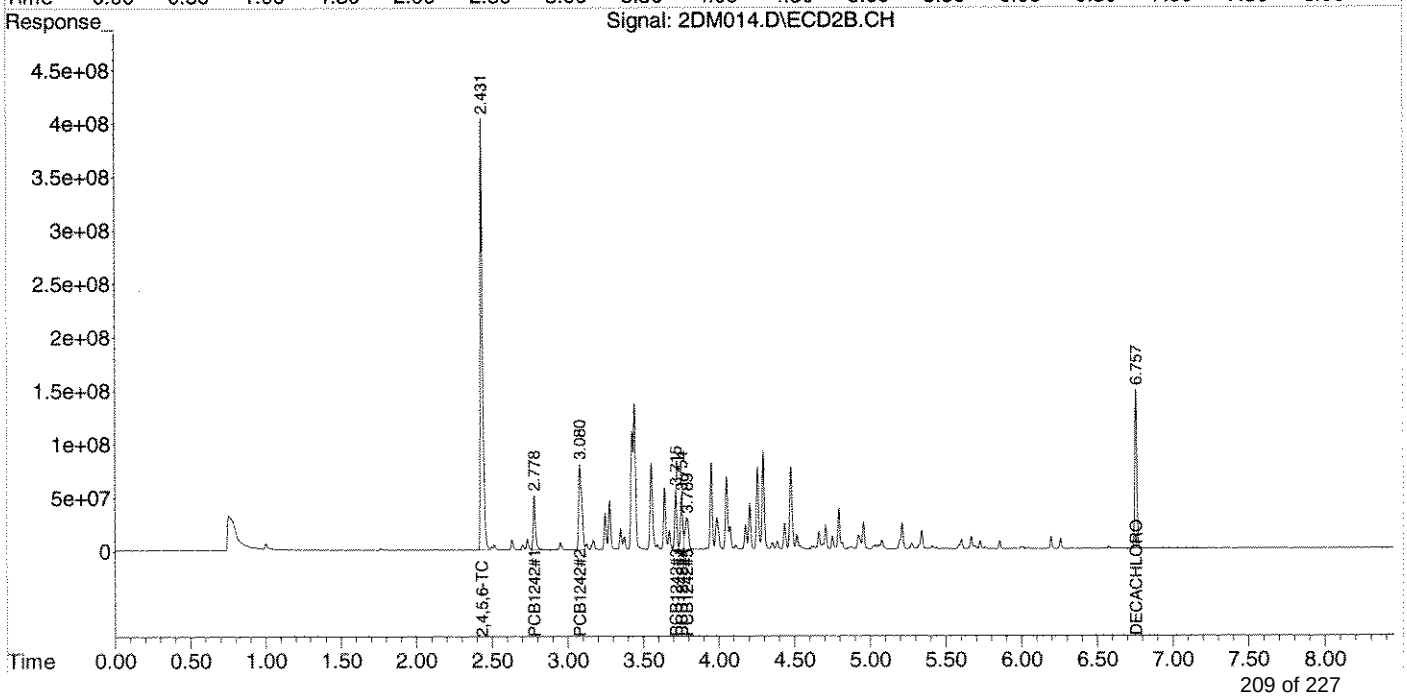
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:12
Operator : RC
Sample : AA28396-CAL6
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:22:05 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:09:47 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:27
Operator : RC
Sample : AA28396-SCV1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:02 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:23:13 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.476	2.432	1770.9E6	2249.0E6	0.2213	0.2175
2)	PCB1242#1	2.735	2.779	195.8E6	265.7E6	2.0152	1.8980
3)	PCB1242#2	3.002	3.081	476.1E6	569.2E6	2.0013	2.0170
4)	PCB1242#3	3.377	3.716	713.5E6	271.8E6	2.1740	1.9700
5)	PCB1242#4	3.486	3.755	509.5E6	263.3E6	2.0492	1.9872
6)	PCB1242#5	3.539	3.792	305.9E6	238.9E6	2.1497	2.0128
7)	DECACHLOR...	6.567	6.759	619.9E6	685.2E6	0.1833	0.1860

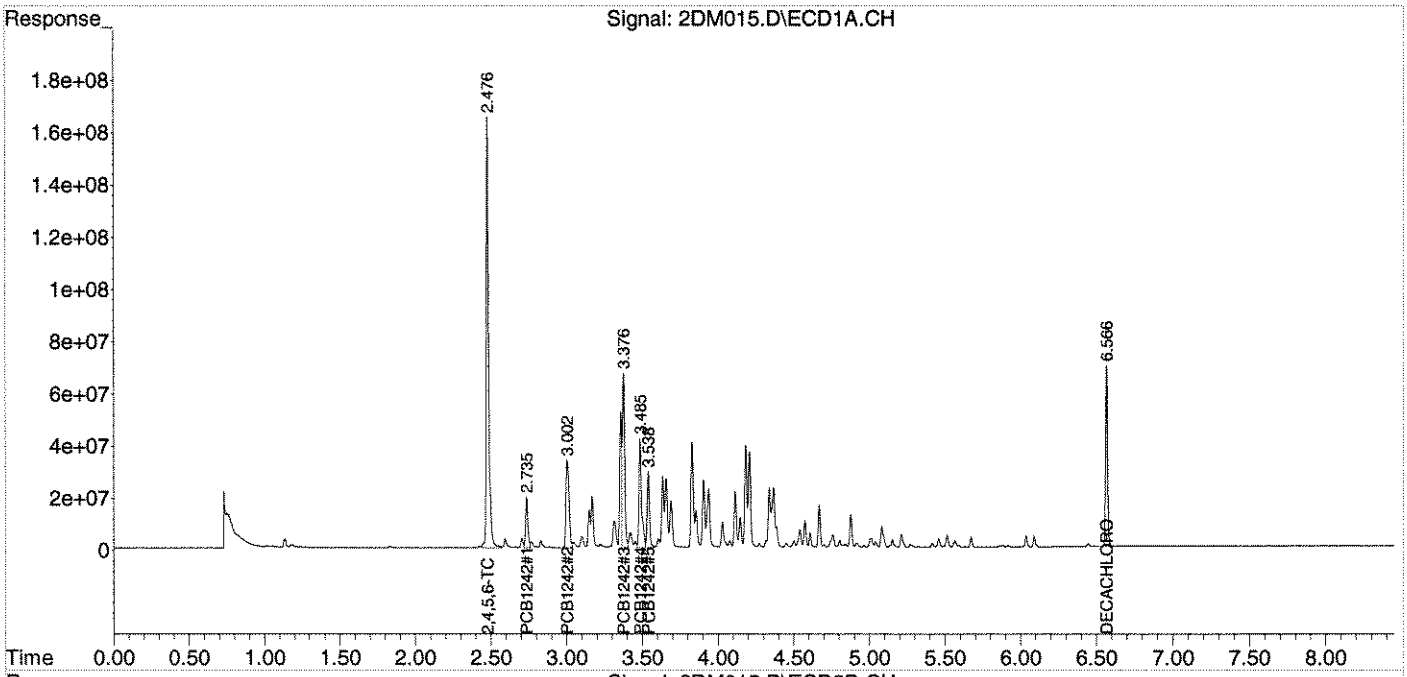
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

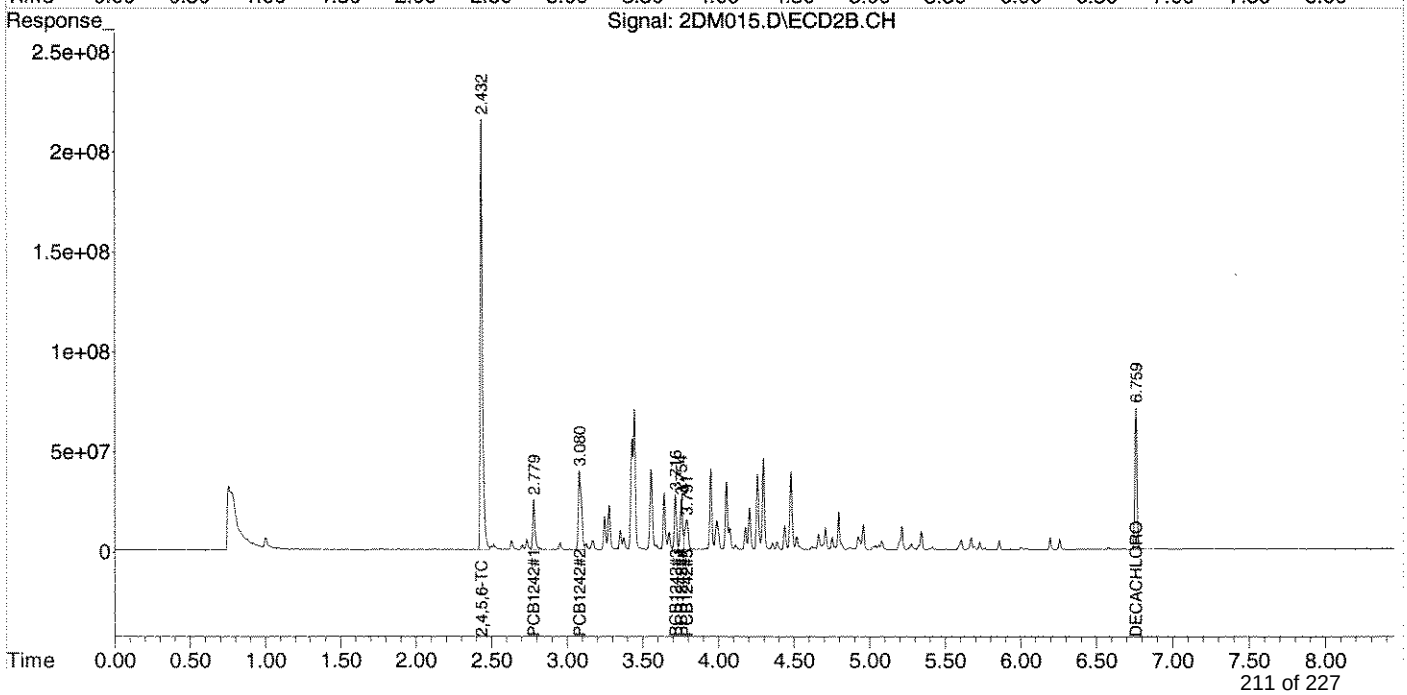
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:27
Operator : RC
Sample : AA28396-SCV1
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:02 2014
Quant Method : Z:\2\METHODS\PCB1242DM14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Apr 18 11:23:13 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA28397

1248

Instrument: OSVGCECD2

Calibration ID: 1404077

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA28397-CAL1	QC		1		A4C0214		
AA28397-CAL2	QC		2		A4C0212		
AA28397-CAL3	QC		3		A4C0211		
AA28397-CAL4	QC		4		A4C0209		
AA28397-CAL5	QC		5		A4C0206		
AA28397-CAL6	QC		6		A4C0203		
AA28397-SCV1	QC		7		A4C0216		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1248DM14.M
Title : PCB; INST OSVGCECD2
Last Update : Fri Apr 18 12:50:04 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2DM016.D CAL2 =2DM017.D CAL3 =2DM018.D
CAL4 =2DM019.D CAL5 =2DM020.D CAL6 =2DM021.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	6.903	7.536	8.044	8.763	8.967	8.691	8.150	E9	9.94
2)	PCB1248#1	3.573	3.359	3.466	3.623	3.636	3.539	3.533	E8	2.98
3)	PCB1248#2	2.874	2.754	2.886	3.081	3.073	3.086	2.959	E8	4.74
4)	PCB1248#3	1.713	1.589	1.616	1.694	1.656	1.657	1.654	E8	2.81
5)	PCB1248#4	1.107	1.066	1.099	1.137	1.121	1.119	1.108	E8	2.21
6)	PCB1248#5	0.993	0.942	0.935	0.990	0.992	1.014	0.978	E8	3.24
7)	DECACHLOROBIP...	3.433	3.121	2.980	3.415	2.799	2.775	3.087	E9	9.40

Signal #2 Calibration Files
CAL1 =2DM016.D CAL2 =2DM017.D CAL3 =2DM018.D
CAL4 =2DM019.D CAL5 =2DM020.D CAL6 =2DM021.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	9.504	9.748	10.640	11.069	10.914	10.302	10.363	E9	6.10
2)	PCB1248#1	3.549	3.337	3.325	3.468	3.447	3.302	3.405	E8	2.88
3)	PCB1248#2	4.080	3.847	3.875	4.033	4.001	3.851	3.948	E8	2.59
4)	PCB1248#3	3.711	3.485	3.521	3.710	3.714	3.579	3.620	E8	2.89
5)	PCB1248#4	1.645	2.058	2.018	2.063	2.033	1.972	1.965	E8	8.14
6)	PCB1248#5	1.408	1.311	1.293	1.347	1.353	1.332	1.340	E8	2.99
7)	DECACHLOROBIP...	3.992	3.481	3.361	3.842	3.176	3.097	3.492	E9	10.29

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:39
Operator : RC
Sample : AA28397-CAL1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:51 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	34513079	47520177	0.0023	0.0052	#
2)	PCB1248#1	4.177	4.256	17864851	17746494	0.0372	0.0571	#
3)	PCB1248#2	4.202	4.294	14370323	20398202	0.0325	0.0559	#
4)	PCB1248#3	4.663	4.479	8565685	18557353	0.0322	0.0556	#
5)	PCB1248#4	4.872	4.793	5534243	8227464	0.0314	0.0427	#
6)	PCB1248#5	5.077	5.212	4963170	7042065	0.0292	0.0573	#
7)	DECACHLOR...	6.563	6.757	17164658	19960265	0.0015	0.0026	#

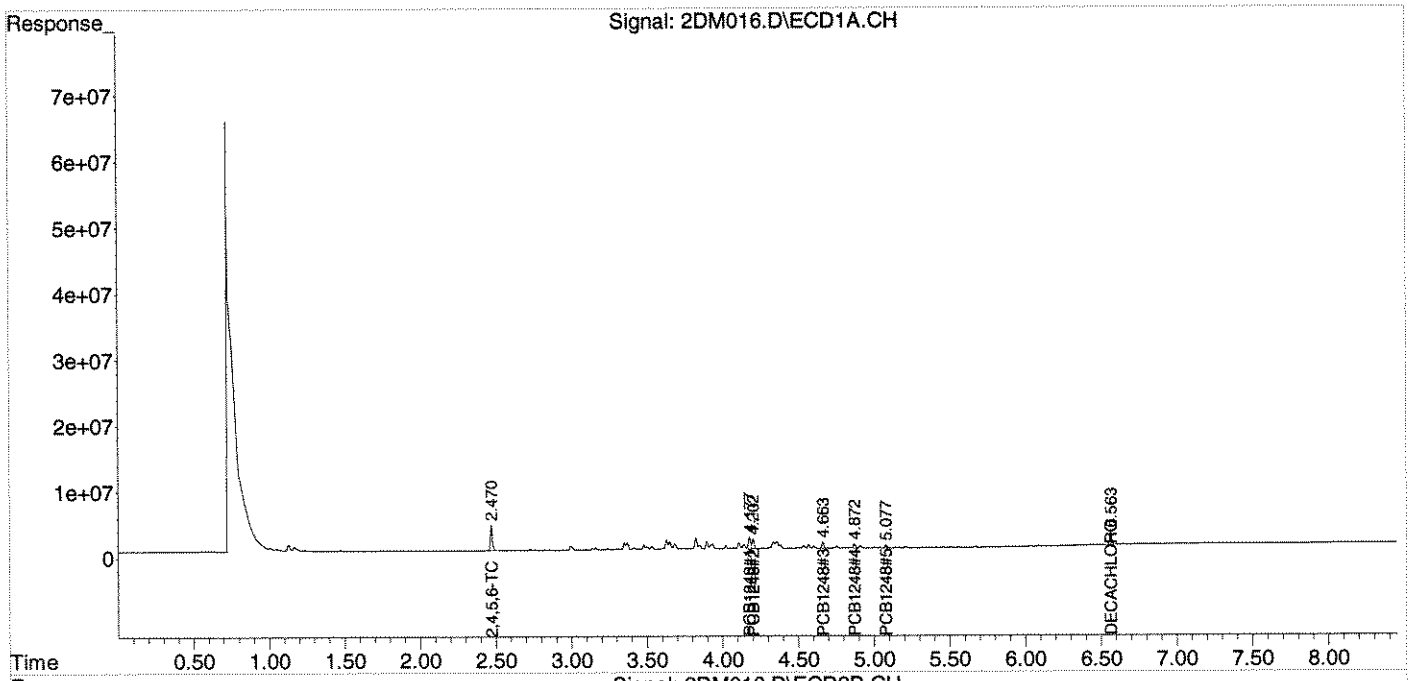
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

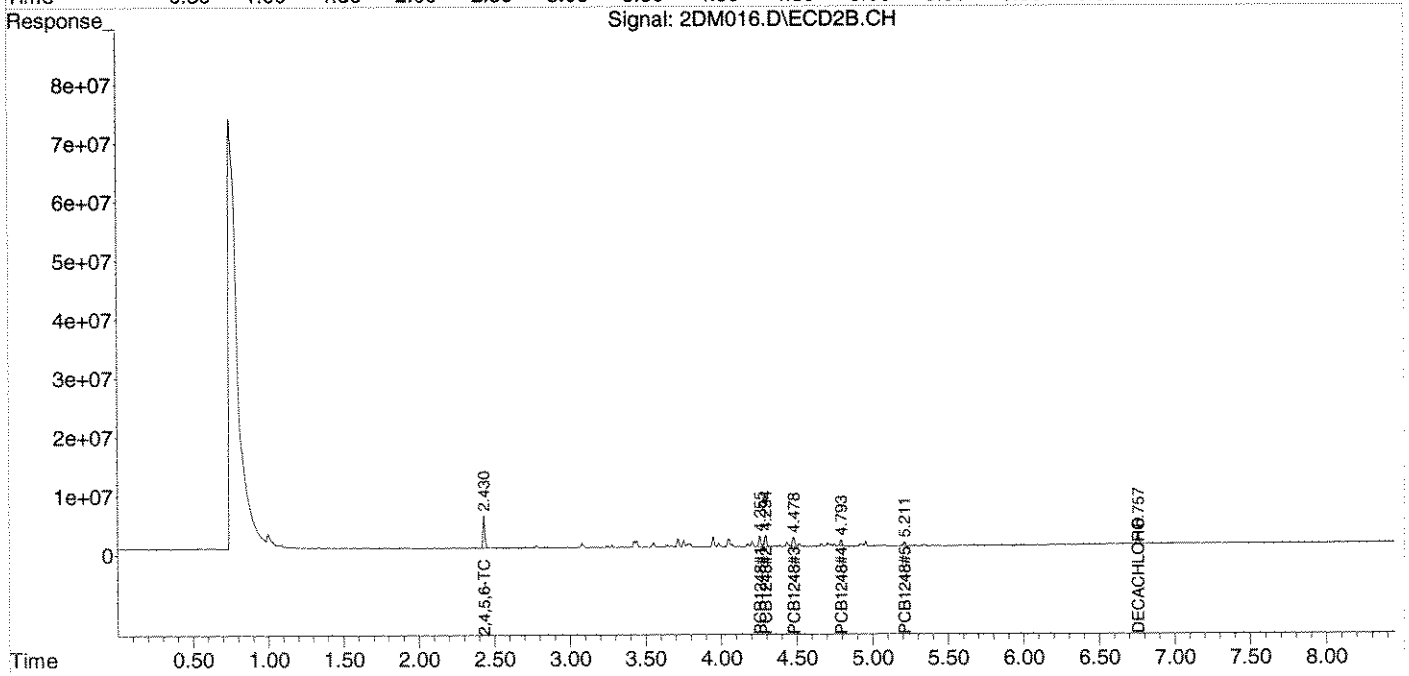
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:39
Operator : RC
Sample : AA28397-CAL1
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:51 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:52
Operator : RC
Sample : AA28397-CAL2
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:55 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.470	2.430	75355893	97482744	0.0050	0.0107	#
2)	PCB1248#1	4.177	4.256	33588304	33373888	0.0700	0.1075	#
3)	PCB1248#2	4.202	4.295	27544262	38472863	0.0622	0.1054	#
4)	PCB1248#3	4.663	4.479	15890231	34854538	0.0597	0.1044	#
5)	PCB1248#4	4.872	4.794	10658891	20584563	0.0604	0.1069	#
6)	PCB1248#5	5.077	5.212	9416358	13106622	0.0555	0.1067	#
7)	DECACHLOR...	6.564	6.757	31210398	34810532	0.0028	0.0045	#

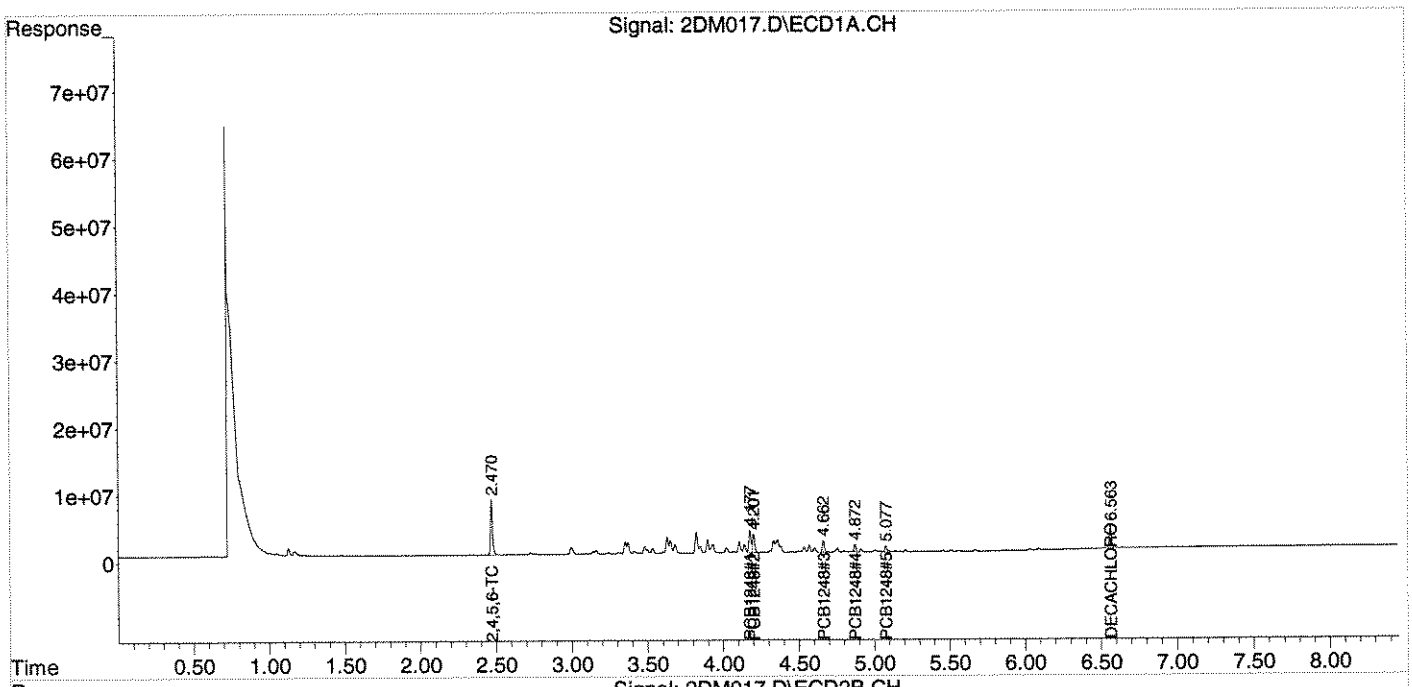
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

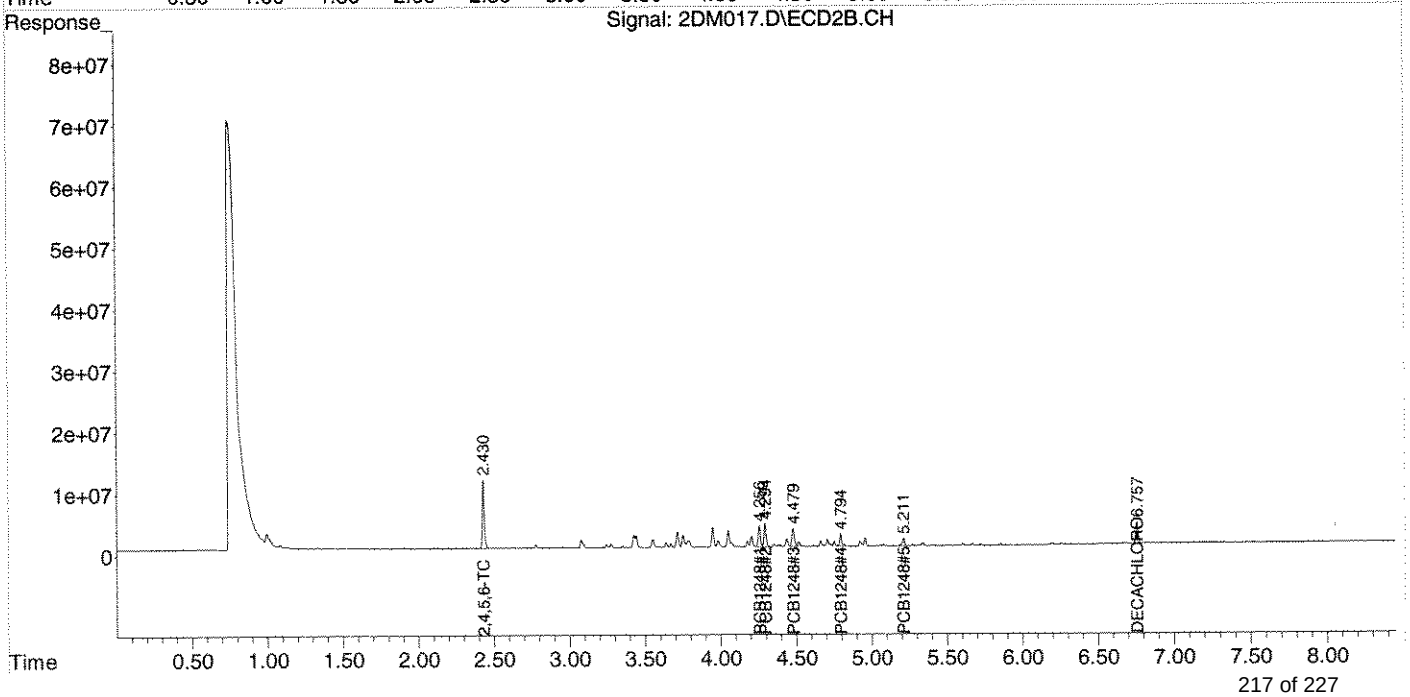
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 11:52
Operator : RC
Sample : AA28397-CAL2
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:55 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:04
Operator : RC
Sample : AA28397-CAL3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:58 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.471	2.431	402.2E6	532.0E6	0.0267	0.0586	#
2)	PCB1248#1	4.178	4.257	173.3E6	166.3E6	0.3612	0.5354	#
3)	PCB1248#2	4.203	4.295	144.3E6	193.8E6	0.3260	0.5308	#
4)	PCB1248#3	4.664	4.480	80792672	176.1E6	0.3037	0.5274	#
5)	PCB1248#4	4.873	4.795	54931873	100.9E6	0.3114	0.5240	#
6)	PCB1248#5	5.078	5.213	46758436	64625199	0.2755	0.5260	#
7)	DECACHLOR...	6.563	6.757	149.0E6	168.1E6	0.0132	0.0219	#

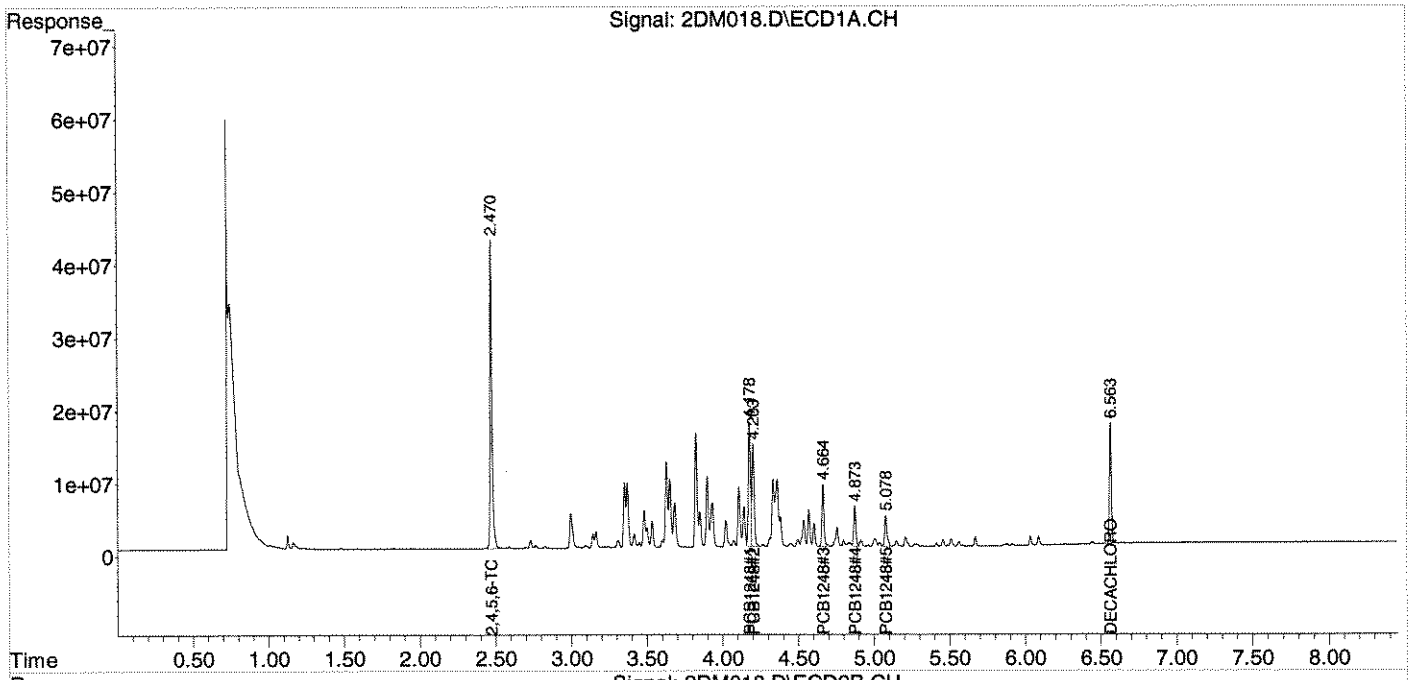
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

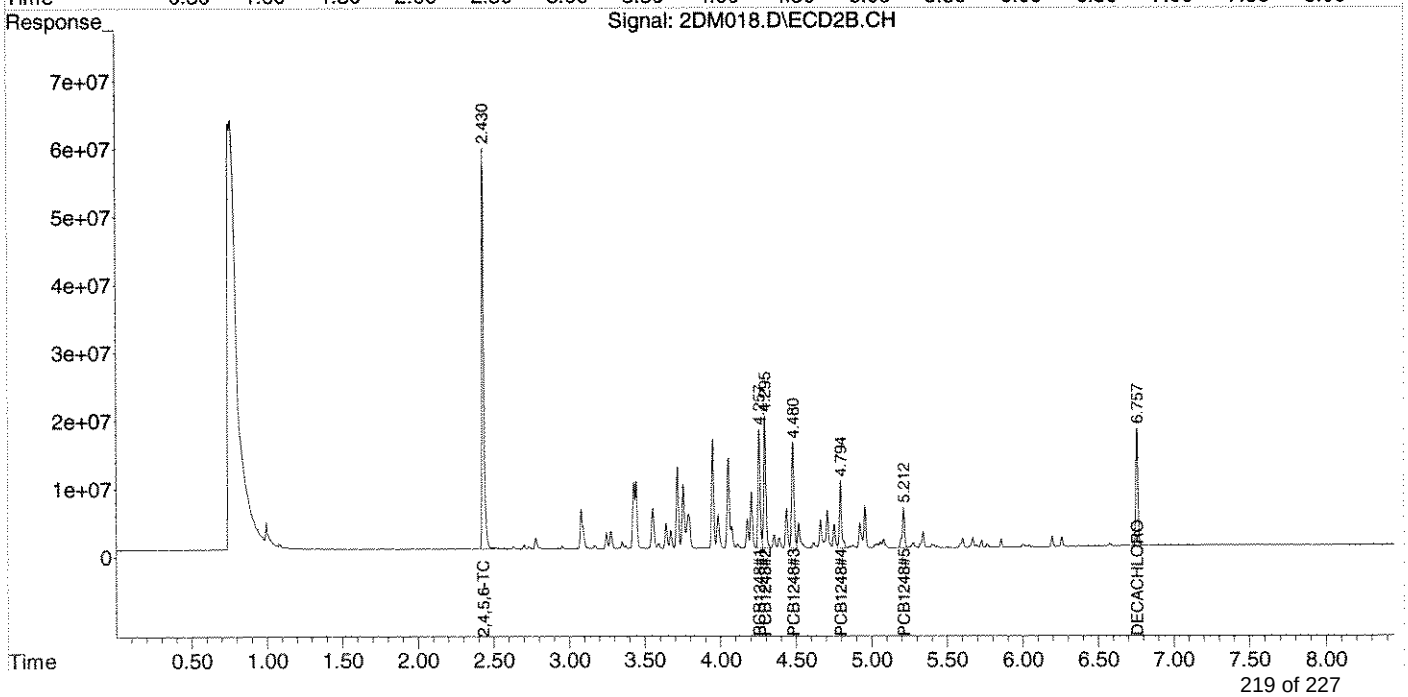
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:04
Operator : RC
Sample : AA28397-CAL3
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:33:58 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:16
Operator : RC
Sample : AA28397-CAL4
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:34:01 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.472	2.431	876.3E6	1106.9E6	0.0581	0.1220	#
2)	PCB1248#1	4.179	4.258	362.3E6	346.8E6	0.7551	1.1167	#
3)	PCB1248#2	4.204	4.296	308.1E6	403.3E6	0.6959	1.1049	#
4)	PCB1248#3	4.665	4.480	169.4E6	371.0E6	0.6369	1.1113	#
5)	PCB1248#4	4.874	4.795	113.7E6	206.3E6	0.6446	1.0715	#
6)	PCB1248#5	5.079	5.213	99003364	134.7E6	0.5833	1.0960	#
7)	DECACHLOR...	6.564	6.759	341.5E6	384.2E6	0.0303	0.0500	#

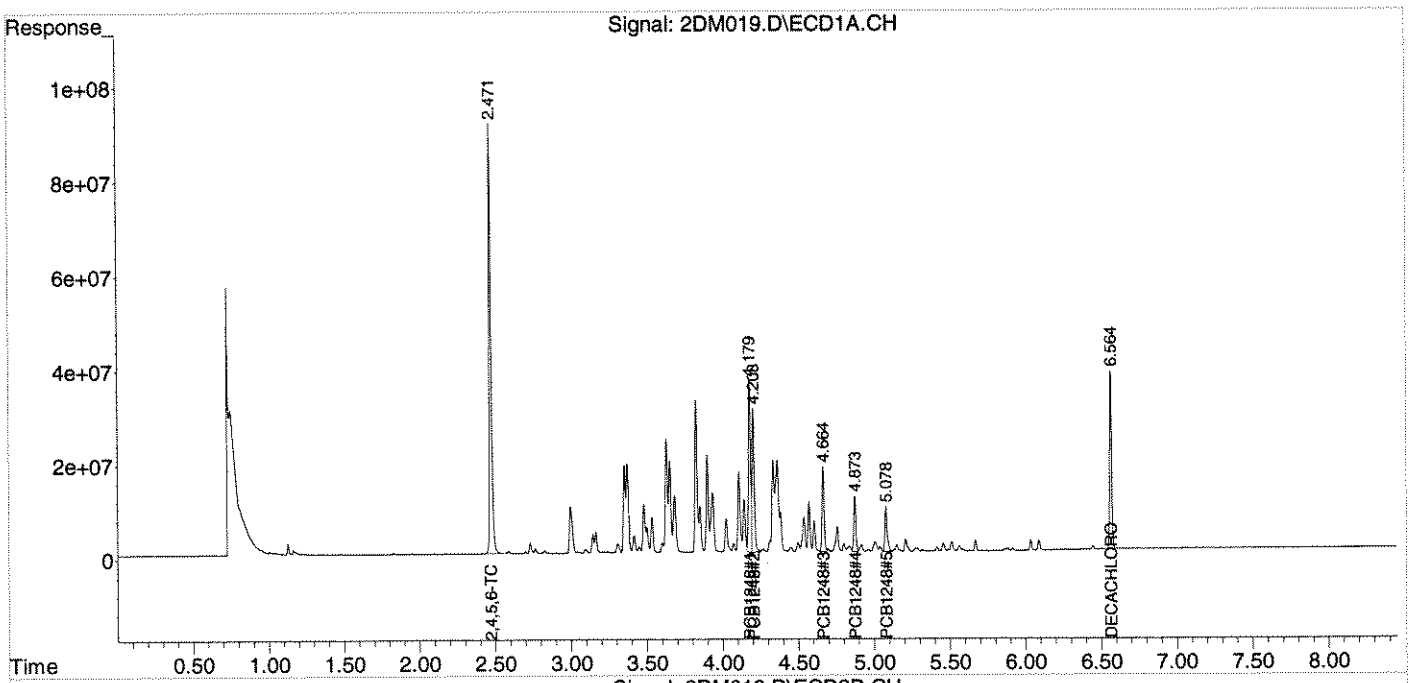
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

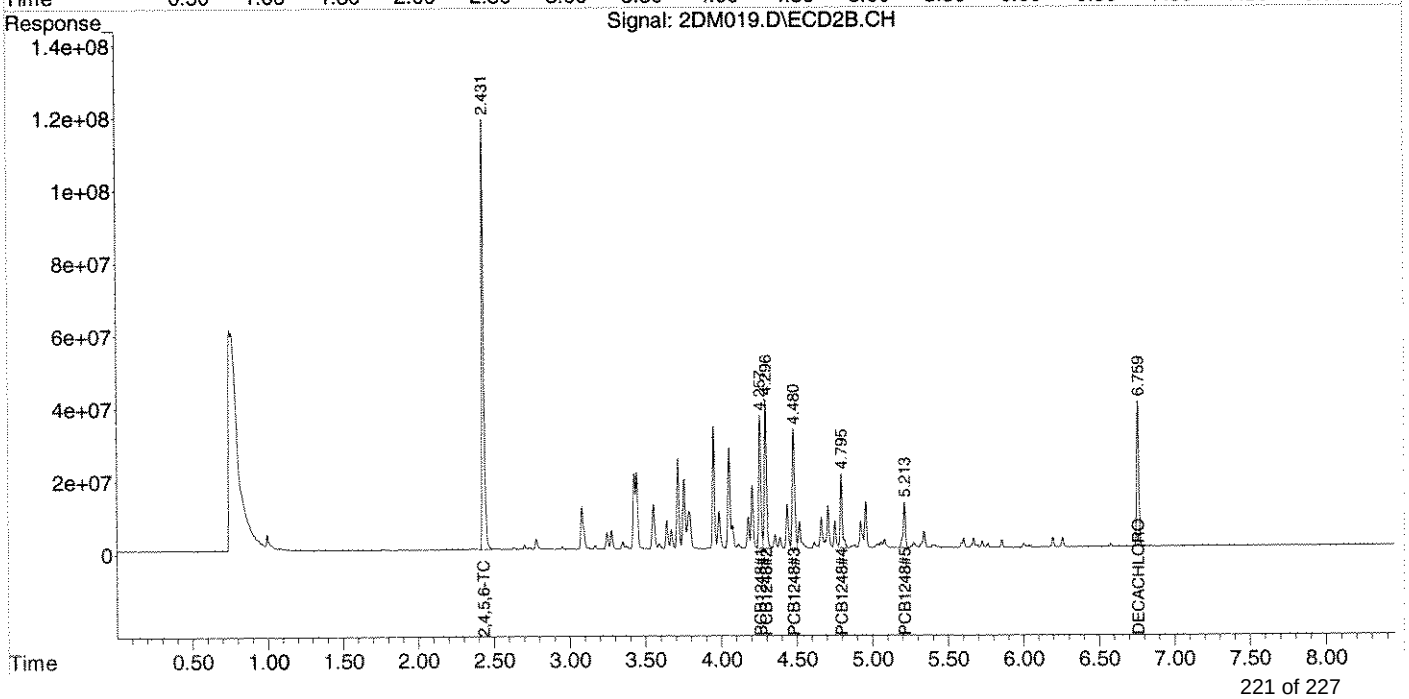
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:16
Operator : RC
Sample : AA28397-CAL4
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:34:01 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:28
Operator : RC
Sample : AA28397-CAL5
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:48:58 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.473	2.432	1793.4E6	2182.8E6	0.1188	0.2405	#
2)	PCB1248#1	4.179	4.258	727.2E6	689.5E6	1.5156	2.2202	#
3)	PCB1248#2	4.203	4.296	614.7E6	800.1E6	1.3885	2.1920	#
4)	PCB1248#3	4.664	4.480	331.2E6	742.8E6	1.2451	2.2250	#
5)	PCB1248#4	4.873	4.795	224.3E6	406.5E6	1.2711	2.1113	#
6)	PCB1248#5	5.078	5.213	198.4E6	270.5E6	1.1689	2.2017	#
7)	DECACHLOR...	6.563	6.757	559.8E6	635.3E6	0.0496	0.0826	#

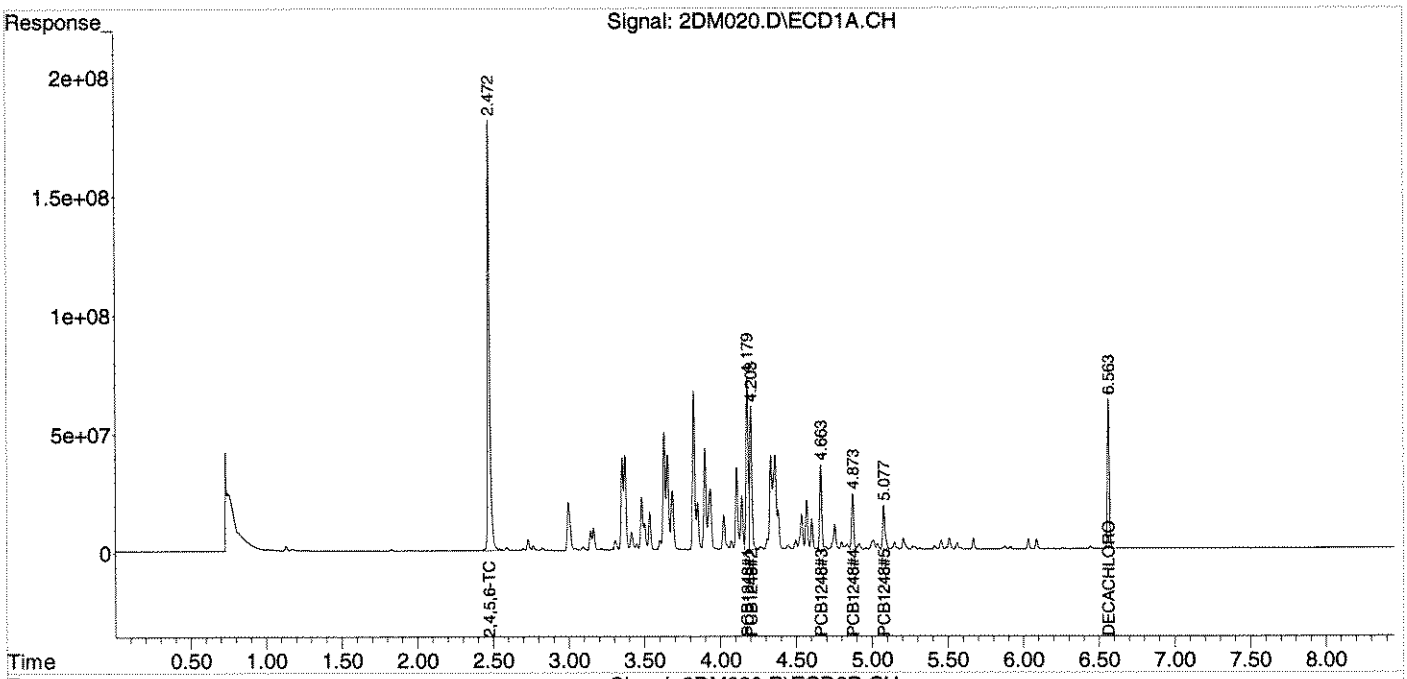
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

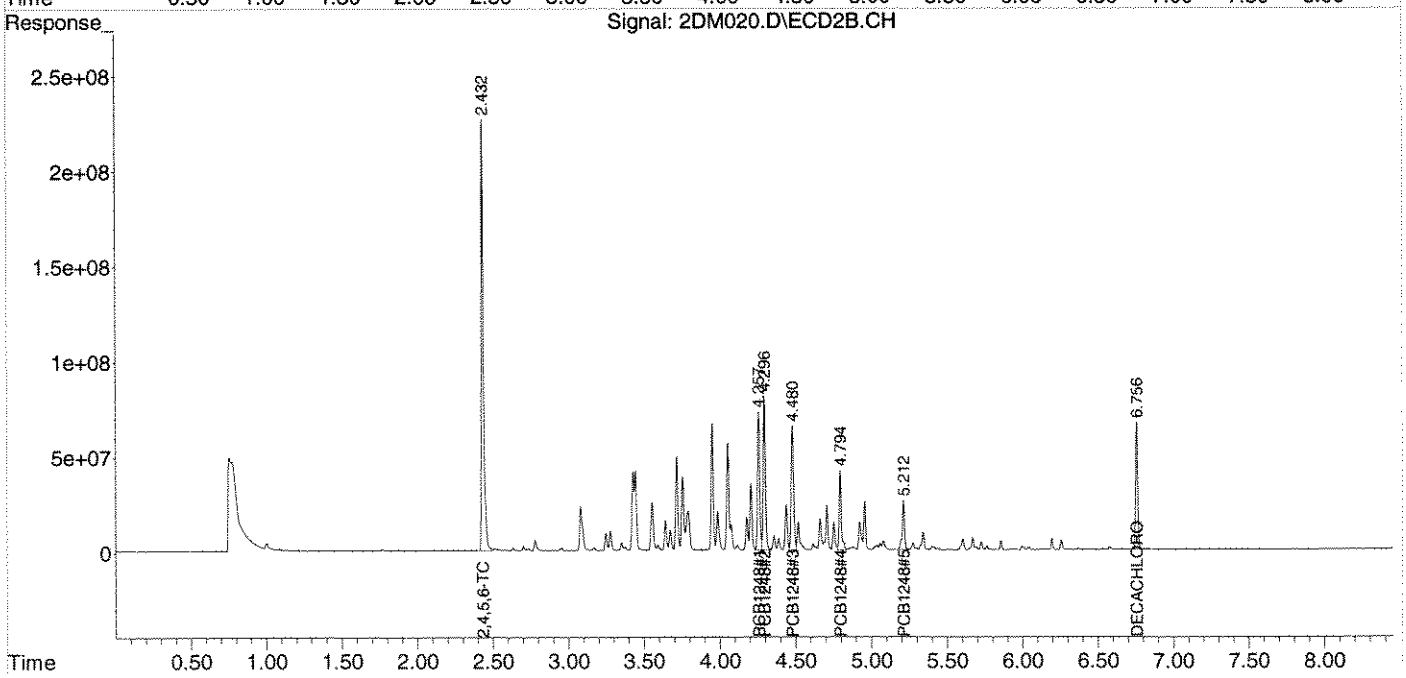
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:28
Operator : RC
Sample : AA28397-CAL5
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:48:58 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:40
Operator : RC
Sample : AA28397-CAL6
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:49:18 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.474	2.433	3476.2E6	4120.9E6	0.2304	0.4540	#
2)	PCB1248#1	4.179	4.257	1415.4E6	1320.8E6	2.9499	4.2532	#
3)	PCB1248#2	4.203	4.295	1234.2E6	1540.5E6	2.7881	4.2205	#
4)	PCB1248#3	4.664	4.480	662.7E6	1431.7E6	2.4911	4.2884	#
5)	PCB1248#4	4.873	4.795	447.4E6	788.7E6	2.5363	4.0961	#
6)	PCB1248#5	5.078	5.212	405.7E6	532.9E6	2.3900	4.3372	#
7)	DECACHLOR...	6.563	6.757	1110.0E6	1238.6E6	0.0984	0.1610	#

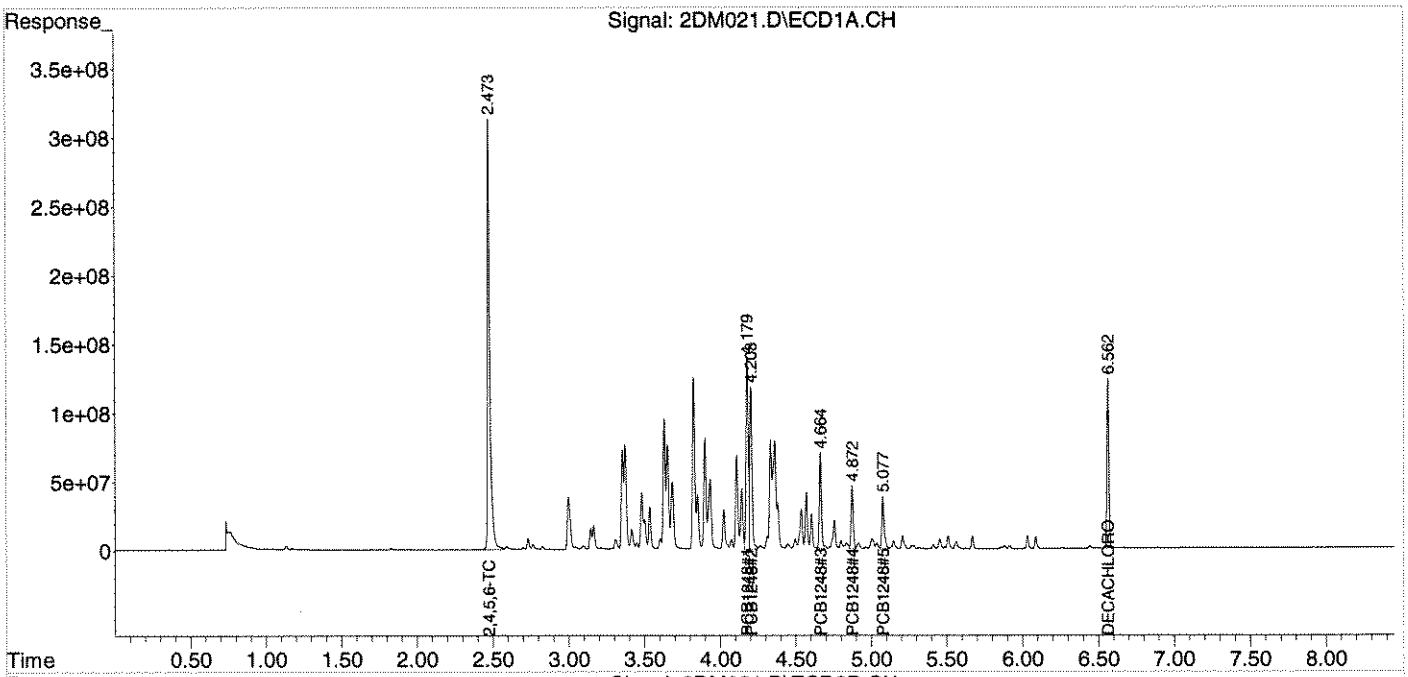
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

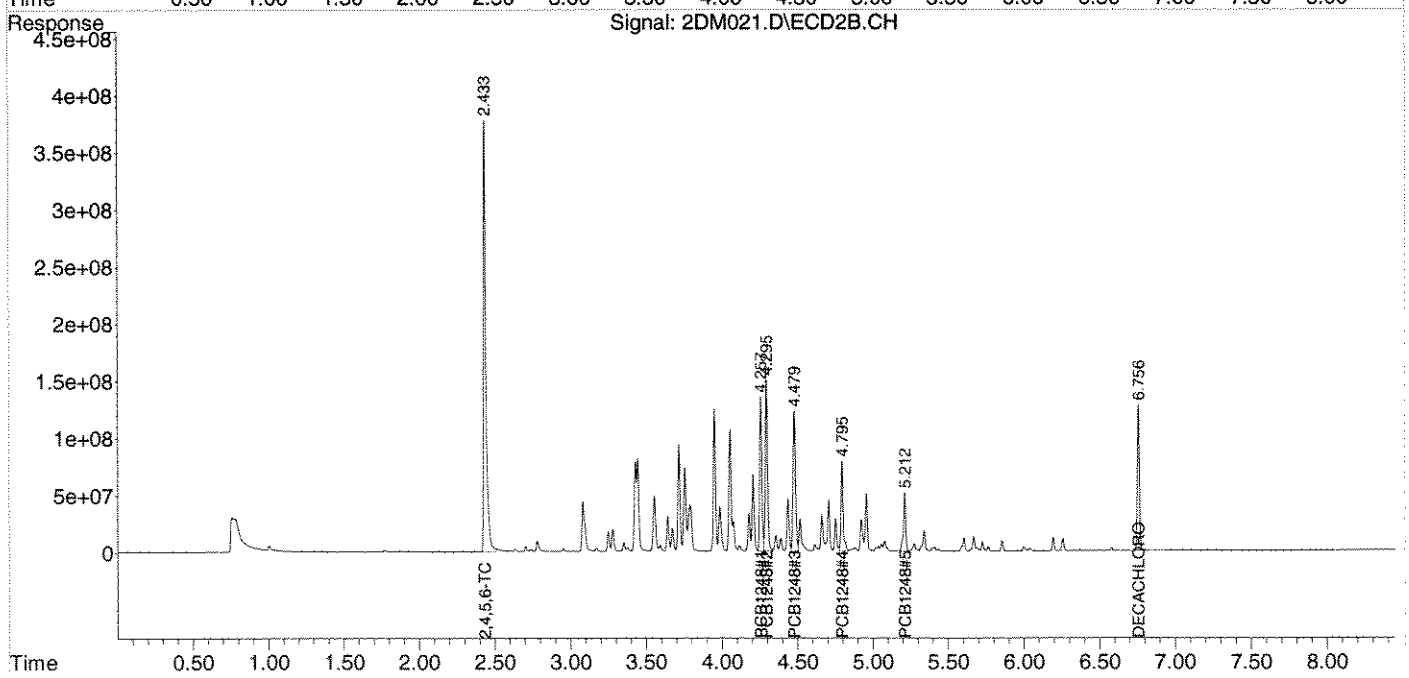
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:40
Operator : RC
Sample : AA28397-CAL6
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 12:49:18 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:33:38 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:52
Operator : RC
Sample : AA28397-SCV1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 13:01:06 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:50:04 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.472	2.432	1880.6E6	2290.9E6	0.2307	0.2211
2)	PCB1248#1	4.179	4.257	799.5E6	743.5E6	2.2632	2.1838
3)	PCB1248#2	4.203	4.296	666.7E6	853.6E6	2.2532	2.1622
4)	PCB1248#3	4.664	4.480	364.5E6	803.4E6	2.2036	2.2193
5)	PCB1248#4	4.873	4.795	244.1E6	436.9E6	2.2029	2.2237
6)	PCB1248#5	5.078	5.213	220.5E6	294.3E6	2.2559	2.1952
7)	DECACHLOR...	6.564	6.758	798.3E6	896.4E6	0.2586	0.2567

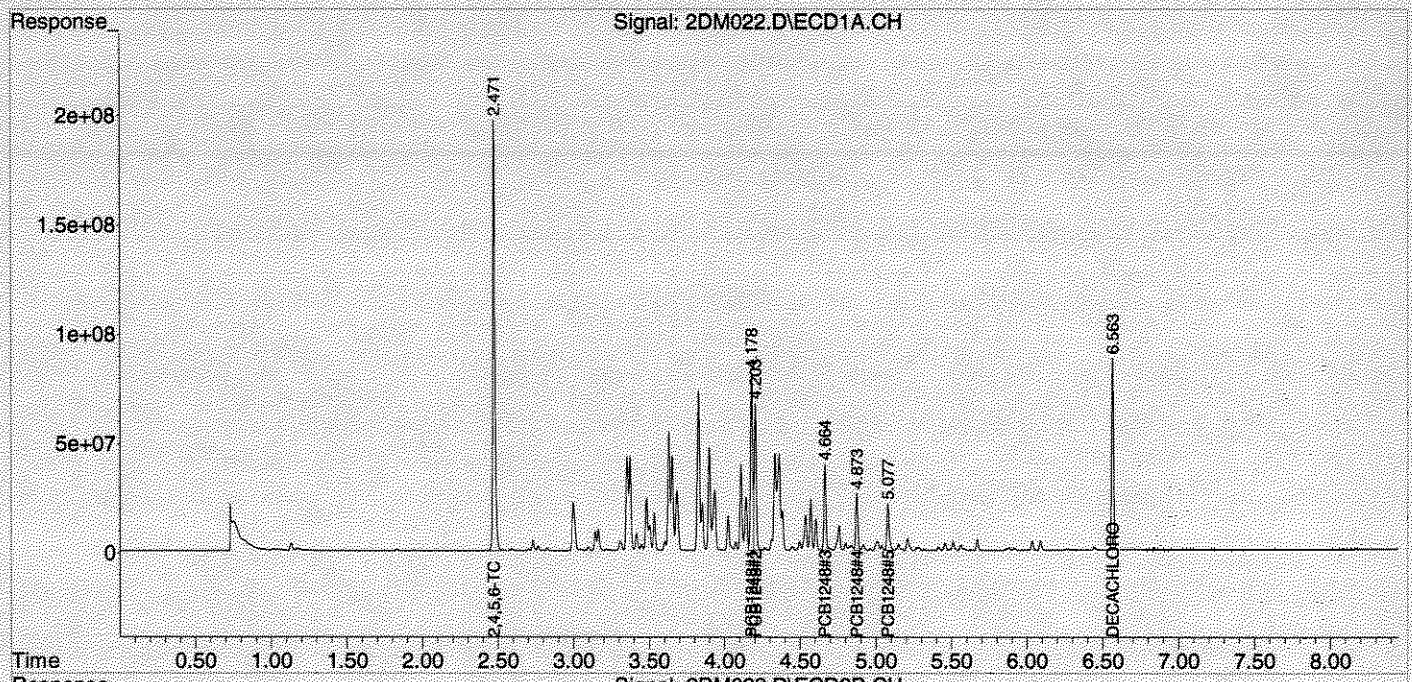
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

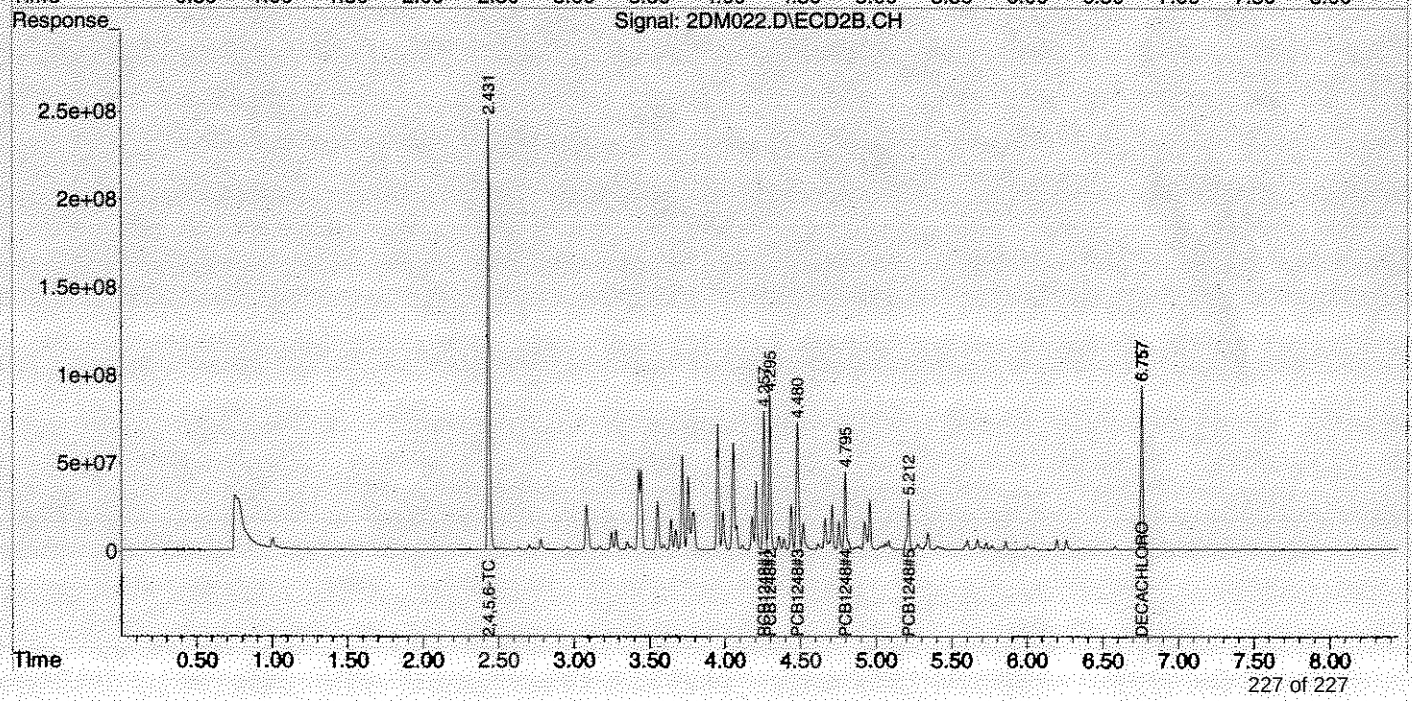
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2DM14\
Data File : 2DM022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 18 Apr 2014 12:52
Operator : RC
Sample : AA28397-SCV1
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 13:01:06 2014
Quant Method : Z:\2\METHODS\PCB1248DM14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Fri Apr 18 12:50:04 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ATTACHMENT 2
COC and SRG Technical Memorandum

Soil Constituents of Concern Selection and Site Soil Remediation Goal Development, Towers Road Disposal Area, Harvey Point Defense Testing Activity, Hertford, North Carolina

PREPARED BY: CH2M HILL

DATE: September 2014

Introduction

This technical memorandum documents refinement of the site-specific constituents of concern (COCs) in soil and development of soil remediation goals (SRGs) for the Remedial Action (RA) at Towers Road Disposal Area consisting of the 2nd Street Disposal Area and 5th Street Disposal Area located at Harvey Point Defense Testing Activity (HPDTA), Hertford, North Carolina. The refinements to the soil COCs and their respective RA SRGs are based on the results of the surface and subsurface soil sampling conducted in accordance with the Phase II Remedial Investigation (RI) Work Plan (CH2M HILL, April 2014). The RA has been initiated prior to completion of the RI to expedite the site remediation and closure process by addressing the waste, which is the presumed source of contamination to other site media. There is the potential for the need for future revisions to the SRGs based on results of subsequent RI activities (e.g., groundwater data). If revisions become necessary, they will be documented in the Phase II RI Report.

Constituents of Concern and Remediation Goals

The soil data collected during the Phase I RI (CH2M HILL, March 2014) were utilized to identify surface and subsurface soil constituents of potential concern (COPCs) to be addressed during the soil RA. In accordance with Appendix A, Section A.7.2 of the Registered Environmental Consultant (REC) Program Implementation Guidance (NCDENR, December 2013), those constituents detected in site-specific 2nd Street Disposal Area and 5th Street Disposal Area soil samples above background values, where established, and not identified as common laboratory contaminants were identified as surface and/or subsurface soil COPCs (shown in italicized text on **Tables 1 through 4**). To support the collection of remedial area delineation samples as part of the Phase II RI, preliminary adjusted SRGs were calculated for the site-specific COPCs as part of the Phase I RI using the methodology described in Appendix E of the REC Program Implementation Guidance (NCDENR, December 2013) (**Tables 5 and 6**).

In accordance with the Phase II RI Work Plan, surface and subsurface soil samples were collected along the perimeter of the waste boundary to further define the limits of site-specific COPCs. Surface and subsurface soil data collected as part of Phase I and Phase II RI activities were compared against protection of groundwater preliminary soil remediation goals (PSRGs), residential health-based PSRGs, and background values to reduce the list of COPCs and identify site-specific COCs. Those constituents that exceeded PSRGs and background values, where established, were identified as surface and/or subsurface soil COCs requiring further action (shown in red bold text on **Tables 1 through 4**).

Site-specific health-based residential SRGs were recalculated for the COCs using the methodology described in Appendix E of the REC Program Implementation Guidance (NCDENR, December 2013) (**Tables 7 through 10**). In accordance with Appendix D of the REC Program Implementation Guidance (NCDENR, December 2013), to attain unrestricted land use, both health-based and protection of groundwater soil leaching remediation goals were considered when selecting the RA SRGs for soil COCs unless all disposal activities and releases of hazardous substances occurred over 15 years ago (true for the Towers Road Disposal Area) and groundwater monitoring immediately at the source area demonstrates that the COCs and any daughter products in groundwater are below the groundwater regulatory standards. In addition, because cleanup to

below natural background conditions is not required, background values were also considered where established. The RA SRGs were selected as follows (**Tables 11 and 12**):

- Where a site-specific soil COC was also detected in groundwater during Phase I RI activities and, therefore, determined to have leaching potential, the RA SRG was selected as the less conservative (greater) value of:
    - The most conservative (lowest) value between the protection of groundwater PSRG, the calculated site-specific surface soil health-based residential SRG, and the calculated site-specific subsurface soil health-based residential SRG
    - The background value, where established
- Where a site-specific soil COC was not detected in groundwater during Phase I RI activities, indicating the soil contaminant has not leached to groundwater, the RA SRG was selected as the less conservative (greater) value between:
    - The more conservative (lowest) value between the calculated site-specific surface and subsurface soil health-based residential SRGs.
    - The background value, where established
- For polychlorinated biphenyls (PCBs) the final SRG was established in accordance with United States Environmental Protection Agencies (USEPA's) policy for PCB remediation at Superfund sites and selected as the unrestricted land use remediation goal of 1 ppm.

Tables 5 and 6 present a comparison of the PSRGs presented in the Phase I RI and Interim Remedial Action Plan (IRAP) with the RA SRGs. Because the RI for groundwater is not yet complete, future revisions to the SRGs may be warranted. To be conservative, the RA SRGs take into consideration all Phase I RI groundwater COPCs (i.e., contaminants detected at concentrations above background values, where established, and not identified as common laboratory contaminants), whether or not they exceeded groundwater regulatory standards. However, if the concentration of a Phase I RI COPC or Phase I RI COPC daughter product does not exceed the regulatory standard following completion of the Phase II RI, it will not be carried forward as a COC at the end of the RI, and the protection of groundwater PSRGs will no longer be applicable. Therefore, SRGs may be further adjusted at the conclusion of the RI. If revisions to the SRGs are warranted, they will be documented in the Phase II RI Report.

Path Forward

During implementation of the IRAP (CH2M HILL, April 2014), waste will be removed to visible limits and disposed of offsite. Soil confirmation samples will be collected from the walls and floor (if above the water table) of the excavation and analyzed for the COCs (**Tables 13 and 14**). Confirmation data will be compared to the RA SRGs (**Tables 13 and 14**). Where COC concentrations exceed the RA SRGs, additional excavation may be conducted and, if so, confirmation samples will be collected for those COCs that exceeded RA SRGs. If all waste and signs of contamination have been removed and soil results continue to exceed the RA SRGs, the results will be evaluated by the REC Registered Site Manager (RSM), HPDTA Environmental Manager, and Naval Facilities Engineering Command (NAVFAC) Remedial Project Manager in consultation with North Carolina Department of Environment and Natural Resources (NCDENR) to determine the appropriate path forward with consideration of whether the contaminants are naturally present and/or if the SRGs are more conservative than warranted due to factoring in Phase I RI groundwater COPCs.

Table 1
2nd Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID / Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SS01-0613 6/11/13	TR-2ND-SS02-0613 6/11/13	TR-2ND-SS03-0613 6/11/13	TR-2ND-SS03D-0613 6/11/13	TR-2ND-SS04-0613 6/11/13	TR-2ND-SS05-0613 6/11/13
Chemical Name												
Volatile Organic Compounds (MG/KG)												
Acetone	24	12,000	--	1 / 6	0.0120 J	TR-2ND-SS05-0613	0.016 U	0.016 U	0.012 U	0.018 U	0.018 U	0.012 J
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 16	0.0230 J	TR-2ND-SS01-0613	0.023 J	0.032 U	0.023 J	0.031 U	0.031 U	0.029 U
Acenaphthene	8.4	680	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.035 J	0.042 J	0.033 J	0.022 J	0.031 U	0.029 U
Acenaphthylene	21	340	--	5 / 16	0.190	TR-2ND-SS02-0613	0.048	0.19	0.043 J	0.029 J	0.027 J	0.029 U
Anthracene	660	3,400	--	6 / 16	0.200	TR-2ND-SS02-0613	0.04 J	0.2	0.04 J	0.027 J	0.032 J	0.029 U
Benzo(a)anthracene	0.18	0.15	--	12 / 16	0.650	TR-2ND-SS02-0613	0.08	**0.65**	0.065	0.059	0.074	0.029 U
Benzo(a)pyrene	0.059	0.015	--	8 / 16	0.540	TR-2ND-SS02-0613	**0.08**	**0.54**	**0.063**	**0.051**	**0.076**	0.029 U
Benzo(b)fluoranthene	0.6	0.15	--	8 / 16	0.880	TR-2ND-SS02-0613	0.11	**0.88**	0.083	0.078	0.14	0.029 U
Benzo(g,h,i)perylene	7,800	340	--	8 / 16	0.300	TR-2ND-SS02-0613	0.048	0.3	0.048	0.042 J	0.052	0.029 U
Benzo(k)fluoranthene	5.9	1.5	--	7 / 16	0.410	TR-2ND-SS02-0613	0.073	0.41	0.058	0.051	0.071	0.029 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	1 / 6	0.110 J	TR-2ND-SS04-0613	0.13 U	0.26 UD	0.13 U	0.13 U	0.11 J	0.12 U
Chrysene	18	15	--	8 / 16	0.660	TR-2ND-SS02-0613	0.085	0.66	0.07	0.059	0.084	0.029 U
Dibenz(a,h)anthracene	0.19	0.015	--	4 / 16	0.0830	TR-2ND-SS02-0613	0.032 U	**0.083**	**0.023 J**	0.031 U	0.031 U	0.029 U
Fluoranthene	330	460	--	9 / 16	0.890	TR-2ND-SS02-0613	0.11	0.89	0.09	0.078	0.12	0.029 U
Fluorene	56	460	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.028 J	0.042 J	0.028 J	0.031 U	0.031 U	0.029 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	7 / 16	0.240	TR-2ND-SS02-0613	0.04 J	**0.24**	0.035 J	0.034 J	0.042 J	0.029 U
Naphthalene	0.21	3.6	--	4 / 16	0.0380 J	TR-2ND-SS01-0613	0.038 J	0.034 J	0.033 J	0.027 J	0.031 U	0.029 U
Phenanthrene	68	340	--	9 / 16	0.250	TR-2nd-SS06-0514	0.058	0.11	0.053	0.047	0.071	0.029 U
Pyrene	220	340	--	9 / 16	0.980	TR-2ND-SS02-0613	0.11	0.98	0.095	0.078	0.12	0.029 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	6 / 16	0.130 PQ	TR-2ND-SS04-0613	0.025 U	0.061 Q	0.12	0.093	0.13 PQ	0.084
Aroclor-1260	0.14	1	--	8 / 16	0.190	TR-2ND-SS04-0613	0.025 UQ	0.14	0.13	0.092	0.19	0.091
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	6 / 6	18,800	TR-2ND-SS01-0613	**18,800**	12,200	9,890	10,200	11,000	11,500
Antimony	0.9	6.2	--	8 / 16	8.14	TR-2ND-SS04-0613	1.12 U	3.49	**6.41**	3.25	**8.14**	1.58 U
Arsenic	5.8	0.61	3.74	16 / 16	8.68	TR-2nd-SS08-0514	**3.17**	**5.02**	**4.96**	**4.63**	**7.52**	**2.82 J**
Barium	580	3,000	134	16 / 16	332.0	TR-2ND-SS03-0613	90.4	156	332	207	329	68.6
Beryllium	63	32	0.636	6 / 6	0.455	TR-2ND-SS05-0613	0.363	0.323	0.248	0.258	0.288	0.455
Cadmium	3	14	0.878	14 / 16	6.24	TR-2ND-SS02-0613	0.364	6.24	3.74	3.21	3.56	0.0792 U
Calcium	--	--	3,600	6 / 6	12,400	TR-2ND-SS03-0613	3,040	11,700	12,400	7,740	9,140	1,090
Chromium	360,000	24,000	38.5	16 / 16	41.6	TR-2ND-SS02-0613	27.1	41.6	31.5	30.4	37.9	16.9
Cobalt	0.9	4.6	4.64	16 / 16	6.72	TR-2ND-SS04-0613	3.62	**6.58**	4.21	4.06	**6.72**	2.86
Copper	700	620	441	16 / 16	710.0	TR-2nd-SS08-0514	46.4	269	250	254	**639**	6.84
Iron	150	11000	14100	16 / 16	30,000	TR-2ND-SS03-0613	10,400	**25,100**	**30,000**	**13,100**	**28,000**	6,940
Lead	270	400	47.9	16 / 16	348.0	TR-2ND-SS04-0613	37.1	223	166	161	348	10.5
Magnesium	--	--	2,600	6 / 6	1,900	TR-2ND-SS01-0613	1,900	1,890	1,350	1,510	1,780	1,360
Manganese	65	360	412	6 / 6	412.0	TR-2ND-SS04-0613	142	310	319	296	**412**	298
Mercury	1	2	0.0366	12 / 12	3.62 D	TR-2ND-SS02-0613	0.934	**3.62 D**	NS	NS	NS	NS
Nickel	130	300	16.8	16 / 16	36.6	TR-2ND-SS04-0613	11.2	19	12.6	12.4	36.6	7.79
Potassium	--	--	765	6 / 6	809.0	TR-2ND-SS03-0613	685	631	809	796	774	403
Silver	3.4	78	--	9 / 16	20.5	TR-2ND-SS04-0613	2.48	3.81	5.28	15.6	20.5	0.396 U
Sodium	--	--	136	6 / 6	188.0	TR-2ND-SS04-0613	62	91.4	72.4	71.4	188	41.4
Vanadium	6	78	31.9	6 / 6	23.1	TR-2ND-SS01-0613	23.1	17.6	14.2	16.2	16.1	17.2
Zinc	1200	4600	87.3	16 / 16	1,020	TR-2ND-SS04-0613	99.2	738	588	591	1,020	25.7

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For non-carcinogenic PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 1
2nd Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SS06-0514 5/5/14	TR-2nd-SS07-0514 5/5/14	TR-2nd-SS08-0514 5/5/14	TR-2nd-SS09-0514 5/5/14	TR-2nd-SS10-0514 5/5/14	TR-2nd-SS10D-0514 5/5/14	TR-2nd-SS11-0514 5/5/14	TR-2nd-SS12-0514 5/5/14
Chemical Name														
Volatile Organic Compounds (MG/KG)														
Acetone	24	12,000	--	1 / 6	0.0120 J	TR-2ND-SS05-0613	NS	NS	NS	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)														
2-Methylnaphthalene	1.6	46	--	2 / 16	0.0230 J	TR-2ND-SS01-0613	0.034 U	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Acenaphthene	8.4	680	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.034 U	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Acenaphthylene	21	340	--	5 / 16	0.190	TR-2ND-SS02-0613	0.034 U	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Anthracene	660	3,400	--	6 / 16	0.200	TR-2ND-SS02-0613	0.064	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Benzo(a)anthracene	0.18	0.15	--	12 / 16	0.650	TR-2ND-SS02-0613	**0.31**	0.023 J	**0.2**	0.056	0.04 J	0.032 J	0.037 U	0.036 U
Benzo(a)pyrene	0.059	0.015	--	8 / 16	0.540	TR-2ND-SS02-0613	**0.27**	0.029 U	**0.18**	**0.026 J**	0.039 U	0.04 U	0.037 U	0.036 U
Benzo(b)fluoranthene	0.6	0.15	--	8 / 16	0.880	TR-2ND-SS02-0613	**0.37**	0.029 U	**0.24**	0.041 J	0.039 U	0.04 U	0.037 U	0.036 U
Benzo(g,h,i)perylene	7,800	340	--	8 / 16	0.300	TR-2ND-SS02-0613	0.21	0.029 U	0.13	0.023 J	0.039 U	0.04 U	0.037 U	0.036 U
Benzo(k)fluoranthene	5.9	1.5	--	7 / 16	0.410	TR-2ND-SS02-0613	0.15	0.029 U	0.087	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	1 / 6	0.110 J	TR-2ND-SS04-0613	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	8 / 16	0.660	TR-2ND-SS02-0613	0.29	0.029 U	0.2	0.028 J	0.039 U	0.04 U	0.037 U	0.036 U
Dibenz(a,h)anthracene	0.19	0.015	--	4 / 16	0.0830	TR-2ND-SS02-0613	**0.056**	0.029 U	**0.035 J**	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Fluoranthene	330	460	--	9 / 16	0.890	TR-2ND-SS02-0613	0.5	0.029 U	0.21	0.061	0.032 J	0.04 U	0.037 U	0.036 U
Fluorene	56	460	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.023 J	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	7 / 16	0.240	TR-2ND-SS02-0613	**0.18**	0.029 U	0.1	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Naphthalene	0.21	3.6	--	4 / 16	0.0380 J	TR-2ND-SS01-0613	0.034 U	0.029 U	0.034 U	0.035 U	0.039 U	0.04 U	0.037 U	0.036 U
Phenanthrene	68	340	--	9 / 16	0.250	TR-2nd-SS06-0514	0.25	0.029 U	0.045	0.026 J	0.023 J	0.04 U	0.037 U	0.036 U
Pyrene	220	340	--	9 / 16	0.980	TR-2ND-SS02-0613	0.41	0.029 U	0.2	0.049	0.026 J	0.04 U	0.037 U	0.036 U
Pesticide/Polychlorinated Biphenyls (MG/KG)														
Aroclor-1254	0.14	1	--	6 / 16	0.130 PQ	TR-2ND-SS04-0613	0.025 U	0.021 U	0.044 JPQ	0.026 U	0.029 U	0.029 U	0.027 U	0.027 U
Aroclor-1260	0.14	1	--	8 / 16	0.190	TR-2ND-SS04-0613	0.029 J	0.021 U	0.15	0.026 U	0.029 U	0.023 J	0.027 U	0.027 U
Total Metals (MG/KG)														
Aluminum	--	15,000	32,000	6 / 6	18,800	TR-2ND-SS01-0613	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	8 / 16	8.14	TR-2ND-SS04-0613	0.674 J	0.852 U	4.67	0.381 J	1.16 U	1.18 U	1.08 U	1.06 U
Arsenic	5.8	0.61	3.74	16 / 16	8.68	TR-2nd-SS08-0514	**7.26**	**2.19 J**	**8.68**	**1.93 J**	**4.16**	**3.5**	**2.04 J**	**2.09 J**
Barium	580	3,000	134	16 / 16	332.0	TR-2ND-SS03-0613	63.8	51.8	195	61.2	125	101	41.5	66.6
Beryllium	63	32	0.636	6 / 6	0.455	TR-2ND-SS05-0613	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	14 / 16	6.24	TR-2ND-SS02-0613	0.339	0.152 U	2.93	0.229 J	0.0528 J	0.119 J	0.139 J	0.076 J
Calcium	--	--	3,600	6 / 6	12,400	TR-2ND-SS03-0613	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	16 / 16	41.6	TR-2ND-SS02-0613	21.1	18.5	28.8	16.6	37.7	30.1	10.8	20.8
Cobalt	0.9	4.6	4.64	16 / 16	6.72	TR-2ND-SS04-0613	2.76	3.74	3.53	2.19	3.73	3.35	2.31	2.76
Copper	700	620	441	16 / 16	710.0	TR-2nd-SS08-0514	27.1	6.84	**710**	18.8	8.79	7.49	4.34	8.05
Iron	150	11000	14100	16 / 16	30,000	TR-2ND-SS03-0613	7,360	9,700	**11,500**	6,600	**13,900**	**11,300**	4,440	6,990
Lead	270	400	47.9	16 / 16	348.0	TR-2ND-SS04-0613	27.7	3.68	164	20.8	14.4	14.3	8.72	8.57
Magnesium	--	--	2,600	6 / 6	1,900	TR-2ND-SS01-0613	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	6 / 6	412.0	TR-2ND-SS04-0613	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	12 / 12	3.62 D	TR-2ND-SS02-0613	0.837	0.0139 J	**3.08 D**	0.27	0.488	0.403	0.188	0.185
Nickel	130	300	16.8	16 / 16	36.6	TR-2ND-SS04-0613	8.25	9.92	23.3	5.51	16.4	13.4	5.07	10
Potassium	--	--	765	6 / 6	809.0	TR-2ND-SS03-0613	NS	NS	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	9 / 16	20.5	TR-2ND-SS04-0613	0.653 Q	0.234 U	15.6 D	0.365 J	0.318 U	0.324 U	0.298 U	0.293 U
Sodium	--	--	136	6 / 6	188.0	TR-2ND-SS04-0613	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	6 / 6	23.1	TR-2ND-SS01-0613	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	1200	4600	87.3	16 / 16	1,020	TR-2ND-SS04-0613	70.4	28	561	39.4	51.9	46.2	22	21.2

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 1
2nd Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID / Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SS13-0514 5/5/14	TR-2nd-SS14-0514 5/5/14	Exceeds Protection of Groundwater PSRG	Exceeds Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name														
Volatile Organic Compounds (MG/KG)														
Acetone	24	12,000	--	1 / 6	0.0120 J	TR-2ND-SS05-0613	NS	NS			no	CLC	--	--
Semivolatile Organic Compounds (MG/KG)														
2-Methylnaphthalene	1.6	46	--	2 / 16	0.0230 J	TR-2ND-SS01-0613	0.036 U	0.035 U			***yes***	D	no	NE
Acenaphthene	8.4	680	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Acenaphthylene	21	340	--	5 / 16	0.190	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Anthracene	660	3,400	--	6 / 16	0.200	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Benzo(a)anthracene	0.18	0.15	--	12 / 16	0.650	TR-2ND-SS02-0613	0.036 U	0.033 J	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(a)pyrene	0.059	0.015	--	8 / 16	0.540	TR-2ND-SS02-0613	0.036 U	0.035 U	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(b)fluoranthene	0.6	0.15	--	8 / 16	0.880	TR-2ND-SS02-0613	0.036 U	0.035 U	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(g,h,i)perylene	7,800	340	--	8 / 16	0.300	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Benzo(k)fluoranthene	5.9	1.5	--	7 / 16	0.410	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
bis(2-Ethylhexyl)phthalate	7.2	35	--	1 / 6	0.110 J	TR-2ND-SS04-0613	NS	NS			no	CLC	--	--
Chrysene	18	15	--	8 / 16	0.660	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Dibenz(a,h)anthracene	0.19	0.015	--	4 / 16	0.0830	TR-2ND-SS02-0613	0.036 U	0.035 U		**yes**	***yes***	PSRG	**yes**	PSRG
Fluoranthene	330	460	--	9 / 16	0.890	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Fluorene	56	460	--	4 / 16	0.0420 J	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Indeno(1,2,3-cd)pyrene	2	0.15	--	7 / 16	0.240	TR-2ND-SS02-0613	0.036 U	0.035 U		**yes**	***yes***	PSRG	**yes**	PSRG
Naphthalene	0.21	3.6	--	4 / 16	0.0380 J	TR-2ND-SS01-0613	0.036 U	0.035 U			***yes***	D	no	PSRG
Phenanthrene	68	340	--	9 / 16	0.250	TR-2nd-SS06-0514	0.036 U	0.035 U			***yes***	D	no	NE
Pyrene	220	340	--	9 / 16	0.980	TR-2ND-SS02-0613	0.036 U	0.035 U			***yes***	D	no	NE
Pesticide/Polychlorinated Biphenyls (MG/KG)														
Aroclor-1254	0.14	1	--	6 / 16	0.130 PQ	TR-2ND-SS04-0613	0.027 U	0.026 U			***yes***	D	no	NE
Aroclor-1260	0.14	1	--	8 / 16	0.190	TR-2ND-SS04-0613	0.027 U	0.026 U	**yes**		***yes***	PSRG	**yes**	PSRG
Total Metals (MG/KG)														
Aluminum	--	15,000	32,000	6 / 6	18,800	TR-2ND-SS01-0613	NS	NS			no	NRS & B	--	--
Antimony	0.9	6.2	--	8 / 16	8.14	TR-2ND-SS04-0613	1.08 U	0.381 J	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Arsenic	5.8	0.61	3.74	16 / 16	8.68	TR-2nd-SS08-0514	**3.3**	**4.08**	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Barium	580	3,000	134	16 / 16	332.0	TR-2ND-SS03-0613	104	69			***yes***	D	no	NE
Beryllium	63	32	0.636	6 / 6	0.455	TR-2ND-SS05-0613	NS	NS			no	B	--	--
Cadmium	3	14	0.878	14 / 16	6.24	TR-2ND-SS02-0613	0.0341 J	0.37	**yes**		***yes***	PSRG	**yes**	PSRG
Calcium	--	--	3,600	6 / 6	12,400	TR-2ND-SS03-0613	NS	NS			no	NUT	--	--
Chromium	360,000	24,000	38.5	16 / 16	41.6	TR-2ND-SS02-0613	37.2	23			***yes***	D	no	NE
Cobalt	0.9	4.6	4.64	16 / 16	6.72	TR-2ND-SS04-0613	3.77	3.63	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Copper	700	620	441	16 / 16	710.0	TR-2nd-SS08-0514	7.23	23.8	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Iron	150	11000	14100	16 / 16	30,000	TR-2ND-SS03-0613	**13,900**	9,810	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Lead	270	400	47.9	16 / 16	348.0	TR-2ND-SS04-0613	10.7	26.3	**yes**		***yes***	PSRG	**yes**	PSRG
Magnesium	--	--	2,600	6 / 6	1,900	TR-2ND-SS01-0613	NS	NS			no	NUT	--	--
Manganese	65	360	412	6 / 6	412.0	TR-2ND-SS04-0613	NS	NS	**yes**	**yes**	no	B	--	--
Mercury	1	2	0.0366	12 / 12	3.62 D	TR-2ND-SS02-0613	0.101	0.216	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Nickel	130	300	16.8	16 / 16	36.6	TR-2ND-SS04-0613	14	11			***yes***	D	no	NE
Potassium	--	--	765	6 / 6	809.0	TR-2ND-SS03-0613	NS	NS			no	NUT	--	--
Silver	3.4	78	--	9 / 16	20.5	TR-2ND-SS04-0613	0.297 U	1.03	**yes**		***yes***	PSRG	**yes**	PSRG
Sodium	--	--	136	6 / 6	188.0	TR-2ND-SS04-0613	NS	NS			no	NUT	--	--
Vanadium	6	78	31.9	6 / 6	23.1	TR-2ND-SS01-0613	NS	NS			no	B	--	--
Zinc	1200	4600	87.3	16 / 16	1,020	TR-2ND-SS04-0613	28.2	64.4			***yes***	D	no	NE

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

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Italicized text indicates COPC
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Underlined text indicates exceedance of Protection of Groundwater PSRG
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J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB01-0.5-01-0613	TR-2ND-SB01-06-08-0613	TR-2ND-SB02-0.5-1-0613	TR-2ND-SB02-06-08-0613	TR-2ND-SB03-0.5-01-0613	TR-2ND-SB03-04-06-0613
Sample Date							6/11/13	6/11/13	6/19/13	6/19/13	6/19/13	6/19/13
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	0.0031 U	0.0024 U	0.0021 U	0.015	0.0029 U	0.0024 U
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	0.016 U	0.03	0.011 U	0.073	0.015 U	0.012 U
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0013 U	0.001 U	0.0008 U	0.0022 J	0.0012 U	0.001 U
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0063 U	0.0049 U	0.0042 U	0.0062 U	0.0059 U	0.0049 U
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0013 U	0.001 U	0.0008 U	0.0012 U	6.00E-04 J	0.001 U
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0013 U	0.001 U	0.0008 U	0.0012 U	0.0012 U	0.001 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0013 U	0.001 U	0.0008 U	0.0012 U	0.0012 U	0.001 U
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0013 U	0.001 U	0.0008 U	0.0032	0.0012 U	0.001 U
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0013 U	0.001 U	0.0008 U	0.0017 J	0.0012 U	0.001 U
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	0.0063 U	0.0049 U	0.0042 U	0.0062 U	0.0059 U	0.0049 U
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0025 U	0.002 U	0.0017 U	0.0065	0.0023 U	0.0019 U
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0013 U	0.001 U	0.0008 U	0.0057	0.0012 U	0.001 U
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	0.0013 U	0.001 U	0.0008 U	0.0012 U	0.0012 U	0.001 U
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0013 U	0.001 U	0.0008 U	0.0014 J	0.0012 U	0.001 U
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0013 U	0.001 U	0.0008 U	0.0012 U	0.0012 U	0.001 U
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0025 U	0.002 U	0.0017 U	0.012	0.0023 U	0.0019 U
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.042 J	0.032 U	0.029 U	0.77	0.033 U	0.031 U
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.05	0.03 J	0.029 U	0.36	0.033 U	0.031 U
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.057	0.032 J	0.029 U	0.035 U	0.033 U	0.031 U
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.047	0.022 J	0.029 U	0.34	0.033 U	0.031 U
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.085	0.032 U	0.029 U	**0.42**	0.033 U	0.031 U
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	**0.08**	0.032 U	0.029 U	**0.19**	0.033 U	0.031 U
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.13	0.032 U	0.029 U	**0.35**	0.033 U	0.031 U
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.07	0.032 U	0.029 U	0.064	0.033 U	0.031 U
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.085	0.032 U	0.029 U	0.2	0.033 U	0.031 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	0.13 U	0.13 U	0.12 U	0.28 UD	0.13 U	0.12 U
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.11	0.015 J	0.029 U	0.41	0.033 U	0.015 J
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.031 U	0.032 U	0.029 U	0.035 U	0.033 U	0.031 U
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.13 U	0.13 U	0.12 U	0.46 JD	0.13 U	0.12 U
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.13	0.032 U	0.029 U	0.99	0.033 U	0.031 U
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.04 J	0.022 J	0.029 U	0.4	0.033 U	0.031 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.055	0.032 U	0.029 U	0.064	0.033 U	0.031 U
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.065	0.037 J	0.029 U	**4.1**	0.033 U	0.031 U
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.1	0.032 U	0.029 U	1.4	0.033 U	0.031 U
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.13	0.032 U	0.029 U	0.74	0.033 U	0.031 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.21	0.025 U	0.023 U	0.76	0.026 U	0.025 U
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.25	0.025 U	0.023 U	0.23	0.026 U	0.025 U

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB01-0.5-01-0613 6/11/13	TR-2ND-SB01-06-08-0613 6/11/13	TR-2ND-SB02-0.5-1-0613 6/19/13	TR-2ND-SB02-06-08-0613 6/19/13	TR-2ND-SB03-0.5-01-0613 6/19/13	TR-2ND-SB03-04-06-0613 6/19/13
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	**18,200**	**16,900**	**15,600**	10,500	**19,300**	13,600
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	**6.56**	1.54 U	1.33 U	**7.12**	1.3 U	1.24 U
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**6.66**	**2.65 J**	**3.53**	**4.92**	**3.74**	**3.06**
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	238	47.1	51.6	103	65.3	43.8
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	0.347	0.399	0.384	0.32	0.42	0.287
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	3.78	0.0772 U	0.0667 U	2.24	0.0652 U	0.0618 U
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	13,800	1,050	1,260	15,900	1,680	1,230
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	71.3	27.9	24.6	21.4	24.2	21.5
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	0.26 U	**1.46**	**1.8**	0.28 U	NS	NS
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	**5.9**	4.04	3.59	**6.86**	3.91	3.28
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	219	7.35	7.17	96.8	9.13	9.56
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	**21,200**	**11,200**	9,210	**15,200**	8,830	7,540
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	375	5.37	7.7	213	6.73	7.82
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	1,780	2,580	2,010	1,620	2,310	2,150
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	**401**	99.4	77.7	267	81.1	77.6
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	**31 D**	0.0113	0.0376	**2.54 D**	**2.12 D**	0.153
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	25	11.2	9.6	12.2	13.3	10.3
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	737	983	707	968	938	772
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	6.76	0.386 U	0.334 U	1.01	0.326 U	0.309 U
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	98	40.9	59.1	220	74.3	61.8
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	1.5 U	**0.591 J**	**0.863 J**	1.39 U	**0.834 J**	1.24 U
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	19.8	28.6	25.1	19	20.6	18.5
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	1,050	29	22.8	527	22.5	26.7

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For non-carcinogenic PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB04-0.5-01-0613 6/19/13	TR-2ND-SB04-04-06-0613 6/19/13	TR-2ND-SB05-0.5-01-0613 6/19/13	TR-2ND-SB05-03-05-0613 6/19/13	TR-2ND-SB06-0.5-01-0613 6/19/13	TR-2ND-SB06-05-07-0613 6/19/13
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	0.0029 U	0.0025 U	0.003 U	0.004 J	0.0096	0.0032 U
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	0.015 U	0.012 U	0.015 U	0.045	0.043	0.016 U
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0058 U	0.0049 U	0.006 U	0.005 U	0.0051 U	0.0063 U
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	0.0058 U	0.0049 U	0.006 U	0.005 U	0.0051 U	0.0063 U
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0023 U	0.002 U	0.0024 U	0.002 U	0.002 U	0.0025 U
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	9.00E-04 J	0.001 U	0.0012 U	0.001 U	0.001 U	0.0013 U
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0012 U	0.001 U	0.0012 U	0.001 U	0.0011 J	0.0013 U
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0012 U	0.001 U	0.0012 U	0.001 U	0.001 U	0.0029
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0023 U	0.002 U	0.0024 U	0.002 U	0.002 U	0.0025 U
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.029 U	0.032 U	0.033 U	0.033 U	0.03 U	0.032 U
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.029 U	0.032 U	0.033 U	0.033 U	0.03 U	0.032 U
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.029 U	0.032 U	0.033 U	0.033 U	0.03 U	0.032 U
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.029 U	0.032 U	0.033 U	0.033 U	0.03 U	0.032 U
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.019 J	0.078	0.066	0.021 J	0.03 U	0.032 U
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	0.029 U	**0.073**	**0.064**	0.033 U	0.03 U	0.032 U
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.04 J	0.063	0.064	0.033 U	0.03 U	0.032 U
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.029 U	0.066	0.061	0.033 U	0.03 U	0.032 U
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.029 U	0.11	0.093	0.032 J	0.03 U	0.032 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	0.25 JDQ	0.27 J	0.26 UDQ	0.13 U	0.12 U	0.13 U
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.023 J	0.086	0.074	0.024 J	0.03 U	0.032 U
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.029 U	**0.058**	**0.045 J**	0.033 U	0.03 U	0.032 U
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.23 UD	0.13 U	0.26 UD	0.13 U	0.12 U	0.13 U
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.023 J	0.078	0.072	0.026 J	0.03 U	0.032 U
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.029 U	0.023 J	0.033 U	0.033 U	0.03 U	0.032 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.029 U	0.053	0.048	0.033 U	0.03 U	0.032 U
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.029 U	0.032 U	0.033 U	0.033 U	0.03 U	0.032 U
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.029 U	0.073	0.058	0.033 U	0.03 U	0.032 U
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.03 J	0.086	0.074	0.026 J	0.03 U	0.032 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.023 U	0.025 U	0.085	0.026 U	0.024 U	0.025 U
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.4	0.025 U	0.13	0.026 U	0.019 J	0.025 U

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB04-0.5-01-0613 6/19/13	TR-2ND-SB04-04-06-0613 6/19/13	TR-2ND-SB05-0.5-01-0613 6/19/13	TR-2ND-SB05-03-05-0613 6/19/13	TR-2ND-SB06-0.5-01-0613 6/19/13	TR-2ND-SB06-05-07-0613 6/19/13
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	**20,800**	12,500	14,500 D	**18,500**	12,300	**18,600**
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	1.34 U	1.64 U	**8.95 JD**	1.53 U	1.45 U	1.51 U
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**3.49**	**2.58 J**	**9.45 JD**	**3.3**	**3.1**	**2.85 J**
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	114	49.5	251 D	70	72.2	66.9
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	0.49	0.319	0.317 JD	0.349	0.422	0.502
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	1.05	0.264	3.94 D	0.118 J	0.556	0.0753 U
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	3,530	1,190	22,200 D	1,490	2,110	1,090
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	26.8	20.7	43.4 D	25.4	17.8	23.5
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS	**1.72**	**2.04**
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	**4.82**	2.96	**5.98 D**	3.39	3.53	3.28
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	77.2	20.6	426 D	30.1	20.1	6.27
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	**11,300**	8,440	**30,100 D**	9,400	7,250	8,580
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	48.3	22.1	**2,110 D**	20.3	25.9	7.37
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	1,870	2,140	1,810 D	2,390	1,300	1,970
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	167	77.3	**474 D**	94.5	225	114
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.407	0.0926	**2.29 D**	**51.3 D**	0.0411	0.0179
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	12.9	9.3	27.6 D	13.2	8.78	10.7
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	826	711	852 D	941	533	643
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	0.143 J	0.328 J	8.87 D	0.383 U	0.363 U	0.376 U
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	86.2	56.8	197 D	225	35.7 J	52.8
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	**0.398 J**	**0.493 J**	6.63 UD	**0.431 J**	1.45 U	**0.511 J**
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	20.6	18.1	18.5 D	20.4	15.9	23.9
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	106	117	1,940 D	670	46	21.4

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
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Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
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mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
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Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB06D-0.5-01-0613 6/19/13	TR-2ND-SB06D-05-07-0613 6/19/13	TR-2ND-SB07-0.5-01-0613 6/19/13	TR-2ND-SB07-04-06-0613 6/19/13	TR-2nd-SB08-01-03-0514 5/7/14	TR-2nd-SB08-03-04-0514 5/7/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	0.0027 U	0.0029 U	0.0022 U	0.0025 U	NS	NS
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	0.0083 J	0.014 U	0.011 U	0.013 U	NS	NS
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0055 U	0.0058 U	0.0044 U	0.0051 U	0.0052 UQ	0.0056 UQ
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0011 U	0.002 J	0.0009 U	0.001 U	0.001 UQ	0.0011 UQ
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	0.0055 U	0.0058 U	0.0044 U	0.0051 U	NS	NS
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0022 U	0.0023 U	0.0017 U	0.002 U	0.0021 U	0.0022 U
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0011 U	0.0012 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0011 U	0.0027	0.0009 U	0.001 U	0.001 UQ	0.0011 UQ
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0022 U	0.0023 U	0.0017 U	0.002 U	0.0021 U	0.0022 U
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	0.27 JD	0.13 U	0.51	0.12 U	NS	NS
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.24 UD	0.13 U	0.12 U	0.12 U	0.25 U	0.25 U
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.033 U	0.034 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.024 U	0.026 U	0.1 PQ	0.025 U	0.025 U	0.025 U
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.024 UQ	0.026 U	0.14	0.025 U	0.025 U	0.025 U

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID / Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2ND-SB06D-0.5-01-0613	TR-2ND-SB06D-05-07-0613	TR-2ND-SB07-0.5-01-0613	TR-2ND-SB07-04-06-0613	TR-2nd-SB08-01-03-0514	TR-2nd-SB08-03-04-0514
							6/19/13	6/19/13	6/19/13	6/19/13	5/7/14	5/7/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	11,800	**17,000**	13,000	**17,800**	NS	NS
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	1.2 U	1.28 U	1.33 U	1.39 U	0.985 U	1.02 U
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**2.3 J**	**2.47 J**	**2.29 J**	**3.09**	**1.62 J**	**1.32 J**
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	102	52.9	63	69.5	105	99.4
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	0.639	0.435	0.409	0.428	NS	NS
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	0.0414 J	0.0639 U	0.0665 U	0.0696 U	0.123 U	0.166 U
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	1,060	998	576	594	NS	NS
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	13.1	22.8	19.4	23.3	32.3	31.4
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	3.25	3.21	2.85	3.53	3.76	3.51
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	2.37	6.47	5.43	7.24	NS	NS
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	5,920	8,490	6,620	8,470	10,800	10,100
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	6.71	7.4	6.65	6.07	8.24	7.47
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	1,130	2,000	1,630	2,130	NS	NS
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	**1,140**	119	189	124	72.3	56.3
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.18	0.0175	0.0326	0.0271	0.0451	0.0722
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	7.61	10.1	8.41	10.8	14.4	14.1
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	317	643	579	732	NS	NS
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	0.3 U	0.32 U	0.333 U	0.348 U	0.271 U	0.28 U
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	35.3	52.1	55.6	76.3	NS	NS
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	1.2 U	1.28 U	**0.489 J**	**0.542 J**	NS	NS
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	12.1	24.5	17.1	21.9	26.3	24.9
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	17.9	21.8	17.4	20.4	21.4	20.6

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB08D-01-03-0514 5/7/14	TR-2nd-SB09-01-03-0514 5/7/14	TR-2nd-SB09-03-04-0514 5/7/14	TR-2nd-SB10-01-03-0514 5/7/14	TR-2nd-SB10-03-05-0514 5/7/14	TR-2nd-SB10D-01-03-0514 5/7/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0054 UQ	0.005 UQ	0.0054 UQ	0.0043 UQ	0.0057 UQ	0.0043 UQ
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0011 UQ	0.001 UQ	0.0011 UQ	0.0009 UQ	0.0011 UQ	0.0009 UQ
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	NS	NS	NS	NS	NS	NS
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0021 U	0.002 U	0.0022 U	0.0017 U	0.0023 U	0.0017 U
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0011 U	0.001 U	0.0011 U	0.0009 U	0.0011 U	0.0009 U
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0011 UQ	0.019	0.021	0.0009 UQ	0.0011 UQ	0.0009 UQ
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0021 U	0.002 U	0.0022 U	0.0017 U	0.0023 U	0.0017 U
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.027 J	0.034 U	0.028 J
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.25 U	0.25 U	0.25 U	0.24 U	0.25 U	0.24 U
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 UQ	0.034 UQ	0.032 UQ
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.034 U	0.034 U	0.034 U	0.032 U	0.034 U	0.032 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.025 U	0.025 U	0.025 U	0.024 UQ	0.025 U	0.024 U
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.025 U	0.025 U	0.025 U	0.036 J	0.025 U	0.024 U

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB08D-01-03-0514 5/7/14	TR-2nd-SB09-01-03-0514 5/7/14	TR-2nd-SB09-03-04-0514 5/7/14	TR-2nd-SB10-01-03-0514 5/7/14	TR-2nd-SB10-03-05-0514 5/7/14	TR-2nd-SB10D-01-03-0514 5/7/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	0.994 U	0.995 U	1.01 U	0.952 U	1.01 U	0.952 U
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**2.03 J**	**2.19 J**	**2.6 J**	**2.57 J**	**2.38 J**	**2.03 J**
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	116	104	72.4	73	58.8	64.2
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	0.159 U	0.124 U	0.176 U	0.191 J	0.152 U	0.119 U
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	35.4	30	23.3	21.1	26.6	21.9
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	4.21	3.37	3.51	2.73	3.23	**5.76**
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	**12,600**	9,700	8,490	7,530	8,770	8,800
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	8.43	7.39	4.84	16.9	5.96	8.2
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	71.4	85.6	96.7	186	46.5	**409**
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.0535	0.0389	0.0166 J	0.958	0.0247	0.195
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	15.3	13.5	12.3	8.26	11	9.49
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	0.273 U	0.274 U	0.279 U	0.427 JQ	0.278 U	0.591 J
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	30.4	22.7	20.6	17.6	22.2	20.8
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	23.5	22.4	20.4	55.2	20.1	23

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB11-01-03-0514	TR-2nd-SB11-03-05-0514	TR-2nd-SB12-01-03-0514	TR-2nd-SB13-01-03-0514	TR-2nd-SB14-01-02-0514	TR-2nd-SB15-01-02-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0055 UQ	0.0056 UQ	0.0065 UQ	0.005 UQ	0.0066 UQ	0.0051 UQ
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0011 U	0.0011 U	0.017	0.001 U	0.0013 U	0.001 U
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0011 UQ	0.0011 UQ	0.0013 UQ	0.001 UQ	0.0013 UQ	0.001 UQ
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	NS	NS	NS	NS	NS	NS
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0022 U	0.0023 U	0.0026 U	0.002 U	0.0026 U	0.002 U
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	0.0011 U	0.0011 U	0.0013 U	0.031	0.0013 U	0.001 U
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0011 U	0.0011 U	0.0013 U	0.001 U	0.0013 U	0.001 U
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0011 UQ	0.0011 UQ	0.0013 UQ	0.001 UQ	0.0013 UQ	0.001 UQ
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0022 U	0.0023 U	0.0026 U	0.002 U	0.0026 U	0.002 U
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.03 J	0.036 U	0.026 J	0.033 U	0.035 U	0.034 U
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.27 U	0.27 U	0.26 U	0.25 U	0.26 U	0.25 U
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.037 UQ	0.036 UQ	0.035 UQ	0.033 UQ	0.035 UQ	0.034 U
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.037 U	0.036 U	0.035 U	0.033 U	0.035 U	0.034 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.027 UQ	0.027 U	0.026 U	0.025 U	0.026 U	0.025 U
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.17	0.027 U	0.026 U	0.025 U	0.026 U	0.025 U

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB11-01-03-0514 5/7/14	TR-2nd-SB11-03-05-0514 5/7/14	TR-2nd-SB12-01-03-0514 5/7/14	TR-2nd-SB13-01-03-0514 5/7/14	TR-2nd-SB14-01-02-0514 5/7/14	TR-2nd-SB15-01-02-0514 5/7/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	1.94 J	1.07 U	2.75	0.991 U	1.05 U	1.02 U
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**3.02 J**	**3.74**	**1.71 J**	**1.73 J**	**2.66 J**	**2.53 J**
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	101	69.6	64.7	91	36.1	63.9
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	0.181 U	0.164 U	0.182 U	0.155 U	0.168 U	0.127 U
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	59.9	40.4	24.2	25.8	18.7	30.8
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	**5.63**	3.96	**6.45**	3.54	2.79	3.75
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	**31,200 D**	**13,000**	8,740	9,720	6,870	**11,400**
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	11.5	10.3	9.48	7.05	3.9	6.66
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	83.8	57.9	193	178	57.2	121
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.939	0.0458	0.2	0.0767	0.042	0.0118 J
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	16.4	12.2	12.8	11.5	9.58	11.3
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	0.159 J	0.293 U	0.288 U	0.0804 J	0.288 U	0.28 U
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	50.7	31.2	19.2	22.2	16.7	26.2
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	43.1	25.2	25.6	21.7	16	20.6

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB16-01-02-0514 5/7/14	TR-2nd-SB17-01-03-0514 5/6/14	TR-2nd-SB17-03-05-0514 5/6/14	TR-2nd-SB17D-01-03-0514 5/6/14	TR-2nd-SB18-01-03-0514 5/6/14	TR-2nd-SB18-03-05-0514 5/6/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.0011 U	NS	NS	NS	NS	NS
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	0.0055 UQ	NS	NS	NS	NS	NS
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	0.0011 U	NS	NS	NS	NS	NS
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	0.0011 U	NS	NS	NS	NS	NS
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	0.0011 UQ	NS	NS	NS	NS	NS
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	0.0011 U	NS	NS	NS	NS	NS
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	0.0011 U	NS	NS	NS	NS	NS
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	NS	NS	NS	NS	NS	NS
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	0.0022 U	NS	NS	NS	NS	NS
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	0.0011 U	NS	NS	NS	NS	NS
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	0.0011 U	NS	NS	NS	NS	NS
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.0011 U	NS	NS	NS	NS	NS
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	0.0011 UQ	NS	NS	NS	NS	NS
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	0.0022 U	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	0.033 U	NS	NS	NS	NS	NS
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	0.033 U	NS	NS	NS	NS	NS
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	0.033 U	NS	NS	NS	NS	NS
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	0.25 U	NS	NS	NS	NS	NS
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	0.033 U	NS	NS	NS	NS	NS
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	0.025 U	NS	NS	NS	NS	NS
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	0.025 U	NS	NS	NS	NS	NS

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-2nd-SB16-01-02-0514 5/7/14	TR-2nd-SB17-01-03-0514 5/6/14	TR-2nd-SB17-03-05-0514 5/6/14	TR-2nd-SB17D-01-03-0514 5/6/14	TR-2nd-SB18-01-03-0514 5/6/14	TR-2nd-SB18-03-05-0514 5/6/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	0.986 U	NS	NS	NS	NS	NS
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**2.57**	NS	NS	NS	NS	NS
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	46.3	NS	NS	NS	NS	NS
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	0.123 U	NS	NS	NS	NS	NS
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	16.3	NS	NS	NS	NS	NS
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	2.66	NS	NS	NS	NS	NS
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	6,390	NS	NS	NS	NS	NS
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	6.17	NS	NS	NS	NS	NS
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	137	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.0275	NS	NS	NS	NS	NS
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	7.59	NS	NS	NS	NS	NS
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	0.271 U	NS	NS	NS	NS	NS
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	15.4	NS	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	16.3	NS	NS	NS	NS	NS

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	2nd-1-2 1/10/12	2nd-2-2 1/10/12	2nd-3-2 1/10/12	2nd-4-2 1/10/12	Exceeds Protection of Groundwater PSRG	Exceeds Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name																
Volatile Organic Compounds (MG/KG)																
2-Butanone	16	5,600	--	5 / 20	0.0150	TR-2ND-SB02-06-08-0613	ND	0.00938 J	ND	0.00998 J			no	CLC	--	--
Acetone	24	12,000	--	9 / 20	0.0730	TR-2ND-SB02-06-08-0613	0.0365 J	0.0658	0.016 J	0.0274 J			no	CLC	--	--
Benzene	0.0073	1.1	--	3/ 35	0.00601	2nd-2-2	0.00346	0.00601	ND	ND			***yes***	D	no	NE
Bromomethane	0.05	1.5	--	1/35	0.00348 J	2nd-2-2	ND	0.00348 J	ND	ND			***yes***	D	no	NE
Chloroform	0.34	0.29	--	2 / 35	0.0170	TR-2nd-SB12-01-03-0514	ND	ND	ND	ND			***yes***	D	no	NE
Chloromethane	0.02	24	--	1/35	0.00701	2nd-2-2	ND	0.00701	ND	ND			***yes***	D	no	NE
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 35	0.00200 J	TR-2ND-SB06D-05-07-0613	ND	ND	ND	ND			***yes***	D	no	NE
Ethylbenzene	8.1	5.4	--	2 / 35	0.00749 J	2nd-4-2	ND	ND	ND	0.00749 J			***yes***	D	no	NE
Isopropylbenzene	1.3	270	--	1 / 35	0.00170 J	TR-2ND-SB02-06-08-0613	ND	ND	ND	ND			***yes***	D	no	NE
Methylene Chloride	0.02	56	--	2/35	0.00240 J	2nd-4-2	ND	ND	0.0016 J	0.0024 J			no	CLC	--	--
m- and p-Xylene	--	120	--	1 / 35	0.00650	TR-2ND-SB02-06-08-0613	ND	ND	ND	ND			***yes***	D	no	NE
o-Xylene	--	140	--	1 / 35	0.00570	TR-2ND-SB02-06-08-0613	ND	ND	ND	ND			***yes***	D	no	NE
Styrene	0.92	870	--	2 / 35	0.0310	TR-2nd-SB13-01-03-0514	ND	ND	ND	ND			***yes***	D	no	NE
Toluene	5.5	820	--	4 / 35	0.00246 J	2nd-2-2	0.00115	0.00246 J	ND	ND			***yes***	D	no	NE
Trichlorofluoromethane (Freon-11)	24	160	--	4 / 35	0.0210	TR-2nd-SB09-03-04-0514	ND	ND	ND	ND			***yes***	D	no	NE
Xylene, total	5.8	130	--	1 / 35	0.0120	TR-2ND-SB02-06-08-0613	ND	ND	ND	ND			***yes***	D	no	NE
Semivolatile Organic Compounds (MG/KG)																
2-Methylnaphthalene	1.6	46	--	2 / 31	0.770	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Acenaphthene	8.4	680	--	3 / 31	0.360	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Acenaphthylene	21	340	--	2 / 31	0.0570	TR-2ND-SB01-0.5-01-0613	NS	NS	NS	NS			***yes***	D	no	NE
Anthracene	660	3,400	--	3 / 31	0.340	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Benzo(a)anthracene	0.18	0.15	--	10 / 31	0.420	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(a)pyrene	0.059	0.015	--	4 / 31	0.190	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(b)fluoranthene	0.6	0.15	--	5 / 31	0.350	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS		**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(g,h,i)perylene	7,800	340	--	4 / 31	0.0700	TR-2ND-SB01-0.5-01-0613	NS	NS	NS	NS			***yes***	D	no	NE
Benzo(k)fluoranthene	5.9	1.5	--	5 / 31	0.200	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
bis(2-Ethylhexyl)phthalate	7.2	35	--	4 / 16	0.510	TR-2ND-SB07-0.5-01-0613	NS	NS	NS	NS			no	CLC	--	--
Chrysene	18	15	--	8 / 31	0.410	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Dibenz(a,h)anthracene	0.19	0.015	--	2 / 31	0.0580	TR-2ND-SB04-04-06-0613	NS	NS	NS	NS		**yes**	***yes***	PSRG	**yes**	PSRG
Dibenzofuran	5.2	16	--	1 / 31	0.460 JD	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Fluoranthene	330	460	--	6 / 31	0.990	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Fluorene	56	460	--	4 / 31	0.400	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Indeno(1,2,3-cd)pyrene	2	0.15	--	4 / 31	0.0640	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Naphthalene	0.21	3.6	--	3 / 31	4.10	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Phenanthrene	68	340	--	4 / 31	1.40	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Pyrene	220	340	--	6 / 31	0.740	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS			***yes***	D	no	NE
Pesticide/Polychlorinated Biphenyls (MG/KG)																
Aroclor-1254	0.14	1	--	4 / 31	0.760	TR-2ND-SB02-06-08-0613	NS	NS	NS	NS	**yes**		***yes***	PSRG	**yes**	PSRG
Aroclor-1260	0.14	1	--	8 / 31	0.400	TR-2ND-SB04-0.5-01-0613	NS	NS	NS	NS	**yes**		***yes***	PSRG	**yes**	PSRG

Table 2
2nd Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	2nd-1-2 1/10/12	2nd-2-2 1/10/12	2nd-3-2 1/10/12	2nd-4-2 1/10/12	Exceeds Protection of Groundwater PSRG	Exceeds Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name																
Total Metals (MG/KG)																
Aluminum	--	15,000	32,000	20 / 20	20,800	TR-2ND-SB04-0.5-01-0613	14,100	13,600	13,300	**18,800**			no	NRS & B	--	--
Antimony	0.9	6.2	--	7 / 35	8.95 JD	TR-2ND-SB05-0.5-01-0613	4.5	3.11	ND	ND	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Arsenic	5.8	0.61	3.74	35 / 35	29.60	2nd-1-2	**29.6**	**4.35**	**2.73**	**0.862**	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Barium	580	3,000	134	35 / 35	251.0 D	TR-2ND-SB05-0.5-01-0613	105	101	40.3	60.3			***yes***	D	no	NE
Beryllium	63	32	0.636	20 / 20	0.639	TR-2ND-SB06D-0.5-01-0613	0.0442 J	0.0477 J	0.0437 J	0.0448 J			no	B	--	--
Cadmium	3	14	0.878	13 / 35	3.94 D	TR-2ND-SB05-0.5-01-0613	3.15	2.7	0.0219 J	0.0336 J	**yes**		***yes***	PSRG	**yes**	PSRG
Calcium	--	--	3,600	20 / 20	22,200 D	TR-2ND-SB05-0.5-01-0613	7,960	8,590	450	1,010			no	NUT	--	--
Chromium	360,000	24,000	38.5	35 / 35	71.3	TR-2ND-SB01-0.5-01-0613	43.1	25.1	17.1	36.1			***yes***	D	no	NE
Chromium (hexavalent)	3.8	0.29	2.11	4 / 6	2.04	TR-2ND-SB06-05-07-0613	NS	NS	NS	NS		**yes**	no	B	--	--
Cobalt	0.9	4.6	4.64	35 / 35	6.86	TR-2ND-SB02-06-08-0613	**5.68**	3.85	2.79	4.37	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Copper	700	620	441	20 / 20	426.0 D	TR-2ND-SB05-0.5-01-0613	138	178	5.52	10.2			no	B	--	--
Iron	150	11,000	14,100	35 / 35	31,200 D	TR-2nd-SB11-01-03-0514	12,700	**18,900**	8,400	10,400	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Lead	270	400	47.9	35 / 35	2,110 D	TR-2ND-SB05-0.5-01-0613	112	202	3.52	5.36	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Magnesium	--	--	2,600	20 / 20	3,970	2nd-1-2	3,970	2,080	2,150	3,090			no	NUT	--	--
Manganese	65	360	412	35 / 35	1,140	TR-2ND-SB06D-0.5-01-0613	229	231	43.5	89.3	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Mercury	1	2	0.0366	35 / 35	51.3 D	TR-2ND-SB05-03-05-0613	0.312	1.74	0.00368 J	0.038	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Nickel	130	300	16.8	35 / 35	27.6 D	TR-2ND-SB05-0.5-01-0613	11.7	23.2	8.77	23.2			***yes***	D	no	NE
Potassium	--	--	765	20 / 20	1,240	2nd-4-2	938	927	642	1,240			no	NUT	--	--
Silver	3.4	78	--	12 / 35	8.87 D	TR-2ND-SB05-0.5-01-0613	8.8	1.62	ND	0.0224 J	**yes**		***yes***	PSRG	**yes**	PSRG
Sodium	--	--	136	20 / 20	225.0	TR-2ND-SB05-03-05-0613	160	112	111	85.2			no	NUT	--	--
Thallium	0.28	0.16	1.29	13 / 20	0.863 J	TR-2ND-SB02-0.5-1-0613	0.0632 J	0.0636 J	0.0437 J	0.101 J	**yes**	**yes**	no	B	--	--
Vanadium	6	78	31.9	35 / 35	50.7	TR-2nd-SB11-01-03-0514	18.9	21.2	19	34.5	**yes**		***yes***	PSRG	**yes**	PSRG
Zinc	1,200	4,600	87.3	35 / 35	1,940 D	TR-2ND-SB05-0.5-01-0613	481	439	16.3	27.2	**yes**		***yes***	PSRG	**yes**	PSRG

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene v
without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background range

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
ND - The material was analyzed for, but not detected. Sampled by others and reported as ND.
NS - Not sampled
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SS01-0613 6/10/13	TR-5TH-SS02-0613 6/10/13	TR-5TH-SS03-0613 6/10/13	TR-5TH-SS04-0613 6/10/13	TR-5TH-SS05-0613 6/10/13	TR-5TH-SS05D-0613 6/10/13
Chemical Name												
Volatile Organic Compounds (MG/KG)												
Benzene	0.0073	1.1	--	1 / 24	7.00E-04 J	TR-5TH-SS03-0613	0.001 U	0.0013 U	7.00E-04 J	0.0011 U	0.001 U	0.001 U
Styrene	0.92	870	--	1 / 24	4.00E-04 J	TR-5TH-SS03-0613	0.001 U	0.0013 U	4.00E-04 J	0.0011 U	0.001 U	0.001 U
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	4 / 24	0.110	TR-5th-SS07-0514	0.03 U	0.032 U	0.03 U	0.031 U	0.087	0.028 U
Acenaphthylene	21	340	--	3 / 24	0.0340 J	TR-5TH-SS05D-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.029 U	0.034 J
Anthracene	660	3400	--	7 / 24	0.530	TR-5TH-SS05-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.53	0.043
Benzo(a)anthracene	0.18	0.15	--	22 / 24	1.80	TR-5TH-SS05-0613	0.03 U	0.07	0.031 J	0.017 J	**1.8**	**0.28**
Benzo(a)pyrene	0.059	0.015	--	12 / 24	1.000	TR-5TH-SS05-0613	0.03 U	**0.12**	**0.029 J**	0.031 U	**1**	**0.16**
Benzo(b)fluoranthene	0.6	0.15	--	14 / 24	1.40	TR-5TH-SS05-0613	0.03 U	**0.24**	0.067	0.027 J	**1.4**	**0.24**
Benzo(g,h,i)perylene	7800	340	--	11 / 24	0.390	TR-5th-SS07-0514	0.03 U	0.075	0.03 U	0.031 U	0.33	0.058
Benzo(k)fluoranthene	5.9	1.5	--	9 / 24	0.690	TR-5TH-SS05-0613	0.03 U	0.13	0.038 J	0.031 U	0.69	0.13
bis(2-Ethylhexyl)phthalate	7.2	35	--	1 / 6	0.180 J	TR-5TH-SS05-0613	0.12 U	0.13 U	0.12 U	0.12 U	0.18 J	0.11 U
Carbazole	0.37	--	--	2 / 24	0.760	TR-5TH-SS04-0613	0.12 U	0.13 U	0.12 U	0.76	0.11 U	0.11 U
Chrysene	18	15	--	14 / 24	1.60	TR-5TH-SS05-0613	0.03 U	0.1	0.043	0.022 J	1.6	0.27
Dibenz(a,h)anthracene	0.19	0.015	--	4 / 24	0.100	TR-5th-SS07-0514	0.03 U	0.032 U	0.03 U	0.031 U	**0.094**	0.028 U
Dibenzofuran	5.2	16	--	2 / 24	0.450	TR-5TH-SS04-0613	0.12 U	0.13 U	0.12 U	0.45	0.11 U	0.11 U
Fluoranthene	330	460	--	17 / 24	3.40	TR-5TH-SS05-0613	0.03 U	0.07	0.048	0.032 J	3.4	0.51
Fluorene	56	460	--	4 / 24	0.140	TR-5TH-SS05-0613	0.03 U	0.032 U	0.03 U	0.031 U	0.14	0.028 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 24	0.340	TR-5th-SS07-0514	0.03 U	0.032 U	0.03 U	0.031 U	**0.29**	0.056
Phenanthrene	68	340	--	9 / 24	1.90	TR-5TH-SS05-0613	0.03 U	0.032 U	0.033 J	0.031 U	1.9	0.22
Pyrene	220	340	--	17 / 24	2.80	TR-5TH-SS05-0613	0.03 U	0.085	0.048	0.027 J	2.8	0.49
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	21 / 24	12.0 DPQ	TR-5th-SS07-0514	0.36 D	0.32 D	**2.8 D**	0.15 Q	0.14 PQ	0.31 DPQ
Aroclor-1260	0.14	1	--	24 / 24	60.0 D	TR-5th-SS07-0514	0.45 D	0.3 D	**5.2 D**	0.33	0.31	0.62 D
Explosives (MG/KG)												
PETN	--	24	--	1 / 6	0.260	TR-5TH-SS22-0514	NS	NS	NS	NS	NS	NS

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SS01-0613	TR-5TH-SS02-0613	TR-5TH-SS03-0613	TR-5TH-SS04-0613	TR-5TH-SS05-0613	TR-5TH-SS05D-0613
Sample Date							6/10/13	6/10/13	6/10/13	6/10/13	6/10/13	6/10/13
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15000	32000	6 / 6	16,100	TR-5TH-SS02-0613	11,900	**16,100**	10,500	8,140	4,300	4,550
Antimony	0.9	6.2	--	11 / 24	17.0 JD	TR-5th-SS08-0514	1.8 U	1.93 U	0.785 J	1.53 U	1.36 U	1.58 U
Arsenic	5.8	0.61	3.74	22 / 24	5.28	TR-5TH-SS01-0613	**5.28**	**2.53 J**	**2.94 J**	**2.26 J**	**1.4 J**	**1.74 J**
Barium	580	3000	134	6 / 6	93.0	TR-5TH-SS01-0613	93	80.3	78.9	50.2	26	30.3
Beryllium	63	32	0.636	6 / 6	0.383	TR-5TH-SS02-0613	0.373	0.383	0.327	0.246	0.155	0.177
Cadmium	3	14	0.878	24 / 24	4.71	TR-5th-SS11-0514	1.25	1.23	1.73	1.02	0.285	0.22
Calcium	--	--	3600	6 / 6	1,860	TR-5TH-SS01-0613	1,860	1,510	1,360	1,190	1,060	911
Chromium	360,000	24,000	38.5	6 / 6	32.9	TR-5TH-SS02-0613	28.1	32.9	18.6	13.4	6.66	7.53
Chromium (hexavalent)	3.8	0.29	2.11	1 / 1	1.05	TR-5TH-SS03-0613	NS	NS	**1.05**	NS	NS	NS
Cobalt	0.9	4.6	4.64	6 / 6	4.47	TR-5TH-SS01-0613	4.47	4.06	3.59	2.13	1.4	1.64
Copper	700	620	441	6 / 6	123.0	TR-5TH-SS03-0613	69.4	60.8	123	28.1	12.9	10.9
Iron	150	11000	14100	24 / 24	24,900	TR-5th-SS12-0514	**17,500**	**11,300**	**11,100**	6,240	3,390	4,190
Lead	270	400	47.9	24 / 24	1,080	TR-5th-SS08-0514	127	180	164	107	23.8	22.2
Magnesium	--	--	2600	6 / 6	1,840	TR-5TH-SS02-0613	1,490	1,840	1,390	940	667	864
Manganese	65	360	412	6 / 6	210.0	TR-5TH-SS01-0613	210	126	117	89.2	78.8	125
Mercury	1	2	0.0366	19 / 19	2.56 D	TR-5th-SS08-0514	NS	NS	0.739	NS	NS	NS
Nickel	130	300	16.8	6 / 6	16.8	TR-5TH-SS03-0613	15.6	13	16.8	6.31	3.14	3.63
Potassium	--	--	765	6 / 6	671.0	TR-5TH-SS02-0613	540	671	439	306	348	617
Sodium	--	--	136	6 / 6	113.0	TR-5TH-SS01-0613	113	66.5	56.4	25.7 J	19.9 J	23.1 J
Vanadium	6	78	31.9	6 / 6	19.4	TR-5TH-SS02-0613	17.3	19.4	14.2	11.3	7.24	8.2
Zinc	1200	4600	87.3	24 / 24	876.0	TR-5TH-SS03-0613	174	192	876	123	31.6	32.1

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For non-carcinogenic PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3]Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5th-SS06-0514	TR-5th-SS07-0514	TR-5th-SS08-0514	TR-5th-SS09-0514	TR-5th-SS10-0514	TR-5th-SS11-0514	TR-5th-SS12-0514	TR-5th-SS12D-0514	TR-5th-SS13-0514
Sample Date				5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
Benzene	0.0073	1.1	--	0.0009 U	0.0011 U	0.0011 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0011 U	0.0015 U
Styrene	0.92	870	--	0.0009 U	0.0011 U	0.0011 U	0.0012 U	0.0013 U	0.0013 U	0.0013 U	0.0011 U	0.0015 U
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	0.032 U	0.11	0.033 U	0.041 UQ	0.035 U	0.061	0.036 UQ	0.033 U	0.04 U
Acenaphthylene	21	340	--	0.026 J	0.02 J	0.033 U	0.041 UQ	0.035 U	0.035 U	0.036 UQ	0.033 U	0.04 U
Anthracene	660	3400	--	0.042	0.23	0.033 U	0.041 UQ	0.023 J	0.11	0.036 UQ	0.033 U	0.04 U
Benzo(a)anthracene	0.18	0.15	--	0.12	**0.63**	0.066	0.078 Q	0.064	**0.34**	0.04 JQ	0.035 J	0.04 U
Benzo(a)pyrene	0.059	0.015	--	**0.11**	**0.57**	**0.049**	**0.069 Q**	**0.041 J**	**0.3**	0.036 UQ	0.033 U	0.04 U
Benzo(b)fluoranthene	0.6	0.15	--	**0.19**	**0.76**	0.079	0.11 Q	0.064	**0.44**	0.036 UQ	0.024 J	0.04 U
Benzo(g,h,i)perylene	7800	340	--	0.1	0.39	0.052	0.072 Q	0.036 J	0.22	0.036 UQ	0.033 U	0.04 U
Benzo(k)fluoranthene	5.9	1.5	--	0.061	0.26	0.033 U	0.042 JQ	0.035 U	0.17	0.036 UQ	0.033 U	0.04 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	0.37	--	--	0.47 UDQ	0.69 JDQ	0.49 UDQ	0.3 U	0.52 UDQ	0.26 U	0.27 U	0.24 U	0.3 U
Chrysene	18	15	--	0.14	0.66	0.062	0.054 Q	0.046	0.36	0.036 UQ	0.033 U	0.04 U
Dibenz(a,h)anthracene	0.19	0.015	--	**0.026 J**	**0.1**	0.033 U	0.041 UQ	0.035 U	**0.058**	0.036 UQ	0.033 U	0.04 U
Dibenzofuran	5.2	16	--	0.47 UDQ	0.29 JDQ	0.49 UDQ	0.3 U	0.52 UDQ	0.26 U	0.27 U	0.24 U	0.3 U
Fluoranthene	330	460	--	0.26	1.3	0.071	0.063 Q	0.087	0.81	0.027 JQ	0.021 J	0.04 U
Fluorene	56	460	--	0.032 U	0.085	0.033 U	0.041 UQ	0.035 U	0.069	0.036 UQ	0.033 U	0.04 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	0.082	**0.34**	0.039 J	0.06 Q	0.026 J	**0.18**	0.036 UQ	0.033 U	0.04 U
Phenanthrene	68	340	--	0.13	0.75	0.044	0.041 UQ	0.059	0.68	0.036 UQ	0.033 U	0.04 U
Pyrene	220	340	--	0.23	1.1	0.074	0.063 Q	0.072	0.63	0.024 JQ	0.019 J	0.04 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	**7.3 DPQ**	**12 DPQ**	**5.7 DPQ**	0.21 JDPQ	0.026 U	0.058 PQ	0.093 PQ	0.23 PQ	0.03 U
Aroclor-1260	0.14	1	--	**25 D**	**60 D**	**29 D**	**1.2 D**	0.21	0.25	0.48	**1.1**	0.02 J
Explosives (MG/KG)												
PETN	--	24	--	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5th-SS06-0514	TR-5th-SS07-0514	TR-5th-SS08-0514	TR-5th-SS09-0514	TR-5th-SS10-0514	TR-5th-SS11-0514	TR-5th-SS12-0514	TR-5th-SS12D-0514	TR-5th-SS13-0514
Sample Date				5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15000	32000	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	3.96	2.17	**17 JD**	2.9	1.04 U	0.359 J	1.39 J	0.974 J	1.18 U
Arsenic	5.8	0.61	3.74	**4.7**	**3.69**	**3.9**	**3.3 J**	**2.4 J**	**1.8 J**	**4.54**	**3.18**	1.64 U
Barium	580	3000	134	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	63	32	0.636	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	4.56	4.29	3.09	2.6	0.335	4.71	0.769	0.511	0.06 J
Calcium	--	--	3600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (hexavalent)	3.8	0.29	2.11	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	700	620	441	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	150	11000	14100	**14,600**	**15,400**	**14,700**	**11,900**	9,350	6,770	**24,900**	**14,200**	680
Lead	270	400	47.9	336	204	**1,080**	228	334	62.3	217	230	8.12
Magnesium	--	--	2600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	1.05	0.617	**2.56 D**	1.06	0.0579	0.12	0.43	0.536	0.0354
Nickel	130	300	16.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
Potassium	--	--	765	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	--	--	136	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	1200	4600	87.3	435	383	382	283	95.3	345	156	133	7.12

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3]Basis:

B - Chemical was detected but is within background range
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NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5th-SS14-0514	TR-5th-SS15-0514	TR-5th-SS16-0514	TR-5th-SS16D-0514	TR-5th-SS17-0514	TR-5th-SS18-0514	TR-5th-SS19-0514	TR-5th-SS20-0514	TR-5th-SS21-0514
Sample Date				5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14
Chemical Name												
Volatile Organic Compounds (MG/KG)												
Benzene	0.0073	1.1	--	0.0014 U	0.0013 UQ	0.0013 UQ	0.0013 U	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.0009 U
Styrene	0.92	870	--	0.0014 U	0.0013 UQ	0.0013 UQ	0.0013 U	0.0016 U	0.0012 U	0.0012 U	0.0012 U	0.0009 U
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.023 J
Acenaphthylene	21	340	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.031 U
Anthracene	660	3400	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.067
Benzo(a)anthracene	0.18	0.15	--	0.022 J	0.048	0.031 J	0.042 J	0.035 J	0.03 J	0.033 J	0.03 J	**0.16**
Benzo(a)pyrene	0.059	0.015	--	0.03 U	**0.021 J**	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	**0.091**
Benzo(b)fluoranthene	0.6	0.15	--	0.03 U	0.042 J	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.15
Benzo(g,h,i)perylene	7800	340	--	0.03 U	0.024 J	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.072
Benzo(k)fluoranthene	5.9	1.5	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.06
bis(2-Ethylhexyl)phthalate	7.2	35	--	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	0.37	--	--	0.22 U	0.27 U	0.28 U	0.28 U	0.27 U	0.23 U	0.23 U	0.27 U	0.23 U
Chrysene	18	15	--	0.03 U	0.024 J	0.038 U	0.017 J	0.036 U	0.031 U	0.032 U	0.037 U	0.13
Dibenz(a,h)anthracene	0.19	0.015	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.031 U
Dibenzofuran	5.2	16	--	0.22 U	0.27 U	0.28 U	0.28 U	0.27 U	0.23 U	0.23 U	0.27 U	0.23 U
Fluoranthene	330	460	--	0.03 U	0.04 J	0.038 U	0.033 J	0.036 U	0.031 U	0.023 J	0.037 U	0.31
Fluorene	56	460	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.033 J
Indeno(1,2,3-cd)pyrene	2	0.15	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 UQ	0.031 UQ	0.032 UQ	0.037 UQ	0.06 Q
Phenanthrene	68	340	--	0.03 U	0.036 U	0.038 U	0.037 U	0.036 U	0.031 U	0.032 U	0.037 U	0.27
Pyrene	220	340	--	0.03 U	0.034 J	0.038 U	0.033 J	0.036 U	0.031 U	0.019 J	0.037 U	0.23
Pesticide/Polychlorinated Biphenyls (MG/KG)												
Aroclor-1254	0.14	1	--	0.022 UQ	0.2 PQ	0.091 PQ	0.037 JP	0.021 JQ	0.021 JPQ	0.021 JPQ	0.027 JPQ	0.089 PQ
Aroclor-1260	0.14	1	--	0.044	0.61	0.17	0.13	0.1	0.25	0.23	0.12	0.71
Explosives (MG/KG)												
PETN	--	24	--	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5th-SS14-0514	TR-5th-SS15-0514	TR-5th-SS16-0514	TR-5th-SS16D-0514	TR-5th-SS17-0514	TR-5th-SS18-0514	TR-5th-SS19-0514	TR-5th-SS20-0514	TR-5th-SS21-0514
Sample Date				5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14	5/5/14
Chemical Name												
Total Metals (MG/KG)												
Aluminum	--	15000	32000	NS	NS	NS	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	0.876 U	0.889 J	0.81 J	0.674 J	1.07 U	0.927 U	0.939 U	1.08 U	0.918 U
Arsenic	5.8	0.61	3.74	1.5 U	**3.96**	**3.2**	**2.84**	**1.79 J**	**2.03 J**	**1.97 J**	**2.53 J**	**1.55 J**
Barium	580	3000	134	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	63	32	0.636	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	0.0392 J	1.31	1.18	0.746	1.47	0.279	0.191 J	0.291 J	0.277 J
Calcium	--	--	3600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium (hexavalent)	3.8	0.29	2.11	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	700	620	441	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	150	11000	14100	721	**14,900**	7,510	9,130	6,070	5,050	7,500	7,720	3,830
Lead	270	400	47.9	6.27	186	105	51.8	31.1	23.4	14.3	22.9	24.4
Magnesium	--	--	2600	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	0.0248	0.202	0.111	0.108	0.087	0.182	0.116	0.129	0.911
Nickel	130	300	16.8	NS	NS	NS	NS	NS	NS	NS	NS	NS
Potassium	--	--	765	NS	NS	NS	NS	NS	NS	NS	NS	NS
Sodium	--	--	136	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	1200	4600	87.3	5.07	159	130	74.1	90.1	38.1	24.4	77.3	36.6

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

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B - Chemical was detected but is within background range
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PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5TH-SS22-0514 5/5/14	TR-5TH-SS23-0514 5/5/14	TR-5TH-SS24-0514 5/5/14	TR-5TH-SS25-0514 5/5/14	TR-5TH-SS26-0514 5/5/14	TR-5TH-SS26D-0514 5/5/14	Protection of Groundwater PSRG	Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name															
Volatile Organic Compounds (MG/KG)															
Benzene	0.0073	1.1	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Styrene	0.92	870	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Semivolatile Organic Compounds (MG/KG)															
Acenaphthene	8.4	680	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Acenaphthylene	21	340	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Anthracene	660	3400	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Benzo(a)anthracene	0.18	0.15	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(a)pyrene	0.059	0.015	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(b)fluoranthene	0.6	0.15	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(g,h,i)perylene	7800	340	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Benzo(k)fluoranthene	5.9	1.5	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
bis(2-Ethylhexyl)phthalate	7.2	35	--	NS	NS	NS	NS	NS	NS			no	CLC	--	--
Carbazole	0.37	--	--	NS	NS	NS	NS	NS	NS	**yes**		***yes***	PSRG	**yes**	PSRG
Chrysene	18	15	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Dibenz(a,h)anthracene	0.19	0.015	--	NS	NS	NS	NS	NS	NS		**yes**	***yes***	PSRG	**yes**	PSRG
Dibenzofuran	5.2	16	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Fluoranthene	330	460	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Fluorene	56	460	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Indeno(1,2,3-cd)pyrene	2	0.15	--	NS	NS	NS	NS	NS	NS		**yes**	***yes***	PSRG	**yes**	PSRG
Phenanthrene	68	340	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Pyrene	220	340	--	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE
Pesticide/Polychlorinated Biphenyls (MG/KG)															
Aroclor-1254	0.14	1	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Aroclor-1260	0.14	1	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Explosives (MG/KG)															
PETN	--	24	--	0.26	0.127 U	0.128 U	0.128 U	0.128 U	0.128 U			--	--	no	NE

Table 3
5th Street Disposal Area Surface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	TR-5TH-SS22-0514 5/5/14	TR-5TH-SS23-0514 5/5/14	TR-5TH-SS24-0514 5/5/14	TR-5TH-SS25-0514 5/5/14	TR-5TH-SS26-0514 5/5/14	TR-5TH-SS26D-0514 5/5/14	Protection of Groundwater PSRG	Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name															
Total Metals (MG/KG)															
Aluminum	--	15000	32000	NS	NS	NS	NS	NS	NS		**yes**	no	NRS & B	--	--
Antimony	0.9	6.2	--	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	D	**yes**	PSRG
Arsenic	5.8	0.61	3.74	NS	NS	NS	NS	NS	NS		**yes**	***yes***	PSRG	**yes**	PSRG
Barium	580	3000	134	NS	NS	NS	NS	NS	NS			no	B	--	--
Beryllium	63	32	0.636	NS	NS	NS	NS	NS	NS			no	B	--	--
Cadmium	3	14	0.878	NS	NS	NS	NS	NS	NS	**yes**		***yes***	D	**yes**	PSRG
Calcium	--	--	3600	NS	NS	NS	NS	NS	NS			no	NUT	--	--
Chromium	360,000	24,000	38.5	NS	NS	NS	NS	NS	NS			no	B	--	--
Chromium (hexavalent)	3.8	0.29	2.11	NS	NS	NS	NS	NS	NS		**yes**	no	B	--	--
Cobalt	0.9	4.6	4.64	NS	NS	NS	NS	NS	NS	**yes**		no	B	--	--
Copper	700	620	441	NS	NS	NS	NS	NS	NS			no	B	--	--
Iron	150	11000	14100	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Lead	270	400	47.9	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	D	**yes**	PSRG
Magnesium	--	--	2600	NS	NS	NS	NS	NS	NS			no	NUT	--	--
Manganese	65	360	412	NS	NS	NS	NS	NS	NS	**yes**		no	B	--	--
Mercury	1	2	0.0366	NS	NS	NS	NS	NS	NS	**yes**	**yes**	***yes***	D	**yes**	PSRG
Nickel	130	300	16.8	NS	NS	NS	NS	NS	NS			no	B	--	--
Potassium	--	--	765	NS	NS	NS	NS	NS	NS			no	NUT	--	--
Sodium	--	--	136	NS	NS	NS	NS	NS	NS			no	NUT	--	--
Vanadium	6	78	31.9	NS	NS	NS	NS	NS	NS	**yes**		no	B	--	--
Zinc	1200	4600	87.3	NS	NS	NS	NS	NS	NS			***yes***	D	no	NE

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outs

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB01-0.5-01-0613	TR-5TH-SB01-02-04-0613	TR-5TH-SB02-0.5-01-0613	TR-5TH-SB02-02-04-0613	TR-5TH-SB03-0.5-01-0613	TR-5TH-SB03-02-04-0613
Sample Date							6/12/13	6/12/13	6/13/13	6/13/13	6/17/13	6/17/13
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	0.0023 U	0.031	0.0021 U	0.0022 U	0.0034 U	0.0028 U
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	0.011 U	0.12	0.011 U	0.0062 J	0.017 U	0.014 J
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0046 U	0.0045 U	0.0042 U	0.0043 U	0.0068 U	0.0055 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0027 U	0.0022 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0046 U	0.0045 U	0.0042 U	0.0043 U	0.0068 U	0.0055 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0046 U	0.0045 U	0.0042 U	0.0043 U	0.0068 U	0.0055 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0009 U	0.0009 U	0.0008 U	0.0009 U	0.0014 U	0.0011 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	0.0018 U	0.0018 U	0.0017 U	0.0017 U	0.0027 U	0.0022 U
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.029 U	0.022 J	0.031 U	0.03 U	0.034 U	0.032 U
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.059	0.031 U	0.031 U	0.03 U	0.034 U	0.032 U
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.057	0.039 J	0.031 U	0.03 U	0.059	0.032 U
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.081	0.056	0.039 J	0.03 U	**0.16**	0.032 U
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	**0.22**	**0.039 J**	**0.025 J**	0.03 U	**0.14**	0.032 U
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	**0.28**	0.076	0.052	0.03 U	**0.21**	0.032 U
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.2	0.027 J	0.031 U	0.03 U	0.078	0.032 U
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.13	0.042 J	0.034 J	0.03 U	0.12	0.032 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	0.12 U	0.32 J	0.12 U	0.12 U	0.14 U	0.13 U
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.11	0.056	0.047	0.03 U	0.16	0.032 U
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	**0.05**	0.031 U	0.031 U	0.03 U	0.034 U	0.032 U
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.15	0.22	0.037 J	0.03 U	0.32	0.032 U
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.029 U	0.022 J	0.031 U	0.03 U	0.034 U	0.032 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	**0.16**	0.022 J	0.031 U	0.03 U	0.062	0.032 U
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.088	0.11	0.031 U	0.03 U	0.2	0.032 U
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.16	0.2	0.039 J	0.03 U	0.28	0.032 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0023 UD	0.058 D	0.0012 U	0.0012 U	0.0027 UD	0.0013 U
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	**2.2 D**	0.95	0.06	0.024 U	0.96 DQ	0.026 U
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	**1.9 D**	0.65	0.066	0.024 U	**1.8 D**	0.036 J
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB01-0.5-01-0613	TR-5TH-SB01-02-04-0613	TR-5TH-SB02-0.5-01-0613	TR-5TH-SB02-02-04-0613	TR-5TH-SB03-0.5-01-0613	TR-5TH-SB03-02-04-0613
Sample Date							6/12/13	6/12/13	6/13/13	6/13/13	6/17/13	6/17/13
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	10,100	10,800	**20,400**	**22,100**	14,200	**27,900**
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	1.15 U	1.16 J	1.86 U	1.91 U	2.35 J	2.17 J
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**2.87**	**3.5 J**	**5.3**	**2.79 J**	**3.69 J**	**0.765 J**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	79.3	97.3	70.8	61.7	150	72.1
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	0.331	0.334	0.416	0.487	0.392	0.392
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	2.86	2.99	0.727	0.0953 U	3.98	0.101 J
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	1,860	2,480	1,800	877	5,010	1,750
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	22.4	22	36.9	26.2	27.5	34.2
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	**0.88**	0.23 U	**1.08**	**0.92**	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	3.33	3.56	**5.28**	3.66	**5.84**	4.3
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	57.1	49.2	49.5	7.29	212	10.5
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	9,760	**12,800**	**26,100**	10,000	**16,000**	**12,000**
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	196	349	103	7.15	389	10.8
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	1,470	1,480	2,280	2,280	1,920	2,950
Manganese	65	360	412	17 / 17	235	5th-4-1	153	227	181	69.6	163	94.9 D
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	1.57 D	1.31	0.202	0.00695 U	NS	NS
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	10.4	10.8	17.6	12	26.9	14.4
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	407	424	748	643	666	971
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.288 U	0.443 U	0.465 U	0.476 U	0.181 J	0.406 U
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	53.9	56.9	115	335	58.6	68.2
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	**0.317 J**	1.77 U	1.86 U	1.91 U	1.94 U	1.62 U
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	13.9	11.9	24.1	25.5	20.6	29.5
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	487	422	714	21.6	636	38.9

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was used. For non-carcinogenic PAHs without PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xylene was not detected in subsurface soil. Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB04-0.5-01-0613	TR-5TH-SB04-04-06-0613	TR-5TH-SB04D-0.5-01-0613	TR-5TH-SB04D-04-06-0613	TR-5TH-SB05-0.5-01-0613	TR-5TH-SB05-02-04-0613
Sample Date							6/17/13	6/17/13	6/17/13	6/17/13	6/18/13	6/18/13
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	0.0022 U	0.0026 U	0.0022 U	0.0026 U	0.0028 U	0.0027 J
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	0.011 U	0.013 U	0.011 U	0.013 U	0.014 U	0.014 J
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	7.00E-04 J	0.0011 U	7.00E-04 J	0.001 U	0.0011 U	0.0009 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0044 U	0.0053 U	0.0044 U	0.0051 U	0.0057 U	0.0046 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	5.00E-04 J	0.0011 U	8.00E-04 J	0.001 U	0.0011 U	0.0009 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0009 U	0.0011 U	0.0009 U	0.001 U	0.0011 U	0.0009 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0018 U	0.0021 U	0.0017 U	0.002 U	0.0023 U	0.0018 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0044 U	0.0053 U	0.0044 U	0.0051 U	0.0057 U	0.0046 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0044 U	0.0053 U	0.0044 U	0.0051 U	0.0057 U	0.0046 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0018	0.0011 U	0.0018	0.001 U	0.0011 U	0.0009 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	0.0018 U	0.0021 U	0.0017 U	0.002 U	0.0023 U	0.0018 U
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.028 U	0.031 U	0.028 U	0.031 U	0.02 J	0.031 U
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.028 U	0.031 U	0.028 U	0.031 U
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.018 J	0.031 U	0.028 U	0.031 U	0.028 U	0.031 U
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.025 J	0.031 U	0.038 J	0.031 U	0.077	0.022 J
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	**0.056**	0.031 U	**0.05**	**0.022 J**
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.15	0.031 U	0.084	0.027 J
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.028 U	0.031 U	0.065	0.031 U	0.028 U	0.031 U
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.083	0.031 U	0.048	0.031 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	0.15 J	0.12 U	0.18 J	0.13 U	0.11 U	0.12 U
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.049	0.031 U	0.087	0.031 U	0.077	0.025 J
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.028 U	0.031 U	0.028 U	0.031 U
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.038 J	0.031 U	0.047	0.031 U	0.2	0.035 J
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.028 U	0.031 U	0.028 U	0.031 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.028 U	0.031 U	0.049	0.031 U	0.028 U	0.031 U
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.027 J	0.031 U	0.028 U	0.031 U	0.21	0.031 U
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.036 J	0.031 U	0.054	0.031 U	0.15	0.035 J
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0022 UD	0.0012 U	0.0022 UD	0.0013 U	0.031 Q	0.004
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	1 D	0.025 U	**1.5 D**	0.025 U	0.49	0.34
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	**1.4 D**	0.023 J	**2.3 D**	0.025 UQ	0.45	0.26
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB04-0.5-01-0613	TR-5TH-SB04-04-06-0613	TR-5TH-SB04D-0.5-01-0613	TR-5TH-SB04D-04-06-0613	TR-5TH-SB05-0.5-01-0613	TR-5TH-SB05-02-04-0613
Sample Date							6/17/13	6/17/13	6/17/13	6/17/13	6/18/13	6/18/13
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	**15,200**	**20,700**	14,500	**19,700**	11,300	9,530
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	1.6 U	1.57 U	1.53 U	1.54 U	1.65 U	1.39 U
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**4.79**	**3.89**	**3.99**	**3.58**	**2.88 J**	**3.89**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	82.8	73.4	82.9	68.7	65.2	55.9
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	0.394	0.507	0.351	0.486	0.275	0.294
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	1.36	0.0529 J	1.33	0.0772 U	1.21	0.949
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	1,870	715	1,830	668	1,290	2,380
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	27.7	25.9	30.4	24.9	19.4	18.6
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	4.42	4.43	**4.69**	4.06	2.77	3.52
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	72.5	17.4	63.7	12.7	134	85.6
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	**20,000**	**11,600**	**26,200**	**11,400**	8,980	**14,000**
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	174	29.1	204	19.6	152	205
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	1,960	2,210	1,890	2,110	1,150	1,270
Manganese	65	360	412	17 / 17	235	5th-4-1	170	104	177	101	110	106
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	NS	NS	NS	NS	NS	NS
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	17.5	12.2	16	11.5	9.81	11.1
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	618	660	602	632	355	458
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.401 U	0.391 U	0.384 U	0.386 U	0.412 U	0.347 U
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	67.8	122	65.3	118	51	48.4
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	**0.604 J**	1.57 U	**0.391 J**	**0.497 J**	1.65 U	1.39 U
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	22.3	26	20	23.8	11.8	13.3
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	153	33.1	232	29.3	120	115

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB06-0.5-01-0613	TR-5TH-SB06-04-06-0613	TR-5th-SB07-01-03-0514	TR-5th-SB07-03-04-0514	TR-5th-SB08-01-03-0514	TR-5th-SB08-03-05-0514
Sample Date							6/18/13	6/18/13	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 UQ	0.0011 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	0.0022 U	0.0025 U	NS	NS	NS	NS
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	0.011 U	0.013 U	NS	NS	NS	NS
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0044 U	0.0051 U	0.0046 U	0.005 U	0.0048 UQ	0.0057 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0009 U	0.001 U	0.0009 UQ	0.001 UQ	0.001 UQ	0.0011 UQ
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0017 U	0.002 U	0.0018 U	0.002 U	0.0019 U	0.0023 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0044 U	0.0051 U	0.0046 U	0.005 U	0.0048 U	0.0057 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0044 U	0.0051 U	0.0046 U	7.00E-04 J	0.0048 U	0.0057 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0009 U	0.001 U	0.0009 U	0.001 U	0.001 U	0.0011 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	0.0017 U	0.002 U	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.057	0.034 U
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	**0.024 J**	0.034 U
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.057	0.034 U
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.027 U	0.032 U	0.033 U	0.032 U	0.035 J	0.034 U
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	0.11 U	0.13 U	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.031 J	0.034 U
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.045	0.034 U
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.032 U	0.034 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.024 J	0.034 U
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.026 J	0.034 U
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.027 U	0.032 U	0.033 U	0.032 U	0.054	0.034 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0011 U	0.0013 U	0.0041 UD	0.0041 UD	0.004 UD	0.0043 UD
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	0.045 Q	0.025 U	0.024 U	0.024 U	**2.4 DP**	0.025 UQ
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	0.071	0.025 UQ	0.024 U	0.016 J	**5.7 D**	0.02 J
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5TH-SB06-0.5-01-0613	TR-5TH-SB06-04-06-0613	TR-5th-SB07-01-03-0514	TR-5th-SB07-03-04-0514	TR-5th-SB08-01-03-0514	TR-5th-SB08-03-05-0514
Sample Date							6/18/13	6/18/13	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	4,990	**20,900**	NS	NS	NS	NS
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	1.66 U	2.01 U	0.972 U	0.957 U	0.775 J	1.02 U
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**1.4 J**	**1.65 J**	**1.68 J**	**1.16 J**	**7.56 JD**	**1.93 J**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	22.3	60.9	54.1	66.6	91.8 D	73.1
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	0.122	0.391	NS	NS	NS	NS
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	0.0644 J	0.101 U	0.052 J	0.153 U	1.29 JD	0.165 U
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	1,330	1,140	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	5.89	26.6	18.6	21.2	55.5 D	34.2
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	0.689 J	3.29	2.8	2.98	**6.13 D**	4.42
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	3.1	7.66	NS	NS	NS	NS
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	2,520	8,990	6,760	7,230	**51,200 D**	**13,000**
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	7.22	7.31	69.2	6.97	234 D	9.06
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	315	2,280	NS	NS	NS	NS
Manganese	65	360	412	17 / 17	235	5th-4-1	24.5	108	NS	NS	NS	NS
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	NS	NS	0.0197 J	0.014 U	0.327	0.00478 J
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	1.8	11.1	7.55	8.93	24.8 D	13.3
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	176	677	NS	NS	NS	NS
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.414 U	0.503 U	0.267 U	0.263 U	0.134 J	0.28 U
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	23.3 J	64.8	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	**0.639 J**	2.01 U	NS	NS	NS	NS
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	7	22.6	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	10.3	20.8	70.4 D	23.4	239 D	26.8

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB09-01-03-0514 5/7/14	TR-5th-SB09-03-05-0514 5/7/14	TR-5th-SB10-01-03-0514 5/7/14	TR-5th-SB10-03-04-0514 5/7/14	TR-5th-SB10D-01-03-0514 5/7/14	TR-5th-SB11-01-03-0514 5/7/14
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0046 U	0.0054 U	0.0058 U	0.0049 U	0.0047 U	0.005 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0009 U	0.0011 U	0.0012 U	0.001 UQ	0.0009 UQ	0.001 U
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0018 U	0.0022 U	0.0023 U	0.0019 U	0.0019 U	0.002 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0046 U	0.0054 U	0.0058 U	0.0049 U	0.0047 U	0.005 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0046 U	0.0054 U	0.0058 U	0.0049 U	0.0047 U	0.005 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0009 U	0.0011 U	0.0012 U	0.001 U	0.0009 U	0.001 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	NS	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.027 J	0.035 U	0.031 U	0.034 U	0.033 U	0.029 J
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.031 U	0.034 U	0.033 U	0.033 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0039 UD	0.0044 UD	0.004 UD	0.0043 UD	0.0041 UD	0.0041 UD
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	0.023 U	0.026 U	0.023 U	0.025 U	0.024 U	0.026 JQ
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	0.024 J	0.026 U	0.023 U	0.025 U	0.024 U	0.048 J
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB09-01-03-0514	TR-5th-SB09-03-05-0514	TR-5th-SB10-01-03-0514	TR-5th-SB10-03-04-0514	TR-5th-SB10D-01-03-0514	TR-5th-SB11-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	0.928 U	1.03 U	0.932 U	1.01 U	0.97 U	1.06 J
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**2.58 J**	**2.96**	**1.27 J**	**3.01 J**	**1.93 J**	**2.14 J**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	122	63.4	67.4	68.5	72.9	54.7
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	0.141 U	0.129 U	0.157 U	0.177 U	0.121 U	0.155 J
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	24.4	26.1	16.4	29.4	16.8	18.9
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	3.34	3.33	2.84	3.34	3.14	**5.84**
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	**11,500**	9,230	6,100	9,060	6,730	9,530
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	9.54	6.24	7.18	6.62	7.49	26.8
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	17 / 17	235	5th-4-1	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	0.0609	0.0177 J	0.0474	0.0215 J	0.0358	0.139
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	9.66	12.1	7.07	11.8	7.2	7.27
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.0911 J	0.283 U	0.256 U	0.277 U	0.267 U	0.268 U
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	22	22.4	17.9	20.9	18.3	60.9

Notes:

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PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

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[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

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Underlined text indicates exceedance of Protection of Groundwater PSRG
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Table 4
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Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB11-03-05-0514	TR-5th-SB12-01-03-0514	TR-5th-SB12-03-05-0514	TR-5th-SB13-01-03-0514	TR-5th-SB13-03-05-0514	TR-5th-SB14-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.005 U	0.005 U	0.0049 U	0.0049 U	0.0053 U	0.0049 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.002 U	0.002 U	0.002 U	0.002 U	0.0021 U	0.002 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.005 U	0.005 U	0.0049 U	0.0049 U	0.0053 U	0.0049 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.005 U	0.005 U	8.00E-04 J	0.0049 U	0.0053 U	0.0049 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.001 U	0.001 U	0.001 U	0.001 U	0.0011 U	0.001 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	NS	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.031 U	0.038 J	0.032 U	0.032 U	0.034 U	0.033 U
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.031 U	0.026 J	0.032 U	0.032 U	0.034 U	0.033 U
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.031 U	0.035 U	0.032 U	0.032 U	0.034 U	0.033 U
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.031 U	0.02 J	0.032 U	0.032 U	0.034 U	0.033 U
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0039 UD	0.0043 UD	0.004 UD	0.004 UD	0.0043 UD	0.0041 UD
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	0.023 UQ	0.045 JQ	0.024 U	0.02 JPQ	0.025 U	0.024 U
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	0.072	0.066	0.024 U	0.089	0.025 U	0.024 U
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB11-03-05-0514	TR-5th-SB12-01-03-0514	TR-5th-SB12-03-05-0514	TR-5th-SB13-01-03-0514	TR-5th-SB13-03-05-0514	TR-5th-SB14-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	0.929 U	1.02 U	0.945 U	0.943 U	1 U	0.972 U
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**1.76 J**	**1.94 J**	**2.04 J**	**2.87 J**	**1.81 J**	**2.02 J**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	67.1	61.8	88.7	109	105	85.6
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	0.0287 J	0.536	0.131 U	0.0791 J	0.163 U	0.164 U
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	14.7	25.5	13.4	26.2	36.1	28.1
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	3.09	3.44	3.9	**4.67**	4.05	3.56
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	6,040	9,760	5,790	10,500	**11,100**	9,420
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	6.79	77.3	6.44	23.9	8.92	7.24
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	17 / 17	235	5th-4-1	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	0.0837	0.117	0.0453	0.0805	0.0167 J	0.019 J
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	7.36	13.9	7.94	12.4	14.6	11.5
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.255 U	0.0882 J	0.26 U	0.069 J	0.276 U	0.267 U
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	23	216 D	21.3	36.6	26.5	26.6

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB14-03-05-0514	TR-5th-SB15-01-03-0514	TR-5th-SB16-01-03-0514	TR-5th-SB16-03-04-0514	TR-5th-SB17-01-03-0514	TR-5th-SB18-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0056 U	0.0066 U	0.0053 U	0.0052 U	0.0056 U	0.005 U
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 UQ	0.001 UQ
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0011 U	0.0013 U	0.0011 U	0.001 U	0.0011 U	0.001 U
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0022 U	0.0026 U	0.0021 U	0.0021 U	0.0022 U	0.002 U
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0056 U	0.0066 U	0.0053 U	0.0052 U	0.0056 U	0.005 U
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0056 U	0.0066 U	0.0053 U	7.00E-04 J	0.0056 U	0.005 U
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0011 U	0.0017 J	0.0011 U	0.001 U	0.0011 U	0.001 U
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	NS	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.018 J
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.086
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.17
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.028 J	0.046	**0.52**
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	**0.053**	**0.38**
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.089	**0.66**
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.034 U	0.037 J	0.034 J	0.032 U	0.069	0.2
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.028 J	0.28
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.52
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	**0.088**
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	1.2
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.027 J
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.02 J	0.032 U	0.051	**0.22 Q**
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.034 U	0.24
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.034 U	0.036 U	0.033 U	0.032 U	0.025 J	1.2
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0043 UD	0.0045 UD	0.0042 UD	0.004 UD	0.0043 UD	0.0039 UD
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	0.025 U	0.026 U	0.025 U	0.024 U	0.21	0.18 PQ
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	0.025 U	0.026 U	0.035 J	0.024 U	0.18	0.16
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB14-03-05-0514	TR-5th-SB15-01-03-0514	TR-5th-SB16-01-03-0514	TR-5th-SB16-03-04-0514	TR-5th-SB17-01-03-0514	TR-5th-SB18-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	1 U	1.06 U	0.986 U	0.945 U	0.434 J	0.599 J
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**3.16**	**1.34 J**	**5.21**	**2.05 J**	**3.21 J**	**6.44 D**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	69.3	10.7	143	65.1	58.1	85.1 D
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	0.146 U	0.0492 J	0.411	0.16 U	0.51	7.19 D
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	24.6	2.66	12.1	26.5	28.3	25.2 D
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	3.56	0.773	4	3.06	3.75	3.89 D
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	9,560	1,410	6,780	10,000	10,800	**20,900 D**
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	5.34	2.64	73.9	6.87	101	**890 D**
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	17 / 17	235	5th-4-1	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	0.00535 J	0.0123 J	0.0313	0.027	0.401	0.0765
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	11.3	1.64	7.95	11.7	22.9	11.8 D
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.276 U	0.29 U	0.271 U	0.26 U	0.0717 J	0.138 J
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	21.8	4.59	244 D	22.3	72.8	483 D

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB18-03-05-0514	TR-5th-SB18D-01-03-0514	TR-5th-SB19-01-03-0514	TR-5th-SB19-03-04-0514	TR-5th-SB19D-03-04-0514	TR-5th-SB20-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	0.0011 U	0.0011 U	NS	NS	NS	NS
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	0.0056 U	0.0053 U	NS	NS	NS	NS
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	0.0011 U	0.0011 U	NS	NS	NS	NS
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	0.0011 UQ	0.0011 UQ	NS	NS	NS	NS
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	0.0023 U	0.0021 U	NS	NS	NS	NS
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	0.0056 U	0.0053 U	NS	NS	NS	NS
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	0.0056 U	0.0053 U	NS	NS	NS	NS
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	0.0011 U	0.0011 U	NS	NS	NS	NS
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	NS	NS	NS	NS	NS	NS
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	0.03 U	0.032 U	NS	NS	NS	NS
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	0.03 U	0.032 U	NS	NS	NS	NS
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	0.03 U	0.067	NS	NS	NS	NS
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	0.03 J	**0.25**	NS	NS	NS	NS
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	0.03 U	**0.19**	NS	NS	NS	NS
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	0.03 U	**0.35**	NS	NS	NS	NS
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	0.03 U	0.11	NS	NS	NS	NS
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	0.03 U	0.12	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	0.014 J	0.25	NS	NS	NS	NS
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	0.03 U	**0.038 J**	NS	NS	NS	NS
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	0.03 U	0.43	NS	NS	NS	NS
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	0.03 U	0.032 U	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	0.03 UQ	0.11 Q	NS	NS	NS	NS
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	0.03 U	0.057	NS	NS	NS	NS
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	0.03 U	0.48	NS	NS	NS	NS
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	0.0038 UD	0.004 UD	NS	NS	NS	NS
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	0.25 PQ	0.19	NS	NS	NS	NS
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	0.11	0.23	NS	NS	NS	NS
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB18-03-05-0514	TR-5th-SB18D-01-03-0514	TR-5th-SB19-01-03-0514	TR-5th-SB19-03-04-0514	TR-5th-SB19D-03-04-0514	TR-5th-SB20-01-03-0514
Sample Date							5/7/14	5/7/14	5/7/14	5/7/14	5/7/14	5/7/14
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	0.9 U	0.952 U	NS	NS	NS	NS
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**1.65 J**	**2.41 JD**	NS	NS	NS	NS
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	44.2	61.1 D	NS	NS	NS	NS
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	0.111 J	0.539 D	NS	NS	NS	NS
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	NS	NS	NS	NS	NS	NS
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	14.1	20.4 D	NS	NS	NS	NS
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	2.37	3.1 D	NS	NS	NS	NS
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	NS	NS	NS	NS	NS	NS
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	6,420	**23,600 D**	NS	NS	NS	NS
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	39.8	92 D	NS	NS	NS	NS
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Manganese	65	360	412	17 / 17	235	5th-4-1	NS	NS	NS	NS	NS	NS
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	0.196	0.0687	NS	NS	NS	NS
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	6.6	13.6 D	NS	NS	NS	NS
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	0.248 U	0.262 U	NS	NS	NS	NS
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	NS	NS	NS	NS	NS	NS
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	NS	NS	NS	NS	NS	NS
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	NS	NS	NS	NS	NS	NS
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	35.8	103 D	NS	NS	NS	NS

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB20-03-05-0514	TR-5TH-SB21-01-03-0514	5th-1-2	5th-2-1	5th-3-1	5th-4-1
Sample Date							5/7/14	5/7/14	1/10/12	1/10/12	1/10/12	1/10/12
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1	NS	NS	ND	ND	ND	0.0195 J
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1	NS	NS	ND	ND	ND	0.696
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1	NS	NS	ND	ND	ND	0.733
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	NS	NS	ND	ND	ND	1.18
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613	NS	NS	0.0243	0.00599 J	0.00892 J	ND
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613	NS	NS	0.0856	0.0451 J	0.0406 J	0.0786 J
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613	NS	NS	ND	ND	ND	ND
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2	NS	NS	0.000812 J	ND	ND	ND
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1	NS	NS	ND	ND	ND	0.102
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613	NS	NS	ND	ND	ND	ND
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1	NS	NS	ND	0.00303 J	ND	ND
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1	NS	NS	ND	ND	ND	0.00749 J
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1	NS	NS	ND	ND	ND	0.00457 J
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1	NS	NS	ND	ND	ND	0.0112 J
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1	NS	NS	ND	ND	ND	0.100 J
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	NS	NS	0.00179 J	0.00118 J	0.000904 J	0.0262 J
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1	NS	NS	ND	ND	ND	0.00873 J
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1	NS	NS	NR	NR	NR	NR
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613	NS	NS	NS	NS	NS	NS
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514	NS	NS	NS	NS	NS	NS
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613	NS	NS	NS	NS	NS	NS
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	NS	NS	NS	NS	NS	NS
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	NS	NS	NS	NS	NS	NS
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	TR-5th-SB20-03-05-0514	TR-5TH-SB21-01-03-0514	5th-1-2	5th-2-1	5th-3-1	5th-4-1
Sample Date							5/7/14	5/7/14	1/10/12	1/10/12	1/10/12	1/10/12
Chemical Name						Max Location						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613	NS	NS	11,300	**21,600**	12,000	17,700
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	NS	NS	ND	0.762	1.33	3.75
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	NS	NS	**1.03**	**3.37**	**1.83**	**3.79**
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613	NS	NS	35.3	104	73.8	66.5
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613	NS	NS	0.0358 J	0.052 J	0.0528 J	0.0412 J
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	NS	NS	0.0307 J	2.1	2.29	7.35
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1	NS	NS	891	1,730	1,590	22,800
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1	NS	NS	15.6	35.7	36.2	58.3
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613	NS	NS	NS	NS	NS	NS
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	NS	NS	2.47	**4.72**	3.25	3.39
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613	NS	NS	4.8	58.9	31.1	148
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	NS	NS	6,050	**36,200**	9,920	**36,300**
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	NS	NS	6.51	243	372	**692**
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613	NS	NS	1,250	2,180	1,650	1,840
Manganese	65	360	412	17 / 17	235	5th-4-1	NS	NS	53.2	141	136	235
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	NS	NS	0.0143	0.0512	1.64	**2.31**
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1	NS	NS	7.51	31.4	28.3	28.2
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613	NS	NS	487	712	473	372
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613	NS	NS	ND	0.0808 J	0.0704 J	0.153
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613	NS	NS	46.5	157	89.3	86.1
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	NS	NS	0.0715 J	0.104 J	0.0821 J	0.0471 J
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	NS	NS	16.1	25.3	15.3	9.89
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	NS	NS	17.6	168	343	2,550

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
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NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

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Red bold text indicates COC
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Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
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PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
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Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID / Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	Protection of Groundwater PSRG	Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name						**Max Location**						
Volatile Organic Compounds (MG/KG)												
1,2,3-Trichlorobenzene	--	9.8	--	1 / 42	0.0195 J	5th-4-1			***yes***	D	no	NE
1,2,4-Trichlorobenzene	2.2	12	--	1 / 42	0.696	5th-4-1			***yes***	D	no	NE
1,3-Dichlorobenzene	2.4	--	--	1 / 42	0.733	5th-4-1			***yes***	D	no	NE
1,4-Dichlorobenzene	0.07	2.4	--	1 / 42	1.18	5th-4-1	**yes**		***yes***	PSRG	**yes**	PSRG
2-Butanone	16	5,600	--	5 / 18	0.0310	TR-5TH-SB01-02-04-0613			no	CLC	--	--
Acetone	24	12,000	--	8 / 18	0.120	TR-5TH-SB01-02-04-0613			no	CLC	--	--
Benzene	0.0073	1.1	--	2 / 42	7.00E-04 J	TR-5TH-SB04-0.5-01-0613			***yes***	D	no	NE
Carbon disulfide	3.8	160	--	1 / 42	0.000812 J	5th-1-2			***yes***	D	no	NE
Chlorobenzene	0.43	58	--	1 / 42	0.102	5th-4-1			***yes***	D	no	NE
Cyclohexane	1.46	120	--	2 / 42	8.00E-04 J	TR-5TH-SB04D-0.5-01-0613			***yes***	D	no	NE
Dichlorodifluoromethane (Freon-12)	29	19	--	1 / 42	0.00303 J	5th-2-1			***yes***	D	no	NE
Ethylbenzene	8.1	5.4	--	1 / 42	0.00749 J	5th-4-1			***yes***	D	no	NE
Isopropylbenzene	1.3	270	--	1 / 42	0.00457 J	5th-4-1			***yes***	D	no	NE
m- and p-Xylene	--	120	--	1 / 42	0.0112 J	5th-4-1			***yes***	D	no	NE
Methyl acetate	--	16,000	--	1/ 42	0.100 J	5th-4-1			***yes***	D	no	NE
Methylene chloride	0.023	56	--	7 / 42	0.0262 J	5th-4-1	**yes**		***yes***	PSRG	**yes**	PSRG
Toluene	5.5	820	--	4 / 42	0.00873 J	5th-4-1			***yes***	D	no	NE
Xylene, total	5.8	130	--	1 / 18	0.0112 J	5th-4-1			--	--	no	NE[4]
Semivolatile Organic Compounds (MG/KG)												
Acenaphthene	8.4	680	--	3 / 38	0.0220 J	TR-5TH-SB01-02-04-0613			***yes***	D	no	NE
Acenaphthylene	21	340	--	2 / 38	0.0860	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Anthracene	660	3,400	--	6 / 38	0.170	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Benzo(a)anthracene	0.18	0.15	--	17 / 38	0.520	TR-5th-SB18-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(a)pyrene	0.059	0.015	--	11 / 38	0.380	TR-5th-SB18-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(b)fluoranthene	0.6	0.15	--	11 / 38	0.660	TR-5th-SB18-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Benzo(g,h,i)perylene	7,800	340	--	10 / 38	0.200	TR-5TH-SB01-0.5-01-0613			***yes***	D	no	NE
Benzo(k)fluoranthene	5.9	1.5	--	9 / 38	0.280	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
bis(2-Ethylhexyl)phthalate	7.2	35	--	3 / 14	0.320 J	TR-5TH-SB01-02-04-0613			no	CLC	--	--
Chrysene	18	15	--	12 / 38	0.520	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Dibenz(a,h)anthracene	0.19	0.015	--	3 / 38	0.0880	TR-5th-SB18-01-03-0514		**yes**	***yes***	PSRG	**yes**	PSRG
Fluoranthene	330	460	--	12 / 38	1.20	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Fluorene	56	460	--	2 / 38	0.0270 J	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Indeno(1,2,3-cd)pyrene	2	0.15	--	9 / 38	0.220 Q	TR-5th-SB18-01-03-0514		**yes**	***yes***	PSRG	**yes**	PSRG
Phenanthrene	68	340	--	8 / 38	0.240	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Pyrene	220	340	--	13 / 38	1.20	TR-5th-SB18-01-03-0514			***yes***	D	no	NE
Pesticide/Polychlorinated Biphenyls (MG/KG)												
4,4'-DDD	0.24	2	--	3 / 38	0.0580 D	TR-5TH-SB01-02-04-0613			***yes***	D	no	NE
Aroclor-1254	0.14	1	--	17 / 38	2.40 DP	TR-5th-SB08-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Aroclor-1260	0.14	1	--	24 / 38	5.70 D	TR-5th-SB08-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Explosives (MG/KG)												
No Detections												

Table 4
5th Street Disposal Area Subsurface Soil COPC and COC Selection
Towers Road Disposal Area
Harvey Point Defense Testing Activity
Hertford, North Carolina

Sample ID / Sample Date	Preliminary Protection of Groundwater Soil Remediation Goal (PSRG)[1]	Residential Health-Based PSRG[1]	Soil Background Criteria[2]	Frequency	Max Value	Max Location	Protection of Groundwater PSRG	Residential Health-Based PSRG	Phase II COPC	COPC Basis[3]	COC	COC Basis[3]
Chemical Name						**Max Location**						
Total Metals (MG/KG)												
Aluminum	--	15,000	32,000	17 / 17	22,100	TR-5TH-SB02-02-04-0613			no	NRS & B	--	--
Antimony	0.9	6.2	--	9 / 41	3.75	5th-4-1	**yes**		***yes***	PSRG	**yes**	PSRG
Arsenic	5.8	0.61	3.74	41 / 41	7.56 JD	TR-5th-SB08-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Barium	580	3,000	134	41 / 41	150	TR-5TH-SB03-0.5-01-0613			***yes***	D	no	NE
Beryllium	63	32	0.636	17 / 17	0.507	TR-5TH-SB04-04-06-0613			no	B	--	--
Cadmium	3	14	0.878	26 / 41	7.35	5th-4-1	**yes**		***yes***	PSRG	**yes**	PSRG
Calcium	--	--	3,600	17 / 17	22,800	5th-4-1			no	NUT	--	--
Chromium	360,000	24,000	38.5	41 / 41	58.3	5th-4-1			***yes***	D	no	NE
Chromium (hexavalent)	3.8	0.29	2.11	3 / 4	1.08	TR-5TH-SB02-0.5-01-0613		**yes**	no	B	--	--
Cobalt	0.9	4.6	4.64	41 / 41	6.13 D	TR-5th-SB08-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Copper	700	620	441	17 / 17	212	TR-5TH-SB03-0.5-01-0613			no	B	--	--
Iron	150	11,000	14,100	41 / 41	51,200 D	TR-5th-SB08-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Lead	270	400	47.9	41 / 41	890 D	TR-5th-SB18-01-03-0514	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Magnesium	--	--	2,600	17 / 17	2,280	TR-5TH-SB02-0.5-01-0613			no	NUT	--	--
Manganese	65	360	412	17 / 17	235	5th-4-1	**yes**		no	B	--	--
Mercury	1	2	0.0366	30 / 32	2.31	5th-4-1	**yes**	**yes**	***yes***	PSRG	**yes**	PSRG
Nickel	130	300	16.8	41 / 41	31.4	5th-2-1			***yes***	D	no	NE
Potassium	--	--	765	17 / 17	748	TR-5TH-SB02-0.5-01-0613			no	NUT	--	--
Silver	3.4	78	--	10 / 41	0.181 J	TR-5TH-SB03-0.5-01-0613			***yes***	D	no	NE
Sodium	--	--	136	17 / 17	335	TR-5TH-SB02-02-04-0613			no	NUT	--	--
Thallium	0.28	0.16	1.29	9 / 17	0.639 J	TR-5TH-SB06-0.5-01-0613	**yes**	**yes**	no	B	--	--
Vanadium	6	78	31.9	17 / 17	26.0	TR-5TH-SB04-04-06-0613	**yes**		no	B	--	--
Zinc	1,200	4,600	87.3	41 / 41	2,550	5th-4-1	**yes**		***yes***	PSRG	**yes**	PSRG

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014). For carcinogenic PAHs without PSRG, the PSRG for benzo(a)pyrene was use
PSRG, the PSRG for pyrene was used. For PCBs, the unrestricted use residential/industrial PSRG of 1 mg/kg was used.

[2] Values are from the maximum values for the background samples collected during the June 2013 sampling event.

[3] Basis:

B - Chemical was detected but is within background range
CLC - Chemical was detected but is a common laboratory contaminant detected below the regulatory standard
D - Chemical was detected outside of the background range (if applicable) and is not a common laboratory contaminant.
NE - Chemical was detected but does not exceed regulatory standards
NRS - Chemical was detected but has no regulatory standard.
NUT - Chemical was detected but is a human nutrient with no regulatory standard
PSRG - Chemical exceeds the NC Protection of Groundwater PSRG or a Health-Based Preliminary PSRG and, if applicable, is outside of background

[4] Total xylenes not detected in 2013, therefore not carried forward as site COPC. Although m- and p-xylene were detected during 2012, concentrations were below the residential health-based PSRG. O-xyle
Xylenes have not been detected in groundwater, therefore is can be reasonably assumed that concentrations of total xylene do not exceed the protection of groundwater PSRG.

Italicized text indicates COPC
Red bold text indicates COC
Bold text indicates exceedance of Residential Health-Based PSRG
Bold box indicates exceedance of background criteria
Underlined text indicates exceedance of Protection of Groundwater PSRG
D - Compound identified in an analysis at a secondary dilution factor.
J - Analyte present. Value may or may not be accurate or precise
P - Difference between the concentration on the two columns is greater than 25%; the lower of the two
NR - Not reported
NS - Not sampled
PCT - Percent
mg/kg - milligrams per kilogram
Q - One or more QC criteria outside acceptance limits
U - The material was analyzed for, but not detected

Table 5

Comparison of IRAP COPC Preliminary SRGs and COC Remedial Action SRGs - 2nd Street Disposal Area

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Constituents of Potential Concern	IRAP Preliminary SRG (mg/kg)	Remedial Action SRG (mg/kg)
VOCs		
Benzene	7.3	--
Bromomethane	3.8	--
Chloroform	1.9	--
Chloromethane	24	--
Dichlorodifluoromethane (Freon-12)	19	--
Ethylbenzene	36	--
Isopropylbenzene	270	--
m- and p-Xylene	120	--
o-Xylene	140	--
Styrene	870	--
Toluene	820	--
Trichlorofluoromethane (Freon-11)	24	--
Xylene, total	130	--
SVOCs		
2-Methylnaphthalene	230	--
Acenaphthene	680	--
Acenaphthylene	340	--
Anthracene	17,000	--
Benzo(a)anthracene	1	1.67
Benzo(a)pyrene	0.1	0.167
Benzo(b)fluoranthene	1	1.67
Benzo(g,h,i)perylene	340	--
Benzo(k)fluoranthene	10	--
Chrysene	100	--
Dibenz(a,h)anthracene	0.1	0.167
Dibenzofuran	16	--
Fluoranthene	460	--
Fluorene	460	--
Indeno(1,2,3-cd)pyrene	1	1.88
Naphthalene	24	40
Phenanthrene	340	--
Pyrene	340	--
PCBs		
Aroclor-1254	1	1
Aroclor-1260	1	1
Metals		
Antimony	0.9	0.9
Arsenic	4.7	5.8
Barium	3,000	--
Cadmium	14	35
Chromium	120,000	--
Cobalt	4.6	4.6
Copper	1,550	1,550
Iron	27,500	27,500
Lead	400	400
Manganese	412	412
Mercury	23	23
Nickel	750	--
Silver	195	195
Vanadium	78	195
Zinc	1,200	1,200

Notes:

Red, bold text indicates site COC.

-- Constituent not identified as site COC, no Remedial Action SRG established.

Table 6

Comparison of IRAP COPC Preliminary SRGs and COC Remedial Action SRGs - 5th Street Disposal Area

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Constituents of Potential Concern	IRAP Preliminary SRG (mg/kg)	Remedial Action SRG (mg/kg)
VOCs		
1,2,3-Trichlorobenzene	9.8	--
1,2,4-Trichlorobenzene	2.2	--
1,3-Dichlorobenzene	2.40	--
1,4-Dichlorobenzene	0.07	0.07
Benzene	0.01	--
Carbon disulfide	800	--
Chlorobenzene	0.43	--
Cyclohexane	600	--
Dichlorodifluoromethane (Freon-12)	24	--
Ethylbenzene	30	--
Isopropylbenzene	1.3	--
m- and p-Xylene	150	--
Methyl Acetate	16,000	--
Methylene chloride	70	180
Styrene	870	--
Toluene	5.5	--
SVOCs		
Acenaphthene	1,133	--
Acenaphthylene	340	--
Anthracene	660	--
Benzo(a)anthracene	1.2	1.36
Benzo(a)pyrene	0.1	0.136
Benzo(b)fluoranthene	1.2	1.36
Benzo(g,h,i)perylene	340	--
Benzo(k)fluoranthene	11.5	--
Carbazole	187	240
Chrysene	115	--
Dibenz(a,h)anthracene	0.12	0.136
Dibenzofuran	80	--
Fluoranthene	460	--
Fluorene	56	--
Indeno(1,2,3-cd)pyrene	1.15	1.36
Phenanthrene	340	--
Pyrene	340	--
Pesticide		
4,4'-DDD	11	--
PCBs		
Aroclor-1254	1	1
Aroclor-1260	1	1
Metals		
Antimony	6.20	16
Arsenic	4.7	5.5
Barium	580	--
Cadmium	14	70
Chromium	120,000	--
Cobalt	4.6	4.6
Iron	150	14,100
Lead	270	270
Mercury	23	23
Nickel	130	--
Silver	195	--
Zinc	1,200	1,200

Notes:

Red, bold text indicates site COC.

-- Constituent not identified as site COC, no Remedial Action SRG established.

Table 7

2nd Street Disposal Area Surface Soil COC Health Based Remediation Goal Calculation

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Analyte	Preliminary Residential Health-Based Soil Remediation Goals (PSRG)[1] (MG/KG)	Carcinogen (c) or noncarcinogen (n)	EPA Res RSL - cancer (cancer risk = 10-6)	EPA Res. RSL - noncancer (hazard index = 1)	Target Organ	**Adjusted Residential**	
						Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (c) (MG/KG)	Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (n) (MG/KG)
Benzo(a)anthracene	1.5E-01	c	1.5E-01		N/A	**1.9E+00**	
Benzo(a)pyrene	1.5E-02	c	1.5E-02		N/A	**1.9E-01**	
Benzo(b)fluoranthene	1.5E-01	c	1.5E-01		N/A	**1.9E+00**	
Dibenz(a,h)anthracene	1.5E-02	c	1.5E-02		N/A	**1.9E-01**	
Indeno(1,2,3-cd)pyrene	1.5E-01	c	1.5E-01		N/A	**1.9E+00**	
Aroclor-1260	1.0E+00	c	2.4E-01		N/A	**1.0E+00**	
Antimony	6.2E+00	n		3.1E+01	Blood, Longevity		**3.1E+01**
Arsenic	6.1E-01	c, n	6.7E-01	3.4E+01	Skin, Vascular	**7.6E+00**	1.7E+01
Cadmium	1.4E+01	c, n	2.1E+03	7.0E+01	Kidney	2.6E+04	**7.0E+01**
Cobalt	4.6E+00	n		2.3E+01	Thyroid		**2.3E+01**
Copper	6.2E+02	n		3.1E+03	Gastrointestinal		**1.6E+03**
Iron	1.1E+04	n		5.5E+04	Gastrointestinal		**2.8E+04**
Lead	4.0E+02	n		4.0E+02	N/A		**4.0E+02**
Mercury	4.6E+00	n		2.3E+01	Immune System		**2.3E+01**
Silver	7.8E+01	n		3.9E+02	Skin		**2.0E+02**
	PSRG Table (January 2014)	EPA RSL Table (May 2014)				Adjusted Remediation Goal	

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014).

[2] Values from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January, 2014) adjusted as follows:

Cancer based PSRG adjustment

adjusted SRG = PSRG x 100/number of carcinogens = PSRG x 100/8 = PSRG x 12.5

Non-cancer based PSRG adjustment

adjusted SRG = PSRG x 5/number of non-carcinogens with same target organ; however, when > 5 chemicals effect same target organ then SRG=PSR(

number of analytes for each target organ

blood - 1, longevity - 1, skin- 2, vascular - 1, kidney - 1, thyroid - 1, gastrointestinal - 2, immune system - 1

MG/KG - Milligrams per kilogram

N/A - not available/not applicable

Table 8

2nd Street Disposal Area Subsurface Soil COC Health Based Remediation Goal Calculation

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Analyte	Preliminary Residential Health-Based Soil Remediation Goals (PSRG)[1] (MG/KG)	Carcinogen (c) or noncarcinogen (n)	EPA Res RSL - cancer (cancer risk = 10-6)	EPA Res. RSL - noncancer (hazard index = 1)	Target Organ	Adjusted Residential	
						Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (c) (MG/KG)	Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (n) (MG/KG)
Benzo(a)anthracene	1.5E-01	c	1.5E-01		N/A	**1.7E+00**	
Benzo(a)pyrene	1.5E-02	c	1.5E-02		N/A	**1.7E-01**	
Benzo(b)fluoranthene	1.5E-01	c	1.5E-01		N/A	**1.7E+00**	
Dibenz(a,h)anthracene	1.5E-02	c	1.5E-02		N/A	**1.7E-01**	
Naphthalene	3.6E+00	c, n	3.8E+00	1.3E+02	Body Weight	**4.0E+01**	1.3E+02
Aroclor-1254	1.0E+00	c, n	2.4E-01	1.1E+00	Ocular, Finger and Toe Nails, Antibodies	**1.0E+00**	1.1E+00
Aroclor-1260	1.0E+00	c	2.4E-01		N/A	**1.0E+00**	
Antimony	6.2E+00	n		3.1E+01	Blood, Longevity		**1.6E+01**
Arsenic	6.1E-01	c, n	6.7E-01	3.4E+01	Skin, Vascular	**6.8E+00**	1.7E+01
Cadmium	1.4E+01	c, n	2.1E+03	7.0E+01	Kidney	2.3E+04	**3.5E+01**
Cobalt	4.6E+00	n		2.3E+01	Thyroid		**2.3E+01**
Iron	1.1E+04	n		5.5E+04	Gastrointestinal		**5.5E+04**
Lead	4.0E+02	n		4.0E+02	N/A		**4.0E+02**
Manganese	3.6E+02	n		1.8E+03	Central Nervous System		**1.8E+03**
Mercury	4.6E+00	n		2.3E+01	Immune System		**2.3E+01**
Silver	7.8E+01	n		3.9E+02	Skin		**2.0E+02**
Vanadium	7.8E+01	n		3.9E+02	Kidney		**2.0E+02**
Zinc	4.6E+03	n		3.9E+02	Blood		**1.2E+04**
	PSRG Table (January 2014)	EPA RSL Table (May 2014)				Adjusted Remediation Goal	

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014).

[2] Values from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January, 2014) adjusted as follows:

Cancer based PSRG adjustment

adjusted SRG = PSRG x 100/number of carcinogens = PSRG x 100/9 = PSRG x 11.1

Non-cancer based PSRG adjustment

adjusted SRG = PSRG x 5/number of non-carcinogens with same target organ; however, when > 5 chemicals effect same target organ then SRG=PSRG

number of analytes for each target organ:

body weight - 1, ocular - 1, finger and toe nails - 1, antibodies - 1, blood - 2, longevity - 1, skin- 2, vascular - 1, kidney - 2, thyroid - 1, gastrointestinal - 1, nervous system - 1, immune system - 1

MG/KG - Milligrams per kilogram

N/A - not available/not applicable

Table 9

5th Street Disposal Area Surface Soil COC Health Based Remediation Goal Calculation

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Analyte	Preliminary Residential Health-Based Soil Remediation Goals (PSRG)[1] (MG/KG)	Carcinogen (c) or noncarcinogen (n)	EPA Res RSL - cancer (cancer risk = 10-6)	EPA Res. RSL - noncancer (hazard index = 1)	Target Organ	**Adjusted Residential**	
						Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (c) (MG/KG)	Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (n) (MG/KG)
Benzo(a)anthracene	1.5E-01	c	1.5E-01		N/A	**1.5E+00**	
Benzo(a)pyrene	1.5E-02	c	1.5E-02		N/A	**1.5E-01**	
Benzo(b)fluoranthene	1.5E-01	c	1.5E-01		N/A	**1.5E+00**	
Carbazole	N/A	c	2.4E+01		N/A	**2.4E+02**	
Dibenz(a,h)anthracene	1.5E-02	c	1.5E-02		N/A	**1.5E-01**	
Indeno(1,2,3-cd)pyrene	1.5E-01	c	1.5E-01		N/A	**1.5E+00**	
Aroclor-1254	1.0E+00	c, n	2.4E-01	1.1E+00	Ocular, Finger and Toe Nails, Antibodies	**1.0E+00**	1.1E+00
Aroclor-1260	1.0E+00	c	2.4E-01		N/A	**1.0E+00**	
Antimony	6.2E+00	n		3.1E+01	Blood, Longevity		**3.1E+01**
Arsenic	6.1E-01	c, n	6.7E-01	3.4E+01	Skin, Vascular	**6.1E+00**	3.4E+01
Cadmium	1.4E+01	c, n	2.1E+03	7.0E+01	Kidney	2.1E+04	**7.0E+01**
Iron	1.1E+04	n		5.5E+04	Gastrointestinal		**5.5E+04**
Lead	4.0E+02	n		4.0E+02	N/A		**4.0E+02**
Mercury	4.6E+00	n		2.3E+01	Immune System		**2.3E+01**
	PSRG Table (January 2014)	EPA RSL Table (May 2014)				Adjusted Remediation Goal	

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014).
Screening value for carbazole calculated using RSL calculator, and oral cancer slope factor of 2.0E-02 (mg/kg-day)[1] from USEPA's Health Affects Assessment Summary Tables, July 2007.

[2] Values from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January, 2014) adjusted as follows:

Cancer based PSRG adjustment

adjusted SRG = PSRG x 100/number of carcinogens = PSRG x 100/10 = PSRG x 10

Non-cancer based PSRG adjustment

adjusted SRG = PSRG x 5/number of non-carcinogens with same target organ; however, when > 5 chemicals effect same target organ then SRG=PSRG

number of analytes for each target organ:

ocular - 1, finger and toe nails - 1, antibodies - 1, blood - 1, longevity - 1, skin- 1, vascular - 1, kidney - 1, gastrointestinal - 1, immune system - 1

MG/KG - Milligrams per kilogram

N/A - not available/not applicable

Table 10

5th Street Disposal Area Subsurface Soil COC Health Based Remediation Goal Calculation

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Analyte	Preliminary Residential Health-Based Soil Remediation Goals (PSRG)[1] (MG/KG)	Carcinogen (c) or noncarcinogen (n)	EPA Res RSL - cancer (cancer risk = 10-6)	EPA Res. RSL - noncancer (hazard index = 1)	Target Organ	**Adjusted Residential**	
						Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (c) (MG/KG)	Adjusted Residential Health-Based Soil Remediation Goals (SRG)[2] (n) (MG/KG)
1,4-Dichlorobenzene	2.4E+00	c, n	2.6E+00	3.4E+03	Liver	**2.2E+01**	1.7E+03
Methylene chloride	5.6E+01	c, n	5.7E+01	3.5E+02	Liver	5.1E+02	**1.8E+02**
Benzo(a)anthracene	1.5E-01	c	1.5E-01		N/A	**1.4E+00**	
Benzo(a)pyrene	1.5E-02	c	1.5E-02		N/A	**1.4E-01**	
Benzo(b)fluoranthene	1.5E-01	c	1.5E-01		N/A	**1.4E+00**	
Dibenz(a,h)anthracene	1.5E-02	c	1.5E-02		N/A	**1.4E-01**	
Indeno(1,2,3-cd)pyrene	1.5E-01	c	1.5E-01		N/A	**1.4E+00**	
Aroclor-1254	1.0E+00	c, n	2.4E-01	1.1E+00	Ocular, Finger and Toe Nails, Antibodies	**1.0E+00**	1.1E+00
Aroclor-1260	1.0E+00	c	2.4E-01		N/A	**1.0E+00**	
Antimony	6.2E+00	n		3.1E+01	Blood, Longevity		**1.6E+01**
Arsenic	6.1E-01	c, n	6.7E-01	3.4E+01	Skin, Vascular	**5.5E+00**	3.4E+01
Cadmium	1.4E+01	c, n	2.1E+03	7.0E+01	Kidney	1.9E+04	**7.0E+01**
Cobalt	4.6E+00	n		2.3E+01	Thyroid		**2.3E+01**
Iron	1.1E+04	n		5.5E+04	Gastrointestinal		**5.5E+04**
Lead	4.0E+02	n		4.0E+02	N/A		**4.0E+02**
Mercury	4.6E+00	n		2.3E+01	Immune System		**2.3E+01**
Zinc	4.6E+03	n		3.9E+02	Blood		**1.2E+04**
	PSRG Table (January 2014)	EPA RSL Table (May 2014)				Adjusted Remediation Goal	

Notes:

[1] Values are from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January 2014).

[2] Values from the Inactive Hazardous Sites Branch Preliminary Soil Remediation Goals (PSRG) Table (NC DENR, January, 2014) adjusted as follows:

Cancer based PSRG adjustment

adjusted SRG = PSRG x 100/number of carcinogens = PSRG x 100/11 = PSRG x 9.1

Non-cancer based PSRG adjustment

adjusted SRG = PSRG x 5/number of non-carcinogens with same target organ; however, when > 5 chemicals effect same target organ then SRG=PSRG

number of analytes for each target organ:

liver - 2, body weight - 1, ocular - 1, finger and toe nails - 1, antibodies - 1, blood - 2, longevity - 1, skin- 1, vascular - 1, kidney - 1, thyroid - 1, gastrointestinal - 1, immune system - 1

MG/KG - Milligrams per kilogram

N/A - not available/not applicable

Table 11

2nd Street Disposal Area Soil Remediation Goal Selection

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

COC	Soil Background Criteria	Protection of Groundwater Soil Remediation Goal (SRG)	Surface Soil Adjusted Residential Health-Based SRG	Subsurface Soil Adjusted Residential Health-Based SRG	2nd Street Disposal Area Remedial Action SRG	Basis[1]
Semivolatile Organic Compounds (MG/KG)						
Benzo(a)anthracene	--	--	1.88	1.67	1.67	SB
Benzo(a)pyrene	--	--	0.188	0.167	0.167	SB
Benzo(b)fluoranthene	--	--	1.88	1.67	1.67	SB
Dibenz(a,h)anthracene	--	--	0.188	0.167	0.167	SB
Indeno(1,2,3-cd)pyrene	--	--	1.88	--	1.88	SS
Naphthalene	--	--	--	40	40	SB
Pesticide/Polychlorinated Biphenyls (MG/KG)						
Aroclor-1254	--	--	--	1	1	SB
Aroclor-1260	--	--	1	1	1	SS/SB
Total Metals (MG/KG)						
Antimony	--	0.9*	31	16	0.9	PG
Arsenic	3.74	5.8*	7.6	6.8	5.8	PG
Cadmium	0.878	--	70	35	35	SB
Cobalt	4.6	0.9	23	23	4.6	B
Copper	441	--	1,550	--	1,550	SS
Iron	14,100	--	27,500	55,000	27,500	SS
Lead	47.9	--	400	400	400	SS/SB
Manganese	412	65	--	1,800	412	B
Mercury	0.037	--	23	23	23	SS/SB
Silver	--	--	195	195	195	SS/SB
Vanadium	31.9	--	--	195	195	SB
Zinc	87.3	1200*	--	12,000	1,200	PG

Notes:

[1] Basis

B - Maximum background value selected; most conservative screening value above background conditions.

PG - Protection of Groundwater value selected as most conservative value

SS - Surface soil adjusted residential health-based SRG selected as most conservative value

SB - Subsurface soil adjusted residential health-based SRG selected as most conservative value

* Protection of Groundwater Soil Remediation Goal is currently applicable because the constituent was identified as a groundwater COPC due to a detection during the Phase I RI. However, no Phase I RI detections exceeded the groundwater regulatory standards. If Phase II RI groundwater concentrations are also less than the regulatory standard, constituent will not be retained as a groundwater COC and the Protection of Groundwater Soil Remediation Goal will no longer be applicable. As a result, the Remedial Action SRG will be revised.

MG/KG - Milligrams per kilogram

-- No applicable criterion; not a media COC; not a groundwater COPC therefore Protection of Groundwater does not apply.

Table 12

5th Street Disposal Area Soil Remediation Goal Selection

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

COC	Soil Background Criteria	Protection of Groundwater Soil Remediation Goal (SRG)	Surface Soil Adjusted Residential Health-Based SRG	Subsurface Soil Adjusted Residential Health-Based SRG	5th Street Disposal Area Remedial Action SRG	Basis[1]
Volatile Organic Compounds (MG/KG)						
1,4-Dichlorobenzene	--	0.07	--	22	0.07	PG
Methylene chloride	--	--	--	180	180	SB
Semivolatile Organic Compounds (MG/KG)						
Benzo(a)anthracene	--	--	1.5	1.36	1.36	SB
Benzo(a)pyrene	--	--	0.15	0.136	0.136	SB
Benzo(b)fluoranthene	--	--	1.5	1.36	1.36	SB
Carbazole	--	--	240	--	240	SS
Dibenz(a,h)anthracene	--	--	0.15	0.136	0.136	SB
Indeno(1,2,3-cd)pyrene	--	--	1.5	1.36	1.36	SB
Pesticide/Polychlorinated Biphenyls (MG/KG)						
Aroclor-1254	--	--	1	1	1	SS/SB
Aroclor-1260	--	--	1	1	1	SS/SB
Total Metals (MG/KG)						
Antimony	--	--	31	16	16	SB
Arsenic	3.74	5.8	6.1	5.5	5.5	SB
Cadmium	0.878	--	70	70	70	SS/SB
Cobalt	4.64	0.9	--	23	4.64	B
Iron	14,100	150	55,000	55,000	14,100	B
Lead	47.9	270	400	400	270	PG
Mercury	0.0366	--	23	23	23	SS/SB
Zinc	87.3	1,200	--	1,200	1,200	PG/SB

Notes:

[1] Basis

B - Maximum background value selected; most conservative screening value above background conditions.

PG - Protection of Groundwater value selected as most conservative value

SS - Surface soil adjusted residential health-based SRG selected as most conservative value

SB - Subsurface soil adjusted residential health-based SRG selected as most conservative value

* Protection of Groundwater Soil Remediation Goal is currently applicable because the constituent was identified as a groundwater COPC due to a detection during the Phase I RI. However, no Phase I RI detections exceeded the groundwater regulatory standards. If Phase II RI groundwater concentrations are also less than the regulatory standard, constituent will not be retained as a groundwater COC and the Protection of Groundwater Soil Remediation Goal will no longer be applicable. As a result, the Remedial Action SRG will be revised.

MG/KG - Milligrams per kilogram

-- No applicable criterion; not a media COC; not a groundwater COPC therefore Protection of Groundwater does not apply.

Table 13

2nd Street Disposal Area Remedial Action Soil Remediation Goals

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

COC	Remedial Action SRG (mg/kg)
Semivolatile Organic Compounds	
Benzo(a)anthracene	1.67
Benzo(a)pyrene	0.167
Benzo(b)fluoranthene	1.67
Dibenz(a,h)anthracene	0.167
Indeno(1,2,3-cd)pyrene	1.88
Naphthalene	40
Pesticide/Polychlorinated Biphenyls	
Aroclor-1254	1
Aroclor-1260	1
Total Metals	
Antimony	0.9
Arsenic	5.8
Cadmium	35
Cobalt	4.6
Copper	1,550
Iron	27,500
Lead	400
Manganese	412
Mercury	23
Silver	195
Vanadium	195
Zinc	1,200

Notes:

mg/kg - Milligrams per kilogram

Table 14

5th Street Disposal Area Remedial Action Soil Remediation Goals

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

COC	Remedial Action SRG (mg/kg)
Volatile Organic Compounds	
1,4-Dichlorobenzene	0.07
Methylene chloride	180
Semivolatile Organic Compounds	
Benzo(a)anthracene	1.36
Benzo(a)pyrene	0.136
Benzo(b)fluoranthene	1.36
Carbazole	240
Dibenz(a,h)anthracene	0.136
Indeno(1,2,3-cd)pyrene	1.36
Pesticide/Polychlorinated Biphenyls	
Aroclor-1254	1
Aroclor-1260	1
Total Metals	
Antimony	16
Arsenic	5.5
Cadmium	70
Cobalt	4.6
Iron	14,100
Lead	270
Mercury	23
Zinc	1,200

Notes:

mg/kg - Milligrams per kilogram

ATTACHMENT 3
Confirmation Sampling Analytical Data and Lab Report

Attachment 3

5th Street Disposal Area Remedial Action Confirmation Sampling

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Sample ID		TR-5TH-CSF01-0814	TR-5TH-CSF02-0814	TR-5TH-CSF03-0814	TR-5TH-CSF04-0814	TR-5TH-CSF05-0814	TR-5TH-CSF05D-0814	TR-5TH-CSF06-0814	TR-5TH-CSF07-0814	TR-5TH-CSF08-0814
Sample Date	**5th Street SRG**	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14
Chemical Name										
Volatile Organic Compounds (MG/KG)										
No Detections										
Semivolatile Organic Compounds (MG/KG)										
Benzo(a)pyrene	0.136	0.029 U	0.027 U	0.029 U	0.034 U	0.027 U	0.027 U	0.028 U	0.027 U	0.027 U
Polychlorinated Biphenyls (MG/KG)										
Aroclor-1254	1	0.021 U	0.02 U	0.03 JPQ	0.025 UQ	0.017 JPQ	0.02 U	0.021 U	0.02 U	0.032 JPQ
Aroclor-1260	1	0.012 J	0.014 J	0.13	0.035 J	0.047	0.02 UQ	0.023 J	0.02 UQ	0.1
Total Metals (MG/KG)										
Antimony	16	2.83 U	2.01 U	2.14 U	3.23 U	2.7 U	2.39 U	3.09 U	2.03 U	2.57 U
Arsenic	5.5	1.41 U	0.571 J	1.12 J	2.69 J	0.721 J	1.06 J	1.48 J	0.486 J	0.673 J
Cobalt	4.6	0.353 U	0.0935 J	0.738	2.62	0.289 J	1.04	1.08	0.145 J	0.329 J
Iron	14,100	425	517	1,650	5,850	1,760	2,570	2,920	657	1,050
Lead	270	1.62 J	2.16	2.16	10.7	22.3	10.8	9.15	2.01 J	7.58
Zinc	1,200	1.36 J	1.45	8.32	20.6	10	15.9	20.2	1.68	6.97

Notes:

J - Analyte present. Value may or may not be accurate or precise

P - Difference between the concentration on the two columns is greater than 25%; the lower of the two values is reported.

Q - One or more QC criteria outside acceptance limits

MG/KG - Milligrams per kilogram

U - The material was analyzed for, but not detected

Shading indicates detection

Bold text indicates exceedance of the 5th Street SRG

Attachment 3

5th Street Disposal Area Remedial Action Confirmation Sampling

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Sample ID		TR-5TH-CSF01-0814	TR-5TH-CSF02-(	TR-5TH-CSF09-0814	TR-5TH-CSW01-0814	TR-5TH-CSW02-0814	TR-5TH-CSW03-0814	TR-5TH-CSW04-0814	TR-5TH-CSW05-0814	TR-5TH-CSW06-0814
Sample Date	**5th Street SRG**	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14
Chemical Name										
Volatile Organic Compounds (MG/KG)										
No Detections										
Semivolatile Organic Compounds (MG/KG)										
Benzo(a)pyrene	0.136	0.029 U	0.027	0.027 U	0.033 U	0.033 J	0.035 U	0.032 U	0.027 U	0.029 U
Polychlorinated Biphenyls (MG/KG)										
Aroclor-1254	1	0.021 U	0.02	0.02 U	0.024 U	0.047 JPQ	0.026 U	0.023 U	0.02 U	0.021 U
Aroclor-1260	1	0.012 J	0.014	0.02 UQ	0.024 U	0.25	0.026 U	0.023 U	0.012 J	0.024 J
Total Metals (MG/KG)										
Antimony	16	2.83 U	2.01	2.72 U	3.4 U	2.54 U	3.09 U	3.2 U	2.84 U	2.46 U
Arsenic	5.5	1.41 U	0.571	1.36 U	4.84	1.81 J	4.43	1.6 U	1.42 U	1.18 J
Cobalt	4.6	0.353 U	0.0935	0.129 J	3.57	1.44	3.28	0.129 J	0.355 U	0.608 J
Iron	14,100	425	517	689 Q	8,750	3,550	7,590	675	379	2,200
Lead	270	1.62 J	2.16	2.07 J	5.52	11.6	6.33	1.87 J	0.733 J	6.73
Zinc	1,200	1.36 J	1.45	1.68	20.6	27.4	21.4	1.83	0.85 J	12.5

Notes:

J - Analyte present. Value may or may not be accurate or precise

P - Difference between the concentration on the two columns is greater than 25%; the lower of the two values is reported.

Q - One or more QC criteria outside acceptance limits

MG/KG - Milligrams per kilogram

U - The material was analyzed for, but not detected

Shading indicates detection

Bold text indicates exceedance of the 5th Street SRG

Attachment 3

5th Street Disposal Area Remedial Action Confirmation Sampling

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Sample ID		TR-5TH-CSF01-0814	TR-5TH-CSF02-(	TR-5TH-CSW07-0814	TR-5TH-CSW07D-0814	TR-5TH-CSW08-0814	TR-5TH-CSW09-0814	TR-5TH-CSW10-0814	TR-5TH-CSW11-0814	TR-5TH-CSW11D-0814
Sample Date	**5th Street SRG**	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14
Chemical Name										
Volatile Organic Compounds (MG/KG)										
No Detections										
Semivolatile Organic Compounds (MG/KG)										
Benzo(a)pyrene	0.136	0.029 U	0.027	0.03 U	0.027 U	0.027 U	0.027 U	0.028 U	0.018 J	0.027 U
Polychlorinated Biphenyls (MG/KG)										
Aroclor-1254	1	0.021 U	0.02	0.022 U	0.02 U	0.02 U	0.02 UQ	0.019 JPQ	0.02 U	0.02 U
Aroclor-1260	1	0.012 J	0.014	0.014 J	0.02 U	0.011 J	0.02 J	0.025 JQ	0.02 U	0.02 U
Total Metals (MG/KG)										
Antimony	16	2.83 U	2.01	2.55 U	2.48 U	2.54 U	2.56 U	2.56 UQ	2.72 U	2.47 U
Arsenic	5.5	1.41 U	0.571	1.48 J	1.15 J	1.27 U	1.28 U	2.16 J	1.36 U	0.645 J
Cobalt	4.6	0.353 U	0.0935	1.03	0.768	0.318 U	0.161 J	2.09	0.17 J	0.0999 J
Iron	14,100	425	517	2,870	2,190	505	662	5,140 Q	796	536
Lead	270	1.62 J	2.16	9.36	8.47	2.03 J	3.44	15.7	3.45	2.12 J
Zinc	1,200	1.36 J	1.45	15.5	10.2	1.22 J	2.95	25.1	2.3	1.42

Notes:

J - Analyte present. Value may or may not be accurate or precise

P - Difference between the concentration on the two columns is greater than 25%; the lower of the two values is reported.

Q - One or more QC criteria outside acceptance limits

MG/KG - Milligrams per kilogram

U - The material was analyzed for, but not detected

Shading indicates detection

Bold text indicates exceedance of the 5th Street SRG

Attachment 3

5th Street Disposal Area Remedial Action Confirmation Sampling

Towers Road Disposal Area

Harvey Point Defense Testing Activity

Hertford, North Carolina

Sample ID		TR-5TH-CSF01-0814	TR-5TH-CSF02-(	TR-5TH-CSW12-0814	TR-5TH-CSW13-0814	TR-5TH-CSW14-0814	TR-5TH-CSW15-0814
Sample Date	**5th Street SRG**	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14	8/1/14
Chemical Name							
Volatile Organic Compounds (MG/KG)							
No Detections							
Semivolatile Organic Compounds (MG/KG)							
Benzo(a)pyrene	0.136	0.029 U	0.027	0.028 U	0.027 U	0.034 U	0.034 U
Polychlorinated Biphenyls (MG/KG)							
Aroclor-1254	1	0.021 U	0.02	0.021 UQ	0.02 U	0.025 U	0.025 U
Aroclor-1260	1	0.012 J	0.014	0.02 J	0.02 U	0.025 U	0.025 U
Total Metals (MG/KG)							
Antimony	16	2.83 U	2.01	0.458 J	2.26 U	2.92 U	2.53 U
Arsenic	5.5	1.41 U	0.571	0.544 J	1.13 U	5.1	4.31
Cobalt	4.6	0.353 U	0.0935	0.887	0.0841 J	3.67	3.87
Iron	14,100	425	517	779	412	7,770	9,250
Lead	270	1.62 J	2.16	6.82	12.1	4.96	7.26
Zinc	1,200	1.36 J	1.45	8.44	1.96	22.4	24.1

Notes:

J - Analyte present. Value may or may not be accurate or precise

P - Difference between the concentration on the two columns is greater than 25%; the lower of the two values is reported.

Q - One or more QC criteria outside acceptance limits

MG/KG - Milligrams per kilogram

U - The material was analyzed for, but not detected

Shading indicates detection

Bold text indicates exceedance of the 5th Street SRG

TABLE OF CONTENTS

SECTION	PAGE
A404270 Final Report	2
A404270 Project Narrative	3
A404270 Chain of Custody	132
A404270 Login Report	138
EPA 8260B Data Summary Package	160
EPA 8260B Raw Data	263
EPA 8270D PAH SIM Data Summary Package	566
EPA 8270D PAH SIM Raw Data	638
EPA 8082A Data Summary Package	788
EPA 8082A Raw Data	933
EPA 6010C Data Summary Package	1176
EPA 6010CRaw Data	1231
SM 2320B Data Summary Package	367
SM 2320B Raw Data	374
SM 4500S2 F Data Summary Package	375
SM 4500S2 F Raw data	382
SM 5310B Data Summary Package	383
SM 5310B Raw Data	396
RSK-175 Data Summary Package	429
RSK-175 Raw Data	445

Environmental Conservation Laboratories, Inc.
10775 Central Port Drive
Orlando FL, 32824
Phone: 407.826.5314 FAX: 407.850.6945
www.encolabs.com

Monday, August 18, 2014

CH2M Hill, Inc. (CH025)

Attn: Juliana Dean

5701 Cleveland Street, Suite 200

Virginia Beach, VA 23462

RE: Laboratory Results for
Project Number: 458605, Project Name/Desc: CTO-0017 Towers Road Disposal-5th St.
ENCO Workorder(s): A404270

Dear Juliana Dean,

Enclosed is a copy of your laboratory report for test samples received by our laboratory on Tuesday, August 5, 2014.

Unless otherwise noted in an attached project narrative, all samples were received in acceptable condition and processed in accordance with the referenced methods/procedures. Results for these procedures apply only to the samples as submitted.

The analytical results contained in this report are in compliance with NELAC standards, except as noted in the project narrative. This report shall not be reproduced except in full, without the written approval of the Laboratory.

This report contains only those analyses performed by Environmental Conservation Laboratories. Unless otherwise noted, all analyses were performed at ENCO Orlando. Data from outside organizations will be reported under separate cover.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,

Marcia Colon

Project Manager

Enclosure(s)

PROJECT NARRATIVE

Client: CH2M Hill, Inc.
Project: CTO-0017 Towers Road Disposal
Project Number: 458605
ENCO Project ID: A404270/B403655
SDG: A404270-CTO0017

Overview

All samples submitted were analyzed by Environmental Conservation Laboratories, Inc. in accordance with the methods referenced in the laboratory report. Any particular difficulties encountered during sample handling and processing will be discussed in the Remarks section below.

Remarks

List of instruments used:

Analytical and Preparation Method	SOP Reference Instrument
EPA 8260B	OVGCMS 1/ OVGCMS 5
EPA 8270D PAH SIM	OSVGMS2
EPA 8082A	OSVGCECD2
EPA 6010C	JMICP1

Analysis: EPA 8260B
Sequence: AA29899
Affected Sample(s): AA29899-CAL3
Nonconformance: Manual integrations
Additional Information: The following manual integrations were performed in the sample(s) AA29899-CAL3 due to incorrect peak selection/peak not found: Isobutyl Alcohol.

Analysis: EPA 8260B
Sequence: AA29950
Affected Sample(s): AA29950-CAL1, AA29950-CAL4, AA29950-CAL5
Nonconformance: Manual integrations
Additional Information: The following manual integrations were performed in the sample(s) AA29950-CAL1 due to incorrect peak selection/peak not found: Acetonitrile, 1,4-Dichlorobenzene.
The following manual integrations were performed in the sample(s) AA29950-CAL4 due to poor integration (peak tailing, baseline selection): 2-Butanone.
The following manual integrations were performed in the sample(s) AA29950-CAL5 due to incorrect peak selection/peak not found: Isopropyl Ether

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Analysis: EPA 8260B
Sequence: AA29967
Affected Sample(s): 4H07029-BSD1
Nonconformance: Manual integrations
Additional Information: The following manual integrations were performed in the sample(s) 4H07029-BSD1 due to incorrect peak selection/peak not found: Acetonitrile, Vinyl Acetate, 1,4-Dichlorobezene.

Analysis: EPA 8270D PAH SIM
Sequence: AA29923
Affected Sample(s): TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW11-0814 [A404270-12], TR-5TH-CS-EB-080114 [A404270-29]
Nonconformance: Manual integrations

PROJECT NARRATIVE

Additional Information: The following manual integrations were performed in the sample(s) TR-5TH-CS-EB-080114 [A404270-29] due to incorrect peak selection/peak not found: Benzo(a)pyrene.
The following manual integrations were performed in the sample(s) TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW11-0814 [A404270-12] due to incorrect peak selection/peak not found: Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoroanthene.

Analysis: EPA 8270D PAH SIM
Sequence: AA29951
Affected Sample(s): TR-5th-CSF02-0814 [A404270-23], TR-5th-CSF08-0814 [A404270-27]
Nonconformance: Manual integrations
Additional Information: The following manual integrations were performed in the sample(s) TR-5th-CSF02-0814 [A404270-23] due to incorrect peak selection/peak not found: Chrysene, Benzo(b)fluoranthene, Benzo(k)fluoroanthene.
The following manual integrations were performed in the sample(s) TR-5th-CSF08-0814 [A404270-27] due to incorrect peak selection/peak not found: Benzo(b)fluoranthene, Benzo(k)fluoroanthene.

Analysis: EPA 8260B
Affected Sample(s): TR-5th-CSW01-0814 [A404270-01], TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW03-0814 [A404270-03], TR-5th-CSW05-0814 [A404270-05], TR-5th-CSW06-0814 [A404270-06], TR-5th-CSW07-0814 [A404270-07], TR-5th-CSW07D-0814 [A404270-08], TR-5th-CSW08-0814 [A404270-09], TR-5th-CSW09-0814 [A404270-10], TR-5th-CSW10-0814 [A404270-11], TR-5th-CSW11-0814 [A404270-12], TR-5th-CSW11D-0814 [A404270-13], TR-5th-CSW12-0814 [A404270-14], TR-5th-CSW13-0814 [A404270-15], TR-5th-CSW14-0814 [A404270-16], TR-5th-CSW15-0814 [A404270-18], TR-5th-CSF01-0814 [A404270-19], TR-5th-CSF02-0814 [A404270-20], TR-5th-CSF03-0814 [A404270-21RE1], TR-5th-CSF04-0814 [A404270-22], TR-5th-CSF05-0814 [A404270-23], TR-5th-CSF05D-0814 [A404270-24], TR-5th-CSF06-0814 [A404270-25], TR-5th-CSF07-0814 [A404270-26], TR-5th-CSF08-0814 [A404270-27], TR-5th-CSF09-0814 [A404270-28], 4H06021-BLK1, 4H06021-BS1, 4H06021-BSD1, 4H06032-BLK1, 4H06032-BS1, 4H06032-MS1, 4H06032-MSD1, 4H07018-BLK1, 4H07018-BS1, 4H07018-MS1, 4H07018-MSD1, 4H08021-BLK1, 4H08021-BS1, 4H08021-BSD1
Nonconformance: The surrogate recovery was outside acceptance limits for 4-Bromofluorobenzene.

Analysis:EPA 8260B
Affected Samples: 4H07018-MS1, 4H07018-MSD1, TR-5th-CSW10-0814 [A404270-11], 4H06032-MS1, 4H06032-MSD1, TR-5th-CSF09-0814 [A404270-28]
Nonconformance: The spike recovery was outside acceptance limits for 1,4-Dichlorobenzene for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

Analysis:EPA 8260B
Affected Samples: TR-5th-CSF03-0814 [A404270-21], TR-5th-CSF03-0814 [A404270-21RE1]
Nonconformance: The internal standards,Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5, and 1,4-Dichlorobenzene-d4 failed low. The sample was re-analyzed for confirmation. In the rerun the internal standards were within acceptable limits. Both sets of data are reported.

Analysis:EPA 8260B
Affected Samples: TR-5th-CSW03-0814 [A404270-03]
Nonconformance: The internal standard,Chlorobenzene-d5 failed low. This internal standard is not associated with any of the analytes reported in these samples; thus, impact on data quality is minimal.

Analysis: EPA 8082A
Affected Sample(s): TR-5th-CSW01-0814 [A404270-01], TR-5th-CSW03-0814 [A404270-03], TR-5th-CSW07D-0814 [A404270-08], TR-5th-CSW11-0814 [A404270-12], TR-5th-CSW11D-0814 [A404270-13], TR-5th-CSW13-0814 [A404270-15], TR-5th-CSW14-0814 [A404270-16], 4H06001-MS1, 4H06001-MSD1, 4H06006-BS1,
Nonconformance: The surrogate recovery was outside acceptance limits for Decachlorobiphenyl.

PROJECT NARRATIVE

Analysis: EPA 8082A
Affected Sample(s): TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW02-0814 [A404270-02RE1], TR-5th-CSW05-0814 [A404270-05], TR-5th-CSW05-0814 [A404270-05RE1], TR-5th-CSW06-0814 [A404270-06], TR-5th-CSW06-0814 [A404270-06RE1], TR-5th-CSW08-0814 [A404270-09], TR-5th-CSW08-0814 [A404270-09RE1], TR-5th-CSF01-0814 [A404270-19], TR-5th-CSF01-0814 [A404270-19RE1], TR-5th-CSF02-0814 [A404270-20], TR-5th-CSF02-0814 [A404270-20RE1], TR-5th-CSF03-0814 [A404270-21], TR-5th-CSF03-0814 [A404270-21RE1]
Nonconformance: The surrogate recovery was outside acceptance limits for Decachlorobiphenyl. The sample was re-extracted and re-analyzed for confirmation. In the rerun, the surrogate recovery was outside acceptance limits for Decachlorobiphenyl, suspect matrix interference. Both sets of data are reported.

Analysis: EPA 8082A
Affected Sample(s): TR-5th-CSW09-0814 [A404270-10], TR-5th-CSW09-0814 [A404270-10RE1], TR-5th-CSW10-0814 [A404270-11], TR-5th-CSW10-0814 [A404270-11RE1], TR-5th-CSW12-0814 [A404270-14], TR-5th-CSW12-0814 [A404270-14RE1]
Nonconformance: The surrogate recovery was outside acceptance limits for Decachlorobiphenyl. The sample was re-extracted and re-analyzed for confirmation. In the rerun, the surrogate recovery was within acceptable limits for Decachlorobiphenyl. Both sets of data are reported.

Analysis: EPA 8082A
Affected Sample(s): TR-5th-CSF05-0814 [A404270-23], TR-5th-CSF05-0814 [A404270-23RE1], TR-5th-CSF06-0814 [A404270-25], TR-5th-CSF06-0814 [A404270-25RE1]
Nonconformance: The sample was re-extracted and re-analyzed for confirmation. In the rerun, the surrogate recovery was outside acceptance limits for Decachlorobiphenyl, suspect matrix interference. Both sets of data are reported.

Analysis: EPA 8082A
Affected Sample(s): TR-5th-CSF08-0814 [A404270-27], TR-5th-CSF08-0814 [A404270-27RE1]
Nonconformance: The sample was re-extracted and re-analyzed for confirmation. Both sets of data are reported.

Analysis:EPA 8082A
Affected Samples: TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW02-0814 [A404270-02RE1], TR-5th-CSW09-0814 [A404270-10RE1], TR-5th-CSW10-0814 [A404270-11], TR-5th-CSW10-0814 [A404270-11RE1], TR-5th-CSW12-0814 [A404270-14], TR-5th-CSW12-0814 [A404270-14RE1], TR-5th-CSF03-0814 [A404270-21], TR-5th-CSF03-0814 [A404270-21RE1], TR-5th-CSF04-0814 [A404270-22], TR-5th-CSF04-0814 [A404270-22RE1], TR-5th-CSF05-0814 [A404270-23], TR-5th-CSF05-0814 [A404270-23RE1], TR-5th-CSF08-0814 [A404270-27], TR-5th-CSF08-0814 [A404270-27RE1]
Nonconformance: Confirmation result exceeds 40% RPD for PCB-1254, lower result was reported.

Analysis:EPA 8082A
Affected Samples: TR-5th-CSW02-0814 [A404270-02], TR-5th-CSW02-0814 [A404270-02RE1], TR-5th-CSW10-0814 [A404270-11], TR-5th-CSW10-0814 [A404270-11RE1], TR-5th-CSF03-0814 [A404270-21], TR-5th-CSF03-0814 [A404270-21RE1], TR-5th-CSF05-0814 [A404270-23RE1], TR-5th-CSF08-0814 [A404270-27], TR-5th-CSF08-0814 [A404270-27RE1]
Nonconformance: This flag is used for pesticide and Aroclor target compounds when there is greater than 25% difference for detected concentrations between the two GC columns for PCB-1254. The lower of the two values is reported and flagged with a "P". The "P" flag is not used unless a compound is identified on both columns.

Analysis:EPA 8082A
Affected Samples: 4H06006-BS1, TR-5th-CSF05D-0814 [A404270-24], TR-5th-CSF06-0814 [A404270-25], TR-5th-CSF07-0814 [A404270-26], TR-5th-CSF09-0814 [A404270-28]
Nonconformance: The associated laboratory control sample exhibited high bias for PCB-1260; since the result is ND, the impact on data quality is minimal.

PROJECT NARRATIVE

Analysis:EPA 8082A
Affected Samples: 4H06006-BS1, TR-5th-CSF04-0814 [A404270-22], TR-5th-CSF05-0814 [A404270-23], 4H08042-BS1, TR-5th-CSF04-0814 [A404270-22RE1], TR-5th-CSF05-0814 [A404270-23RE1]
Nonconformance: Result is estimated for PCB-1260 due to bias in the associated laboratory control sample. The sample was re-extracted and re-analyzed for confirmation. At the time of the finalization of the data package the reruns were not completed, the rerun results will follow.

Analysis:EPA 8082A
Affected Samples: 4H06006-BS1, TR-5th-CSF08-0814 [A404270-27], 4H13024-BS1, TR-5th-CSF08-0814 [A404270-27RE1]
Nonconformance: Result is estimated for PCB-1260 due to bias in the associated laboratory control sample.

Analysis: EPA 6010C
Affected Samples: A404270-01 (TR-5TH-CSW01-0814)[B403655-01], A404270-02 (TR-5TH-CSW02-0814)[B403655-02], A404270-03 (TR-5TH-CSW03-0814)[B403655-03], A404270-04 (TR-5TH-CSW04-0814)[B403655-04], A404270-05 (TR-5TH-CSW05-0814)[B403655-05], A404270-06 (TR-5TH-CSW06-0814)[B403655-06], A404270-07 (TR-5TH-CSW07-0814)[B403655-07], A404270-08 (TR-5TH-CSW07D-0814)[B403655-08], A404270-09 (TR-5TH-CSW08-0814)[B403655-09], A404270-10 (TR-5TH-CSW09-0814)[B403655-10], A404270-11 (TR-5TH-CSW010-0814)[B403655-11], A404270-12 (TR-5TH-CSW11-0814)[B403655-12], A404270-13 (TR-5TH-CSW11D-0814)[B403655-13], A404270-14 (TR-5TH-CSW12-0814)[B403655-14], A404270-15 (TR-5TH-CSW13-0814)[B403655-15], A404270-16 (TR-5TH-CSW14-0814)[B403655-16], A404270-18 (TR-5TH-CSW15-0814)[B403655-17], A404270-19 (TR-5TH-CSF01-0814)[B403655-18], A404270-20 (TR-5TH-CSF02-0814)[B403655-19], A404270-21 (TR-5TH-CSF03-0814)[B403655-20]
Nonconformance: The laboratory blank 4H06003-BLK1 had a concentration of antimony and iron above the DL but below the PQL. The concentration of antimony and iron found in the laboratory blank was less than half of the reporting limit which is acceptable by DOD QSM 4.2.

Analysis: EPA 6010C
Affected Samples: A404270-22 (TR-5TH-CSF04-0814)[B403655-21], A404270-23 (TR-5TH-CSF05-0814)[B403655-22], A404270-24 (TR-5TH-CSF05D-0814)[B403655-23], A404270-25 (TR-5TH-CSF06-0814)[B403655-24], A404270-26 (TR-5TH-CSF07-0814)[B403655-25], A404270-27 (TR-5TH-CSF08-0814)[B403655-26], A404270-28 (TR-5TH-CSF09-0814)[B403655-27]
Nonconformance: The laboratory blank 4H06004-BLK1 had a concentration of iron above the DL but below the PQL. The concentration of iron found in the laboratory blank was less than half of the reporting limit which is acceptable by DOD QSM 4.2.

Analysis: EPA 6010C
Affected Samples: A404270-11 (TR-5TH-CSW010-0814)[B403655-11], 4H06003-MS1, 4H06003-MSD1
Nonconformance: The matrix spike and matrix spike duplicate had recoveries that were outside acceptance limits for antimony, but by virtue of a laboratory control sample being in control, the laboratory has demonstrated to be in control of its internal process.

Analysis: EPA 6010C
Affected Samples: A404270-11 (TR-5TH-CSW010-0814)[B403655-11], 4H06003-MS1, 4H06003-MSD1
Nonconformance: The sample selected for matrix spiking had high levels of the target analyte iron, rendering the spike used invalid. This may be reflected in matrix spike and matrix spike duplicate recoveries outside of acceptance limits, but is not a reflection of laboratory performance; the laboratory control sample (LCS) passed acceptance criteria, and therefore the analytical system is considered to be in control.

Analysis: EPA 6010C
Affected Samples: A404270-28 (TR-5TH-CSF09-0814)[B403655-27], 4H06004-MS1, 4H06004-MSD1
Nonconformance: The sample selected for matrix spiking had high levels of the target analyte iron, rendering the spike used invalid. This may be reflected in matrix spike and matrix spike duplicate recoveries outside of acceptance limits, but is not a reflection of laboratory performance; the laboratory control sample (LCS) passed acceptance criteria, and therefore the analytical system is considered to be in control.

PROJECT NARRATIVE

Analysis: EPA 6010C
Affected Samples: A404270-01 (TR-5TH-CSW01-0814)[B403655-01], A404270-02 (TR-5TH-CSW02-0814)[B403655-02], A404270-03 (TR-5TH-CSW03-0814)[B403655-03], A404270-04 (TR-5TH-CSW04-0814)[B403655-04], A404270-05 (TR-5TH-CSW05-0814)[B403655-05], A404270-06 (TR-5TH-CSW06-0814)[B403655-06], A404270-07 (TR-5TH-CSW07-0814)[B403655-07], A404270-08 (TR-5TH-CSW07D-0814)[B403655-08], A404270-09 (TR-5TH-CSW08-0814)[B403655-09], A404270-10 (TR-5TH-CSW09-0814)[B403655-10], A404270-11 (TR-5TH-CSW010-0814)[B403655-11], A404270-12 (TR-5TH-CSW11-0814)[B403655-12], A404270-13 (TR-5TH-CSW11D-0814)[B403655-13], A404270-14 (TR-5TH-CSW12-0814)[B403655-14], A404270-15 (TR-5TH-CSW13-0814)[B403655-15], A404270-16 (TR-5TH-CSW14-0814)[B403655-16], A404270-18 (TR-5TH-CSW15-0814)[B403655-17], A404270-19 (TR-5TH-CSF01-0814)[B403655-18], A404270-20 (TR-5TH-CSF02-0814)[B403655-19], A404270-21 (TR-5TH-CSF03-0814)[B403655-20], A404270-22 (TR-5TH-CSF04-0814)[B403655-21], A404270-23 (TR-5TH-CSF05-0814)[B403655-22], A404270-24 (TR-5TH-CSF05D-0814)[B403655-23], A404270-25 (TR-5TH-CSF06-0814)[B403655-24], A404270-26 (TR-5TH-CSF07-0814)[B403655-25], A404270-27 (TR-5TH-CSF08-0814)[B403655-26], A404270-28 (TR-5TH-CSF09-0814)[B403655-27]
Nonconformance: Iron was detected above the calibration range for the above samples. High calibration verification standard was analyzed and passed all acceptance criteria.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy package and in computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures.

Marcia Colon
August 18, 2014
Project Manager

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SAMPLE SUMMARY/LABORATORY CHRONICLE

Client ID:	TR-5TH-CSW01-0814	Lab ID: A404270-01	Sampled: 08/01/14 12:10	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 10:44
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 19:21
EPA 8260B	08/15/14		08/06/14	00:00	8/6/2014 15:52
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 11:34

Client ID:	TR-5TH-CSW02-0814	Lab ID: A404270-02	Sampled: 08/01/14 12:15	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 10:51
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 19:33
EPA 8260B	08/15/14		08/06/14	00:00	8/6/2014 16:21
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 11:56

Client ID:	TR-5TH-CSW02-0814	Lab ID: A404270-02RE1	Sampled: 08/01/14 12:15	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 06:28

Client ID:	TR-5TH-CSW03-0814	Lab ID: A404270-03	Sampled: 08/01/14 12:20	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 10:53
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 19:45
EPA 8260B	08/15/14		08/06/14	00:00	8/6/2014 16:49
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 12:19

Client ID:	TR-5TH-CSW04-0814	Lab ID: A404270-04	Sampled: 08/01/14 12:30	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 10:55
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 19:57
EPA 8260B	08/15/14		08/06/14	00:00	8/6/2014 17:18
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 12:41

Client ID:	TR-5TH-CSW05-0814	Lab ID: A404270-05	Sampled: 08/01/14 12:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 10:58
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 20:09
EPA 8260B	08/15/14		08/06/14	00:00	8/6/2014 17:46
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 13:03

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Client ID:	TR-5TH-CSW05-0814	Lab ID: A404270-05RE1	Sampled: 08/01/14 12:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 10:30

Client ID:	TR-5TH-CSW06-0814	Lab ID: A404270-06	Sampled: 08/01/14 12:40	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:01
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 20:45
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 11:17
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 13:25

Client ID:	TR-5TH-CSW06-0814	Lab ID: A404270-06RE1	Sampled: 08/01/14 12:40	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 06:40

Client ID:	TR-5TH-CSW07-0814	Lab ID: A404270-07	Sampled: 08/01/14 12:50	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:03
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 20:58
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 13:11
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 13:47

Client ID:	TR-5TH-CSW07D-0814	Lab ID: A404270-08	Sampled: 08/01/14 12:50	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:05
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 21:10
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 13:39
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 14:09

Client ID:	TR-5TH-CSW08-0814	Lab ID: A404270-09	Sampled: 08/01/14 12:55	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:07
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 21:22
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 14:08
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 14:31

Client ID:	TR-5TH-CSW08-0814	Lab ID: A404270-09RE1	Sampled: 08/01/14 12:55	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 10:42

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Client ID:	TR-5TH-CSW09-0814	Lab ID: A404270-10	Sampled: 08/01/14 13:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:10
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 21:34
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 14:36
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 14:53

Client ID:	TR-5TH-CSW09-0814	Lab ID: A404270-10RE1	Sampled: 08/01/14 13:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 06:52

Client ID:	TR-5TH-CSW10-0814	Lab ID: A404270-11	Sampled: 08/01/14 11:30	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:13
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 19:08
EPA 8260B	08/15/14		08/07/14	10:57	8/7/2014 23:03
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 11:12

Client ID:	TR-5TH-CSW10-0814	Lab ID: A404270-11RE1	Sampled: 08/01/14 11:30	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 06:16

Client ID:	TR-5TH-CSW11-0814	Lab ID: A404270-12	Sampled: 08/01/14 11:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:20
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 21:46
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 15:05
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 15:14

Client ID:	TR-5TH-CSW11D-0814	Lab ID: A404270-13	Sampled: 08/01/14 11:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:23
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 21:58
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 15:34
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 15:36

Client ID:	TR-5TH-CSW12-0814	Lab ID: A404270-14	Sampled: 08/01/14 11:40	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:25
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 22:10
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 16:02
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 15:58

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Client ID:	TR-5TH-CSW12-0814	Lab ID: A404270-14RE1	Sampled: 08/01/14 11:40	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 07:04

Client ID:	TR-5TH-CSW13-0814	Lab ID: A404270-15	Sampled: 08/01/14 11:45	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:28
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 22:23
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 16:31
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 16:20

Client ID:	TR-5TH-CSW14-0814	Lab ID: A404270-16	Sampled: 08/01/14 11:50	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:31
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 22:35
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 16:59
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 16:42

Client ID:	TR-5TH-CSW15-0814	Lab ID: A404270-18	Sampled: 08/01/14 12:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:33
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 23:11
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 17:27
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 17:04

Client ID:	TR-5TH-CSF01-0814	Lab ID: A404270-19	Sampled: 08/01/14 13:10	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:35
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 23:23
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 17:55
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 17:25

Client ID:	TR-5TH-CSF01-0814	Lab ID: A404270-19RE1	Sampled: 08/01/14 13:10	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 10:54

Client ID:	TR-5TH-CSF02-0814	Lab ID: A404270-20	Sampled: 08/01/14 13:15	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:38
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 23:35
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 18:23
EPA 8270D	08/15/14	09/14/14	08/05/14	16:30	8/6/2014 17:47

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Client ID: TR-5TH-CSF02-0814	Lab ID: A404270-20RE1	Sampled: 08/01/14 13:15	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 11:06

Client ID: TR-5TH-CSF03-0814	Lab ID: A404270-21	Sampled: 08/01/14 13:20	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:00	8/7/2014 11:41
EPA 8082A	08/01/15	08/01/15	08/06/14	06:30	8/7/2014 23:47
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 18:51
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 13:24

Client ID: TR-5TH-CSF03-0814	Lab ID: A404270-21RE1	Sampled: 08/01/14 13:20	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 07:16
EPA 8260B	08/15/14		08/08/14	00:00	8/8/2014 12:53

Client ID: TR-5TH-CSF04-0814	Lab ID: A404270-22	Sampled: 08/01/14 13:30	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:00
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 09:02
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 19:19
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 13:46

Client ID: TR-5TH-CSF04-0814	Lab ID: A404270-22RE1	Sampled: 08/01/14 13:30	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 07:52

Client ID: TR-5TH-CSF05-0814	Lab ID: A404270-23	Sampled: 08/01/14 13:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:02
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 09:51
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 19:47
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 14:08

Client ID: TR-5TH-CSF05-0814	Lab ID: A404270-23RE1	Sampled: 08/01/14 13:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/09/14	08:42	8/13/2014 08:04

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Client ID: TR-5TH-CSF05D-0814	Lab ID: A404270-24	Sampled: 08/01/14 13:35	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:05
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 10:03
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 20:15
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 14:30

Client ID: TR-5TH-CSF06-0814	Lab ID: A404270-25	Sampled: 08/01/14 13:45	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:07
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 10:15
EPA 8260B	08/15/14		08/07/14	10:57	8/7/2014 23:31
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 14:51

Client ID: TR-5TH-CSF06-0814	Lab ID: A404270-25RE1	Sampled: 08/01/14 13:45	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 11:30

Client ID: TR-5TH-CSF07-0814	Lab ID: A404270-26	Sampled: 08/01/14 13:50	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:09
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 10:27
EPA 8260B	08/15/14		08/07/14	10:57	8/7/2014 23:59
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 15:13

Client ID: TR-5TH-CSF08-0814	Lab ID: A404270-27	Sampled: 08/01/14 14:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:12
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 10:39
EPA 8260B	08/15/14		08/07/14	10:57	8/8/2014 00:27
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 15:35

Client ID: TR-5TH-CSF08-0814	Lab ID: A404270-27RE1	Sampled: 08/01/14 14:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8082A	08/01/15	08/01/15	08/13/14	14:00	8/14/2014 11:18

Client ID: TR-5TH-CSF09-0814	Lab ID: A404270-28	Sampled: 08/01/14 14:05	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:02	8/7/2014 12:19
EPA 8082A	08/01/15	08/01/15	08/06/14	09:27	8/8/2014 08:50
EPA 8260B	08/15/14		08/06/14	14:56	8/7/2014 11:46
EPA 8270D	08/15/14	09/14/14	08/05/14	18:30	8/7/2014 13:02

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Client ID: TR-5TH-CS-EB-080114	Lab ID: A404270-29	Sampled: 08/01/14 21:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)		Prep Date/Time(s)		Analysis Date/Time(s)
EPA 6010C	01/28/15		08/06/14	09:04	8/7/2014 10:30
EPA 8082A	08/01/15	08/01/15	08/06/14	13:54	8/8/2014 07:46
EPA 8270D	08/08/14	09/14/14	08/05/14	20:30	8/6/2014 09:23

Client ID: TR-5TH-CS-TB-080114	Lab ID: A404270-30	Sampled: 08/01/14 00:00	Received: 08/05/14 06:45

Parameter	Hold Date/Time(s)	Prep Date/Time(s)		Analysis Date/Time(s)
EPA 8260B	08/15/14	08/07/14	00:00	8/7/2014 19:29

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ANALYTICAL RESULTS

Description:	TR-5TH-CSW01-0814	**Lab Sample ID:**	A404270-01	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	81.8

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0021	EPA 8260B	08/06/14 15:52	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*65*	*1*	*50.0*	*129 %*	*85-120*	*4H06021*	*EPA 8260B*	*08/06/14 15:52*	*KKW*	*QS-03*
Dibromofluoromethane	*46*	*1*	*50.0*	*93 %*	*74-133*	*4H06021*	*EPA 8260B*	*08/06/14 15:52*	*KKW*	
Toluene-d8	*54*	*1*	*50.0*	*108 %*	*85-115*	*4H06021*	*EPA 8260B*	*08/06/14 15:52*	*KKW*	

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Description:	TR-5TH-CSW01-0814	**Lab Sample ID:**	A404270-01	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	81.8

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.033	U	mg/kg dry	1	0.018	0.033	0.043	EPA 8270D	08/06/14 11:34	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.8*	*1*	*2.41*	*76 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 11:34*	*jjb*	

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Description:	TR-5TH-CSW01-0814	**Lab Sample ID:**	A404270-01	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	81.8

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.024	U	mg/kg dry	1	0.020	0.024	0.049	EPA 8082A	08/07/14 19:21	RC	
PCB-1260 [11096-82-5] ^	<0.024	U	mg/kg dry	1	0.013	0.024	0.049	EPA 8082A	08/07/14 19:21	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.032*	*1*	*0.0408*	*79 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 19:21*	*RC*	
Decachlorobiphenyl	*0.061*	*1*	*0.0408*	*149 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 19:21*	*RC*	*QS-03*

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Description:	TR-5TH-CSW01-0814	**Lab Sample ID:**	A404270-01	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	81.8

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<3.40	U	mg/kg dry	1	0.481	3.40	6.79	EPA 6010C	08/07/14 10:44	ACV	
Arsenic [7440-38-2] ^	**4.84**		mg/kg dry	1	0.605	1.70	3.40	EPA 6010C	08/07/14 10:44	ACV	
Cobalt [7440-48-4] ^	**3.57**		mg/kg dry	1	0.122	0.425	0.849	EPA 6010C	08/07/14 10:44	ACV	
Iron [7439-89-6] ^	**8750**		mg/kg dry	1	0.425	4.25	8.49	EPA 6010C	08/07/14 10:44	ACV	
Lead [7439-92-1] ^	**5.52**		mg/kg dry	1	0.187	1.70	3.40	EPA 6010C	08/07/14 10:44	ACV	
Zinc [7440-66-6] ^	**20.6**		mg/kg dry	1	0.442	0.849	1.70	EPA 6010C	08/07/14 10:44	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW02-0814	**Lab Sample ID:**	A404270-02	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0025	EPA 8260B	08/06/14 16:21	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*63*	*1*	*50.0*	*125 %*	*85-120*	*4H06021*	*EPA 8260B*	*08/06/14 16:21*	*KKW*	*QS-03*
Dibromofluoromethane	*48*	*1*	*50.0*	*95 %*	*74-133*	*4H06021*	*EPA 8260B*	*08/06/14 16:21*	*KKW*	
Toluene-d8	*53*	*1*	*50.0*	*105 %*	*85-115*	*4H06021*	*EPA 8260B*	*08/06/14 16:21*	*KKW*	

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Description:	TR-5TH-CSW02-0814	**Lab Sample ID:**	A404270-02	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	**0.033**	J	mg/kg dry	1	0.019	0.034	0.045	EPA 8270D	08/06/14 11:56	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.1*	*1*	*2.54*	*81 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 11:56*	*jjb*	

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Description:	TR-5TH-CSW02-0814	**Lab Sample ID:**	A404270-02	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	**0.047**	JPQ	mg/kg dry	1	0.020	0.025	0.051	EPA 8082A	08/07/14 19:33	RC	GC-07
PCB-1254 [11097-69-1] ^	**0.036**	JPQ	mg/kg dry	1	0.020	0.025	0.051	EPA 8082A	08/13/14 06:28	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.25**		mg/kg dry	1	0.014	0.025	0.051	EPA 8082A	08/07/14 19:33	RC	
PCB-1260 [11096-82-5] ^	**0.19**		mg/kg dry	1	0.014	0.025	0.051	EPA 8082A	08/13/14 06:28	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.034*	*1*	*0.0427*	*79 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 19:33*	*RC*	
2,4,5,6-TCMX	*0.020*	*1*	*0.0426*	*46 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 06:28*	*JJB*	
Decachlorobiphenyl	*0.020*	*1*	*0.0426*	*48 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 06:28*	*JJB*	*QS-03*
Decachlorobiphenyl	*0.057*	*1*	*0.0427*	*133 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 19:33*	*RC*	*QS-03*

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Description:	TR-5TH-CSW02-0814	**Lab Sample ID:**	A404270-02	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.54	U	mg/kg dry	1	0.360	2.54	5.09	EPA 6010C	08/07/14 10:51	ACV	
Arsenic [7440-38-2] ^	**1.81**	J	mg/kg dry	1	0.453	1.27	2.54	EPA 6010C	08/07/14 10:51	ACV	
Cobalt [7440-48-4] ^	**1.44**		mg/kg dry	1	0.0916	0.318	0.636	EPA 6010C	08/07/14 10:51	ACV	
Iron [7439-89-6] ^	**3550**		mg/kg dry	1	0.318	3.18	6.36	EPA 6010C	08/07/14 10:51	ACV	
Lead [7439-92-1] ^	**11.6**		mg/kg dry	1	0.140	1.27	2.54	EPA 6010C	08/07/14 10:51	ACV	
Zinc [7440-66-6] ^	**27.4**		mg/kg dry	1	0.331	0.636	1.27	EPA 6010C	08/07/14 10:51	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW03-0814	**Lab Sample ID:**	A404270-03	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.0

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0026	EPA 8260B	08/06/14 16:49	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*61*	*1*	*50.0*	*122 %*	*85-120*	*4H06021*	*EPA 8260B*	*08/06/14 16:49*	*KKW*	*QS-03*
Dibromofluoromethane	*47*	*1*	*50.0*	*94 %*	*74-133*	*4H06021*	*EPA 8260B*	*08/06/14 16:49*	*KKW*	
Toluene-d8	*53*	*1*	*50.0*	*106 %*	*85-115*	*4H06021*	*EPA 8260B*	*08/06/14 16:49*	*KKW*	

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Description:	TR-5TH-CSW03-0814	**Lab Sample ID:**	A404270-03	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.0

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.035	U	mg/kg dry	1	0.019	0.035	0.045	EPA 8270D	08/06/14 12:19	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.56*	*79 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 12:19*	*jjb*	

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Description:	TR-5TH-CSW03-0814	**Lab Sample ID:**	A404270-03	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.0

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.026	U	mg/kg dry	1	0.021	0.026	0.051	EPA 8082A	08/07/14 19:45	RC	
PCB-1260 [11096-82-5] ^	<0.026	U	mg/kg dry	1	0.014	0.026	0.051	EPA 8082A	08/07/14 19:45	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.033*	*1*	*0.0425*	*77 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 19:45*	*RC*	
Decachlorobiphenyl	*0.062*	*1*	*0.0425*	*145 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 19:45*	*RC*	*QS-03*

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Description:	TR-5TH-CSW03-0814	**Lab Sample ID:**	A404270-03	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.0

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<3.09	U	mg/kg dry	1	0.437	3.09	6.18	EPA 6010C	08/07/14 10:53	ACV	
Arsenic [7440-38-2] ^	**4.43**		mg/kg dry	1	0.550	1.54	3.09	EPA 6010C	08/07/14 10:53	ACV	
Cobalt [7440-48-4] ^	**3.28**		mg/kg dry	1	0.111	0.386	0.772	EPA 6010C	08/07/14 10:53	ACV	
Iron [7439-89-6] ^	**7590**		mg/kg dry	1	0.386	3.86	7.72	EPA 6010C	08/07/14 10:53	ACV	
Lead [7439-92-1] ^	**6.33**		mg/kg dry	1	0.170	1.54	3.09	EPA 6010C	08/07/14 10:53	ACV	
Zinc [7440-66-6] ^	**21.4**		mg/kg dry	1	0.402	0.772	1.54	EPA 6010C	08/07/14 10:53	ACV	

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Description:	TR-5TH-CSW04-0814	**Lab Sample ID:**	A404270-04	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	85.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0026	EPA 8260B	08/06/14 17:18	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*60*	*1*	*50.0*	*120 %*	*85-120*	*4H06021*	*EPA 8260B*	*08/06/14 17:18*	*KKW*	
Dibromofluoromethane	*45*	*1*	*50.0*	*91 %*	*74-133*	*4H06021*	*EPA 8260B*	*08/06/14 17:18*	*KKW*	
Toluene-d8	*52*	*1*	*50.0*	*103 %*	*85-115*	*4H06021*	*EPA 8260B*	*08/06/14 17:18*	*KKW*	

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Description:	TR-5TH-CSW04-0814	**Lab Sample ID:**	A404270-04	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	85.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.032	U	mg/kg dry	1	0.018	0.032	0.041	EPA 8270D	08/06/14 12:41	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*2.2*	*1*	*2.34*	*94 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 12:41*	*jjb*	

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Description:	TR-5TH-CSW04-0814	**Lab Sample ID:**	A404270-04	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	85.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.023	U	mg/kg dry	1	0.019	0.023	0.047	EPA 8082A	08/07/14 19:57	RC	
PCB-1260 [11096-82-5] ^	<0.023	U	mg/kg dry	1	0.013	0.023	0.047	EPA 8082A	08/07/14 19:57	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.024*	*1*	*0.0387*	*63 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 19:57*	*RC*	
Decachlorobiphenyl	*0.047*	*1*	*0.0387*	*120 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 19:57*	*RC*	

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Description:	TR-5TH-CSW04-0814	**Lab Sample ID:**	A404270-04	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	85.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<3.20	U	mg/kg dry	1	0.453	3.20	6.40	EPA 6010C	08/07/14 10:55	ACV	
Arsenic [7440-38-2] ^	<1.60	U	mg/kg dry	1	0.570	1.60	3.20	EPA 6010C	08/07/14 10:55	ACV	
Cobalt [7440-48-4] ^	**0.129**	J	mg/kg dry	1	0.115	0.400	0.800	EPA 6010C	08/07/14 10:55	ACV	
Iron [7439-89-6] ^	**675**		mg/kg dry	1	0.400	4.00	8.00	EPA 6010C	08/07/14 10:55	ACV	
Lead [7439-92-1] ^	**1.87**	J	mg/kg dry	1	0.176	1.60	3.20	EPA 6010C	08/07/14 10:55	ACV	
Zinc [7440-66-6] ^	**1.83**		mg/kg dry	1	0.416	0.800	1.60	EPA 6010C	08/07/14 10:55	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW05-0814	**Lab Sample ID:**	A404270-05	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.3

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0012	U	mg/kg dry	1	0.0005	0.0012	0.0023	EPA 8260B	08/06/14 17:46	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*64*	*1*	*50.0*	*128 %*	*85-120*	*4H06021*	*EPA 8260B*	*08/06/14 17:46*	*KKW*	*QS-03*
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*74-133*	*4H06021*	*EPA 8260B*	*08/06/14 17:46*	*KKW*	
Toluene-d8	*54*	*1*	*50.0*	*107 %*	*85-115*	*4H06021*	*EPA 8260B*	*08/06/14 17:46*	*KKW*	

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Description:	TR-5TH-CSW05-0814	**Lab Sample ID:**	A404270-05	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.3

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 13:03	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.00*	*94 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 13:03*	*jjb*	

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Description:	TR-5TH-CSW05-0814	**Lab Sample ID:**	A404270-05	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 20:09	RC	
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/14/14 10:30	JJB	
PCB-1260 [11096-82-5] ^	**0.012**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 20:09	RC	
PCB-1260 [11096-82-5] ^	**0.013**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/14/14 10:30	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.031*	*1*	*0.0336*	*93 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 20:09*	*RC*	
2,4,5,6-TCMX	*0.041*	*1*	*0.0335*	*122 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 10:30*	*JJB*	
Decachlorobiphenyl	*0.045*	*1*	*0.0335*	*134 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 10:30*	*JJB*	*QM-14*
Decachlorobiphenyl	*0.053*	*1*	*0.0336*	*159 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 20:09*	*RC*	*QS-03*

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Description:	TR-5TH-CSW05-0814	**Lab Sample ID:**	A404270-05	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.3

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.84	U	mg/kg dry	1	0.402	2.84	5.68	EPA 6010C	08/07/14 10:58	ACV	
Arsenic [7440-38-2] ^	<1.42	U	mg/kg dry	1	0.505	1.42	2.84	EPA 6010C	08/07/14 10:58	ACV	
Cobalt [7440-48-4] ^	<0.355	U	mg/kg dry	1	0.102	0.355	0.709	EPA 6010C	08/07/14 10:58	ACV	
Iron [7439-89-6] ^	**379**		mg/kg dry	1	0.355	3.55	7.09	EPA 6010C	08/07/14 10:58	ACV	
Lead [7439-92-1] ^	**0.733**	J	mg/kg dry	1	0.156	1.42	2.84	EPA 6010C	08/07/14 10:58	ACV	
Zinc [7440-66-6] ^	**0.850**	J	mg/kg dry	1	0.369	0.709	1.42	EPA 6010C	08/07/14 10:58	ACV	

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Description:	TR-5TH-CSW06-0814	**Lab Sample ID:**	A404270-06	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/07/14 11:17	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*76*	*1*	*50.0*	*152 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 11:17*	*KKW*	*QS-03*
Dibromofluoromethane	*51*	*1*	*50.0*	*101 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 11:17*	*KKW*	
Toluene-d8	*56*	*1*	*50.0*	*111 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 11:17*	*KKW*	

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Description:	TR-5TH-CSW06-0814	**Lab Sample ID:**	A404270-06	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.029	U	mg/kg dry	1	0.016	0.029	0.037	EPA 8270D	08/06/14 13:25	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*2.0*	*1*	*2.11*	*93 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 13:25*	*jjb*	

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Description:	TR-5TH-CSW06-0814	**Lab Sample ID:**	A404270-06	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/07/14 20:45	RC	
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/13/14 06:40	JJB	
PCB-1260 [11096-82-5] ^	**0.021**	J	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/07/14 20:45	RC	
PCB-1260 [11096-82-5] ^	**0.024**	J	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/13/14 06:40	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.023*	*1*	*0.0352*	*66 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 20:45*	*RC*	
2,4,5,6-TCMX	*0.035*	*1*	*0.0358*	*97 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 06:40*	*JJB*	
Decachlorobiphenyl	*0.043*	*1*	*0.0358*	*119 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 06:40*	*JJB*	
Decachlorobiphenyl	*0.050*	*1*	*0.0352*	*143 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 20:45*	*RC*	*QS-03*

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Description:	TR-5TH-CSW06-0814	**Lab Sample ID:**	A404270-06	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.46	U	mg/kg dry	1	0.348	2.46	4.92	EPA 6010C	08/07/14 11:01	ACV	
Arsenic [7440-38-2] ^	**1.18**	J	mg/kg dry	1	0.437	1.23	2.46	EPA 6010C	08/07/14 11:01	ACV	
Cobalt [7440-48-4] ^	**0.608**	J	mg/kg dry	1	0.0885	0.307	0.614	EPA 6010C	08/07/14 11:01	ACV	
Iron [7439-89-6] ^	**2200**		mg/kg dry	1	0.307	3.07	6.14	EPA 6010C	08/07/14 11:01	ACV	
Lead [7439-92-1] ^	**6.73**		mg/kg dry	1	0.135	1.23	2.46	EPA 6010C	08/07/14 11:01	ACV	
Zinc [7440-66-6] ^	**12.5**		mg/kg dry	1	0.319	0.614	1.23	EPA 6010C	08/07/14 11:01	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW07-0814	**Lab Sample ID:**	A404270-07	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	90.2

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0022	EPA 8260B	08/07/14 13:11	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*67*	*1*	*50.0*	*135 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 13:11*	*KKW*	*QS-03*
Dibromofluoromethane	*45*	*1*	*50.0*	*90 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 13:11*	*KKW*	
Toluene-d8	*51*	*1*	*50.0*	*103 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 13:11*	*KKW*	

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Description:	TR-5TH-CSW07-0814	**Lab Sample ID:**	A404270-07	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	90.2

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.030	U	mg/kg dry	1	0.017	0.030	0.039	EPA 8270D	08/06/14 13:47	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*2.1*	*1*	*2.22*	*95 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 13:47*	*jjb*	

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Description:	TR-5TH-CSW07-0814	**Lab Sample ID:**	A404270-07	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	90.2

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.022	U	mg/kg dry	1	0.018	0.022	0.044	EPA 8082A	08/07/14 20:58	RC	
PCB-1260 [11096-82-5] ^	**0.014**	J	mg/kg dry	1	0.012	0.022	0.044	EPA 8082A	08/07/14 20:58	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.029*	*1*	*0.0363*	*78 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 20:58*	*RC*	
Decachlorobiphenyl	*0.044*	*1*	*0.0363*	*121 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 20:58*	*RC*	

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Description:	TR-5TH-CSW07-0814	**Lab Sample ID:**	A404270-07	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	90.2

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.55	U	mg/kg dry	1	0.361	2.55	5.10	EPA 6010C	08/07/14 11:03	ACV	
Arsenic [7440-38-2] ^	**1.48**	J	mg/kg dry	1	0.454	1.27	2.55	EPA 6010C	08/07/14 11:03	ACV	
Cobalt [7440-48-4] ^	**1.03**		mg/kg dry	1	0.0917	0.318	0.637	EPA 6010C	08/07/14 11:03	ACV	
Iron [7439-89-6] ^	**2870**		mg/kg dry	1	0.318	3.18	6.37	EPA 6010C	08/07/14 11:03	ACV	
Lead [7439-92-1] ^	**9.36**		mg/kg dry	1	0.140	1.27	2.55	EPA 6010C	08/07/14 11:03	ACV	
Zinc [7440-66-6] ^	**15.5**		mg/kg dry	1	0.331	0.637	1.27	EPA 6010C	08/07/14 11:03	ACV	

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Description:	TR-5TH-CSW07D-0814	**Lab Sample ID:**	A404270-08	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.4

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0012	U	mg/kg dry	1	0.0005	0.0012	0.0024	EPA 8260B	08/07/14 13:39	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*75*	*1*	*50.0*	*151 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 13:39*	*KKW*	*QS-03*
Dibromofluoromethane	*52*	*1*	*50.0*	*104 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 13:39*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*115 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 13:39*	*KKW*	

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Description:	TR-5TH-CSW07D-0814	**Lab Sample ID:**	A404270-08	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.4

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.036	EPA 8270D	08/06/14 14:09	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.01*	*100 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 14:09*	*jjb*	

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Description:	TR-5TH-CSW07D-0814	**Lab Sample ID:**	A404270-08	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.4

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.041	EPA 8082A	08/07/14 21:10	RC	
PCB-1260 [11096-82-5] ^	<0.020	U	mg/kg dry	1	0.011	0.020	0.041	EPA 8082A	08/07/14 21:10	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.031*	*1*	*0.0339*	*93 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 21:10*	*RC*	
Decachlorobiphenyl	*0.048*	*1*	*0.0339*	*142 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 21:10*	*RC*	*QS-03*

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Description:	TR-5TH-CSW07D-0814	**Lab Sample ID:**	A404270-08	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.4

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.48	U	mg/kg dry	1	0.351	2.48	4.96	EPA 6010C	08/07/14 11:05	ACV	
Arsenic [7440-38-2] ^	**1.15**	J	mg/kg dry	1	0.441	1.24	2.48	EPA 6010C	08/07/14 11:05	ACV	
Cobalt [7440-48-4] ^	**0.768**		mg/kg dry	1	0.0893	0.310	0.620	EPA 6010C	08/07/14 11:05	ACV	
Iron [7439-89-6] ^	**2190**		mg/kg dry	1	0.310	3.10	6.20	EPA 6010C	08/07/14 11:05	ACV	
Lead [7439-92-1] ^	**8.47**		mg/kg dry	1	0.136	1.24	2.48	EPA 6010C	08/07/14 11:05	ACV	
Zinc [7440-66-6] ^	**10.2**		mg/kg dry	1	0.322	0.620	1.24	EPA 6010C	08/07/14 11:05	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW08-0814	**Lab Sample ID:**	A404270-09	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:55	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0023	EPA 8260B	08/07/14 14:08	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*75*	*1*	*50.0*	*150 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 14:08*	*KKW*	*QS-03*
Dibromofluoromethane	*53*	*1*	*50.0*	*106 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 14:08*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*113 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 14:08*	*KKW*	

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Description:	TR-5TH-CSW08-0814	**Lab Sample ID:**	A404270-09	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:55	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 14:31	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.7*	*1*	*2.00*	*86 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 14:31*	*jjb*	

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Description:	TR-5TH-CSW08-0814	**Lab Sample ID:**	A404270-09	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:55	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 21:22	RC	
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/14/14 10:42	JJB	
PCB-1260 [11096-82-5] ^	**0.011**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 21:22	RC	
PCB-1260 [11096-82-5] ^	**0.013**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/14/14 10:42	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.029*	*1*	*0.0337*	*85 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 21:22*	*RC*	
2,4,5,6-TCMX	*0.038*	*1*	*0.0333*	*114 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 10:42*	*JJB*	
Decachlorobiphenyl	*0.043*	*1*	*0.0333*	*130 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 10:42*	*JJB*	*QM-14*
Decachlorobiphenyl	*0.043*	*1*	*0.0337*	*128 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 21:22*	*RC*	*QS-03*

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Description:	TR-5TH-CSW08-0814	**Lab Sample ID:**	A404270-09	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:55	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.54	U	mg/kg dry	1	0.360	2.54	5.09	EPA 6010C	08/07/14 11:07	ACV	
Arsenic [7440-38-2] ^	<1.27	U	mg/kg dry	1	0.453	1.27	2.54	EPA 6010C	08/07/14 11:07	ACV	
Cobalt [7440-48-4] ^	<0.318	U	mg/kg dry	1	0.0916	0.318	0.636	EPA 6010C	08/07/14 11:07	ACV	
Iron [7439-89-6] ^	**505**		mg/kg dry	1	0.318	3.18	6.36	EPA 6010C	08/07/14 11:07	ACV	
Lead [7439-92-1] ^	**2.03**	J	mg/kg dry	1	0.140	1.27	2.54	EPA 6010C	08/07/14 11:07	ACV	
Zinc [7440-66-6] ^	**1.22**	J	mg/kg dry	1	0.331	0.636	1.27	EPA 6010C	08/07/14 11:07	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW09-0814	**Lab Sample ID:**	A404270-10	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0012	U	mg/kg dry	1	0.0005	0.0012	0.0024	EPA 8260B	08/07/14 14:36	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*68*	*1*	*50.0*	*136 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 14:36*	*KKW*	*QS-03*
Dibromofluoromethane	*48*	*1*	*50.0*	*97 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 14:36*	*KKW*	
Toluene-d8	*55*	*1*	*50.0*	*110 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 14:36*	*KKW*	

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Description:	TR-5TH-CSW09-0814	**Lab Sample ID:**	A404270-10	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 14:53	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.02*	*92 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 14:53*	*jjb*	

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Description:	TR-5TH-CSW09-0814	**Lab Sample ID:**	A404270-10	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 21:34	RC	
PCB-1254 [11097-69-1] ^	<0.020	UQ	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/13/14 06:52	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.025**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 21:34	RC	
PCB-1260 [11096-82-5] ^	**0.020**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/13/14 06:52	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.032*	*1*	*0.0337*	*96 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 21:34*	*RC*	
2,4,5,6-TCMX	*0.028*	*1*	*0.0336*	*84 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 06:52*	*JJB*	
Decachlorobiphenyl	*0.036*	*1*	*0.0336*	*108 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 06:52*	*JJB*	
Decachlorobiphenyl	*0.053*	*1*	*0.0337*	*157 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 21:34*	*RC*	*QS-03*

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Description:	TR-5TH-CSW09-0814	**Lab Sample ID:**	A404270-10	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.56	U	mg/kg dry	1	0.362	2.56	5.12	EPA 6010C	08/07/14 11:10	ACV	
Arsenic [7440-38-2] ^	<1.28	U	mg/kg dry	1	0.456	1.28	2.56	EPA 6010C	08/07/14 11:10	ACV	
Cobalt [7440-48-4] ^	**0.161**	J	mg/kg dry	1	0.0922	0.320	0.640	EPA 6010C	08/07/14 11:10	ACV	
Iron [7439-89-6] ^	**662**		mg/kg dry	1	0.320	3.20	6.40	EPA 6010C	08/07/14 11:10	ACV	
Lead [7439-92-1] ^	**3.44**		mg/kg dry	1	0.141	1.28	2.56	EPA 6010C	08/07/14 11:10	ACV	
Zinc [7440-66-6] ^	**2.95**		mg/kg dry	1	0.333	0.640	1.28	EPA 6010C	08/07/14 11:10	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW10-0814	**Lab Sample ID:**	A404270-11	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.5

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	UQ	mg/kg dry	1	0.0005	0.0010	0.0021	EPA 8260B	08/07/14 23:03	KKW	QM-07

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*74*	*1*	*50.0*	*148 %*	*85-120*	*4H07018*	*EPA 8260B*	*08/07/14 23:03*	*KKW*	*QS-03*
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*74-133*	*4H07018*	*EPA 8260B*	*08/07/14 23:03*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*113 %*	*85-115*	*4H07018*	*EPA 8260B*	*08/07/14 23:03*	*KKW*	

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Description:	TR-5TH-CSW10-0814	**Lab Sample ID:**	A404270-11	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.5

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.028	U	mg/kg dry	1	0.016	0.028	0.036	EPA 8270D	08/06/14 11:12	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.07*	*99 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 11:12*	*jjb*	

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Description:	TR-5TH-CSW10-0814	**Lab Sample ID:**	A404270-11	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.5

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	**0.037**	JPQ	mg/kg dry	1	0.017	0.021	0.041	EPA 8082A	08/07/14 19:08	RC	GC-07
PCB-1254 [11097-69-1] ^	**0.019**	JPQ	mg/kg dry	1	0.017	0.021	0.041	EPA 8082A	08/13/14 06:16	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.15**		mg/kg dry	1	0.011	0.021	0.041	EPA 8082A	08/07/14 19:08	RC	
PCB-1260 [11096-82-5] ^	**0.025**	JQ	mg/kg dry	1	0.011	0.021	0.041	EPA 8082A	08/13/14 06:16	JJB	QM-07

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
2,4,5,6-TCMX	*0.036*	*1*	*0.0347*	*103 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 19:08*	*RC*	
2,4,5,6-TCMX	*0.034*	*1*	*0.0343*	*99 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 06:16*	*JJB*	
Decachlorobiphenyl	*0.042*	*1*	*0.0343*	*121 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 06:16*	*JJB*	
Decachlorobiphenyl	*0.056*	*1*	*0.0347*	*160 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 19:08*	*RC*	*QS-03*

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Description:	TR-5TH-CSW10-0814	**Lab Sample ID:**	A404270-11	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.5

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.56	UQ	mg/kg dry	1	0.362	2.56	5.12	EPA 6010C	08/07/14 11:13	ACV	QM-07
Arsenic [7440-38-2] ^	**2.16**	J	mg/kg dry	1	0.456	1.28	2.56	EPA 6010C	08/07/14 11:13	ACV	
Cobalt [7440-48-4] ^	**2.09**		mg/kg dry	1	0.0921	0.320	0.640	EPA 6010C	08/07/14 11:13	ACV	
Iron [7439-89-6] ^	**5140**	Q	mg/kg dry	1	0.320	3.20	6.40	EPA 6010C	08/07/14 11:13	ACV	QM-02
Lead [7439-92-1] ^	**15.7**		mg/kg dry	1	0.141	1.28	2.56	EPA 6010C	08/07/14 11:13	ACV	
Zinc [7440-66-6] ^	**25.1**		mg/kg dry	1	0.333	0.640	1.28	EPA 6010C	08/07/14 11:13	ACV	

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Description:	TR-5TH-CSW11-0814	**Lab Sample ID:**	A404270-12	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0020	EPA 8260B	08/07/14 15:05	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*69*	*1*	*50.0*	*138 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 15:05*	*KKW*	*QS-03*
Dibromofluoromethane	*44*	*1*	*50.0*	*88 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 15:05*	*KKW*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 15:05*	*KKW*	

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Description:	TR-5TH-CSW11-0814	**Lab Sample ID:**	A404270-12	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	**0.018**	J	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 15:14	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.01*	*102 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 15:14*	*jjb*	

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Description:	TR-5TH-CSW11-0814	**Lab Sample ID:**	A404270-12	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 21:46	RC	
PCB-1260 [11096-82-5] ^	<0.020	U	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 21:46	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.029*	*1*	*0.0335*	*87 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 21:46*	*RC*	
Decachlorobiphenyl	*0.048*	*1*	*0.0335*	*143 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 21:46*	*RC*	*QS-03*

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Description:	TR-5TH-CSW11-0814	**Lab Sample ID:**	A404270-12	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.72	U	mg/kg dry	1	0.384	2.72	5.43	EPA 6010C	08/07/14 11:20	ACV	
Arsenic [7440-38-2] ^	<1.36	U	mg/kg dry	1	0.484	1.36	2.72	EPA 6010C	08/07/14 11:20	ACV	
Cobalt [7440-48-4] ^	**0.170**	J	mg/kg dry	1	0.0978	0.340	0.679	EPA 6010C	08/07/14 11:20	ACV	
Iron [7439-89-6] ^	**796**		mg/kg dry	1	0.340	3.40	6.79	EPA 6010C	08/07/14 11:20	ACV	
Lead [7439-92-1] ^	**3.45**		mg/kg dry	1	0.149	1.36	2.72	EPA 6010C	08/07/14 11:20	ACV	
Zinc [7440-66-6] ^	**2.30**		mg/kg dry	1	0.353	0.679	1.36	EPA 6010C	08/07/14 11:20	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW11D-0814	**Lab Sample ID:**	A404270-13	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0020	EPA 8260B	08/07/14 15:34	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*70*	*1*	*50.0*	*140 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 15:34*	*KKW*	*QS-03*
Dibromofluoromethane	*47*	*1*	*50.0*	*94 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 15:34*	*KKW*	
Toluene-d8	*54*	*1*	*50.0*	*107 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 15:34*	*KKW*	

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Description:	TR-5TH-CSW11D-0814	**Lab Sample ID:**	A404270-13	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 15:36	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.02*	*97 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 15:36*	*jjb*	

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Description:	TR-5TH-CSW11D-0814	**Lab Sample ID:**	A404270-13	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 21:58	RC	
PCB-1260 [11096-82-5] ^	<0.020	U	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 21:58	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.037*	*1*	*0.0337*	*110 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 21:58*	*RC*	
Decachlorobiphenyl	*0.049*	*1*	*0.0337*	*146 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 21:58*	*RC*	*QS-03*

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Description:	TR-5TH-CSW11D-0814	**Lab Sample ID:**	A404270-13	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.9

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.47	U	mg/kg dry	1	0.349	2.47	4.93	EPA 6010C	08/07/14 11:23	ACV	
Arsenic [7440-38-2] ^	**0.645**	J	mg/kg dry	1	0.439	1.23	2.47	EPA 6010C	08/07/14 11:23	ACV	
Cobalt [7440-48-4] ^	**0.0999**	J	mg/kg dry	1	0.0888	0.308	0.617	EPA 6010C	08/07/14 11:23	ACV	
Iron [7439-89-6] ^	**536**		mg/kg dry	1	0.308	3.08	6.17	EPA 6010C	08/07/14 11:23	ACV	
Lead [7439-92-1] ^	**2.12**	J	mg/kg dry	1	0.136	1.23	2.47	EPA 6010C	08/07/14 11:23	ACV	
Zinc [7440-66-6] ^	**1.42**		mg/kg dry	1	0.321	0.617	1.23	EPA 6010C	08/07/14 11:23	ACV	

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Description:	TR-5TH-CSW12-0814	**Lab Sample ID:**	A404270-14	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0021	EPA 8260B	08/07/14 16:02	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*73*	*1*	*50.0*	*145 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 16:02*	*KKW*	*QS-03*
Dibromofluoromethane	*49*	*1*	*50.0*	*97 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 16:02*	*KKW*	
Toluene-d8	*56*	*1*	*50.0*	*113 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 16:02*	*KKW*	

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Description:	TR-5TH-CSW12-0814	**Lab Sample ID:**	A404270-14	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.028	U	mg/kg dry	1	0.016	0.028	0.036	EPA 8270D	08/06/14 15:58	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.07*	*95 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 15:58*	*jjb*	

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Description:	TR-5TH-CSW12-0814	**Lab Sample ID:**	A404270-14	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.021	UQ	mg/kg dry	1	0.017	0.021	0.041	EPA 8082A	08/07/14 22:10	RC	GC-07
PCB-1254 [11097-69-1] ^	<0.021	UQ	mg/kg dry	1	0.017	0.021	0.041	EPA 8082A	08/13/14 07:04	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.019**	J	mg/kg dry	1	0.011	0.021	0.041	EPA 8082A	08/07/14 22:10	RC	
PCB-1260 [11096-82-5] ^	**0.020**	J	mg/kg dry	1	0.011	0.021	0.041	EPA 8082A	08/13/14 07:04	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.021*	*1*	*0.0345*	*62 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 22:10*	*RC*	
2,4,5,6-TCMX	*0.025*	*1*	*0.0350*	*72 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 07:04*	*JJB*	
Decachlorobiphenyl	*0.042*	*1*	*0.0350*	*120 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 07:04*	*JJB*	
Decachlorobiphenyl	*0.046*	*1*	*0.0345*	*133 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 22:10*	*RC*	*QS-03*

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Description:	TR-5TH-CSW12-0814	**Lab Sample ID:**	A404270-14	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:40	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	96.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	**0.458**	J	mg/kg dry	1	0.381	2.69	5.38	EPA 6010C	08/07/14 11:25	ACV	
Arsenic [7440-38-2] ^	**0.544**	J	mg/kg dry	1	0.479	1.34	2.69	EPA 6010C	08/07/14 11:25	ACV	
Cobalt [7440-48-4] ^	**0.887**		mg/kg dry	1	0.0968	0.336	0.672	EPA 6010C	08/07/14 11:25	ACV	
Iron [7439-89-6] ^	**779**		mg/kg dry	1	0.336	3.36	6.72	EPA 6010C	08/07/14 11:25	ACV	
Lead [7439-92-1] ^	**6.82**		mg/kg dry	1	0.148	1.34	2.69	EPA 6010C	08/07/14 11:25	ACV	
Zinc [7440-66-6] ^	**8.44**		mg/kg dry	1	0.350	0.672	1.34	EPA 6010C	08/07/14 11:25	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW13-0814	**Lab Sample ID:**	A404270-15	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0020	EPA 8260B	08/07/14 16:31	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*69*	*1*	*50.0*	*138 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 16:31*	*KKW*	*QS-03*
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 16:31*	*KKW*	
Toluene-d8	*55*	*1*	*50.0*	*111 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 16:31*	*KKW*	

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Description:	TR-5TH-CSW13-0814	**Lab Sample ID:**	A404270-15	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 16:20	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.7*	*1*	*1.99*	*85 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 16:20*	*jjb*	

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Description:	TR-5TH-CSW13-0814	**Lab Sample ID:**	A404270-15	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 22:23	RC	
PCB-1260 [11096-82-5] ^	<0.020	U	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 22:23	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.030*	*1*	*0.0333*	*91 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 22:23*	*RC*	
Decachlorobiphenyl	*0.044*	*1*	*0.0333*	*131 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 22:23*	*RC*	*QS-03*

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Description:	TR-5TH-CSW13-0814	**Lab Sample ID:**	A404270-15	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.26	U	mg/kg dry	1	0.319	2.26	4.51	EPA 6010C	08/07/14 11:28	ACV	
Arsenic [7440-38-2] ^	<1.13	U	mg/kg dry	1	0.401	1.13	2.26	EPA 6010C	08/07/14 11:28	ACV	
Cobalt [7440-48-4] ^	**0.0841**	J	mg/kg dry	1	0.0812	0.282	0.564	EPA 6010C	08/07/14 11:28	ACV	
Iron [7439-89-6] ^	**412**		mg/kg dry	1	0.282	2.82	5.64	EPA 6010C	08/07/14 11:28	ACV	
Lead [7439-92-1] ^	**12.1**		mg/kg dry	1	0.124	1.13	2.26	EPA 6010C	08/07/14 11:28	ACV	
Zinc [7440-66-6] ^	**1.96**		mg/kg dry	1	0.293	0.564	1.13	EPA 6010C	08/07/14 11:28	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW14-0814	**Lab Sample ID:**	A404270-16	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	79.6

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/07/14 16:59	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*71*	*1*	*50.0*	*143 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 16:59*	*KKW*	*QS-03*
Dibromofluoromethane	*46*	*1*	*50.0*	*93 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 16:59*	*KKW*	
Toluene-d8	*54*	*1*	*50.0*	*108 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 16:59*	*KKW*	

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Description:	TR-5TH-CSW14-0814	**Lab Sample ID:**	A404270-16	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	79.6

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.034	U	mg/kg dry	1	0.019	0.034	0.044	EPA 8270D	08/06/14 16:42	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*2.2*	*1*	*2.48*	*88 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 16:42*	*jjb*	

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Description:	TR-5TH-CSW14-0814	**Lab Sample ID:**	A404270-16	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	79.6

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.025	U	mg/kg dry	1	0.020	0.025	0.050	EPA 8082A	08/07/14 22:35	RC	
PCB-1260 [11096-82-5] ^	<0.025	U	mg/kg dry	1	0.014	0.025	0.050	EPA 8082A	08/07/14 22:35	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.031*	*1*	*0.0418*	*75 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 22:35*	*RC*	
Decachlorobiphenyl	*0.059*	*1*	*0.0418*	*141 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 22:35*	*RC*	*QS-03*

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Description:	TR-5TH-CSW14-0814	**Lab Sample ID:**	A404270-16	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 11:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	79.6

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.92	U	mg/kg dry	1	0.414	2.92	5.85	EPA 6010C	08/07/14 11:31	ACV	
Arsenic [7440-38-2] ^	**5.10**		mg/kg dry	1	0.520	1.46	2.92	EPA 6010C	08/07/14 11:31	ACV	
Cobalt [7440-48-4] ^	**3.67**		mg/kg dry	1	0.105	0.365	0.731	EPA 6010C	08/07/14 11:31	ACV	
Iron [7439-89-6] ^	**7770**		mg/kg dry	1	0.365	3.65	7.31	EPA 6010C	08/07/14 11:31	ACV	
Lead [7439-92-1] ^	**4.96**		mg/kg dry	1	0.161	1.46	2.92	EPA 6010C	08/07/14 11:31	ACV	
Zinc [7440-66-6] ^	**22.4**		mg/kg dry	1	0.380	0.731	1.46	EPA 6010C	08/07/14 11:31	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSW15-0814	**Lab Sample ID:**	A404270-18	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.9

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0025	EPA 8260B	08/07/14 17:27	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*70*	*1*	*50.0*	*140 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 17:27*	*KKW*	*QS-03*
Dibromofluoromethane	*47*	*1*	*50.0*	*94 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 17:27*	*KKW*	
Toluene-d8	*53*	*1*	*50.0*	*107 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 17:27*	*KKW*	

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Description:	TR-5TH-CSW15-0814	**Lab Sample ID:**	A404270-18	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.9

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.034	U	mg/kg dry	1	0.019	0.034	0.044	EPA 8270D	08/06/14 17:04	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.3*	*1*	*2.52*	*92 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 17:04*	*jjb*	

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Description:	TR-5TH-CSW15-0814	**Lab Sample ID:**	A404270-18	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.9

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.025	U	mg/kg dry	1	0.020	0.025	0.051	EPA 8082A	08/07/14 23:11	RC	
PCB-1260 [11096-82-5] ^	<0.025	U	mg/kg dry	1	0.014	0.025	0.051	EPA 8082A	08/07/14 23:11	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.025*	*1*	*0.0422*	*60 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 23:11*	*RC*	
Decachlorobiphenyl	*0.049*	*1*	*0.0422*	*116 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 23:11*	*RC*	

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Description:	TR-5TH-CSW15-0814	**Lab Sample ID:**	A404270-18	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 12:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	78.9

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.53	U	mg/kg dry	1	0.359	2.53	5.07	EPA 6010C	08/07/14 11:33	ACV	
Arsenic [7440-38-2] ^	**4.31**		mg/kg dry	1	0.451	1.27	2.53	EPA 6010C	08/07/14 11:33	ACV	
Cobalt [7440-48-4] ^	**3.87**		mg/kg dry	1	0.0912	0.317	0.634	EPA 6010C	08/07/14 11:33	ACV	
Iron [7439-89-6] ^	**9250**		mg/kg dry	1	0.317	3.17	6.34	EPA 6010C	08/07/14 11:33	ACV	
Lead [7439-92-1] ^	**7.26**		mg/kg dry	1	0.139	1.27	2.53	EPA 6010C	08/07/14 11:33	ACV	
Zinc [7440-66-6] ^	**24.1**		mg/kg dry	1	0.329	0.634	1.27	EPA 6010C	08/07/14 11:33	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSF01-0814	**Lab Sample ID:**	A404270-19	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.3

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/07/14 17:55	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*74*	*1*	*50.0*	*148 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 17:55*	*KKW*	*QS-03*
Dibromofluoromethane	*50*	*1*	*50.0*	*101 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 17:55*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*114 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 17:55*	*KKW*	

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Description:	TR-5TH-CSF01-0814	**Lab Sample ID:**	A404270-19	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.3

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.029	U	mg/kg dry	1	0.016	0.029	0.037	EPA 8270D	08/06/14 17:25	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.11*	*88 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 17:25*	*jjb*	

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Description:	TR-5TH-CSF01-0814	**Lab Sample ID:**	A404270-19	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:10	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	94.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/07/14 23:23	RC	
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/14/14 10:54	JJB	
PCB-1260 [11096-82-5] ^	**0.012**	J	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/07/14 23:23	RC	
PCB-1260 [11096-82-5] ^	<0.021	U	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/14/14 10:54	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.041*	*1*	*0.0355*	*116 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 23:23*	*RC*	
2,4,5,6-TCMX	*0.039*	*1*	*0.0353*	*111 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 10:54*	*JJB*	
Decachlorobiphenyl	*0.059*	*1*	*0.0355*	*165 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 23:23*	*RC*	*QS-03*
Decachlorobiphenyl	*0.045*	*1*	*0.0353*	*126 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 10:54*	*JJB*	*QM-14*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.83	U	mg/kg dry	1	0.400	2.83	5.66	EPA 6010C	08/07/14 11:35	ACV	
Arsenic [7440-38-2] ^	<1.41	U	mg/kg dry	1	0.503	1.41	2.83	EPA 6010C	08/07/14 11:35	ACV	
Cobalt [7440-48-4] ^	<0.353	U	mg/kg dry	1	0.102	0.353	0.707	EPA 6010C	08/07/14 11:35	ACV	
Iron [7439-89-6] ^	**425**		mg/kg dry	1	0.353	3.53	7.07	EPA 6010C	08/07/14 11:35	ACV	
Lead [7439-92-1] ^	**1.62**	J	mg/kg dry	1	0.156	1.41	2.83	EPA 6010C	08/07/14 11:35	ACV	
Zinc [7440-66-6] ^	**1.36**	J	mg/kg dry	1	0.368	0.707	1.41	EPA 6010C	08/07/14 11:35	ACV	

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Description:	TR-5TH-CSF02-0814	**Lab Sample ID:**	A404270-20	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0025	EPA 8260B	08/07/14 18:23	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*69*	*1*	*50.0*	*137 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 18:23*	*KKW*	*QS-03*
Dibromofluoromethane	*48*	*1*	*50.0*	*95 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 18:23*	*KKW*	
Toluene-d8	*55*	*1*	*50.0*	*110 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 18:23*	*KKW*	

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Description:	TR-5TH-CSF02-0814	**Lab Sample ID:**	A404270-20	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/06/14 17:47	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.8*	*1*	*2.01*	*92 %*	*50-150*	*4H05022*	*EPA 8270D*	*08/06/14 17:47*	*jjb*	

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Description:	TR-5TH-CSF02-0814	**Lab Sample ID:**	A404270-20	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:15	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.5

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/07/14 23:35	RC	
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/14/14 11:06	JJB	
PCB-1260 [11096-82-5] ^	**0.014**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/07/14 23:35	RC	
PCB-1260 [11096-82-5] ^	**0.015**	J	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/14/14 11:06	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.034*	*1*	*0.0335*	*101 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 23:35*	*RC*	
2,4,5,6-TCMX	*0.040*	*1*	*0.0333*	*119 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 11:06*	*JJB*	
Decachlorobiphenyl	*0.047*	*1*	*0.0335*	*141 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 23:35*	*RC*	*QS-03*
Decachlorobiphenyl	*0.046*	*1*	*0.0333*	*139 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 11:06*	*JJB*	*QM-14*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.01	U	mg/kg dry	1	0.285	2.01	4.02	EPA 6010C	08/07/14 11:38	ACV	
Arsenic [7440-38-2] ^	**0.571**	J	mg/kg dry	1	0.358	1.01	2.01	EPA 6010C	08/07/14 11:38	ACV	
Cobalt [7440-48-4] ^	**0.0935**	J	mg/kg dry	1	0.0724	0.251	0.503	EPA 6010C	08/07/14 11:38	ACV	
Iron [7439-89-6] ^	**517**		mg/kg dry	1	0.251	2.51	5.03	EPA 6010C	08/07/14 11:38	ACV	
Lead [7439-92-1] ^	**2.16**		mg/kg dry	1	0.111	1.01	2.01	EPA 6010C	08/07/14 11:38	ACV	
Zinc [7440-66-6] ^	**1.45**		mg/kg dry	1	0.261	0.503	1.01	EPA 6010C	08/07/14 11:38	ACV	

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Description:	TR-5TH-CSF03-0814	**Lab Sample ID:**	A404270-21	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	93.3

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	UQ	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/07/14 18:51	KKW	
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/08/14 12:53	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
4-Bromofluorobenzene	*60*	*1*	*50.0*	*119 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 18:51*	*KKW*	
4-Bromofluorobenzene	*68*	*1*	*50.0*	*136 %*	*85-120*	*4H08021*	*EPA 8260B*	*08/08/14 12:53*	*KKW*	*QS-03*
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 18:51*	*KKW*	
Dibromofluoromethane	*44*	*1*	*50.0*	*88 %*	*74-133*	*4H08021*	*EPA 8260B*	*08/08/14 12:53*	*KKW*	
Toluene-d8	*46*	*1*	*50.0*	*92 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 18:51*	*KKW*	
Toluene-d8	*51*	*1*	*50.0*	*102 %*	*85-115*	*4H08021*	*EPA 8260B*	*08/08/14 12:53*	*KKW*	

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.029	U	mg/kg dry	1	0.016	0.029	0.038	EPA 8270D	08/07/14 13:24	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.14*	*90 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 13:24*	*jfi*	

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Description:	TR-5TH-CSF03-0814	**Lab Sample ID:**	A404270-21	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:20	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	93.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	**0.030**	JPQ	mg/kg dry	1	0.017	0.021	0.043	EPA 8082A	08/07/14 23:47	RC	GC-07
PCB-1254 [11097-69-1] ^	**0.060**	PQ	mg/kg dry	1	0.017	0.021	0.043	EPA 8082A	08/13/14 07:16	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.13**		mg/kg dry	1	0.012	0.021	0.043	EPA 8082A	08/07/14 23:47	RC	
PCB-1260 [11096-82-5] ^	**0.23**		mg/kg dry	1	0.012	0.021	0.043	EPA 8082A	08/13/14 07:16	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.037*	*1*	*0.0357*	*104 %*	*20-137*	*4H06001*	*EPA 8082A*	*08/07/14 23:47*	*RC*	
2,4,5,6-TCMX	*0.037*	*1*	*0.0363*	*103 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 07:16*	*JJB*	
Decachlorobiphenyl	*0.049*	*1*	*0.0357*	*138 %*	*60-125*	*4H06001*	*EPA 8082A*	*08/07/14 23:47*	*RC*	*QS-03*
Decachlorobiphenyl	*0.048*	*1*	*0.0363*	*131 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 07:16*	*JJB*	*QM-14*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.14	U	mg/kg dry	1	0.303	2.14	4.29	EPA 6010C	08/07/14 11:41	ACV	
Arsenic [7440-38-2] ^	**1.12**	J	mg/kg dry	1	0.382	1.07	2.14	EPA 6010C	08/07/14 11:41	ACV	
Cobalt [7440-48-4] ^	**0.738**		mg/kg dry	1	0.0772	0.268	0.536	EPA 6010C	08/07/14 11:41	ACV	
Iron [7439-89-6] ^	**1650**		mg/kg dry	1	0.268	2.68	5.36	EPA 6010C	08/07/14 11:41	ACV	
Lead [7439-92-1] ^	**2.16**		mg/kg dry	1	0.118	1.07	2.14	EPA 6010C	08/07/14 11:41	ACV	
Zinc [7440-66-6] ^	**8.32**		mg/kg dry	1	0.279	0.536	1.07	EPA 6010C	08/07/14 11:41	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSF04-0814	**Lab Sample ID:**	A404270-22	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	80.4

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0020	EPA 8260B	08/07/14 19:19	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*80*	*1*	*50.0*	*161 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 19:19*	*KKW*	*QS-03*
Dibromofluoromethane	*55*	*1*	*50.0*	*109 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 19:19*	*KKW*	
Toluene-d8	*61*	*1*	*50.0*	*121 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 19:19*	*KKW*	

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Description:	TR-5TH-CSF04-0814	**Lab Sample ID:**	A404270-22	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	80.4

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.034	U	mg/kg dry	1	0.019	0.034	0.044	EPA 8270D	08/07/14 13:46	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*2.1*	*1*	*2.49*	*84 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 13:46*	*jfi*	

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Description:	TR-5TH-CSF04-0814	**Lab Sample ID:**	A404270-22	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:30	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	80.4

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.025	UQ	mg/kg dry	1	0.020	0.025	0.050	EPA 8082A	08/08/14 09:02	RC	GC-07
PCB-1254 [11097-69-1] ^	<0.025	UQ	mg/kg dry	1	0.020	0.025	0.050	EPA 8082A	08/13/14 07:52	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.029**	JQ	mg/kg dry	1	0.014	0.025	0.050	EPA 8082A	08/08/14 09:02	RC	J-02
PCB-1260 [11096-82-5] ^	**0.035**	J	mg/kg dry	1	0.014	0.025	0.050	EPA 8082A	08/13/14 07:52	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.013*	*1*	*0.0409*	*31 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 09:02*	*RC*	
2,4,5,6-TCMX	*0.017*	*1*	*0.0416*	*40 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 07:52*	*JJB*	
Decachlorobiphenyl	*0.025*	*1*	*0.0409*	*60 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 09:02*	*RC*	
Decachlorobiphenyl	*0.031*	*1*	*0.0416*	*76 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 07:52*	*JJB*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<3.23	U	mg/kg dry	1	0.457	3.23	6.46	EPA 6010C	08/07/14 12:00	ACV	
Arsenic [7440-38-2] ^	**2.69**	J	mg/kg dry	1	0.575	1.61	3.23	EPA 6010C	08/07/14 12:00	ACV	
Cobalt [7440-48-4] ^	**2.62**		mg/kg dry	1	0.116	0.404	0.807	EPA 6010C	08/07/14 12:00	ACV	
Iron [7439-89-6] ^	**5850**		mg/kg dry	1	0.404	4.04	8.07	EPA 6010C	08/07/14 12:00	ACV	
Lead [7439-92-1] ^	**10.7**		mg/kg dry	1	0.178	1.61	3.23	EPA 6010C	08/07/14 12:00	ACV	
Zinc [7440-66-6] ^	**20.6**		mg/kg dry	1	0.420	0.807	1.61	EPA 6010C	08/07/14 12:00	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSF05-0814	**Lab Sample ID:**	A404270-23	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.8

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	U	mg/kg dry	1	0.0006	0.0013	0.0026	EPA 8260B	08/07/14 19:47	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*69*	*1*	*50.0*	*138 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 19:47*	*KKW*	*QS-03*
Dibromofluoromethane	*46*	*1*	*50.0*	*92 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 19:47*	*KKW*	
Toluene-d8	*54*	*1*	*50.0*	*107 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 19:47*	*KKW*	

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Description:	TR-5TH-CSF05-0814	**Lab Sample ID:**	A404270-23	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.8

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/07/14 14:08	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*2.0*	*1*	*2.02*	*97 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 14:08*	*jfi*	

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Description:	TR-5TH-CSF05-0814	**Lab Sample ID:**	A404270-23	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.8

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	UQ	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/08/14 09:51	RC	GC-07
PCB-1254 [11097-69-1] ^	**0.017**	JPQ	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/13/14 08:04	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.047**	Q	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/08/14 09:51	RC	J-02
PCB-1260 [11096-82-5] ^	**0.047**		mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/13/14 08:04	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.025*	*1*	*0.0341*	*74 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 09:51*	*RC*	
2,4,5,6-TCMX	*0.033*	*1*	*0.0341*	*96 %*	*20-137*	*4H08042*	*EPA 8082A*	*08/13/14 08:04*	*JJB*	
Decachlorobiphenyl	*0.038*	*1*	*0.0341*	*111 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 09:51*	*RC*	
Decachlorobiphenyl	*0.049*	*1*	*0.0341*	*143 %*	*60-125*	*4H08042*	*EPA 8082A*	*08/13/14 08:04*	*JJB*	*QM-14*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.70	U	mg/kg dry	1	0.382	2.70	5.40	EPA 6010C	08/07/14 12:02	ACV	
Arsenic [7440-38-2] ^	**0.721**	J	mg/kg dry	1	0.480	1.35	2.70	EPA 6010C	08/07/14 12:02	ACV	
Cobalt [7440-48-4] ^	**0.289**	J	mg/kg dry	1	0.0972	0.337	0.675	EPA 6010C	08/07/14 12:02	ACV	
Iron [7439-89-6] ^	**1760**		mg/kg dry	1	0.337	3.37	6.75	EPA 6010C	08/07/14 12:02	ACV	
Lead [7439-92-1] ^	**22.3**		mg/kg dry	1	0.148	1.35	2.70	EPA 6010C	08/07/14 12:02	ACV	
Zinc [7440-66-6] ^	**10.0**		mg/kg dry	1	0.351	0.675	1.35	EPA 6010C	08/07/14 12:02	ACV	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

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Description:	TR-5TH-CSF05D-0814	**Lab Sample ID:**	A404270-24	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0012	U	mg/kg dry	1	0.0005	0.0012	0.0024	EPA 8260B	08/07/14 20:15	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*73*	*1*	*50.0*	*145 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 20:15*	*KKW*	*QS-03*
Dibromofluoromethane	*50*	*1*	*50.0*	*100 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 20:15*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*114 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 20:15*	*KKW*	

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Description:	TR-5TH-CSF05D-0814	**Lab Sample ID:**	A404270-24	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.036	EPA 8270D	08/07/14 14:30	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.8*	*1*	*2.01*	*91 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 14:30*	*jfi*	

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Description:	TR-5TH-CSF05D-0814	**Lab Sample ID:**	A404270-24	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.041	EPA 8082A	08/08/14 10:03	RC	
PCB-1260 [11096-82-5] ^	<0.020	UQ	mg/kg dry	1	0.011	0.020	0.041	EPA 8082A	08/08/14 10:03	RC	QL-02

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.030*	*1*	*0.0337*	*89 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 10:03*	*RC*	
Decachlorobiphenyl	*0.038*	*1*	*0.0337*	*113 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 10:03*	*RC*	

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Description:	TR-5TH-CSF05D-0814	**Lab Sample ID:**	A404270-24	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:35	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.39	U	mg/kg dry	1	0.339	2.39	4.79	EPA 6010C	08/07/14 12:05	ACV	
Arsenic [7440-38-2] ^	**1.06**	J	mg/kg dry	1	0.426	1.20	2.39	EPA 6010C	08/07/14 12:05	ACV	
Cobalt [7440-48-4] ^	**1.04**		mg/kg dry	1	0.0862	0.299	0.598	EPA 6010C	08/07/14 12:05	ACV	
Iron [7439-89-6] ^	**2570**		mg/kg dry	1	0.299	2.99	5.98	EPA 6010C	08/07/14 12:05	ACV	
Lead [7439-92-1] ^	**10.8**		mg/kg dry	1	0.132	1.20	2.39	EPA 6010C	08/07/14 12:05	ACV	
Zinc [7440-66-6] ^	**15.9**		mg/kg dry	1	0.311	0.598	1.20	EPA 6010C	08/07/14 12:05	ACV	

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Description:	TR-5TH-CSF06-0814	**Lab Sample ID:**	A404270-25	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	95.1

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0011	U	mg/kg dry	1	0.0005	0.0011	0.0021	EPA 8260B	08/07/14 23:31	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*71*	*1*	*50.0*	*143 %*	*85-120*	*4H07018*	*EPA 8260B*	*08/07/14 23:31*	*KKW*	*QS-03*
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*74-133*	*4H07018*	*EPA 8260B*	*08/07/14 23:31*	*KKW*	
Toluene-d8	*56*	*1*	*50.0*	*111 %*	*85-115*	*4H07018*	*EPA 8260B*	*08/07/14 23:31*	*KKW*	

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Description:	TR-5TH-CSF06-0814	**Lab Sample ID:**	A404270-25	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	95.1

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.028	U	mg/kg dry	1	0.016	0.028	0.037	EPA 8270D	08/07/14 14:51	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.9*	*1*	*2.10*	*92 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 14:51*	*jfi*	

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Description:	TR-5TH-CSF06-0814	**Lab Sample ID:**	A404270-25	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:45	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	95.1

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/08/14 10:15	RC	
PCB-1254 [11097-69-1] ^	<0.021	U	mg/kg dry	1	0.017	0.021	0.042	EPA 8082A	08/14/14 11:30	JJB	
PCB-1260 [11096-82-5] ^	**0.018**	JQ	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/08/14 10:15	RC	QL-02
PCB-1260 [11096-82-5] ^	**0.023**	J	mg/kg dry	1	0.012	0.021	0.042	EPA 8082A	08/14/14 11:30	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.028*	*1*	*0.0355*	*79 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 10:15*	*RC*	
2,4,5,6-TCMX	*0.040*	*1*	*0.0349*	*114 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 11:30*	*JJB*	
Decachlorobiphenyl	*0.035*	*1*	*0.0355*	*100 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 10:15*	*RC*	
Decachlorobiphenyl	*0.045*	*1*	*0.0349*	*129 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 11:30*	*JJB*	*QS-03*

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<3.09	U	mg/kg dry	1	0.438	3.09	6.19	EPA 6010C	08/07/14 12:07	ACV	
Arsenic [7440-38-2] ^	**1.48**	J	mg/kg dry	1	0.551	1.55	3.09	EPA 6010C	08/07/14 12:07	ACV	
Cobalt [7440-48-4] ^	**1.08**		mg/kg dry	1	0.111	0.387	0.773	EPA 6010C	08/07/14 12:07	ACV	
Iron [7439-89-6] ^	**2920**		mg/kg dry	1	0.387	3.87	7.73	EPA 6010C	08/07/14 12:07	ACV	
Lead [7439-92-1] ^	**9.15**		mg/kg dry	1	0.170	1.55	3.09	EPA 6010C	08/07/14 12:07	ACV	
Zinc [7440-66-6] ^	**20.2**		mg/kg dry	1	0.402	0.773	1.55	EPA 6010C	08/07/14 12:07	ACV	

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Description:	TR-5TH-CSF07-0814	**Lab Sample ID:**	A404270-26	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.5

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0010	U	mg/kg dry	1	0.0005	0.0010	0.0020	EPA 8260B	08/07/14 23:59	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*74*	*1*	*50.0*	*148 %*	*85-120*	*4H07018*	*EPA 8260B*	*08/07/14 23:59*	*KKW*	*QS-03*
Dibromofluoromethane	*51*	*1*	*50.0*	*103 %*	*74-133*	*4H07018*	*EPA 8260B*	*08/07/14 23:59*	*KKW*	
Toluene-d8	*58*	*1*	*50.0*	*116 %*	*85-115*	*4H07018*	*EPA 8260B*	*08/07/14 23:59*	*KKW*	

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Description:	TR-5TH-CSF07-0814	**Lab Sample ID:**	A404270-26	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.5

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.036	EPA 8270D	08/07/14 15:13	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.03*	*95 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 15:13*	*jfi*	

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Description:	TR-5TH-CSF07-0814	**Lab Sample ID:**	A404270-26	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.5

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.041	EPA 8082A	08/08/14 10:27	RC	
PCB-1260 [11096-82-5] ^	<0.020	UQ	mg/kg dry	1	0.011	0.020	0.041	EPA 8082A	08/08/14 10:27	RC	QL-02

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.027*	*1*	*0.0335*	*79 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 10:27*	*RC*	
Decachlorobiphenyl	*0.036*	*1*	*0.0335*	*108 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 10:27*	*RC*	

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Description:	TR-5TH-CSF07-0814	**Lab Sample ID:**	A404270-26	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 13:50	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.5

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.03	U	mg/kg dry	1	0.287	2.03	4.06	EPA 6010C	08/07/14 12:09	ACV	
Arsenic [7440-38-2] ^	**0.486**	J	mg/kg dry	1	0.361	1.02	2.03	EPA 6010C	08/07/14 12:09	ACV	
Cobalt [7440-48-4] ^	**0.145**	J	mg/kg dry	1	0.0731	0.254	0.508	EPA 6010C	08/07/14 12:09	ACV	
Iron [7439-89-6] ^	**657**		mg/kg dry	1	0.254	2.54	5.08	EPA 6010C	08/07/14 12:09	ACV	
Lead [7439-92-1] ^	**2.01**	J	mg/kg dry	1	0.112	1.02	2.03	EPA 6010C	08/07/14 12:09	ACV	
Zinc [7440-66-6] ^	**1.68**		mg/kg dry	1	0.264	0.508	1.02	EPA 6010C	08/07/14 12:09	ACV	

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Description:	TR-5TH-CSF08-0814	**Lab Sample ID:**	A404270-27	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0012	U	mg/kg dry	1	0.0005	0.0012	0.0024	EPA 8260B	08/08/14 00:27	KKW	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*75*	*1*	*50.0*	*151 %*	*85-120*	*4H07018*	*EPA 8260B*	*08/08/14 00:27*	*KKW*	*QS-03*
Dibromofluoromethane	*49*	*1*	*50.0*	*98 %*	*74-133*	*4H07018*	*EPA 8260B*	*08/08/14 00:27*	*KKW*	
Toluene-d8	*58*	*1*	*50.0*	*115 %*	*85-115*	*4H07018*	*EPA 8260B*	*08/08/14 00:27*	*KKW*	

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Description:	TR-5TH-CSF08-0814	**Lab Sample ID:**	A404270-27	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.036	EPA 8270D	08/07/14 15:35	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*1.9*	*1*	*2.02*	*96 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 15:35*	*jfi*	

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Description:	TR-5TH-CSF08-0814	**Lab Sample ID:**	A404270-27	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	98.3

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	**0.023**	JPQ	mg/kg dry	1	0.016	0.020	0.041	EPA 8082A	08/08/14 10:39	RC	GC-07
PCB-1254 [11097-69-1] ^	**0.032**	JPQ	mg/kg dry	1	0.016	0.020	0.041	EPA 8082A	08/14/14 11:18	JJB	GC-07
PCB-1260 [11096-82-5] ^	**0.084**	Q	mg/kg dry	1	0.011	0.020	0.041	EPA 8082A	08/08/14 10:39	RC	J-02
PCB-1260 [11096-82-5] ^	**0.10**		mg/kg dry	1	0.011	0.020	0.041	EPA 8082A	08/14/14 11:18	JJB	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.029*	*1*	*0.0341*	*84 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 10:39*	*RC*	
2,4,5,6-TCMX	*0.034*	*1*	*0.0338*	*100 %*	*20-137*	*4H13024*	*EPA 8082A*	*08/14/14 11:18*	*JJB*	
Decachlorobiphenyl	*0.034*	*1*	*0.0341*	*99 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 10:39*	*RC*	
Decachlorobiphenyl	*0.041*	*1*	*0.0338*	*121 %*	*60-125*	*4H13024*	*EPA 8082A*	*08/14/14 11:18*	*JJB*	

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.57	U	mg/kg dry	1	0.364	2.57	5.15	EPA 6010C	08/07/14 12:12	ACV	
Arsenic [7440-38-2] ^	**0.673**	J	mg/kg dry	1	0.458	1.29	2.57	EPA 6010C	08/07/14 12:12	ACV	
Cobalt [7440-48-4] ^	**0.329**	J	mg/kg dry	1	0.0927	0.322	0.644	EPA 6010C	08/07/14 12:12	ACV	
Iron [7439-89-6] ^	**1050**		mg/kg dry	1	0.322	3.22	6.44	EPA 6010C	08/07/14 12:12	ACV	
Lead [7439-92-1] ^	**7.58**		mg/kg dry	1	0.142	1.29	2.57	EPA 6010C	08/07/14 12:12	ACV	
Zinc [7440-66-6] ^	**6.97**		mg/kg dry	1	0.335	0.644	1.29	EPA 6010C	08/07/14 12:12	ACV	

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Description:	TR-5TH-CSF09-0814	**Lab Sample ID:**	A404270-28	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:05	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.2

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<0.0013	UQ	mg/kg dry	1	0.0006	0.0013	0.0025	EPA 8260B	08/07/14 11:46	KKW	QM-07

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*77*	*1*	*50.0*	*155 %*	*85-120*	*4H06032*	*EPA 8260B*	*08/07/14 11:46*	*KKW*	*QS-03*
Dibromofluoromethane	*51*	*1*	*50.0*	*102 %*	*74-133*	*4H06032*	*EPA 8260B*	*08/07/14 11:46*	*KKW*	
Toluene-d8	*57*	*1*	*50.0*	*114 %*	*85-115*	*4H06032*	*EPA 8260B*	*08/07/14 11:46*	*KKW*	

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Description:	TR-5TH-CSF09-0814	**Lab Sample ID:**	A404270-28	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:05	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.2

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.027	U	mg/kg dry	1	0.015	0.027	0.035	EPA 8270D	08/07/14 13:02	jfi	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
p-Terphenyl	*1.9*	*1*	*2.02*	*94 %*	*50-150*	*4H05023*	*EPA 8270D*	*08/07/14 13:02*	*jfi*	

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Description:	TR-5TH-CSF09-0814	**Lab Sample ID:**	A404270-28	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:05	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.2

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<0.020	U	mg/kg dry	1	0.016	0.020	0.040	EPA 8082A	08/08/14 08:50	RC	
PCB-1260 [11096-82-5] ^	<0.020	UQ	mg/kg dry	1	0.011	0.020	0.040	EPA 8082A	08/08/14 08:50	RC	QL-02

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	**Notes**
2,4,5,6-TCMX	*0.027*	*1*	*0.0334*	*80 %*	*20-137*	*4H06006*	*EPA 8082A*	*08/08/14 08:50*	*RC*	
Decachlorobiphenyl	*0.038*	*1*	*0.0334*	*113 %*	*60-125*	*4H06006*	*EPA 8082A*	*08/08/14 08:50*	*RC*	

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Description:	TR-5TH-CSF09-0814	**Lab Sample ID:**	A404270-28	**Received:**	08/05/14 06:45
Matrix:	Soil	**Sampled:**	08/01/14 14:05	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price	**% Solids:**	99.2

Metals by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<2.72	U	mg/kg dry	1	0.385	2.72	5.45	EPA 6010C	08/07/14 12:19	ACV	
Arsenic [7440-38-2] ^	<1.36	U	mg/kg dry	1	0.485	1.36	2.72	EPA 6010C	08/07/14 12:19	ACV	
Cobalt [7440-48-4] ^	**0.129**	J	mg/kg dry	1	0.0980	0.340	0.681	EPA 6010C	08/07/14 12:19	ACV	
Iron [7439-89-6] ^	**689**	Q	mg/kg dry	1	0.340	3.40	6.81	EPA 6010C	08/07/14 12:19	ACV	QM-02
Lead [7439-92-1] ^	**2.07**	J	mg/kg dry	1	0.150	1.36	2.72	EPA 6010C	08/07/14 12:19	ACV	
Zinc [7440-66-6] ^	**1.68**		mg/kg dry	1	0.354	0.681	1.36	EPA 6010C	08/07/14 12:19	ACV	

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Description:	TR-5TH-CS-EB-080114	**Lab Sample ID:**	A404270-29	**Received:**	08/05/14 06:45
Matrix:	Water	**Sampled:**	08/01/14 21:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price		

Semivolatile Organic Compounds by GCMS SIM

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Benzo(a)pyrene [50-32-8] ^	<0.090	U	ug/L	1	0.043	0.090	0.10	EPA 8270D	08/06/14 09:23	jjb	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
p-Terphenyl	*5.9*	*1*	*5.71*	*104 %*	*58-132*	*4H05046*	*EPA 8270D*	*08/06/14 09:23*	*jjb*	

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Description:	TR-5TH-CS-EB-080114	**Lab Sample ID:**	A404270-29	**Received:**	08/05/14 06:45
Matrix:	Water	**Sampled:**	08/01/14 21:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	Nate Price		

Polychlorinated Biphenyls by GC

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
PCB-1254 [11097-69-1] ^	<1.0	U	ug/L	1	0.50	1.0	1.0	EPA 8082A	08/08/14 07:46	RC	
PCB-1260 [11096-82-5] ^	<1.0	U	ug/L	1	0.48	1.0	1.0	EPA 8082A	08/08/14 07:46	RC	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
2,4,5,6-TCMX	*0.86*	*1*	*1.00*	*86 %*	*38-142*	*4H06028*	*EPA 8082A*	*08/08/14 07:46*	*RC*	
Decachlorobiphenyl	*0.69*	*1*	*1.00*	*69 %*	*40-135*	*4H06028*	*EPA 8082A*	*08/08/14 07:46*	*RC*	

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Description: TR-5TH-CS-EB-080114 **Lab Sample ID:** A404270-29 **Received:** 08/05/14 06:45

Matrix: Water **Sampled:** 08/01/14 21:00 **Work Order:** A404270

Project: CTO-0017 Towers Road Disposal-5th St. **Sampled By:** Nate Price

Metals (total recoverable) by EPA 6000/7000 Series Methods

^ - ENCO Jacksonville certified analyte [DOD A2LA: 3000.02]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
Antimony [7440-36-0] ^	<20.0	U	ug/L	1	5.65	20.0	40.0	EPA 6010C	08/07/14 10:30	ACV	
Arsenic [7440-38-2] ^	<20.0	U	ug/L	1	7.12	20.0	40.0	EPA 6010C	08/07/14 10:30	ACV	
Cobalt [7440-48-4] ^	<5.00	U	ug/L	1	1.60	5.00	10.0	EPA 6010C	08/07/14 10:30	ACV	
Iron [7439-89-6] ^	**9.68**	J	ug/L	1	5.60	50.0	100	EPA 6010C	08/07/14 10:30	ACV	
Lead [7439-92-1] ^	<20.0	U	ug/L	1	2.20	20.0	40.0	EPA 6010C	08/07/14 10:30	ACV	
Zinc [7440-66-6] ^	<10.0	U	ug/L	1	5.20	10.0	20.0	EPA 6010C	08/07/14 10:30	ACV	

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Description:	TR-5TH-CS-TB-080114	**Lab Sample ID:**	A404270-30	**Received:**	08/05/14 06:45
Matrix:	Water	**Sampled:**	08/01/14 00:00	**Work Order:**	A404270
Project:	CTO-0017 Towers Road Disposal-5th St.	**Sampled By:**	enco ORL		

Volatile Organic Compounds by GCMS

^ - ENCO Orlando certified analyte [DOD A2LA: 3000-01]

Analyte [CAS Number]	Results	Flag	Units	DF	DL	LOD	LOQ	Method	Analyzed	By	Notes
1,4-Dichlorobenzene [106-46-7] ^	<1.0	U	ug/L	1	0.76	1.0	2.0	EPA 8260B	08/07/14 19:29	JFL	

Surrogates	*Results*	*DF*	*Spike Lvl*	*% Rec*	*% Rec Limits*	*Batch*	*Method*	*Analyzed*	*By*	Notes
4-Bromofluorobenzene	*51*	*1*	*50.0*	*103 %*	*75-120*	*4H07029*	*EPA 8260B*	*08/07/14 19:29*	*JFL*	
Dibromofluoromethane	*47*	*1*	*50.0*	*95 %*	*85-115*	*4H07029*	*EPA 8260B*	*08/07/14 19:29*	*JFL*	
Toluene-d8	*49*	*1*	*50.0*	*97 %*	*85-120*	*4H07029*	*EPA 8260B*	*08/07/14 19:29*	*JFL*	

This report relates only to the sample as received by the laboratory, and may only be reproduced in full.

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Batch 4H06003 - EPA 3050B

Blank (4H06003-BLK1) Prepared: 08/06/2014 09:00 Analyzed: 08/07/2014 10:36

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	**0.632**	**J**	7.55	mg/kg wet							
Arsenic	<1.89	U	3.77	mg/kg wet							
Cobalt	<0.472	U	0.943	mg/kg wet							
Iron	**1.21**	**J**	9.43	mg/kg wet							
Lead	<1.89	U	3.77	mg/kg wet							
Zinc	<0.943	U	1.89	mg/kg wet							

LCS (4H06003-BS1) Prepared: 08/06/2014 09:00 Analyzed: 08/07/2014 10:38

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	46.2		7.69	mg/kg wet	48.1		96	80-120			
Arsenic	46.2		3.85	mg/kg wet	48.1		96	80-120			
Cobalt	46.1		0.962	mg/kg wet	48.1		96	80-120			
Iron	230		9.62	mg/kg wet	240		96	80-120			
Lead	47.5		3.85	mg/kg wet	48.1		99	80-120			
Zinc	47.2		1.92	mg/kg wet	48.1		98	80-120			

Matrix Spike (4H06003-MS1) Prepared: 08/06/2014 09:00 Analyzed: 08/07/2014 10:41

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	21.2		7.40	mg/kg dry	46.3	0.524 U	46	80-120			QM-07
Arsenic	44.6		3.70	mg/kg dry	46.3	2.16	92	80-120			
Cobalt	44.7		0.925	mg/kg dry	46.3	2.09	92	80-120			
Iron	5420		9.25	mg/kg dry	231	5140	118	80-120			
Lead	58.0		3.70	mg/kg dry	46.3	15.7	91	80-120			
Zinc	69.9		1.85	mg/kg dry	46.3	25.1	97	80-120			

Matrix Spike Dup (4H06003-MSD1) Prepared: 08/06/2014 09:00 Analyzed: 08/07/2014 10:42

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	23.1		7.54	mg/kg dry	47.1	0.533 U	49	80-120	9	20	QM-07
Arsenic	46.2		3.77	mg/kg dry	47.1	2.16	94	80-120	4	20	
Cobalt	46.5		0.942	mg/kg dry	47.1	2.09	94	80-120	4	20	
Iron	5140		9.42	mg/kg dry	236	5140	NR	80-120	5	20	QM-02
Lead	61.4		3.77	mg/kg dry	47.1	15.7	97	80-120	6	20	
Zinc	67.3		1.88	mg/kg dry	47.1	25.1	90	80-120	4	20	

Post Spike (4H06003-PS1) Prepared: 08/06/2014 09:00 Analyzed: 08/07/2014 13:04

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	0.434		0.0400	mg/L	0.500	-7.72E-5	87	80-120			
Lead	0.483		0.0400	mg/L	0.500	0.00490	96	80-120			

Batch 4H06004 - EPA 3050B

QUALITY CONTROL

Metals by EPA 6000/7000 Series Methods - Quality Control

Blank (4H06004-BLK1) Prepared: 08/06/2014 09:02 Analyzed: 08/07/2014 11:51

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	<3.92	U	7.84	mg/kg wet							
Arsenic	<1.96	U	3.92	mg/kg wet							
Cobalt	<0.490	U	0.980	mg/kg wet							
Iron	**0.989**	**J**	9.80	mg/kg wet							
Lead	<1.96	U	3.92	mg/kg wet							
Zinc	<0.980	U	1.96	mg/kg wet							

LCS (4H06004-BS1) Prepared: 08/06/2014 09:02 Analyzed: 08/07/2014 11:54

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	46.0		7.55	mg/kg wet	47.2		98	80-120			
Arsenic	46.0		3.77	mg/kg wet	47.2		97	80-120			
Cobalt	46.4		0.943	mg/kg wet	47.2		98	80-120			
Iron	232		9.43	mg/kg wet	236		98	80-120			
Lead	47.3		3.77	mg/kg wet	47.2		100	80-120			
Zinc	47.0		1.89	mg/kg wet	47.2		100	80-120			

Matrix Spike (4H06004-MS1) Prepared: 08/06/2014 09:02 Analyzed: 08/07/2014 11:56

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	29.8		5.93	mg/kg dry	37.0	0.419 U	80	80-120			
Arsenic	35.3		2.96	mg/kg dry	37.0	0.527 U	95	80-120			
Cobalt	36.1		0.741	mg/kg dry	37.0	0.129	97	80-120			
Iron	942		7.41	mg/kg dry	185	689	137	80-120			QM-02
Lead	38.6		2.96	mg/kg dry	37.0	2.07	99	80-120			
Zinc	38.4		1.48	mg/kg dry	37.0	1.68	99	80-120			

Matrix Spike Dup (4H06004-MSD1) Prepared: 08/06/2014 09:02 Analyzed: 08/07/2014 11:58

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	28.4		5.68	mg/kg dry	35.5	0.402 U	80	80-120	5	20	
Arsenic	33.5		2.84	mg/kg dry	35.5	0.505 U	94	80-120	5	20	
Cobalt	34.5		0.710	mg/kg dry	35.5	0.129	97	80-120	5	20	
Iron	920		7.10	mg/kg dry	177	689	131	80-120	2	20	QM-02
Lead	37.0		2.84	mg/kg dry	35.5	2.07	98	80-120	4	20	
Zinc	36.9		1.42	mg/kg dry	35.5	1.68	99	80-120	4	20	

Post Spike (4H06004-PS1) Prepared: 08/06/2014 09:02 Analyzed: 08/07/2014 13:07

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Iron	3.38		0.100	mg/L	2.50	1.01	95	80-120			

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4H06006 - EPA 3005A

QUALITY CONTROL

Metals (total recoverable) by EPA 6000/7000 Series Methods - Quality Control

Batch 4H06006 - EPA 3005A

Blank (4H06006-BLK1) Prepared: 08/06/2014 09:04 Analyzed: 08/07/2014 10:23

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	<20.0	U	40.0	ug/L							
Arsenic	<20.0	U	40.0	ug/L							
Cobalt	<5.00	U	10.0	ug/L							
Iron	<50.0	U	100	ug/L							
Lead	<20.0	U	40.0	ug/L							
Zinc	<10.0	U	20.0	ug/L							

LCS (4H06006-BS1) Prepared: 08/06/2014 09:04 Analyzed: 08/07/2014 10:26

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	482		40.0	ug/L	500		96	80-120			
Arsenic	481		40.0	ug/L	500		96	80-120			
Cobalt	480		10.0	ug/L	500		96	80-120			
Iron	2390		100	ug/L	2500		96	80-120			
Lead	493		40.0	ug/L	500		99	80-120			
Zinc	493		20.0	ug/L	500		99	80-120			

LCS Dup (4H06006-BSD1) Prepared: 08/06/2014 09:04 Analyzed: 08/07/2014 10:28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Antimony	486		40.0	ug/L	500		97	80-120	0.9	20	
Arsenic	483		40.0	ug/L	500		97	80-120	0.3	20	
Cobalt	485		10.0	ug/L	500		97	80-120	1	20	
Iron	2420		100	ug/L	2500		97	80-120	1	20	
Lead	495		40.0	ug/L	500		99	80-120	0.5	20	
Zinc	499		20.0	ug/L	500		100	80-120	1	20	

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 4H06021 - EPA 5035_MS

Blank (4H06021-BLK1) Prepared: 08/06/2014 00:00 Analyzed: 08/06/2014 11:37

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	<0.0010	U	0.0020	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*69*	*Q*		*ug/L*	*50.0*		*138*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*96*	*74-133*			
Surrogate: Toluene-d8	*53*			*ug/L*	*50.0*		*106*	*85-115*			

LCS (4H06021-BS1) Prepared: 08/06/2014 00:00 Analyzed: 08/06/2014 10:40

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.021		0.0020	mg/kg wet	0.0200		103	70-125			
Surrogate: 4-Bromofluorobenzene	*61*	*Q*		*ug/L*	*50.0*		*121*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*95*	*74-133*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*85-115*			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 4H06021 - EPA 5035_MS

LCS Dup (4H06021-BSD1) Prepared: 08/06/2014 00:00 Analyzed: 08/06/2014 11:08

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.019		0.0020	mg/kg wet	0.0200		93	70-125	10	30	
Surrogate: 4-Bromofluorobenzene	*62*	*Q*		*ug/L*	*50.0*		*124*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*97*	*74-133*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*104*	*85-115*			

Batch 4H06032 - EPA 5035_MS

Blank (4H06032-BLK1) Prepared: 08/06/2014 14:56 Analyzed: 08/07/2014 10:49

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	<0.0010	U	0.0020	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*77*	*Q*		*ug/L*	*50.0*		*154*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*98*	*74-133*			
Surrogate: Toluene-d8	*55*			*ug/L*	*50.0*		*111*	*85-115*			

LCS (4H06032-BS1) Prepared: 08/06/2014 14:56 Analyzed: 08/07/2014 10:21

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.020		0.0020	mg/kg wet	0.0200		98	70-125			
Surrogate: 4-Bromofluorobenzene	*72*	*Q*		*ug/L*	*50.0*		*144*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*50*			*ug/L*	*50.0*		*100*	*74-133*			
Surrogate: Toluene-d8	*55*			*ug/L*	*50.0*		*110*	*85-115*			

Matrix Spike (4H06032-MS1) Prepared: 08/06/2014 14:56 Analyzed: 08/07/2014 12:14

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.012	Q	0.0020	mg/kg dry	0.0202	0.0005 U	57	70-125			QM-07
Surrogate: 4-Bromofluorobenzene	*70*	*Q*		*ug/L*	*50.0*		*139*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*48*			*ug/L*	*50.0*		*97*	*74-133*			
Surrogate: Toluene-d8	*55*			*ug/L*	*50.0*		*111*	*85-115*			

Matrix Spike Dup (4H06032-MSD1) Prepared: 08/06/2014 14:56 Analyzed: 08/07/2014 12:42

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.0091	Q	0.0020	mg/kg dry	0.0202	0.0005 U	45	70-125	24	30	QM-07
Surrogate: 4-Bromofluorobenzene	*71*	*Q*		*ug/L*	*50.0*		*142*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*102*	*74-133*			
Surrogate: Toluene-d8	*56*			*ug/L*	*50.0*		*113*	*85-115*			

Batch 4H07018 - EPA 5035_MS

Blank (4H07018-BLK1) Prepared: 08/07/2014 10:57 Analyzed: 08/07/2014 22:07

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 4H07018 - EPA 5035_MS

Blank (4H07018-BLK1) Continued Prepared: 08/07/2014 10:57 Analyzed: 08/07/2014 22:07

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	<0.0010	U	0.0020	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*73*	*Q*		*ug/L*	*50.0*		*146*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*74-133*			
Surrogate: Toluene-d8	*53*			*ug/L*	*50.0*		*105*	*85-115*			

LCS (4H07018-BS1) Prepared: 08/07/2014 10:57 Analyzed: 08/07/2014 21:39

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.018		0.0020	mg/kg wet	0.0200		91	70-125			
Surrogate: 4-Bromofluorobenzene	*72*	*Q*		*ug/L*	*50.0*		*144*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*49*			*ug/L*	*50.0*		*99*	*74-133*			
Surrogate: Toluene-d8	*57*			*ug/L*	*50.0*		*114*	*85-115*			

Matrix Spike (4H07018-MS1) Prepared: 08/07/2014 10:57 Analyzed: 08/08/2014 01:22

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.0057	Q	0.0021	mg/kg dry	0.0207	0.0005 U	27	70-125			QM-07
Surrogate: 4-Bromofluorobenzene	*67*	*Q*		*ug/L*	*50.0*		*134*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*51*			*ug/L*	*50.0*		*101*	*74-133*			
Surrogate: Toluene-d8	*58*			*ug/L*	*50.0*		*116*	*85-115*			

Matrix Spike Dup (4H07018-MSD1) Prepared: 08/07/2014 10:57 Analyzed: 08/08/2014 01:50

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.0064	Q	0.0021	mg/kg dry	0.0207	0.0005 U	31	70-125	13	30	QM-07
Surrogate: 4-Bromofluorobenzene	*72*	*Q*		*ug/L*	*50.0*		*145*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*52*			*ug/L*	*50.0*		*104*	*74-133*			
Surrogate: Toluene-d8	*59*			*ug/L*	*50.0*		*118*	*85-115*			

Batch 4H07029 - EPA 5030B_MS

Blank (4H07029-BLK1) Prepared: 08/07/2014 00:00 Analyzed: 08/07/2014 12:26

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	<1.0	U	2.0	ug/L							
Surrogate: 4-Bromofluorobenzene	*49*			*ug/L*	*50.0*		*97*	*75-120*			
Surrogate: Dibromofluoromethane	*45*			*ug/L*	*50.0*		*89*	*85-115*			
Surrogate: Toluene-d8	*48*			*ug/L*	*50.0*		*96*	*85-120*			

LCS (4H07029-BS1) Prepared: 08/07/2014 00:00 Analyzed: 08/07/2014 10:57

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	23		2.0	ug/L	20.0		117	75-125			

QUALITY CONTROL

Volatile Organic Compounds by GCMS - Quality Control

Batch 4H07029 - EPA 5030B_MS

LCS (4H07029-BS1) Continued Prepared: 08/07/2014 00:00 Analyzed: 08/07/2014 10:57

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*93*	*75-120*			
Surrogate: Dibromofluoromethane	*45*			*ug/L*	*50.0*		*91*	*85-115*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*93*	*85-120*			

LCS Dup (4H07029-BSD1) Prepared: 08/07/2014 00:00 Analyzed: 08/07/2014 11:27

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	23		2.0	ug/L	20.0		116	75-125	0.7	30	
Surrogate: 4-Bromofluorobenzene	*47*			*ug/L*	*50.0*		*94*	*75-120*			
Surrogate: Dibromofluoromethane	*46*			*ug/L*	*50.0*		*91*	*85-115*			
Surrogate: Toluene-d8	*47*			*ug/L*	*50.0*		*93*	*85-120*			

Batch 4H08021 - EPA 5035_MS

Blank (4H08021-BLK1) Prepared: 08/08/2014 00:00 Analyzed: 08/08/2014 11:56

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	<0.0010	U	0.0020	mg/kg wet							
Surrogate: 4-Bromofluorobenzene	*73*	*Q*		*ug/L*	*50.0*		*146*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*74-133*			
Surrogate: Toluene-d8	*54*			*ug/L*	*50.0*		*108*	*85-115*			

LCS (4H08021-BS1) Prepared: 08/08/2014 00:00 Analyzed: 08/08/2014 10:59

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.017		0.0020	mg/kg wet	0.0200		86	70-125			
Surrogate: 4-Bromofluorobenzene	*69*	*Q*		*ug/L*	*50.0*		*139*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*45*			*ug/L*	*50.0*		*90*	*74-133*			
Surrogate: Toluene-d8	*52*			*ug/L*	*50.0*		*105*	*85-115*			

LCS Dup (4H08021-BSD1) Prepared: 08/08/2014 00:00 Analyzed: 08/08/2014 11:27

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,4-Dichlorobenzene	0.018		0.0020	mg/kg wet	0.0200		91	70-125	5	30	
Surrogate: 4-Bromofluorobenzene	*71*	*Q*		*ug/L*	*50.0*		*142*	*85-120*			*QS-03*
Surrogate: Dibromofluoromethane	*47*			*ug/L*	*50.0*		*94*	*74-133*			
Surrogate: Toluene-d8	*53*			*ug/L*	*50.0*		*106*	*85-115*			

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 4H05022 - EPA 3550C_MS

Blank (4H05022-BLK1) Prepared: 08/05/2014 16:30 Analyzed: 08/06/2014 09:44

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	<0.027	U	0.035	mg/kg wet							
Surrogate: p-Terphenyl	*1.9*			*mg/kg wet*	*2.00*		*95*	*50-150*			

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 4H05022 - EPA 3550C_MS

LCS (4H05022-BS1) Prepared: 08/05/2014 16:30 Analyzed: 08/06/2014 10:06

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	1.8		0.035	mg/kg wet	2.00		92	50-110			
Surrogate: p-Terphenyl	*1.9*			*mg/kg wet*	*2.00*		*97*	*50-150*			

Matrix Spike (4H05022-MS1) Prepared: 08/05/2014 16:30 Analyzed: 08/06/2014 10:28

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	2.0		0.036	mg/kg dry	2.07	0.016 U	94	50-110			
Surrogate: p-Terphenyl	*2.0*			*mg/kg dry*	*2.07*		*94*	*50-150*			

Matrix Spike Dup (4H05022-MSD1) Prepared: 08/05/2014 16:30 Analyzed: 08/06/2014 10:50

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	1.9		0.036	mg/kg dry	2.07	0.016 U	91	50-110	4	30	
Surrogate: p-Terphenyl	*2.0*			*mg/kg dry*	*2.07*		*94*	*50-150*			

Batch 4H05023 - EPA 3550C_MS

Blank (4H05023-BLK1) Prepared: 08/05/2014 18:30 Analyzed: 08/07/2014 11:35

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	<0.027	U	0.035	mg/kg wet							
Surrogate: p-Terphenyl	*1.8*			*mg/kg wet*	*2.00*		*92*	*50-150*			

LCS (4H05023-BS1) Prepared: 08/05/2014 18:30 Analyzed: 08/07/2014 11:57

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	1.7		0.035	mg/kg wet	2.00		85	50-110			
Surrogate: p-Terphenyl	*1.7*			*mg/kg wet*	*2.00*		*87*	*50-150*			

Matrix Spike (4H05023-MS1) Prepared: 08/05/2014 18:30 Analyzed: 08/07/2014 12:18

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	2.1		0.035	mg/kg dry	2.00	0.015 U	102	50-110			
Surrogate: p-Terphenyl	*1.9*			*mg/kg dry*	*2.00*		*96*	*50-150*			

Matrix Spike Dup (4H05023-MSD1) Prepared: 08/05/2014 18:30 Analyzed: 08/07/2014 12:40

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	1.9		0.035	mg/kg dry	2.00	0.015 U	96	50-110	7	30	

QUALITY CONTROL

Semivolatile Organic Compounds by GCMS SIM - Quality Control

Batch 4H05023 - EPA 3550C_MS

Matrix Spike Dup (4H05023-MSD1) Continued Prepared: 08/05/2014 18:30 Analyzed: 08/07/2014 12:40

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: p-Terphenyl	*1.9*			*mg/kg dry*	*2.00*		*94*	*50-150*			

Batch 4H05046 - EPA 3511_MS

Blank (4H05046-BLK1) Prepared: 08/05/2014 20:30 Analyzed: 08/06/2014 08:17

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	<0.090	U	0.10	ug/L							
Surrogate: p-Terphenyl	*6.2*			*ug/L*	*5.71*		*109*	*58-132*			

LCS (4H05046-BS1) Prepared: 08/05/2014 20:30 Analyzed: 08/06/2014 08:39

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	5.3		0.10	ug/L	5.71		93	53-120			
Surrogate: p-Terphenyl	*5.5*			*ug/L*	*5.71*		*96*	*58-132*			

LCS Dup (4H05046-BSD1) Prepared: 08/05/2014 20:30 Analyzed: 08/06/2014 09:01

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzo(a)pyrene	4.7		0.10	ug/L	5.71		82	53-120	12	20	
Surrogate: p-Terphenyl	*5.8*			*ug/L*	*5.71*		*102*	*58-132*			

Polychlorinated Biphenyls by GC - Quality Control

Batch 4H06001 - EPA 3550C

Blank (4H06001-BLK1) Prepared: 08/06/2014 06:30 Analyzed: 08/07/2014 18:20

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet							
PCB-1260	<0.020	U	0.040	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.022*			*mg/kg wet*	*0.0333*		*66*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.039*			*mg/kg wet*	*0.0333*		*116*	*60-125*			

LCS (4H06001-BS1) Prepared: 08/06/2014 06:30 Analyzed: 08/07/2014 18:32

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1260	0.36		0.040	mg/kg wet	0.333		109	60-130			
Surrogate: 2,4,5,6-TCMX	*0.016*			*mg/kg wet*	*0.0333*		*49*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.036*			*mg/kg wet*	*0.0333*		*107*	*60-125*			

Matrix Spike (4H06001-MS1) Prepared: 08/06/2014 06:30 Analyzed: 08/07/2014 18:44

Source: A404270-11

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 4H06001 - EPA 3550C

Matrix Spike (4H06001-MS1) Continued Prepared: 08/06/2014 06:30 Analyzed: 08/07/2014 18:44

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.021	U	0.041	mg/kg dry		0.037		29-185			
PCB-1260	0.57		0.041	mg/kg dry	0.344	0.15	121	60-130			
Surrogate: 2,4,5,6-TCMX	*0.030*			*mg/kg dry*	*0.0344*		*86*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.046*	*Q*		*mg/kg dry*	*0.0344*		*135*	*60-125*			*QS-03*

Matrix Spike Dup (4H06001-MSD1) Prepared: 08/06/2014 06:30 Analyzed: 08/07/2014 18:56

Source: A404270-11

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.021	U	0.041	mg/kg dry		0.037		29-185		30	
PCB-1260	0.59		0.041	mg/kg dry	0.342	0.15	128	60-130	4	30	
Surrogate: 2,4,5,6-TCMX	*0.030*			*mg/kg dry*	*0.0342*		*88*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.043*	*Q*		*mg/kg dry*	*0.0342*		*126*	*60-125*			*QS-03*

Batch 4H06006 - EPA 3550C

Blank (4H06006-BLK1) Prepared: 08/06/2014 09:27 Analyzed: 08/08/2014 08:02

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet							
PCB-1260	<0.020	U	0.040	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.028*			*mg/kg wet*	*0.0333*		*85*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.041*			*mg/kg wet*	*0.0333*		*123*	*60-125*			

LCS (4H06006-BS1) Prepared: 08/06/2014 09:27 Analyzed: 08/08/2014 08:14

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1260	0.44	Q	0.040	mg/kg wet	0.333		132	60-130			J-02, QL-02
Surrogate: 2,4,5,6-TCMX	*0.031*			*mg/kg wet*	*0.0333*		*93*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.043*	*Q*		*mg/kg wet*	*0.0333*		*130*	*60-125*			*QS-03*

Matrix Spike (4H06006-MS1) Prepared: 08/06/2014 09:27 Analyzed: 08/08/2014 08:26

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg dry		0.016 U		29-185			
PCB-1260	0.37		0.040	mg/kg dry	0.337	0.011 U	109	60-130			
Surrogate: 2,4,5,6-TCMX	*0.025*			*mg/kg dry*	*0.0337*		*74*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.038*			*mg/kg dry*	*0.0337*		*112*	*60-125*			

Matrix Spike Dup (4H06006-MSD1) Prepared: 08/06/2014 09:27 Analyzed: 08/08/2014 08:38

Source: A404270-28

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 4H06006 - EPA 3550C

Matrix Spike Dup (4H06006-MSD1) Continued Prepared: 08/06/2014 09:27 Analyzed: 08/08/2014 08:38

Source: A404270-28

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg dry		0.016 U		29-185		30	
PCB-1260	0.38		0.040	mg/kg dry	0.342	0.011 U	111	60-130	4	30	
Surrogate: 2,4,5,6-TCMX	*0.027*			*mg/kg dry*	*0.0342*		*78*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.037*			*mg/kg dry*	*0.0342*		*108*	*60-125*			

Batch 4H06028 - EPA 3510C

Blank (4H06028-BLK1) Prepared: 08/06/2014 13:54 Analyzed: 08/08/2014 07:10

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<1.0	U	1.0	ug/L							
PCB-1260	<1.0	U	1.0	ug/L							
Surrogate: 2,4,5,6-TCMX	*0.76*			*ug/L*	*1.00*		*76*	*38-142*			
Surrogate: Decachlorobiphenyl	*0.88*			*ug/L*	*1.00*		*88*	*40-135*			

LCS (4H06028-BS1) Prepared: 08/06/2014 13:54 Analyzed: 08/08/2014 07:22

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<1.0	U	1.0	ug/L				29-185			
PCB-1260	11		1.0	ug/L	10.0		112	30-145			
Surrogate: 2,4,5,6-TCMX	*0.83*			*ug/L*	*1.00*		*83*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.1*			*ug/L*	*1.00*		*113*	*40-135*			

LCS Dup (4H06028-BSD1) Prepared: 08/06/2014 13:54 Analyzed: 08/08/2014 07:34

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<1.0	U	1.0	ug/L				29-185		30	
PCB-1260	11		1.0	ug/L	10.0		110	30-145	1	30	
Surrogate: 2,4,5,6-TCMX	*0.71*			*ug/L*	*1.00*		*71*	*38-142*			
Surrogate: Decachlorobiphenyl	*1.0*			*ug/L*	*1.00*		*105*	*40-135*			

Batch 4H08042 - EPA 3550C

Blank (4H08042-BLK1) Prepared: 08/09/2014 08:42 Analyzed: 08/13/2014 05:27

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet							
PCB-1260	<0.020	U	0.040	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.026*			*mg/kg wet*	*0.0333*		*78*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.032*			*mg/kg wet*	*0.0333*		*96*	*60-125*			

LCS (4H08042-BS1) Prepared: 08/09/2014 08:42 Analyzed: 08/13/2014 05:39

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185			

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 4H08042 - EPA 3550C

LCS (4H08042-BS1) Continued Prepared: 08/09/2014 08:42 Analyzed: 08/13/2014 05:39

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1260	0.34		0.040	mg/kg wet	0.333		102	60-130			
Surrogate: 2,4,5,6-TCMX	*0.024*			*mg/kg wet*	*0.0333*		*73*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.034*			*mg/kg wet*	*0.0333*		*102*	*60-125*			

Matrix Spike (4H08042-MS1) Prepared: 08/09/2014 08:42 Analyzed: 08/13/2014 05:51

Source: A404270-11RE1

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.021	U	0.041	mg/kg dry		0.019		29-185			
PCB-1260	0.49	Q	0.041	mg/kg dry	0.350	0.025	132	60-130			QM-07
Surrogate: 2,4,5,6-TCMX	*0.030*			*mg/kg dry*	*0.0350*		*86*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.044*	*Q*		*mg/kg dry*	*0.0350*		*127*	*60-125*			*QS-03*

Matrix Spike Dup (4H08042-MSD1) Prepared: 08/09/2014 08:42 Analyzed: 08/13/2014 06:03

Source: A404270-11RE1

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.021	U	0.041	mg/kg dry		0.019		29-185		30	
PCB-1260	0.53	Q	0.041	mg/kg dry	0.349	0.025	144	60-130	8	30	QM-07
Surrogate: 2,4,5,6-TCMX	*0.037*			*mg/kg dry*	*0.0349*		*106*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.048*	*Q*		*mg/kg dry*	*0.0349*		*136*	*60-125*			*QS-03*

Batch 4H13024 - EPA 3550C

Blank (4H13024-BLK1) Prepared: 08/13/2014 14:00 Analyzed: 08/14/2014 09:54

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet							
PCB-1260	<0.020	U	0.040	mg/kg wet							
Surrogate: 2,4,5,6-TCMX	*0.029*			*mg/kg wet*	*0.0333*		*86*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.032*			*mg/kg wet*	*0.0333*		*97*	*60-125*			

LCS (4H13024-BS1) Prepared: 08/13/2014 14:00 Analyzed: 08/14/2014 10:06

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185			
PCB-1260	0.37		0.040	mg/kg wet	0.333		112	60-130			
Surrogate: 2,4,5,6-TCMX	*0.031*			*mg/kg wet*	*0.0333*		*92*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.036*			*mg/kg wet*	*0.0333*		*107*	*60-125*			

LCS Dup (4H13024-BSD1) Prepared: 08/13/2014 14:00 Analyzed: 08/14/2014 10:18

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
PCB-1254	<0.020	U	0.040	mg/kg wet				29-185		30	
PCB-1260	0.36		0.040	mg/kg wet	0.333		109	60-130	3	30	

QUALITY CONTROL

Polychlorinated Biphenyls by GC - Quality Control

Batch 4H13024 - EPA 3550C

LCS Dup (4H13024-BSD1) Continued Prepared: 08/13/2014 14:00 Analyzed: 08/14/2014 10:18

Analyte	Result	Flag	LOQ	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: 2,4,5,6-TCMX	*0.029*			*mg/kg wet*	*0.0333*		*86*	*20-137*			
Surrogate: Decachlorobiphenyl	*0.034*			*mg/kg wet*	*0.0333*		*101*	*60-125*			

FLAGS/NOTES AND DEFINITIONS

B	The analyte was detected in the associated method blank.
D	The sample was analyzed at dilution.
J	The reported result is an estimated value.
U	Analyte was not detected and is reported as less than the LOD or as defined by the client. The LOD has been adjusted for any dilution or concentration of the sample.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence (85% or greater confidence) to make a "tentative identification".
Q	One or more quality control criteria failed.
GC-07	Confirmation result exceeds 40% RPD, lower result reported due to interference.
J-02	Result is estimated due to bias in the associated laboratory control sample (LCS).
QL-02	The associated laboratory control sample exhibited high bias; since the result is ND, the impact on data quality is minimal.
QM-02	The RPD and/or percent recovery for this QC spike sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QM-14	Confirmed matrix effects
QS-03	Surrogate recovery outside acceptance limits

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT
X Expedited

Due ___/___/___

Lab Workorder: A404270

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSW01-0814	8/1/14	12:10		SO	2		X	X	X							
	TR-5TH-CSW02-0814	8/1/14	12:15		SO	2		X	X	X							
	TR-5TH-CSW03-0814	8/1/14	12:20		SO	2		X	X	X							
	TR-5TH-CSW04-0814	8/1/14	12:30		SO	2		X	X	X							
	TR-5TH-CSW05-0814	8/1/14	12:35		SO	2		X	X	X							
	TR-5TH-CSW06-0814	8/1/14	12:40		SO	2		X	X	X							
	TR-5TH-CSW07-0814	8/1/14	12:50		SO	2		X	X	X							
	TR-5TH-CSW07D-0814	8/1/14	12:50		SO	2		X	X	X							
	TR-5TH-CSW08-0814	8/1/14	12:55		SO	2		X	X	X							
	TR-5TH-CSW09-0814	8/1/14	13:00		SO	2		X	X	X							
	TR-5TH-CSW10-0814	8/1/14	11:30		SO	2		X	X	X							Run QA/QC
	TR-5TH-CSW10-0814-MS	8/1/14	11:30		SO	2		X	X	X							

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time	Received By	Date/Time
			8/4/14 1420	K Dyle	8/5/14 ~~0900~~ 0645
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: SL-78 2°C MEDB+W 3°C

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

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Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT

X Expedited

Due ___/___/___

Lab Workorder: A404270

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSW01-0814	8/1/14	12:10		SO	3	X										
	TR-5TH-CSW02-0814	8/1/14	12:15		SO	3	X										
	TR-5TH-CSW03-0814	8/1/14	12:20		SO	3	X										
	TR-5TH-CSW04-0814	8/1/14	12:30		SO	3	X										
	TR-5TH-CSW05-0814	8/1/14	12:35		SO	3	X										
	TR-5TH-CSW06-0814	8/1/14	12:40		SO	3	X										
	TR-5TH-CSW07-0814	8/1/14	12:50		SO	3	X										
	TR-5TH-CSW07D-0814	8/1/14	12:50		SO	3	X										
	TR-5TH-CSW08-0814	8/1/14	12:55		SO	3	X										
	TR-5TH-CSW09-0814	8/1/14	13:00		SO	3	X										
	TR-5TH-CSW10-0814	8/1/14	11:30		SO	3	X										Run QA/QC
	TR-5TH-CSW10-0814-MS	8/1/14	11:30		SO	3	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time 8/4/14 1420	Received By K. Dyl	Date/Time 8/5/14 0645
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt -20C JX-15			Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT
X Expedited

Due ___/___/___

Lab Workorder: A404270

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSW10-0814-SD	8/1/14	11:30		SO	2		X	X	X							
	TR-5TH-CSW11-0814	8/1/14	11:35		SO	2		X	X	X							
	TR-5TH-CSW11D-0814	8/1/14	11:35		SO	2		X	X	X							
	TR-5TH-CSW12-0814	8/1/14	11:40		SO	2		X	X	X							
	TR-5TH-CSW13-0814	8/1/14	11:45		SO	2		X	X	X							
	TR-5TH-CSW14-0814	8/1/14	11:50		SO	2		X	X	X							
	TR-5TH-CSW15-0814	8/1/14	12:00		SO	2		X	X	X							
	TR-5TH-CSF01-0814	8/1/14	13:10		SO	2		X	X	X							
	TR-5TH-CSF02-0814	8/1/14	13:15		SO	2		X	X	X							
	TR-5TH-CSF03-0814	8/1/14	13:20		SO	2		X	X	X							
	TR-5TH-CSF04-0814	8/1/14	13:30		SO	2		X	X	X							
	TR-5TH-CSF05-0814	8/1/14	13:35		SO	2		X	X	X							

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time	Received By	Date/Time
		[signature]	8/4/14 1420	K. Dyer	8/5/14 0845 0900 KMD
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: SL-78 2°C MED B+W 3°C

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
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Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard
X 7 d TAT
___ Expedited

Due ___/___/___

Lab Workorder: A404270

Requested Analyses / Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSW10-0814-SD	8/1/14	11:30		SO	3	X										
	TR-5TH-CSW11-0814	8/1/14	11:35		SO	3	X										
	TR-5TH-CSW11D-0814	8/1/14	11:35		SO	3	X										
	TR-5TH-CSW12-0814	8/1/14	11:40		SO	3	X										
	TR-5TH-CSW13-0814	8/1/14	11:45		SO	3	X										
	TR-5TH-CSW14-0814	8/1/14	11:50		SO	3	X										
	TR-5TH-CSW15-0814	8/1/14	12:00		SO	3	X										
	TR-5TH-CSF01-0814	8/1/14	13:10		SO	3	X										
	TR-5TH-CSF02-0814	8/1/14	13:15		SO	3	X										
	TR-5TH-CSF03-0814	8/1/14	13:20		SO	3	X										
	TR-5TH-CSF04-0814	8/1/14	13:30		SO	3	X										
	TR-5TH-CSF05-0814	8/1/14	13:35		SO	3	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time	Received By	Date/Time
			8/4/14 1420	K. Dyl	8/5/14 0645 0400
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 2°C JX-15		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

10775 Central Port Dr.
Orlando, FL 32824
(407) 826-5314 Fax (407) 850-6945

4810 Executive Park Court, Suite 111
Jacksonville, FL 32216-6069
(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT

X Expedited

Due ___/___/___

Lab Workorder: AY04270

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSF05D-0814	8/1/14	13:35		SO	2		X	X	X							
	TR-5TH-CSF06-0814	8/1/14	13:45		SO	2		X	X	X							
	TR-5TH-CSF07-0814	8/1/14	13:50		SO	2		X	X	X							
	TR-5TH-CSF08-0814	8/1/14	14:00		SO	2		X	X	X							
	TR-5TH-CSF09-0814	8/1/14	14:05		SO	2		X	X	X							Run QA/QC
	TR-5TH-CSF09-0814-MS	8/1/14	14:05		SO	2		X	X	X							
	TR-5TH-CSF09-0814-SD	8/1/14	14:05		SO	2		X	X	X							
	TR-5TH-CS-EB-080114	8/1/14	21:00		AQ	5		X	X	X							

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time	Received By	Date/Time
			8/4/14 1420	K. Dyer	8/5/14 0845
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: SL-78 2°C MED B+W 3°C

Condition Upon Receipt: ✓ Acceptable ___ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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(904) 296-3007 Fax (904) 296-6210

102-A Woodwinds Industrial Court
Cary, NC 27511
(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT
X Expedited

Due __/__/__

Lab Workorder: A4G4220

Preservation (See Codes) (Combine as necessary)

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CSF05D-0814	8/1/14	13:35		SO	3	X										
	TR-5TH-CSF06-0814	8/1/14	13:45		SO	3	X										
	TR-5TH-CSF07-0814	8/1/14	13:50		SO	3	X										
	TR-5TH-CSF08-0814	8/1/14	14:00		SO	3	X										
	TR-5TH-CSF09-0814	8/1/14	14:05		SO	3	X										Run QA/QC
	TR-5TH-CSF09-0814-MS	8/1/14	14:05		SO	3	X										
	TR-5TH-CSF09-0814-SD	8/1/14	14:05		SO	3	X										

<-- Total # of Containers

Sample Kit Prepared By	Date/Time		Date/Time	Received By	Date/Time
		[signature]	8/4/14 1420	K. Dylan	8/5/14 0645 ~~0900~~ EMD
Comments			Date/Time	Received By	Date/Time
			Date/Time	Received By	Date/Time
		Cooler #'s & Temps on Receipt: 2°C JX-15		Condition Upon Receipt: ✓ Acceptable ___ Unacceptable	

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

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ENVIRONMENTAL CONSERVATION LABORATORIES CHAIN-OF-CUSTODY RECORD

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(919) 467-3090 Fax (919) 467-3515

Client Name: CH2M Hill, Inc. (CH025)	Project Number: 458605
Address: 5701 Cleveland Street, Suite 200	Project Name/Desc: CTO-0017 Towers Road Disposal-5th
City/ST/Zip: Virginia Beach, VA 23462	PO # / Billing Info: 954284
Tel: 757-671-6232 / Fax:	Reporting Contact: Juliana Dean
Sampler(s) Name, Affiliation (Print): Nate Price	Billing Contact: Janna Staszak
Sampler(s) Signature:	Facility # (if required):

Requested Analyses

Requested Turnaround Times

Note : Rush requests subject to acceptance by the facility

___ Standard 7 d TAT
X Expedited

Due __/__/__

Lab Workorder: A404270

Item #	Sample ID (Field Identification)	Collection Date	Collection Time	Comp / Grab	Matrix (see codes)	Total # of Containers	8260B (1,4-dichlorobenzene)	8082A DOD (PCB-1254 and PCB-1260)	8270D PAH SIM DOD (benzo (a)pyrene)	As, Co, Fe, Pb, Zn, Sb							Sample Comments
	TR-5TH-CS-EB-080114	8/1/14	21:00		AQ	2	X										*frozen
	TR-5TH-CS-TB-080114	8/1/14	0:00		AQ	2	X										

Preservation (See Codes) (Combine as necessary)

<-- Total # of Containers

Sample Kit Prepared By	Date/Time	Date/Time	Received By	Date/Time
		8/4/14 1420	K. Dyl[illegible]	8/5/14 0900
Comments		Date/Time	Received By	Date/Time
		Date/Time	Received By	Date/Time

Cooler #'s & Temps on Receipt: SL-78 2°C MED B+W 3°C JX-15 -2°C

Condition Upon Receipt: ___ Acceptable ✓ Unacceptable

Matrix : GW-Groundwater SO-Soil SE-Sediment SW-Surface Water WW-Wastewater A-Air O-Other (detail in comments)

Preservation: I-Ice H-HCl N-HNO3 S-H2SO4 NO-NaOH O-Other (detail in comments)

Note : All samples submitted to ENCO Labs are in accordance with the terms and conditions listed on the reverse of this form, unless prior written agreements exist

WORK ORDER

Printed: 8/6/2014 7:38:54AM

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Report To:

CH2M Hill, Inc. (CH025)
Juliana Dean
5701 Cleveland Street, Suite 200
Virginia Beach, VA 23462
Phone: (757) 671-6232
Fax:

Invoice To:

CH2M Hill, Inc. (CH025)
Janna Staszak
5701 Cleveland Street, Suite 200
Virginia Beach, VA 23462
Phone :(757) 671-6256
Fax:

Client Notes

Project Notes

Work Order Notes

Soil samples were frozen by client within 5 hours of sampling. The frozen samples were shipped in a salt slurry to ENCO, soil samples were received into the lab frozen. Cooer temp was -2 C. MCC 8/5/14

Vials for EB sample received into lab broken, client was notified. VOC analysis was cancelled by client. MCC 8/5/14

Sample -017 is not a real sample. Mistaken copy of -016. KMD 8/5/14. -17 SHOULD have been deleted not cancelled. MCC 8/6/14

Date Due:	08-Aug-14 17:00 (3 day TAT)		
Received By:	Kaitlin Dylnicki	Date Received:	05-Aug-14 06:45
Logged In By:	Marcia Colon	Date Logged In:	24-Jul-14 07:34

Cooler: JX-15 received at -2.0°C

Containers Intact	Y	Containers Properly Preserved	Y	Proper Containers Received	Y	COC/Labels Agree	Y	Custody Seals Intact	Y
Volatile Containers Preserved	Y	Volatile Containers Headspace Free	Y	Aqueous Samples Checked for Residual Cl	N	All Samples in PreLog Received	N	Received On Ice	Y
Temperature Corrected	Y								

Cooler: MED B+W received at 3.0°C

Containers Intact	N	Containers Properly Preserved	Y	Proper Containers Received	Y	COC/Labels Agree	Y	Custody Seals Intact	Y
Volatile Containers Preserved	N	Volatile Containers Headspace Free	N	Aqueous Samples Checked for Residual Cl	N	All Samples in PreLog Received	N	Received On Ice	Y
Temperature Corrected	Y								

Cooler: SL-78 received at 2.0°C

Containers Intact	Y	Containers Properly Preserved	Y	Proper Containers Received	Y	COC/Labels Agree	Y	Custody Seals Intact	Y
Volatile Containers Preserved	N	Volatile Containers Headspace Free	N	Aqueous Samples Checked for Residual Cl	N	All Samples in PreLog Received	N	Received On Ice	Y
Temperature Corrected	Y								

Analysis	Due	TAT	Expires	Status	Comments

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
A404270-01 TR-5TH-CSW01-0814 [Soil] Sampled 01-Aug-14 12:10 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:10	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:10	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:10	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:10	Received	Auto-Included
A404270-02 TR-5TH-CSW02-0814 [Soil] Sampled 01-Aug-14 12:15 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:15	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:15	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:15	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:15	Received	Auto-Included
A404270-03 TR-5TH-CSW03-0814 [Soil] Sampled 01-Aug-14 12:20 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:20	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:20	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:20	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:20	Received	Auto-Included
A404270-04 TR-5TH-CSW04-0814 [Soil] Sampled 01-Aug-14 12:30 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:30	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:30	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:30	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:30	Received	Auto-Included
A404270-05 TR-5TH-CSW05-0814 [Soil] Sampled 01-Aug-14 12:35 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:35	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:35	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:35	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:35	Received	Auto-Included
A404270-06 TR-5TH-CSW06-0814 [Soil] Sampled 01-Aug-14 12:40 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:40	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:40	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:40	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:40	Received	Auto-Included

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
A404270-07 TR-5TH-CSW07-0814 [Soil] Sampled 01-Aug-14 12:50 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:50	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:50	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:50	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:50	Received	Auto-Included
A404270-08 TR-5TH-CSW07D-0814 [Soil] Sampled 01-Aug-14 12:50 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:50	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:50	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:50	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:50	Received	Auto-Included
A404270-09 TR-5TH-CSW08-0814 [Soil] Sampled 01-Aug-14 12:55 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:55	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:55	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:55	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:55	Received	Auto-Included
A404270-10 TR-5TH-CSW09-0814 [Soil] Sampled 01-Aug-14 13:00 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:00	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:00	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:00	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:00	Received	Auto-Included
A404270-11 TR-5TH-CSW010-0814 [Soil] Sampled 01-Aug-14 11:30 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:30	Batched	1254 & 1260 only. USE for MS/MSD
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:30	Received	1,4-DCB only. USE for MS/MSD
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:30	Prepared	Benzo(a)pyrene only. USE for MS/MSD
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:30	Received	Auto-Included
A404270-12 TR-5TH-CSW11-0814 [Soil] Sampled 01-Aug-14 11:35 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:35	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:35	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:35	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:35	Received	Auto-Included

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
A404270-13 TR-5TH-CSW11D-0814 [Soil] Sampled 01-Aug-14 11:35 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:35	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:35	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:35	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:35	Received	Auto-Included
A404270-14 TR-5TH-CSW12-0814 [Soil] Sampled 01-Aug-14 11:40 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:40	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:40	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:40	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:40	Received	Auto-Included
A404270-15 TR-5TH-CSW13-0814 [Soil] Sampled 01-Aug-14 11:45 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:45	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:45	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:45	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:45	Received	Auto-Included
A404270-16 TR-5TH-CSW14-0814 [Soil] Sampled 01-Aug-14 11:50 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:50	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:50	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:50	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:50	Received	Auto-Included
A404270-17 NO SAMPLE [Soil] Sampled 01-Aug-14 11:50 Eastern					**Mistaken copy of -016. NOT A REAL SAMPLE. KMD 8/5/14.**
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 11:50	Cancelled	NOT A SAMPLE!!!
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 11:50	Cancelled	NOT A SAMPLE!!!
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 11:50	Cancelled	NOT A SAMPLE!!!
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	Cancelled	NOT A SAMPLE!!!

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
A404270-18 TR-5TH-CSW15-0814 [Soil] Sampled 01-Aug-14 12:00 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 12:00	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 12:00	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 12:00	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 12:00	Received	Auto-Included
A404270-19 TR-5TH-CSF01-0814 [Soil] Sampled 01-Aug-14 13:10 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:10	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:10	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:10	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:10	Received	Auto-Included
A404270-20 TR-5TH-CSF02-0814 [Soil] Sampled 01-Aug-14 13:15 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:15	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:15	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:15	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:15	Received	Auto-Included
A404270-21 TR-5TH-CSF03-0814 [Soil] Sampled 01-Aug-14 13:20 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:20	Batched	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:20	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:20	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:20	Received	Auto-Included
A404270-22 TR-5TH-CSF04-0814 [Soil] Sampled 01-Aug-14 13:30 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:30	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:30	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:30	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:30	Received	Auto-Included
A404270-23 TR-5TH-CSF05-0814 [Soil] Sampled 01-Aug-14 13:35 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:35	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:35	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:35	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:35	Received	Auto-Included

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
A404270-24 TR-5TH-CSF05D-0814 [Soil] Sampled 01-Aug-14 13:35 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:35	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:35	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:35	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:35	Received	Auto-Included
A404270-25 TR-5TH-CSF06-0814 [Soil] Sampled 01-Aug-14 13:45 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:45	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:45	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:45	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:45	Received	Auto-Included
A404270-26 TR-5TH-CSF07-0814 [Soil] Sampled 01-Aug-14 13:50 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 13:50	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 13:50	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 13:50	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 13:50	Received	Auto-Included
A404270-27 TR-5TH-CSF08-0814 [Soil] Sampled 01-Aug-14 14:00 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 14:00	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 14:00	Received	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 14:00	Prepared	Benzo(a)pyrene only
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 14:00	Received	Auto-Included
A404270-28 TR-5TH-CSF09-0814 [Soil] Sampled 01-Aug-14 14:05 Eastern					
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 14:05	Received	1254 & 1260 only. USE for MS/MSD
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 14:05	Received	1,4-DCB only. USE for MS/MSD
8270D PAH SIM DOD	08-Aug-14 15:00	3	15-Aug-14 14:05	Prepared	Benzo(a)pyrene only. USE for MS/MSD
Solids, Dry Weight	08-Aug-14 15:00	3	28-Jan-15 14:05	Received	Auto-Included
A404270-29 TR-5TH-CS-EB-080114 [Water] Sampled 01-Aug-14 21:00 Eastern					**Vials broken upon arrival. client notified. 8260B cancelled. KMD 8/5/14.**
8082A DOD	08-Aug-14 15:00	3	01-Aug-15 21:00	Received	1254 & 1260 only
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 21:00	Cancelled	1,4-DCB only
8270D PAH SIM DOD	08-Aug-14 15:00	3	08-Aug-14 21:00	Prepared	Benzo(a)pyrene only
A404270-30 TR-5TH-CS-TB-080114 [Water] Sampled 01-Aug-14 00:00 Eastern					
8260B TCL SOM01.2 DOD	08-Aug-14 15:00	3	15-Aug-14 00:00	Received	1,4-DCB only

ENCO Jacksonville

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-01 TR-5TH-CSW01-0814 [Soil] Sampled 01-Aug-14 12:10 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:10	SubContracted	
A404270-02 TR-5TH-CSW02-0814 [Soil] Sampled 01-Aug-14 12:15 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:15	SubContracted	
A404270-03 TR-5TH-CSW03-0814 [Soil] Sampled 01-Aug-14 12:20 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:20	SubContracted	
A404270-04 TR-5TH-CSW04-0814 [Soil] Sampled 01-Aug-14 12:30 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:30	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-05 TR-5TH-CSW05-0814 [Soil] Sampled 01-Aug-14 12:35 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:35	SubContracted	
A404270-06 TR-5TH-CSW06-0814 [Soil] Sampled 01-Aug-14 12:40 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:40	SubContracted	
A404270-07 TR-5TH-CSW07-0814 [Soil] Sampled 01-Aug-14 12:50 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
A404270-08 TR-5TH-CSW07D-0814 [Soil] Sampled 01-Aug-14 12:50 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:50	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-09 TR-5TH-CSW08-0814 [Soil] Sampled 01-Aug-14 12:55 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:55	SubContracted	
A404270-10 TR-5TH-CSW09-0814 [Soil] Sampled 01-Aug-14 13:00 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:00	SubContracted	
A404270-11 TR-5TH-CSW010-0814 [Soil] Sampled 01-Aug-14 11:30 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:30	SubContracted	USE for MS/MSD
A404270-12 TR-5TH-CSW11-0814 [Soil] Sampled 01-Aug-14 11:35 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-13 TR-5TH-CSW11D-0814 [Soil] Sampled 01-Aug-14 11:35 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:35	SubContracted	
A404270-14 TR-5TH-CSW12-0814 [Soil] Sampled 01-Aug-14 11:40 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:40	SubContracted	
A404270-15 TR-5TH-CSW13-0814 [Soil] Sampled 01-Aug-14 11:45 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:45	SubContracted	
A404270-16 TR-5TH-CSW14-0814 [Soil] Sampled 01-Aug-14 11:50 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 11:50	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-18 TR-5TH-CSW15-0814 [Soil] Sampled 01-Aug-14 12:00 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 12:00	SubContracted	
A404270-19 TR-5TH-CSF01-0814 [Soil] Sampled 01-Aug-14 13:10 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:10	SubContracted	
A404270-20 TR-5TH-CSF02-0814 [Soil] Sampled 01-Aug-14 13:15 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:15	SubContracted	
A404270-21 TR-5TH-CSF03-0814 [Soil] Sampled 01-Aug-14 13:20 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:20	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-22 TR-5TH-CSF04-0814 [Soil] Sampled 01-Aug-14 13:30 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:30	SubContracted	
A404270-23 TR-5TH-CSF05-0814 [Soil] Sampled 01-Aug-14 13:35 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
A404270-24 TR-5TH-CSF05D-0814 [Soil] Sampled 01-Aug-14 13:35 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:35	SubContracted	
A404270-25 TR-5TH-CSF06-0814 [Soil] Sampled 01-Aug-14 13:45 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:45	SubContracted	

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

Analysis	Due	TAT	Expires	Status	Comments
ENCO Jacksonville					
A404270-26 TR-5TH-CSF07-0814 [Soil] Sampled 01-Aug-14 13:50 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 13:50	SubContracted	
A404270-27 TR-5TH-CSF08-0814 [Soil] Sampled 01-Aug-14 14:00 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:00	SubContracted	
A404270-28 TR-5TH-CSF09-0814 [Soil] Sampled 01-Aug-14 14:05 Eastern					
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 14:05	SubContracted	USE for MS/MSD
A404270-29 TR-5TH-CS-EB-080114 [Water] Sampled 01-Aug-14 21:00 Eastern					**Vials broken upon arrival. client notified. 8260B cancelled. KMD 8/5/14.**
Antimony Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	
Arsenic Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	
Cobalt Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	
Iron Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	
Lead Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	
Zinc Total EPA 6010C DOD	08-Aug-14 15:00	3	28-Jan-15 21:00	SubContracted	

Reviewed By

Date

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

METALS RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
A404270-12	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-20	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-18	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-17	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-17	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-13	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-13	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-13	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-12	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-11	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-11	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-11	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-18	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-18	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-18	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-17	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-17	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-17	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-17	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-16	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-15	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-11	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-09	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-20	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-20	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-19	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-19	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-19	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-19	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-12	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-12	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-10	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-10	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-10	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-18	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-09	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-15	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-14	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-14	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00

Reviewed By

Date

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

A404270-14	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-14	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-14	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-13	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-13	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-13	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-12	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-12	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-11	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-09	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-02	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-06	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-06	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-05	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-05	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-03	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-03	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-03	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-03	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-03	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-03	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-02	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-15	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-02	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-07	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-02	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-02	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-04	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-04	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-04	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-01	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-01	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-01	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-01	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-01	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-01	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-02	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-05	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-11	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-15	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-14	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-08	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-08	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-08	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-07	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-07	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-06	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00

Reviewed By

Date

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

A404270-06	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-06	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-06	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-05	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-07	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-05	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-04	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-04	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-04	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-15	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-09	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-08	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-08	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-08	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-07	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-07	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-15	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-05	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-23	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-23	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-29	Lead Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-29	Iron Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-29	Cobalt Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-28	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-26	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-25	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-21	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00
A404270-27	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-18	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-27	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-25	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-24	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-24	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-28	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-28	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-28	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-20	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-29	Antimony Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-28	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-26	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-26	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-26	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-29	Arsenic Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-26	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-29	Zinc Total EPA 6010C DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	28-Jan-15 21:00	08-Aug-14 15:00
A404270-22	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-21	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00

Reviewed By

Date

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

A404270-23	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-21	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00
A404270-23	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-28	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-23	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-27	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-26	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-27	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-27	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-27	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00
A404270-25	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-21	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00
A404270-25	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-19	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-22	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-22	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-21	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00
A404270-10	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-10	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-09	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-19	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-09	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-22	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-25	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-25	Antimony Total EPA 6010C DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-24	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-24	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-24	Cobalt Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-24	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-23	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-22	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-20	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-20	Lead Total EPA 6010C DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-22	Arsenic Total EPA 6010C DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-10	Iron Total EPA 6010C DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-21	Zinc Total EPA 6010C DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00

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Date

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A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

SVOCGC RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
A404270-14	8082A DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	01-Aug-15 11:40	08-Aug-14 15:00
A404270-03	8082A DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	01-Aug-15 12:20	08-Aug-14 15:00
A404270-21	8082A DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	01-Aug-15 13:20	08-Aug-14 15:00
A404270-10	8082A DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	01-Aug-15 13:00	08-Aug-14 15:00
A404270-12	8082A DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	01-Aug-15 11:35	08-Aug-14 15:00
A404270-27	8082A DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	01-Aug-15 14:00	08-Aug-14 15:00
A404270-08	8082A DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	01-Aug-15 12:50	08-Aug-14 15:00
A404270-19	8082A DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	01-Aug-15 13:10	08-Aug-14 15:00
A404270-07	8082A DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	01-Aug-15 12:50	08-Aug-14 15:00
A404270-17	8082A DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	01-Aug-15 11:50	08-Aug-14 15:00
A404270-11	8082A DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	01-Aug-15 11:30	08-Aug-14 15:00
A404270-01	8082A DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	01-Aug-15 12:10	08-Aug-14 15:00
A404270-22	8082A DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	01-Aug-15 13:30	08-Aug-14 15:00
A404270-24	8082A DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	01-Aug-15 13:35	08-Aug-14 15:00
A404270-15	8082A DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	01-Aug-15 11:45	08-Aug-14 15:00
A404270-09	8082A DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	01-Aug-15 12:55	08-Aug-14 15:00
A404270-18	8082A DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	01-Aug-15 12:00	08-Aug-14 15:00
A404270-06	8082A DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	01-Aug-15 12:40	08-Aug-14 15:00
A404270-29	8082A DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	01-Aug-15 21:00	08-Aug-14 15:00
A404270-16	8082A DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	01-Aug-15 11:50	08-Aug-14 15:00
A404270-05	8082A DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	01-Aug-15 12:35	08-Aug-14 15:00
A404270-02	8082A DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	01-Aug-15 12:15	08-Aug-14 15:00
A404270-26	8082A DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	01-Aug-15 13:50	08-Aug-14 15:00
A404270-28	8082A DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	01-Aug-15 14:05	08-Aug-14 15:00
A404270-20	8082A DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	01-Aug-15 13:15	08-Aug-14 15:00
A404270-04	8082A DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	01-Aug-15 12:30	08-Aug-14 15:00
A404270-23	8082A DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	01-Aug-15 13:35	08-Aug-14 15:00
A404270-13	8082A DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	01-Aug-15 11:35	08-Aug-14 15:00
A404270-25	8082A DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	01-Aug-15 13:45	08-Aug-14 15:00

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Date

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A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

SVOCGCMS RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
A404270-17	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	15-Aug-14 11:50	08-Aug-14 15:00
A404270-23	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	15-Aug-14 13:35	08-Aug-14 15:00
A404270-27	8270D PAH SIM DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	15-Aug-14 14:00	08-Aug-14 15:00
A404270-21	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	15-Aug-14 13:20	08-Aug-14 15:00
A404270-25	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	15-Aug-14 13:45	08-Aug-14 15:00
A404270-22	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	15-Aug-14 13:30	08-Aug-14 15:00
A404270-02	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	15-Aug-14 12:15	08-Aug-14 15:00
A404270-13	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	15-Aug-14 11:35	08-Aug-14 15:00
A404270-09	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	15-Aug-14 12:55	08-Aug-14 15:00
A404270-20	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	15-Aug-14 13:15	08-Aug-14 15:00
A404270-01	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	15-Aug-14 12:10	08-Aug-14 15:00
A404270-08	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	15-Aug-14 12:50	08-Aug-14 15:00
A404270-29	8270D PAH SIM DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	08-Aug-14 21:00	08-Aug-14 15:00
A404270-15	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	15-Aug-14 11:45	08-Aug-14 15:00
A404270-19	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	15-Aug-14 13:10	08-Aug-14 15:00
A404270-11	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	15-Aug-14 11:30	08-Aug-14 15:00
A404270-14	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	15-Aug-14 11:40	08-Aug-14 15:00
A404270-04	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	15-Aug-14 12:30	08-Aug-14 15:00
A404270-05	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	15-Aug-14 12:35	08-Aug-14 15:00
A404270-16	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	15-Aug-14 11:50	08-Aug-14 15:00
A404270-06	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	15-Aug-14 12:40	08-Aug-14 15:00
A404270-03	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	15-Aug-14 12:20	08-Aug-14 15:00
A404270-12	8270D PAH SIM DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	15-Aug-14 11:35	08-Aug-14 15:00
A404270-10	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	15-Aug-14 13:00	08-Aug-14 15:00
A404270-26	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	15-Aug-14 13:50	08-Aug-14 15:00
A404270-24	8270D PAH SIM DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	15-Aug-14 13:35	08-Aug-14 15:00
A404270-18	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	15-Aug-14 12:00	08-Aug-14 15:00
A404270-07	8270D PAH SIM DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	15-Aug-14 12:50	08-Aug-14 15:00
A404270-28	8270D PAH SIM DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	15-Aug-14 14:05	08-Aug-14 15:00

Reviewed By

Date

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A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

VOCGCMS RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
A404270-30	8260B TCL SOM01.2 DOD	Water	3	01-Aug-14 00:00	05-Aug-14 06:45	15-Aug-14 00:00	08-Aug-14 15:00
A404270-04	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	15-Aug-14 12:30	08-Aug-14 15:00
A404270-06	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	15-Aug-14 12:40	08-Aug-14 15:00
A404270-27	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	15-Aug-14 14:00	08-Aug-14 15:00
A404270-01	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	15-Aug-14 12:10	08-Aug-14 15:00
A404270-03	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	15-Aug-14 12:20	08-Aug-14 15:00
A404270-05	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	15-Aug-14 12:35	08-Aug-14 15:00
A404270-02	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	15-Aug-14 12:15	08-Aug-14 15:00
A404270-13	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	15-Aug-14 11:35	08-Aug-14 15:00
A404270-21	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	15-Aug-14 13:20	08-Aug-14 15:00
A404270-10	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	15-Aug-14 13:00	08-Aug-14 15:00
A404270-19	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	15-Aug-14 13:10	08-Aug-14 15:00
A404270-20	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	15-Aug-14 13:15	08-Aug-14 15:00
A404270-23	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	15-Aug-14 13:35	08-Aug-14 15:00
A404270-18	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	15-Aug-14 12:00	08-Aug-14 15:00
A404270-17	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	15-Aug-14 11:50	08-Aug-14 15:00
A404270-24	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	15-Aug-14 13:35	08-Aug-14 15:00
A404270-14	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	15-Aug-14 11:40	08-Aug-14 15:00
A404270-09	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	15-Aug-14 12:55	08-Aug-14 15:00
A404270-25	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	15-Aug-14 13:45	08-Aug-14 15:00
A404270-11	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	15-Aug-14 11:30	08-Aug-14 15:00
A404270-26	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	15-Aug-14 13:50	08-Aug-14 15:00
A404270-12	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	15-Aug-14 11:35	08-Aug-14 15:00
A404270-15	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	15-Aug-14 11:45	08-Aug-14 15:00
A404270-16	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	15-Aug-14 11:50	08-Aug-14 15:00
A404270-22	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	15-Aug-14 13:30	08-Aug-14 15:00
A404270-29	8260B TCL SOM01.2 DOD	Water	3	01-Aug-14 21:00	05-Aug-14 06:45	15-Aug-14 21:00	08-Aug-14 15:00
A404270-07	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	15-Aug-14 12:50	08-Aug-14 15:00
A404270-28	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	15-Aug-14 14:05	08-Aug-14 15:00
A404270-08	8260B TCL SOM01.2 DOD	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	15-Aug-14 12:50	08-Aug-14 15:00

Reviewed By

Date

WORK ORDER

Printed: 8/6/2014 7:38:54AM

A404270

ENCO Orlando

Client:	**CH2M Hill, Inc. (CH025)**	**Lab Project Mgr:**	**Marcia Colon**
Project:	**CTO-0017 Towers Road Disposal-5th St.**	**Project Number:**	**458605**
PO #:	**954284**		

WETCHEM RUSH NOTICE

Lab Number	Analysis	Matrix	TAT	Sampled	Received	Expires	Due
A404270-21	Solids, Dry Weight	Soil	3	01-Aug-14 13:20	05-Aug-14 06:45	28-Jan-15 13:20	08-Aug-14 15:00
A404270-04	Solids, Dry Weight	Soil	3	01-Aug-14 12:30	05-Aug-14 06:45	28-Jan-15 12:30	08-Aug-14 15:00
A404270-12	Solids, Dry Weight	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-19	Solids, Dry Weight	Soil	3	01-Aug-14 13:10	05-Aug-14 06:45	28-Jan-15 13:10	08-Aug-14 15:00
A404270-18	Solids, Dry Weight	Soil	3	01-Aug-14 12:00	05-Aug-14 06:45	28-Jan-15 12:00	08-Aug-14 15:00
A404270-01	Solids, Dry Weight	Soil	3	01-Aug-14 12:10	05-Aug-14 06:45	28-Jan-15 12:10	08-Aug-14 15:00
A404270-13	Solids, Dry Weight	Soil	3	01-Aug-14 11:35	05-Aug-14 06:45	28-Jan-15 11:35	08-Aug-14 15:00
A404270-10	Solids, Dry Weight	Soil	3	01-Aug-14 13:00	05-Aug-14 06:45	28-Jan-15 13:00	08-Aug-14 15:00
A404270-22	Solids, Dry Weight	Soil	3	01-Aug-14 13:30	05-Aug-14 06:45	28-Jan-15 13:30	08-Aug-14 15:00
A404270-09	Solids, Dry Weight	Soil	3	01-Aug-14 12:55	05-Aug-14 06:45	28-Jan-15 12:55	08-Aug-14 15:00
A404270-23	Solids, Dry Weight	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-06	Solids, Dry Weight	Soil	3	01-Aug-14 12:40	05-Aug-14 06:45	28-Jan-15 12:40	08-Aug-14 15:00
A404270-08	Solids, Dry Weight	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-16	Solids, Dry Weight	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-26	Solids, Dry Weight	Soil	3	01-Aug-14 13:50	05-Aug-14 06:45	28-Jan-15 13:50	08-Aug-14 15:00
A404270-03	Solids, Dry Weight	Soil	3	01-Aug-14 12:20	05-Aug-14 06:45	28-Jan-15 12:20	08-Aug-14 15:00
A404270-25	Solids, Dry Weight	Soil	3	01-Aug-14 13:45	05-Aug-14 06:45	28-Jan-15 13:45	08-Aug-14 15:00
A404270-15	Solids, Dry Weight	Soil	3	01-Aug-14 11:45	05-Aug-14 06:45	28-Jan-15 11:45	08-Aug-14 15:00
A404270-20	Solids, Dry Weight	Soil	3	01-Aug-14 13:15	05-Aug-14 06:45	28-Jan-15 13:15	08-Aug-14 15:00
A404270-11	Solids, Dry Weight	Soil	3	01-Aug-14 11:30	05-Aug-14 06:45	28-Jan-15 11:30	08-Aug-14 15:00
A404270-24	Solids, Dry Weight	Soil	3	01-Aug-14 13:35	05-Aug-14 06:45	28-Jan-15 13:35	08-Aug-14 15:00
A404270-05	Solids, Dry Weight	Soil	3	01-Aug-14 12:35	05-Aug-14 06:45	28-Jan-15 12:35	08-Aug-14 15:00
A404270-14	Solids, Dry Weight	Soil	3	01-Aug-14 11:40	05-Aug-14 06:45	28-Jan-15 11:40	08-Aug-14 15:00
A404270-02	Solids, Dry Weight	Soil	3	01-Aug-14 12:15	05-Aug-14 06:45	28-Jan-15 12:15	08-Aug-14 15:00
A404270-07	Solids, Dry Weight	Soil	3	01-Aug-14 12:50	05-Aug-14 06:45	28-Jan-15 12:50	08-Aug-14 15:00
A404270-17	Solids, Dry Weight	Soil	3	01-Aug-14 11:50	05-Aug-14 06:45	28-Jan-15 11:50	08-Aug-14 15:00
A404270-28	Solids, Dry Weight	Soil	3	01-Aug-14 14:05	05-Aug-14 06:45	28-Jan-15 14:05	08-Aug-14 15:00
A404270-27	Solids, Dry Weight	Soil	3	01-Aug-14 14:00	05-Aug-14 06:45	28-Jan-15 14:00	08-Aug-14 15:00

Reviewed By

Date

ENCO Orlando

SDG: A404270-CTO0017

CLASS: 01_VOA_MS

METHOD: EPA 8260B

ANALYSES DATA PACKAGE COVER PAGE

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Client Sample Id:	Lab Sample Id:
TR-5TH-CSW01-0814	A404270-01
TR-5TH-CSW02-0814	A404270-02
TR-5TH-CSW03-0814	A404270-03
TR-5TH-CSW04-0814	A404270-04
TR-5TH-CSW05-0814	A404270-05
TR-5TH-CSW06-0814	A404270-06
TR-5TH-CSW07-0814	A404270-07
TR-5TH-CSW07D-0814	A404270-08
TR-5TH-CSW08-0814	A404270-09
TR-5TH-CSW09-0814	A404270-10
TR-5TH-CSW010-0814	A404270-11
TR-5TH-CSW11-0814	A404270-12
TR-5TH-CSW11D-0814	A404270-13
TR-5TH-CSW12-0814	A404270-14
TR-5TH-CSW13-0814	A404270-15
TR-5TH-CSW14-0814	A404270-16
TR-5TH-CSW15-0814	A404270-18
TR-5TH-CSF01-0814	A404270-19
TR-5TH-CSF02-0814	A404270-20
TR-5TH-CSF03-0814	A404270-21
TR-5TH-CSF03-0814	A404270-21RE1
TR-5TH-CSF04-0814	A404270-22
TR-5TH-CSF05-0814	A404270-23
TR-5TH-CSF05D-0814	A404270-24
TR-5TH-CSF06-0814	A404270-25
TR-5TH-CSF07-0814	A404270-26
TR-5TH-CSF08-0814	A404270-27
TR-5TH-CSF09-0814	A404270-28
TR-5TH-CS-TB-080114	A404270-30

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-01	File ID:	5HA015.D
Sampled:	08/01/14 12:10	Prepared:	08/06/14 00:00	Analyzed:	08/06/14 15:52
Solids:	81.79	Preparation:	EPA 5035_MS	Initial/Final:	5.83 g / 5 mL

Batch: 4H06021 Sequence: AA29941 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	46	93	74 - 133	
Toluene-d8	50.0	54	108	85 - 115	
4-Bromofluorobenzene	50.0	65	129	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	453907	10.863	639658	10.88	
1,4-Difluorobenzene	685738	11.52	977088	11.529	
Chlorobenzene-d5	768840	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	456300	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-02	File ID:	5HA016.D
Sampled:	08/01/14 12:15	Prepared:	08/06/14 00:00	Analyzed:	08/06/14 16:21
Solids:	78.60	Preparation:	EPA 5035_MS	Initial/Final:	4.55 g / 5 mL

Batch: 4H06021 Sequence: AA29941 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0025

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	48	95	74 - 133	
Toluene-d8	50.0	53	105	85 - 115	
4-Bromofluorobenzene	50.0	63	125	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	475897	10.871	639658	10.88	
1,4-Difluorobenzene	725523	11.521	977088	11.529	
Chlorobenzene-d5	819933	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	482763	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-03	File ID:	5HA017.D
Sampled:	08/01/14 12:20	Prepared:	08/06/14 00:00	Analyzed:	08/06/14 16:49
Solids:	77.99	Preparation:	EPA 5035_MS	Initial/Final:	5.25 g / 5 mL

Batch: 4H06021 Sequence: AA29941 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0026

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	94	74 - 133	
Toluene-d8	50.0	53	106	85 - 115	
4-Bromofluorobenzene	50.0	61	122	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	337625	10.871	639658	10.88	
1,4-Difluorobenzene	504486	11.521	977088	11.529	
Chlorobenzene-d5	591174	14.717	1218049	14.725	*
1,4-Dichlorobenzene-d4	352682	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-04	File ID:	5HA018.D
Sampled:	08/01/14 12:30	Prepared:	08/06/14 00:00	Analyzed:	08/06/14 17:18
Solids:	85.57	Preparation:	EPA 5035_MS	Initial/Final:	4.49 g / 5 mL

Batch: 4H06021 Sequence: AA29941 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0026

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	45	91	74 - 133	
Toluene-d8	50.0	52	103	85 - 115	
4-Bromofluorobenzene	50.0	60	120	85 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	488081	10.871	639658	10.88	
1,4-Difluorobenzene	718751	11.52	977088	11.529	
Chlorobenzene-d5	799353	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	477686	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-05	File ID:	5HA019.D
Sampled:	08/01/14 12:35	Prepared:	08/06/14 00:00	Analyzed:	08/06/14 17:46
Solids:	99.26	Preparation:	EPA 5035_MS	Initial/Final:	4.34 g / 5 mL

Batch: 4H06021 Sequence: AA29941 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0012	U	0.0005	0.0012	0.0023

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	46	92	74 - 133	
Toluene-d8	50.0	54	107	85 - 115	
4-Bromofluorobenzene	50.0	64	128	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	477568	10.871	639658	10.88	
1,4-Difluorobenzene	692837	11.521	977088	11.529	
Chlorobenzene-d5	779187	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	446065	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-06	File ID:	5HB006.D
Sampled:	08/01/14 12:40	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 11:17
Solids:	94.63	Preparation:	EPA 5035_MS	Initial/Final:	4.69 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	51	101	74 - 133	
Toluene-d8	50.0	56	111	85 - 115	
4-Bromofluorobenzene	50.0	76	152	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	583776	10.863	639658	10.88	
1,4-Difluorobenzene	955577	11.512	977088	11.529	
Chlorobenzene-d5	947091	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	515652	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-07	File ID:	5HB010.D
Sampled:	08/01/14 12:50	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 13:11
Solids:	90.23	Preparation:	EPA 5035_MS	Initial/Final:	4.63 g / 5 mL

Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0022

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	45	90	74 - 133	
Toluene-d8	50.0	51	103	85 - 115	
4-Bromofluorobenzene	50.0	67	135	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	956568	10.863	639658	10.88	
1,4-Difluorobenzene	1557590	11.521	977088	11.529	
Chlorobenzene-d5	1580379	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	893482	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW07D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-08	File ID:	5HB011.D
Sampled:	08/01/14 12:50	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 13:39
Solids:	98.35	Preparation:	EPA 5035_MS	Initial/Final:	4.29 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0012	U	0.0005	0.0012	0.0024

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	52	104	74 - 133	
Toluene-d8	50.0	57	115	85 - 115	
4-Bromofluorobenzene	50.0	75	151	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	834926	10.871	639658	10.88	
1,4-Difluorobenzene	1365210	11.52	977088	11.529	
Chlorobenzene-d5	1380842	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	733129	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-09	File ID:	5HB012.D
Sampled:	08/01/14 12:55	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 14:08
Solids:	99.50	Preparation:	EPA 5035_MS	Initial/Final:	4.43 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0023

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	53	106	74 - 133	
Toluene-d8	50.0	57	113	85 - 115	
4-Bromofluorobenzene	50.0	75	150	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	828425	10.863	639658	10.88	
1,4-Difluorobenzene	1376413	11.52	977088	11.529	
Chlorobenzene-d5	1396837	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	802656	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-10	File ID:	5HB013.D
Sampled:	08/01/14 13:00	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 14:36
Solids:	98.90	Preparation:	EPA 5035_MS	Initial/Final:	4.29 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0012	U	0.0005	0.0012	0.0024

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	48	97	74 - 133	
Toluene-d8	50.0	55	110	85 - 115	
4-Bromofluorobenzene	50.0	68	136	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	817680	10.871	639658	10.88	
1,4-Difluorobenzene	1309385	11.521	977088	11.529	
Chlorobenzene-d5	1308033	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	670412	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW010-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-11	File ID:	5HB031.D
Sampled:	08/01/14 11:30	Prepared:	08/07/14 10:57	Analyzed:	08/07/14 23:03
Solids:	96.48	Preparation:	EPA 5035_MS	Initial/Final:	4.71 g / 5 mL

Batch:	4H07018	Sequence:	AA29955	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	UQ	0.0005	0.0010	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	50	100	74 - 133	
Toluene-d8	50.0	57	113	85 - 115	
4-Bromofluorobenzene	50.0	74	148	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	897522	10.863	639658	10.88	
1,4-Difluorobenzene	1464352	11.521	977088	11.529	
Chlorobenzene-d5	1591181	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	926677	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW11-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-12	File ID:	5HB014.D
Sampled:	08/01/14 11:35	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 15:05
Solids:	99.47	Preparation:	EPA 5035_MS	Initial/Final:	5.45 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0020

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	44	88	74 - 133	
Toluene-d8	50.0	51	102	85 - 115	
4-Bromofluorobenzene	50.0	69	138	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	952222	10.871	639658	10.88	
1,4-Difluorobenzene	1534167	11.521	977088	11.529	
Chlorobenzene-d5	1611396	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	977734	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW11D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-13	File ID:	5HB015.D
Sampled:	08/01/14 11:35	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 15:34
Solids:	98.87	Preparation:	EPA 5035_MS	Initial/Final:	4.72 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0020

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	94	74 - 133	
Toluene-d8	50.0	54	107	85 - 115	
4-Bromofluorobenzene	50.0	70	140	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	882457	10.871	639658	10.88	
1,4-Difluorobenzene	1406994	11.52	977088	11.529	
Chlorobenzene-d5	1414467	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	777844	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW12-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-14	File ID:	5HB016.D
Sampled:	08/01/14 11:40	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 16:02
Solids:	96.57	Preparation:	EPA 5035_MS	Initial/Final:	5.19 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	49	97	74 - 133	
Toluene-d8	50.0	56	113	85 - 115	
4-Bromofluorobenzene	50.0	73	145	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	813184	10.871	639658	10.88	
1,4-Difluorobenzene	1309388	11.521	977088	11.529	
Chlorobenzene-d5	1343287	14.725	1218049	14.725	
1,4-Dichlorobenzene-d4	735311	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW13-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-15	File ID:	5HB017.D
Sampled:	08/01/14 11:45	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 16:31
Solids:	99.63	Preparation:	EPA 5035_MS	Initial/Final:	4.84 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0020

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	50	100	74 - 133	
Toluene-d8	50.0	55	111	85 - 115	
4-Bromofluorobenzene	50.0	69	138	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	775088	10.871	639658	10.88	
1,4-Difluorobenzene	1264000	11.521	977088	11.529	
Chlorobenzene-d5	1284404	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	659469	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW14-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-16	File ID:	5HB018.D
Sampled:	08/01/14 11:50	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 16:59
Solids:	79.56	Preparation:	EPA 5035_MS	Initial/Final:	5.88 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	46	93	74 - 133	
Toluene-d8	50.0	54	108	85 - 115	
4-Bromofluorobenzene	50.0	71	143	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	883244	10.863	639658	10.88	
1,4-Difluorobenzene	1426282	11.521	977088	11.529	
Chlorobenzene-d5	1560168	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	959400	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSW15-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-18	File ID:	5HB019.D
Sampled:	08/01/14 12:00	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 17:27
Solids:	78.92	Preparation:	EPA 5035_MS	Initial/Final:	5.17 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0025

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	94	74 - 133	
Toluene-d8	50.0	53	107	85 - 115	
4-Bromofluorobenzene	50.0	70	140	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	728619	10.863	639658	10.88	
1,4-Difluorobenzene	1212339	11.52	977088	11.529	
Chlorobenzene-d5	1287858	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	775369	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19	File ID:	5HB020.D
Sampled:	08/01/14 13:10	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 17:55
Solids:	94.31	Preparation:	EPA 5035_MS	Initial/Final:	4.8 g / 5 mL

Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	50	101	74 - 133	
Toluene-d8	50.0	57	114	85 - 115	
4-Bromofluorobenzene	50.0	74	148	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	788656	10.871	639658	10.88	
1,4-Difluorobenzene	1288022	11.52	977088	11.529	
Chlorobenzene-d5	1382980	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	816832	17.322	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-20	File ID:	5HB021.D
Sampled:	08/01/14 13:15	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 18:23
Solids:	99.47	Preparation:	EPA 5035_MS	Initial/Final:	4 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0025

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	48	95	74 - 133	
Toluene-d8	50.0	55	110	85 - 115	
4-Bromofluorobenzene	50.0	69	137	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	846553	10.871	639658	10.88	
1,4-Difluorobenzene	1358508	11.52	977088	11.529	
Chlorobenzene-d5	1480239	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	858292	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-21	File ID:	5HB022.D
Sampled:	08/01/14 13:20	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 18:51
Solids:	93.31	Preparation:	EPA 5035_MS	Initial/Final:	4.74 g / 5 mL

Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	UQ	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	46	92	74 - 133	
Toluene-d8	50.0	46	92	85 - 115	
4-Bromofluorobenzene	50.0	60	119	85 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	194598	10.871	639658	10.88	*
1,4-Difluorobenzene	325665	11.512	977088	11.529	*
Chlorobenzene-d5	372745	14.717	1218049	14.725	*
1,4-Dichlorobenzene-d4	220124	17.313	568681	17.33	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-21RE1	File ID:	5HC007.D
Sampled:	08/01/14 13:20	Prepared:	08/08/14 00:00	Analyzed:	08/08/14 12:53
Solids:	93.31	Preparation:	EPA 5035_MS	Initial/Final:	4.66 g / 5 mL

Batch:	4H08021	Sequence:	AA29977	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	44	88	74 - 133	
Toluene-d8	50.0	51	102	85 - 115	
4-Bromofluorobenzene	50.0	68	136	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	809035	10.863	639658	10.88	
1,4-Difluorobenzene	1302080	11.512	977088	11.529	
Chlorobenzene-d5	1367267	14.709	1218049	14.725	
1,4-Dichlorobenzene-d4	791023	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22	File ID:	5HB023.D
Sampled:	08/01/14 13:30	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 19:19
Solids:	80.44	Preparation:	EPA 5035_MS	Initial/Final:	6.07 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0020

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	55	109	74 - 133	
Toluene-d8	50.0	61	121	85 - 115	*
4-Bromofluorobenzene	50.0	80	161	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	755300	10.871	639658	10.88	
1,4-Difluorobenzene	1239774	11.52	977088	11.529	
Chlorobenzene-d5	1328811	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	832314	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23	File ID:	5HB024.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 19:47
Solids:	98.80	Preparation:	EPA 5035_MS	Initial/Final:	3.94 g / 5 mL

Batch: 4H06032 Sequence: AA29943 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	U	0.0006	0.0013	0.0026

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	46	92	74 - 133	
Toluene-d8	50.0	54	107	85 - 115	
4-Bromofluorobenzene	50.0	69	138	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	827084	10.871	639658	10.88	
1,4-Difluorobenzene	1327890	11.512	977088	11.529	
Chlorobenzene-d5	1409436	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	813076	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF05D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-24	File ID:	5HB025.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 20:15
Solids:	98.30	Preparation:	EPA 5035_MS	Initial/Final:	4.24 g / 5 mL

Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0012	U	0.0005	0.0012	0.0024

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	50	100	74 - 133	
Toluene-d8	50.0	57	114	85 - 115	
4-Bromofluorobenzene	50.0	73	145	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	766995	10.871	639658	10.88	
1,4-Difluorobenzene	1256753	11.52	977088	11.529	
Chlorobenzene-d5	1337286	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	758370	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-25	File ID:	5HB032.D
Sampled:	08/01/14 13:45	Prepared:	08/07/14 10:57	Analyzed:	08/07/14 23:31
Solids:	95.10	Preparation:	EPA 5035_MS	Initial/Final:	4.62 g / 5 mL

Batch: 4H07018 Sequence: AA29955 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0011	U	0.0005	0.0011	0.0021

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	49	98	74 - 133	
Toluene-d8	50.0	56	111	85 - 115	
4-Bromofluorobenzene	50.0	71	143	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	872540	10.863	639658	10.88	
1,4-Difluorobenzene	1412228	11.521	977088	11.529	
Chlorobenzene-d5	1464649	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	807667	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-26	File ID:	5HB033.D
Sampled:	08/01/14 13:50	Prepared:	08/07/14 10:57	Analyzed:	08/07/14 23:59
Solids:	98.50	Preparation:	EPA 5035_MS	Initial/Final:	4.82 g / 5 mL

Batch: 4H07018 Sequence: AA29955 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0010	U	0.0005	0.0010	0.0020

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	51	103	74 - 133	
Toluene-d8	50.0	58	116	85 - 115	*
4-Bromofluorobenzene	50.0	74	148	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	799019	10.871	639658	10.88	
1,4-Difluorobenzene	1307143	11.521	977088	11.529	
Chlorobenzene-d5	1432812	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	809009	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-27	File ID:	5HB034.D
Sampled:	08/01/14 14:00	Prepared:	08/07/14 10:57	Analyzed:	08/08/14 00:27
Solids:	98.33	Preparation:	EPA 5035_MS	Initial/Final:	4.26 g / 5 mL

Batch: 4H07018 Sequence: AA29955 Calibration: 1408017 Instrument: OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0012	U	0.0005	0.0012	0.0024

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	49	98	74 - 133	
Toluene-d8	50.0	58	115	85 - 115	
4-Bromofluorobenzene	50.0	75	151	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	835069	10.863	639658	10.88	
1,4-Difluorobenzene	1362184	11.52	977088	11.529	
Chlorobenzene-d5	1480385	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	873204	17.313	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-28	File ID:	5HB007.D
Sampled:	08/01/14 14:05	Prepared:	08/06/14 14:56	Analyzed:	08/07/14 11:46
Solids:	99.25	Preparation:	EPA 5035_MS	Initial/Final:	4.03 g / 5 mL

Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017	Instrument:	OVGCMS5

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<0.0013	UQ	0.0006	0.0013	0.0025

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	51	102	74 - 133	
Toluene-d8	50.0	57	114	85 - 115	
4-Bromofluorobenzene	50.0	77	155	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	848276	10.863	639658	10.88	
1,4-Difluorobenzene	1385010	11.512	977088	11.529	
Chlorobenzene-d5	1392571	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	778999	17.314	568681	17.33	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8260B

TR-5TH-CS-TB-080114

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	A404270-30	File ID:	1H7021.D
Sampled:	08/01/14 00:00	Prepared:	08/07/14 00:00	Analyzed:	08/07/14 19:29
Solids:		Preparation:	EPA 5030B_MS	Initial/Final:	5 mL / 5 mL

Batch: 4H07029 Sequence: AA29967 Calibration: 1408028 Instrument: OVGCMS1

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	LOD	LOQ
106-46-7	1,4-Dichlorobenzene	1	<1.0	U	0.76	1.0	2.0

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	95	85 - 115	
Toluene-d8	50.0	49	97	85 - 120	
4-Bromofluorobenzene	50.0	51	103	75 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	212517	10.97	174839	10.98	
1,4-Difluorobenzene	343695	11.55	341486	11.54	
Chlorobenzene-d5	285844	14.21	288973	14.21	
1,4-Dichlorobenzene-d4	130165	16.47	128462	16.47	

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSW01-0814	08/01/14 12:10	08/05/14 06:45	08/06/14 00:00	NA	NA	08/06/14 15:52	5.00	14.00	
TR-5TH-CSW02-0814	08/01/14 12:15	08/05/14 06:45	08/06/14 00:00	NA	NA	08/06/14 16:21	5.00	14.00	
TR-5TH-CSW03-0814	08/01/14 12:20	08/05/14 06:45	08/06/14 00:00	NA	NA	08/06/14 16:49	5.00	14.00	
TR-5TH-CSW04-0814	08/01/14 12:30	08/05/14 06:45	08/06/14 00:00	NA	NA	08/06/14 17:18	5.00	14.00	
TR-5TH-CSW05-0814	08/01/14 12:35	08/05/14 06:45	08/06/14 00:00	NA	NA	08/06/14 17:46	5.00	14.00	
TR-5TH-CSW06-0814	08/01/14 12:40	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 11:17	5.00	14.00	
TR-5TH-CSW07-0814	08/01/14 12:50	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 13:11	6.00	14.00	
TR-5TH-CSW07D-0814	08/01/14 12:50	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 13:39	6.00	14.00	
TR-5TH-CSW08-0814	08/01/14 12:55	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 14:08	6.00	14.00	
TR-5TH-CSW09-0814	08/01/14 13:00	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 14:36	6.00	14.00	
TR-5TH-CSW010-0814	08/01/14 11:30	08/05/14 06:45	08/07/14 10:57	NA	NA	08/07/14 23:03	6.00	14.00	
TR-5TH-CSW11-0814	08/01/14 11:35	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 15:05	6.00	14.00	
TR-5TH-CSW11D-0814	08/01/14 11:35	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 15:34	6.00	14.00	
TR-5TH-CSW12-0814	08/01/14 11:40	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 16:02	6.00	14.00	
TR-5TH-CSW13-0814	08/01/14 11:45	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 16:31	6.00	14.00	
TR-5TH-CSW14-0814	08/01/14 11:50	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 16:59	6.00	14.00	
TR-5TH-CSW15-0814	08/01/14 12:00	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 17:27	6.00	14.00	
TR-5TH-CSF01-0814	08/01/14 13:10	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 17:55	6.00	14.00	
TR-5TH-CSF02-0814	08/01/14 13:15	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 18:23	6.00	14.00	
TR-5TH-CSF03-0814	08/01/14 13:20	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 18:51	6.00	14.00	
TR-5TH-CSF03-0814	08/01/14 13:20	08/05/14 06:45	08/08/14 00:00	NA	NA	08/08/14 12:53	6.00	14.00	
TR-5TH-CSF04-0814	08/01/14 13:30	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 19:19	6.00	14.00	
TR-5TH-CSF05-0814	08/01/14 13:35	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 19:47	6.00	14.00	

HOLDING TIME SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSF05D-0814	08/01/14 13:35	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 20:15	6.00	14.00	
TR-5TH-CSF06-0814	08/01/14 13:45	08/05/14 06:45	08/07/14 10:57	NA	NA	08/07/14 23:31	6.00	14.00	
TR-5TH-CSF07-0814	08/01/14 13:50	08/05/14 06:45	08/07/14 10:57	NA	NA	08/07/14 23:59	6.00	14.00	
TR-5TH-CSF08-0814	08/01/14 14:00	08/05/14 06:45	08/07/14 10:57	NA	NA	08/08/14 00:27	6.00	14.00	
TR-5TH-CSF09-0814	08/01/14 14:05	08/05/14 06:45	08/06/14 14:56	NA	NA	08/07/14 11:46	5.00	14.00	
TR-5TH-CS-TB-080114	08/01/14 00:00	08/05/14 06:45	08/07/14 00:00	NA	NA	08/07/14 19:29	6.00	14.00	

PREPARATION BATCH SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06021 Batch Matrix: Soil Preparation: EPA 5035_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06021-BLK1	5HA006.D	08/06/14 00:00	
LCS	4H06021-BS1	5HA004.D	08/06/14 00:00	
LCS Dup	4H06021-BSD1	5HA005.D	08/06/14 00:00	
TR-5TH-CSW01-0814	A404270-01	5HA015.D	08/06/14 00:00	
TR-5TH-CSW02-0814	A404270-02	5HA016.D	08/06/14 00:00	
TR-5TH-CSW03-0814	A404270-03	5HA017.D	08/06/14 00:00	
TR-5TH-CSW04-0814	A404270-04	5HA018.D	08/06/14 00:00	
TR-5TH-CSW05-0814	A404270-05	5HA019.D	08/06/14 00:00	

PREPARATION BATCH SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06032 Batch Matrix: Soil Preparation: EPA 5035_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06032-BLK1	5HB005.D	08/06/14 14:56	
LCS	4H06032-BS1	5HB004.D	08/06/14 14:56	
TR-5TH-CSF09-0814	4H06032-MS1	5HB008.D	08/06/14 14:56	
TR-5TH-CSF09-0814	4H06032-MSD1	5HB009.D	08/06/14 14:56	
TR-5TH-CSW06-0814	A404270-06	5HB006.D	08/06/14 14:56	
TR-5TH-CSW07-0814	A404270-07	5HB010.D	08/06/14 14:56	
TR-5TH-CSW07D-0814	A404270-08	5HB011.D	08/06/14 14:56	
TR-5TH-CSW08-0814	A404270-09	5HB012.D	08/06/14 14:56	
TR-5TH-CSW09-0814	A404270-10	5HB013.D	08/06/14 14:56	
TR-5TH-CSW11-0814	A404270-12	5HB014.D	08/06/14 14:56	
TR-5TH-CSW11D-0814	A404270-13	5HB015.D	08/06/14 14:56	
TR-5TH-CSW12-0814	A404270-14	5HB016.D	08/06/14 14:56	
TR-5TH-CSW13-0814	A404270-15	5HB017.D	08/06/14 14:56	
TR-5TH-CSW14-0814	A404270-16	5HB018.D	08/06/14 14:56	
TR-5TH-CSW15-0814	A404270-18	5HB019.D	08/06/14 14:56	
TR-5TH-CSF01-0814	A404270-19	5HB020.D	08/06/14 14:56	
TR-5TH-CSF02-0814	A404270-20	5HB021.D	08/06/14 14:56	
TR-5TH-CSF03-0814	A404270-21	5HB022.D	08/06/14 14:56	
TR-5TH-CSF04-0814	A404270-22	5HB023.D	08/06/14 14:56	
TR-5TH-CSF05-0814	A404270-23	5HB024.D	08/06/14 14:56	
TR-5TH-CSF05D-0814	A404270-24	5HB025.D	08/06/14 14:56	
TR-5TH-CSF09-0814	A404270-28	5HB007.D	08/06/14 14:56	

PREPARATION BATCH SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H07018 Batch Matrix: Soil Preparation: EPA 5035_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H07018-BLK1	5HB029.D	08/07/14 10:57	
LCS	4H07018-BS1	5HB028.D	08/07/14 10:57	
TR-5TH-CSW010-0814	4H07018-MS1	5HB036.D	08/07/14 10:57	
TR-5TH-CSW010-0814	4H07018-MSD1	5HB037.D	08/07/14 10:57	
TR-5TH-CSW010-0814	A404270-11	5HB031.D	08/07/14 10:57	
TR-5TH-CSF06-0814	A404270-25	5HB032.D	08/07/14 10:57	
TR-5TH-CSF07-0814	A404270-26	5HB033.D	08/07/14 10:57	
TR-5TH-CSF08-0814	A404270-27	5HB034.D	08/07/14 10:57	

PREPARATION BATCH SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H07029 Batch Matrix: Water Preparation: EPA 5030B_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H07029-BLK1	1H7007.D	08/07/14 00:00	
LCS	4H07029-BS1	1H7004.D	08/07/14 00:00	
LCS Dup	4H07029-BSD1	1H7005.D	08/07/14 00:00	
TR-5TH-CS-TB-080114	A404270-30	1H7021.D	08/07/14 00:00	

PREPARATION BATCH SUMMARY

EPA 8260B

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H08021 Batch Matrix: Soil Preparation: EPA 5035_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H08021-BLK1	5HC005.D	08/08/14 00:00	
LCS	4H08021-BS1	5HC003.D	08/08/14 00:00	
LCS Dup	4H08021-BSD1	5HC004.D	08/08/14 00:00	
TR-5TH-CSF03-0814	A404270-21RE1	5HC007.D	08/08/14 00:00	

METHOD BLANK DATA SHEET
EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06021-BLK1	File ID:	5HA006.D
Prepared:	08/06/14 00:00	Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL
Analyzed:	08/06/14 11:37	Instrument:	OVGCMS5		
Batch:	4H06021	Sequence:	AA29941	Calibration:	1408017

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
106-46-7	1,4-Dichlorobenzene	<0.0010	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	48	96	74 - 133	
Toluene-d8	50.0	53	106	85 - 115	
4-Bromofluorobenzene	50.0	69	138	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	696693	10.863	639658	10.88	
1,4-Difluorobenzene	1064770	11.512	977088	11.529	
Chlorobenzene-d5	1098560	14.709	1218049	14.725	
1,4-Dichlorobenzene-d4	637299	17.305	568681	17.33	

METHOD BLANK DATA SHEET
EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06032-BLK1	File ID:	5HB005.D
Prepared:	08/06/14 14:56	Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL
Analyzed:	08/07/14 10:49	Instrument:	OVGCMS5		
Batch:	4H06032	Sequence:	AA29943	Calibration:	1408017

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
106-46-7	1,4-Dichlorobenzene	<0.0010	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	49	98	74 - 133	
Toluene-d8	50.0	55	111	85 - 115	
4-Bromofluorobenzene	50.0	77	154	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	1001464	10.863	639658	10.88	
1,4-Difluorobenzene	1616567	11.512	977088	11.529	
Chlorobenzene-d5	1639733	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	987464	17.313	568681	17.33	

METHOD BLANK DATA SHEET
EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H07018-BLK1	File ID:	5HB029.D
Prepared:	08/07/14 10:57	Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL
Analyzed:	08/07/14 22:07	Instrument:	OVGCMS5		
Batch:	4H07018	Sequence:	AA29955	Calibration:	1408017

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
106-46-7	1,4-Dichlorobenzene	<0.0010	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	94	74 - 133	
Toluene-d8	50.0	53	105	85 - 115	
4-Bromofluorobenzene	50.0	73	146	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	1029533	10.871	639658	10.88	
1,4-Difluorobenzene	1686588	11.52	977088	11.529	
Chlorobenzene-d5	1777419	14.717	1218049	14.725	
1,4-Dichlorobenzene-d4	1087060	17.322	568681	17.33	

METHOD BLANK DATA SHEET
EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	4H07029-BLK1	File ID:	1H7007.D
Prepared:	08/07/14 00:00	Preparation:	EPA 5030B_MS	Initial/Final:	5 mL / 5 mL
Analyzed:	08/07/14 12:26	Instrument:	OVGCMS1		
Batch:	4H07029	Sequence:	AA29967	Calibration:	1408028

CAS NO.	COMPOUND	CONC. (ug/L)	Q
106-46-7	1,4-Dichlorobenzene	<1.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	45	89	85 - 115	
Toluene-d8	50.0	48	96	85 - 120	
4-Bromofluorobenzene	50.0	49	97	75 - 120	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	221283	10.97	174839	10.98	
1,4-Difluorobenzene	353153	11.55	341486	11.54	
Chlorobenzene-d5	295557	14.21	288973	14.21	
1,4-Dichlorobenzene-d4	128602	16.47	128462	16.47	

METHOD BLANK DATA SHEET
EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H08021-BLK1	File ID:	5HC005.D
Prepared:	08/08/14 00:00	Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL
Analyzed:	08/08/14 11:56	Instrument:	OVGCMS5		
Batch:	4H08021	Sequence:	AA29977	Calibration:	1408017

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
106-46-7	1,4-Dichlorobenzene	<0.0010	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.0	47	94	74 - 133	
Toluene-d8	50.0	54	108	85 - 115	
4-Bromofluorobenzene	50.0	73	146	85 - 120	*

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Pentafluorobenzene	815011	10.863	639658	10.88	
1,4-Difluorobenzene	1327044	11.512	977088	11.529	
Chlorobenzene-d5	1422573	14.709	1218049	14.725	
1,4-Dichlorobenzene-d4	873646	17.305	568681	17.33	

LCS / LCS DUPLICATE RECOVERY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06021	Laboratory ID:	4H06021-BS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.021	103	70 - 125

COMPOUND	SPIKE ADDED (mg/kg wet)	LCSD CONCENTRATION (mg/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.019	93	10	30	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06032	Laboratory ID:	4H06032-BS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.020	98	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H07018	Laboratory ID:	4H07018-BS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.018	91	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Water		
Batch:	4H07029	Laboratory ID:	4H07029-BS1
Preparation:	EPA 5030B_MS	Initial/Final:	5 mL / 5 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	20.0	23	117	75 - 125

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	20.0	23	116	0.7	30	75 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H08021	Laboratory ID:	4H08021-BS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.017	86	70 - 125

COMPOUND	SPIKE ADDED (mg/kg wet)	LCSD CONCENTRATION (mg/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	0.0200	0.018	91	5	30	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260B

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06032	Laboratory ID:	4H06032-MS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

Source Sample Name: TR-5TH-CSF09-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0202	ND	0.012	57 *	70 - 125

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	0.0202	0.0091	45 *	24	30	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8260B

TR-5TH-CSW010-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H07018	Laboratory ID:	4H07018-MS1
Preparation:	EPA 5035_MS	Initial/Final:	5 g / 5 mL

Source Sample Name: TR-5TH-CSW010-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	0.0207	ND	0.0057	27 *	70 - 125

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	0.0207	0.0064	31 *	13	30	70 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29899	Instrument:	OVGCMS5
Matrix:	Water	Calibration:	1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (AA29899-ICV1)			Lab File ID: 5H4012.D		Analyzed: 08/04/14 16:18			
Dibromofluoromethane	50.0	100	0 - 200	10.387	10.38683	0.0002	+/-0.5	
Toluene-d8	50.0	101	0 - 200	13.041	13.041	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	113	0 - 200	15.999	15.9956	0.0034	+/-0.5	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29941
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29941-CCV1)			Lab File ID: 5HA002.D		Analyzed: 08/06/14 09:17			
Dibromofluoromethane	50.0	83	80 - 120	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	87	80 - 120	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	93	80 - 120	15.982	15.9956	-0.0136	+/-1.0	
Calibration Check (AA29941-CCV2)			Lab File ID: 5HA003.D		Analyzed: 08/06/14 09:56			
Dibromofluoromethane	50.0	98	80 - 120	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	107	80 - 120	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	111	80 - 120	15.982	15.9956	-0.0136	+/-1.0	
LCS (4H06021-BS1)			Lab File ID: 5HA004.D		Analyzed: 08/06/14 10:40			
Dibromofluoromethane	50.0	95	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	104	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	121	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
LCS Dup (4H06021-BSD1)			Lab File ID: 5HA005.D		Analyzed: 08/06/14 11:08			
Dibromofluoromethane	50.0	97	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	104	85 - 115	13.024	13.041	-0.0170	+/-1.0	
4-Bromofluorobenzene	50.0	124	85 - 120	15.974	15.9956	-0.0216	+/-1.0	*
Blank (4H06021-BLK1)			Lab File ID: 5HA006.D		Analyzed: 08/06/14 11:37			
Dibromofluoromethane	50.0	96	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	106	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	138	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Instrument RL Check (AA29941-CRL1)			Lab File ID: 5HA007.D		Analyzed: 08/06/14 12:05			
Dibromofluoromethane	50.0	95	0 - 200	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	102	0 - 200	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	129	0 - 200	15.982	15.9956	-0.0136	+/-1.0	
TR-5TH-CSW01-0814 (A404270-01)			Lab File ID: 5HA015.D		Analyzed: 08/06/14 15:52			
Dibromofluoromethane	50.0	93	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	108	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	129	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW02-0814 (A404270-02)			Lab File ID: 5HA016.D		Analyzed: 08/06/14 16:21			
Dibromofluoromethane	50.0	95	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	105	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	125	85 - 120	15.991	15.9956	-0.0046	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29941
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW03-0814 (A404270-03)			Lab File ID: 5HA017.D		Analyzed: 08/06/14 16:49			
Dibromofluoromethane	50.0	94	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	106	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	122	85 - 120	15.991	15.9956	-0.0046	+/-1.0	*
TR-5TH-CSW04-0814 (A404270-04)			Lab File ID: 5HA018.D		Analyzed: 08/06/14 17:18			
Dibromofluoromethane	50.0	91	74 - 133	10.387	10.38683	0.0002	+/-1.0	
Toluene-d8	50.0	103	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	120	85 - 120	15.982	15.9956	-0.0136	+/-1.0	
TR-5TH-CSW05-0814 (A404270-05)			Lab File ID: 5HA019.D		Analyzed: 08/06/14 17:46			
Dibromofluoromethane	50.0	92	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	107	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	128	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29943-CCV1)			Lab File ID: 5HB003.D		Analyzed: 08/07/14 09:48			
Dibromofluoromethane	50.0	100	80 - 120	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	114	80 - 120	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	129	80 - 120	15.982	15.9956	-0.0136	+/-1.0	*
LCS (4H06032-BS1)			Lab File ID: 5HB004.D		Analyzed: 08/07/14 10:21			
Dibromofluoromethane	50.0	100	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	110	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	144	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Blank (4H06032-BLK1)			Lab File ID: 5HB005.D		Analyzed: 08/07/14 10:49			
Dibromofluoromethane	50.0	98	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	111	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	154	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW06-0814 (A404270-06)			Lab File ID: 5HB006.D		Analyzed: 08/07/14 11:17			
Dibromofluoromethane	50.0	101	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	111	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	152	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF09-0814 (A404270-28)			Lab File ID: 5HB007.D		Analyzed: 08/07/14 11:46			
Dibromofluoromethane	50.0	102	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	114	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	155	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Matrix Spike (4H06032-MS1)			Lab File ID: 5HB008.D		Analyzed: 08/07/14 12:14			
Dibromofluoromethane	50.0	97	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	111	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	139	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Matrix Spike Dup (4H06032-MSD1)			Lab File ID: 5HB009.D		Analyzed: 08/07/14 12:42			
Dibromofluoromethane	50.0	102	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	113	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	142	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW07-0814 (A404270-07)			Lab File ID: 5HB010.D		Analyzed: 08/07/14 13:11			
Dibromofluoromethane	50.0	90	74 - 133	10.379	10.38683	-0.0078	+/-1.0	
Toluene-d8	50.0	103	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	135	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW07D-0814 (A404270-08)			Lab File ID: 5HB011.D		Analyzed: 08/07/14 13:39			
Dibromofluoromethane	50.0	104	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	115	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	151	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW08-0814 (A404270-09)			Lab File ID: 5HB012.D		Analyzed: 08/07/14 14:08			
Dibromofluoromethane	50.0	106	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	113	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	150	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW09-0814 (A404270-10)			Lab File ID: 5HB013.D		Analyzed: 08/07/14 14:36			
Dibromofluoromethane	50.0	97	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	110	85 - 115	13.041	13.041	0.0000	+/-1.0	
4-Bromofluorobenzene	50.0	136	85 - 120	15.991	15.9956	-0.0046	+/-1.0	*
TR-5TH-CSW11-0814 (A404270-12)			Lab File ID: 5HB014.D		Analyzed: 08/07/14 15:05			
Dibromofluoromethane	50.0	88	74 - 133	10.387	10.38683	0.0002	+/-1.0	
Toluene-d8	50.0	102	85 - 115	13.041	13.041	0.0000	+/-1.0	
4-Bromofluorobenzene	50.0	138	85 - 120	15.991	15.9956	-0.0046	+/-1.0	*
TR-5TH-CSW11D-0814 (A404270-13)			Lab File ID: 5HB015.D		Analyzed: 08/07/14 15:34			
Dibromofluoromethane	50.0	94	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	107	85 - 115	13.041	13.041	0.0000	+/-1.0	
4-Bromofluorobenzene	50.0	140	85 - 120	15.99	15.9956	-0.0056	+/-1.0	*
TR-5TH-CSW12-0814 (A404270-14)			Lab File ID: 5HB016.D		Analyzed: 08/07/14 16:02			
Dibromofluoromethane	50.0	97	74 - 133	10.387	10.38683	0.0002	+/-1.0	
Toluene-d8	50.0	113	85 - 115	13.041	13.041	0.0000	+/-1.0	
4-Bromofluorobenzene	50.0	145	85 - 120	15.991	15.9956	-0.0046	+/-1.0	*
TR-5TH-CSW13-0814 (A404270-15)			Lab File ID: 5HB017.D		Analyzed: 08/07/14 16:31			
Dibromofluoromethane	50.0	100	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	111	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	138	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSW14-0814 (A404270-16)			Lab File ID: 5HB018.D		Analyzed: 08/07/14 16:59			
Dibromofluoromethane	50.0	93	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	108	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	143	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW15-0814 (A404270-18)			Lab File ID: 5HB019.D		Analyzed: 08/07/14 17:27			
Dibromofluoromethane	50.0	94	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	107	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	140	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF01-0814 (A404270-19)			Lab File ID: 5HB020.D		Analyzed: 08/07/14 17:55			
Dibromofluoromethane	50.0	101	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	114	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	148	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF02-0814 (A404270-20)			Lab File ID: 5HB021.D		Analyzed: 08/07/14 18:23			
Dibromofluoromethane	50.0	95	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	110	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	137	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF03-0814 (A404270-21)			Lab File ID: 5HB022.D		Analyzed: 08/07/14 18:51			
Dibromofluoromethane	50.0	92	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	92	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	119	85 - 120	15.982	15.9956	-0.0136	+/-1.0	
TR-5TH-CSF04-0814 (A404270-22)			Lab File ID: 5HB023.D		Analyzed: 08/07/14 19:19			
Dibromofluoromethane	50.0	109	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	121	85 - 115	13.032	13.041	-0.0090	+/-1.0	*
4-Bromofluorobenzene	50.0	161	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF05-0814 (A404270-23)			Lab File ID: 5HB024.D		Analyzed: 08/07/14 19:47			
Dibromofluoromethane	50.0	92	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	107	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	138	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF05D-0814 (A404270-24)			Lab File ID: 5HB025.D		Analyzed: 08/07/14 20:15			
Dibromofluoromethane	50.0	100	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	114	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	145	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29950
Instrument: OVGCMS1
Matrix: Water
Calibration: 1408028

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (AA29950-ICV1)			Lab File ID: 1H6023.D		Analyzed: 08/06/14 23:31			
Dibromofluoromethane	50.0	91	0 - 200	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	96	0 - 200	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	99	0 - 200	15.3	15.3	0.0000	+/-0.5	
Initial Cal Check (AA29950-ICV2)			Lab File ID: 1H6024.D		Analyzed: 08/07/14 00:00			
Dibromofluoromethane	50.0	94	0 - 200	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	99	0 - 200	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	100	0 - 200	15.3	15.3	0.0000	+/-0.5	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29955
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29955-CCV1)			Lab File ID: 5HB027.D		Analyzed: 08/07/14 21:11			
Dibromofluoromethane	50.0	93	80 - 120	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	108	80 - 120	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	123	80 - 120	15.982	15.9956	-0.0136	+/-1.0	*
LCS (4H07018-BS1)			Lab File ID: 5HB028.D		Analyzed: 08/07/14 21:39			
Dibromofluoromethane	50.0	99	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	114	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	144	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Blank (4H07018-BLK1)			Lab File ID: 5HB029.D		Analyzed: 08/07/14 22:07			
Dibromofluoromethane	50.0	94	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	105	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	146	85 - 120	15.99	15.9956	-0.0056	+/-1.0	*
Instrument RL Check (AA29955-CRL1)			Lab File ID: 5HB030.D		Analyzed: 08/07/14 22:35			
Dibromofluoromethane	50.0	95	0 - 200	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	112	0 - 200	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	148	0 - 200	15.982	15.9956	-0.0136	+/-1.0	
TR-5TH-CSW010-0814 (A404270-11)			Lab File ID: 5HB031.D		Analyzed: 08/07/14 23:03			
Dibromofluoromethane	50.0	100	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	113	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	148	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF06-0814 (A404270-25)			Lab File ID: 5HB032.D		Analyzed: 08/07/14 23:31			
Dibromofluoromethane	50.0	98	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	111	85 - 115	13.033	13.041	-0.0080	+/-1.0	
4-Bromofluorobenzene	50.0	143	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF07-0814 (A404270-26)			Lab File ID: 5HB033.D		Analyzed: 08/07/14 23:59			
Dibromofluoromethane	50.0	103	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	116	85 - 115	13.032	13.041	-0.0090	+/-1.0	*
4-Bromofluorobenzene	50.0	148	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
TR-5TH-CSF08-0814 (A404270-27)			Lab File ID: 5HB034.D		Analyzed: 08/08/14 00:27			
Dibromofluoromethane	50.0	98	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	115	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	151	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29955	Instrument:	OVGCMS5
Matrix:	Soil	Calibration:	1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Matrix Spike (4H07018-MS1)			Lab File ID: 5HB036.D		Analyzed: 08/08/14 01:22			
Dibromofluoromethane	50.0	101	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	116	85 - 115	13.032	13.041	-0.0090	+/-1.0	*
4-Bromofluorobenzene	50.0	134	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*
Matrix Spike Dup (4H07018-MSD1)			Lab File ID: 5HB037.D		Analyzed: 08/08/14 01:50			
Dibromofluoromethane	50.0	104	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	118	85 - 115	13.032	13.041	-0.0090	+/-1.0	*
4-Bromofluorobenzene	50.0	145	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29967
Instrument: OVGCMS1
Matrix: Water
Calibration: 1408028

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29967-CCV1)			Lab File ID: 1H7003.D		Analyzed: 08/07/14 10:19			
Dibromofluoromethane	50.0	93	80 - 120	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	96	80 - 120	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	96	80 - 120	15.3	15.3	0.0000	+/-0.5	
LCS (4H07029-BS1)			Lab File ID: 1H7004.D		Analyzed: 08/07/14 10:57			
Dibromofluoromethane	50.0	91	85 - 115	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	93	85 - 120	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	93	75 - 120	15.3	15.3	0.0000	+/-0.5	
LCS Dup (4H07029-BSD1)			Lab File ID: 1H7005.D		Analyzed: 08/07/14 11:27			
Dibromofluoromethane	50.0	91	85 - 115	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	93	85 - 120	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	94	75 - 120	15.3	15.3	0.0000	+/-0.5	
Blank (4H07029-BLK1)			Lab File ID: 1H7007.D		Analyzed: 08/07/14 12:26			
Dibromofluoromethane	50.0	89	85 - 115	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	96	85 - 120	12.83	12.82	0.0100	+/-0.5	
4-Bromofluorobenzene	50.0	97	75 - 120	15.3	15.3	0.0000	+/-0.5	
Instrument RL Check (AA29967-CRL1)			Lab File ID: 1H7008.D		Analyzed: 08/07/14 12:56			
Dibromofluoromethane	50.0	82	0 - 200	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	93	0 - 200	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	94	0 - 200	15.3	15.3	0.0000	+/-0.5	
TR-5TH-CS-TB-080114 (A404270-30)			Lab File ID: 1H7021.D		Analyzed: 08/07/14 19:29			
Dibromofluoromethane	50.0	95	85 - 115	10.55	10.55	0.0000	+/-0.5	
Toluene-d8	50.0	97	85 - 120	12.82	12.82	0.0000	+/-0.5	
4-Bromofluorobenzene	50.0	103	75 - 120	15.3	15.3	0.0000	+/-0.5	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29977
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29977-CCV1)			Lab File ID: 5HC002.D		Analyzed: 08/08/14 10:20			
Dibromofluoromethane	50.0	92	80 - 120	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	109	80 - 120	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	126	80 - 120	15.982	15.9956	-0.0136	+/-1.0	*
LCS (4H08021-BS1)			Lab File ID: 5HC003.D		Analyzed: 08/08/14 10:59			
Dibromofluoromethane	50.0	90	74 - 133	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	105	85 - 115	13.024	13.041	-0.0170	+/-1.0	
4-Bromofluorobenzene	50.0	139	85 - 120	15.974	15.9956	-0.0216	+/-1.0	*
LCS Dup (4H08021-BSD1)			Lab File ID: 5HC004.D		Analyzed: 08/08/14 11:27			
Dibromofluoromethane	50.0	94	74 - 133	10.37	10.38683	-0.0168	+/-1.0	
Toluene-d8	50.0	106	85 - 115	13.024	13.041	-0.0170	+/-1.0	
4-Bromofluorobenzene	50.0	142	85 - 120	15.974	15.9956	-0.0216	+/-1.0	*
Blank (4H08021-BLK1)			Lab File ID: 5HC005.D		Analyzed: 08/08/14 11:56			
Dibromofluoromethane	50.0	94	74 - 133	10.37	10.38683	-0.0168	+/-1.0	
Toluene-d8	50.0	108	85 - 115	13.024	13.041	-0.0170	+/-1.0	
4-Bromofluorobenzene	50.0	146	85 - 120	15.974	15.9956	-0.0216	+/-1.0	*
Instrument RL Check (AA29977-CRL1)			Lab File ID: 5HC006.D		Analyzed: 08/08/14 12:24			
Dibromofluoromethane	50.0	89	0 - 200	10.378	10.38683	-0.0088	+/-1.0	
Toluene-d8	50.0	105	0 - 200	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	137	0 - 200	15.974	15.9956	-0.0216	+/-1.0	
TR-5TH-CSF03-0814 (A404270-21RE1)			Lab File ID: 5HC007.D		Analyzed: 08/08/14 12:53			
Dibromofluoromethane	50.0	88	74 - 133	10.37	10.38683	-0.0168	+/-1.0	
Toluene-d8	50.0	102	85 - 115	13.032	13.041	-0.0090	+/-1.0	
4-Bromofluorobenzene	50.0	136	85 - 120	15.982	15.9956	-0.0136	+/-1.0	*

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29899
Instrument: OVGCMS5
Matrix: Water
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA29899-CAL1)			Lab File ID: 5H4003.D			Analyzed: 08/04/14 12:04			
Pentafluorobenzene	738609	10.88	639658	10.88	115	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1141194	11.529	977088	11.529	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1080869	14.725	1218049	14.725	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	589403	17.322	568681	17.33	104	50 - 200	-0.0080	+/-0.50	
Cal Standard (AA29899-CAL2)			Lab File ID: 5H4004.D			Analyzed: 08/04/14 12:32			
Pentafluorobenzene	736302	10.872	639658	10.88	115	50 - 200	-0.0080	+/-0.50	
1,4-Difluorobenzene	1111209	11.521	977088	11.529	114	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1078262	14.725	1218049	14.725	89	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	617524	17.322	568681	17.33	109	50 - 200	-0.0080	+/-0.50	
Cal Standard (AA29899-CAL3)			Lab File ID: 5H4005.D			Analyzed: 08/04/14 13:00			
Pentafluorobenzene	766891	10.871	639658	10.88	120	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1146312	11.521	977088	11.529	117	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1158010	14.725	1218049	14.725	95	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	646194	17.322	568681	17.33	114	50 - 200	-0.0080	+/-0.50	
Cal Standard (AA29899-CAL4)			Lab File ID: 5H4006.D			Analyzed: 08/04/14 13:28			
Pentafluorobenzene	619313	10.879	639658	10.88	97	50 - 200	-0.0010	+/-0.50	
1,4-Difluorobenzene	948384	11.529	977088	11.529	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1027169	14.725	1218049	14.725	84	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	532102	17.33	568681	17.33	94	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29899-CAL5)			Lab File ID: 5H4007.D			Analyzed: 08/04/14 13:57			
Pentafluorobenzene	639658	10.88	639658	10.88	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	977088	11.529	977088	11.529	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1218049	14.725	1218049	14.725	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	568681	17.33	568681	17.33	100	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29899-CAL6)			Lab File ID: 5H4008.D			Analyzed: 08/04/14 14:25			
Pentafluorobenzene	689574	10.871	639658	10.88	108	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1059294	11.521	977088	11.529	108	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1450635	14.725	1218049	14.725	119	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	632440	17.33	568681	17.33	111	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29899-CAL7)			Lab File ID: 5H4009.D			Analyzed: 08/04/14 14:53			
Pentafluorobenzene	726641	10.88	639658	10.88	114	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1096994	11.529	977088	11.529	112	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1629803	14.725	1218049	14.725	134	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	664743	17.33	568681	17.33	117	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29899
Instrument: OVGCMS5
Matrix: Water
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA29899-CAL8)			Lab File ID: 5H4010.D			Analyzed: 08/04/14 15:22			
Pentafluorobenzene	782573	10.88	639658	10.88	122	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1218875	11.529	977088	11.529	125	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1368434	14.725	1218049	14.725	112	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	799158	17.33	568681	17.33	141	50 - 200	0.0000	+/-0.50	
Initial Cal Check (AA29899-ICV1)			Lab File ID: 5H4012.D			Analyzed: 08/04/14 16:18			
Pentafluorobenzene	735155	10.88	639658	10.88	115	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	1138810	11.529	977088	11.529	117	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	1325755	14.725	1218049	14.725	109	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	623907	17.33	568681	17.33	110	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29941
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29941-CCV1)			Lab File ID: 5HA002.D			Analyzed: 08/06/14 09:17			
Pentafluorobenzene	939416	10.863	639658	10.88	147	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1466020	11.512	977088	11.529	150	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1738020	14.709	1218049	14.725	143	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	860271	17.313	568681	17.33	151	50 - 200	-0.0170	+/-0.50	
Calibration Check (AA29941-CCV2)			Lab File ID: 5HA003.D			Analyzed: 08/06/14 09:56			
Pentafluorobenzene	788095	10.863	639658	10.88	123	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1202225	11.512	977088	11.529	123	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1520038	14.709	1218049	14.725	125	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	724463	17.313	568681	17.33	127	50 - 200	-0.0170	+/-0.50	
LCS (4H06021-BS1)			Lab File ID: 5HA004.D			Analyzed: 08/06/14 10:40			
Pentafluorobenzene	771949	10.863	639658	10.88	121	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1189184	11.512	977088	11.529	122	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1319411	14.709	1218049	14.725	108	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	678703	17.314	568681	17.33	119	50 - 200	-0.0160	+/-0.50	
LCS Dup (4H06021-BSD1)			Lab File ID: 5HA005.D			Analyzed: 08/06/14 11:08			
Pentafluorobenzene	766692	10.863	639658	10.88	120	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1158643	11.512	977088	11.529	119	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1304501	14.709	1218049	14.725	107	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	696764	17.305	568681	17.33	123	50 - 200	-0.0250	+/-0.50	
Blank (4H06021-BLK1)			Lab File ID: 5HA006.D			Analyzed: 08/06/14 11:37			
Pentafluorobenzene	696693	10.863	639658	10.88	109	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1064770	11.512	977088	11.529	109	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1098560	14.709	1218049	14.725	90	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	637299	17.305	568681	17.33	112	50 - 200	-0.0250	+/-0.50	
Instrument RL Check (AA29941-CRL1)			Lab File ID: 5HA007.D			Analyzed: 08/06/14 12:05			
Pentafluorobenzene	678989	10.863	639658	10.88	106	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1031126	11.512	977088	11.529	106	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1087651	14.709	1218049	14.725	89	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	615268	17.305	568681	17.33	108	50 - 200	-0.0250	+/-0.50	
TR-5TH-CSW01-0814 (A404270-01)			Lab File ID: 5HA015.D			Analyzed: 08/06/14 15:52			
Pentafluorobenzene	453907	10.863	639658	10.88	71	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	685738	11.52	977088	11.529	70	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	768840	14.717	1218049	14.725	63	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	456300	17.313	568681	17.33	80	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29941
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW02-0814 (A404270-02)			Lab File ID: 5HA016.D			Analyzed: 08/06/14 16:21			
Pentafluorobenzene	475897	10.871	639658	10.88	74	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	725523	11.521	977088	11.529	74	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	819933	14.717	1218049	14.725	67	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	482763	17.322	568681	17.33	85	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW03-0814 (A404270-03)			Lab File ID: 5HA017.D			Analyzed: 08/06/14 16:49			
Pentafluorobenzene	337625	10.871	639658	10.88	53	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	504486	11.521	977088	11.529	52	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	591174	14.717	1218049	14.725	49	50 - 200	-0.0080	+/-0.50	*
1,4-Dichlorobenzene-d4	352682	17.313	568681	17.33	62	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSW04-0814 (A404270-04)			Lab File ID: 5HA018.D			Analyzed: 08/06/14 17:18			
Pentafluorobenzene	488081	10.871	639658	10.88	76	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	718751	11.52	977088	11.529	74	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	799353	14.717	1218049	14.725	66	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	477686	17.322	568681	17.33	84	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW05-0814 (A404270-05)			Lab File ID: 5HA019.D			Analyzed: 08/06/14 17:46			
Pentafluorobenzene	477568	10.871	639658	10.88	75	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	692837	11.521	977088	11.529	71	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	779187	14.717	1218049	14.725	64	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	446065	17.314	568681	17.33	78	50 - 200	-0.0160	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29943-CCV1)			Lab File ID: 5HB003.D			Analyzed: 08/07/14 09:48			
Pentafluorobenzene	895196	10.871	639658	10.88	140	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1472283	11.512	977088	11.529	151	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1921403	14.717	1218049	14.725	158	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	1005690	17.313	568681	17.33	177	50 - 200	-0.0170	+/-0.50	
LCS (4H06032-BS1)			Lab File ID: 5HB004.D			Analyzed: 08/07/14 10:21			
Pentafluorobenzene	975904	10.863	639658	10.88	153	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1599507	11.512	977088	11.529	164	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1766863	14.717	1218049	14.725	145	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	992511	17.314	568681	17.33	175	50 - 200	-0.0160	+/-0.50	
Blank (4H06032-BLK1)			Lab File ID: 5HB005.D			Analyzed: 08/07/14 10:49			
Pentafluorobenzene	1001464	10.863	639658	10.88	157	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1616567	11.512	977088	11.529	165	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1639733	14.717	1218049	14.725	135	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	987464	17.313	568681	17.33	174	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSW06-0814 (A404270-06)			Lab File ID: 5HB006.D			Analyzed: 08/07/14 11:17			
Pentafluorobenzene	583776	10.863	639658	10.88	91	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	955577	11.512	977088	11.529	98	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	947091	14.717	1218049	14.725	78	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	515652	17.313	568681	17.33	91	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSF09-0814 (A404270-28)			Lab File ID: 5HB007.D			Analyzed: 08/07/14 11:46			
Pentafluorobenzene	848276	10.863	639658	10.88	133	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1385010	11.512	977088	11.529	142	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1392571	14.717	1218049	14.725	114	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	778999	17.314	568681	17.33	137	50 - 200	-0.0160	+/-0.50	
Matrix Spike (4H06032-MS1)			Lab File ID: 5HB008.D			Analyzed: 08/07/14 12:14			
Pentafluorobenzene	909399	10.863	639658	10.88	142	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1441249	11.512	977088	11.529	148	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1593349	14.717	1218049	14.725	131	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	841905	17.313	568681	17.33	148	50 - 200	-0.0170	+/-0.50	
Matrix Spike Dup (4H06032-MSD1)			Lab File ID: 5HB009.D			Analyzed: 08/07/14 12:42			
Pentafluorobenzene	919432	10.863	639658	10.88	144	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1478480	11.512	977088	11.529	151	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1591068	14.717	1218049	14.725	131	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	848910	17.313	568681	17.33	149	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW07-0814 (A404270-07)			Lab File ID: 5HB010.D			Analyzed: 08/07/14 13:11			
Pentafluorobenzene	956568	10.863	639658	10.88	150	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1557590	11.521	977088	11.529	159	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1580379	14.717	1218049	14.725	130	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	893482	17.314	568681	17.33	157	50 - 200	-0.0160	+/-0.50	
TR-5TH-CSW07D-0814 (A404270-08)			Lab File ID: 5HB011.D			Analyzed: 08/07/14 13:39			
Pentafluorobenzene	834926	10.871	639658	10.88	131	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1365210	11.52	977088	11.529	140	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1380842	14.717	1218049	14.725	113	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	733129	17.313	568681	17.33	129	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSW08-0814 (A404270-09)			Lab File ID: 5HB012.D			Analyzed: 08/07/14 14:08			
Pentafluorobenzene	828425	10.863	639658	10.88	130	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1376413	11.52	977088	11.529	141	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1396837	14.717	1218049	14.725	115	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	802656	17.322	568681	17.33	141	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW09-0814 (A404270-10)			Lab File ID: 5HB013.D			Analyzed: 08/07/14 14:36			
Pentafluorobenzene	817680	10.871	639658	10.88	128	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1309385	11.521	977088	11.529	134	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1308033	14.717	1218049	14.725	107	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	670412	17.322	568681	17.33	118	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW11-0814 (A404270-12)			Lab File ID: 5HB014.D			Analyzed: 08/07/14 15:05			
Pentafluorobenzene	952222	10.871	639658	10.88	149	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1534167	11.521	977088	11.529	157	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1611396	14.717	1218049	14.725	132	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	977734	17.322	568681	17.33	172	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW11D-0814 (A404270-13)			Lab File ID: 5HB015.D			Analyzed: 08/07/14 15:34			
Pentafluorobenzene	882457	10.871	639658	10.88	138	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1406994	11.52	977088	11.529	144	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1414467	14.717	1218049	14.725	116	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	777844	17.322	568681	17.33	137	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSW12-0814 (A404270-14)			Lab File ID: 5HB016.D			Analyzed: 08/07/14 16:02			
Pentafluorobenzene	813184	10.871	639658	10.88	127	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1309388	11.521	977088	11.529	134	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1343287	14.725	1218049	14.725	110	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	735311	17.322	568681	17.33	129	50 - 200	-0.0080	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW13-0814 (A404270-15)			Lab File ID: 5HB017.D			Analyzed: 08/07/14 16:31			
Pentafluorobenzene	775088	10.871	639658	10.88	121	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1264000	11.521	977088	11.529	129	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1284404	14.717	1218049	14.725	105	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	659469	17.314	568681	17.33	116	50 - 200	-0.0160	+/-0.50	
TR-5TH-CSW14-0814 (A404270-16)			Lab File ID: 5HB018.D			Analyzed: 08/07/14 16:59			
Pentafluorobenzene	883244	10.863	639658	10.88	138	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1426282	11.521	977088	11.529	146	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1560168	14.717	1218049	14.725	128	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	959400	17.313	568681	17.33	169	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSW15-0814 (A404270-18)			Lab File ID: 5HB019.D			Analyzed: 08/07/14 17:27			
Pentafluorobenzene	728619	10.863	639658	10.88	114	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1212339	11.52	977088	11.529	124	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1287858	14.717	1218049	14.725	106	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	775369	17.313	568681	17.33	136	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSF01-0814 (A404270-19)			Lab File ID: 5HB020.D			Analyzed: 08/07/14 17:55			
Pentafluorobenzene	788656	10.871	639658	10.88	123	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1288022	11.52	977088	11.529	132	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1382980	14.717	1218049	14.725	114	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	816832	17.322	568681	17.33	144	50 - 200	-0.0080	+/-0.50	
TR-5TH-CSF02-0814 (A404270-20)			Lab File ID: 5HB021.D			Analyzed: 08/07/14 18:23			
Pentafluorobenzene	846553	10.871	639658	10.88	132	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1358508	11.52	977088	11.529	139	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1480239	14.717	1218049	14.725	122	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	858292	17.313	568681	17.33	151	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSF03-0814 (A404270-21)			Lab File ID: 5HB022.D			Analyzed: 08/07/14 18:51			
Pentafluorobenzene	194598	10.871	639658	10.88	30	50 - 200	-0.0090	+/-0.50	*
1,4-Difluorobenzene	325665	11.512	977088	11.529	33	50 - 200	-0.0170	+/-0.50	*
Chlorobenzene-d5	372745	14.717	1218049	14.725	31	50 - 200	-0.0080	+/-0.50	*
1,4-Dichlorobenzene-d4	220124	17.313	568681	17.33	39	50 - 200	-0.0170	+/-0.50	*
TR-5TH-CSF04-0814 (A404270-22)			Lab File ID: 5HB023.D			Analyzed: 08/07/14 19:19			
Pentafluorobenzene	755300	10.871	639658	10.88	118	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1239774	11.52	977088	11.529	127	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1328811	14.717	1218049	14.725	109	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	832314	17.313	568681	17.33	146	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSF05-0814 (A404270-23)			Lab File ID: 5HB024.D			Analyzed: 08/07/14 19:47			
Pentafluorobenzene	827084	10.871	639658	10.88	129	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1327890	11.512	977088	11.529	136	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1409436	14.717	1218049	14.725	116	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	813076	17.313	568681	17.33	143	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSF05D-0814 (A404270-24)			Lab File ID: 5HB025.D			Analyzed: 08/07/14 20:15			
Pentafluorobenzene	766995	10.871	639658	10.88	120	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1256753	11.52	977088	11.529	129	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1337286	14.717	1218049	14.725	110	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	758370	17.313	568681	17.33	133	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29950
Instrument: OVGCMS1
Matrix: Water
Calibration: 1408028

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA29950-CAL1)			Lab File ID: 1H6014.D			Analyzed: 08/06/14 19:09			
Pentafluorobenzene	208301	10.97	174839	10.98	119	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	341956	11.54	341486	11.54	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	277250	14.21	288973	14.21	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	121263	16.47	128462	16.47	94	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL2)			Lab File ID: 1H6015.D			Analyzed: 08/06/14 19:38			
Pentafluorobenzene	210316	10.97	174839	10.98	120	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	339555	11.54	341486	11.54	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	282073	14.21	288973	14.21	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	120586	16.47	128462	16.47	94	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL3)			Lab File ID: 1H6016.D			Analyzed: 08/06/14 20:07			
Pentafluorobenzene	203895	10.97	174839	10.98	117	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	327981	11.54	341486	11.54	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	280278	14.21	288973	14.21	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	119369	16.47	128462	16.47	93	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL4)			Lab File ID: 1H6017.D			Analyzed: 08/06/14 20:36			
Pentafluorobenzene	220978	10.97	174839	10.98	126	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	355591	11.54	341486	11.54	104	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	292556	14.21	288973	14.21	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	128096	16.47	128462	16.47	100	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL5)			Lab File ID: 1H6018.D			Analyzed: 08/06/14 21:05			
Pentafluorobenzene	174839	10.98	174839	10.98	100	50 - 200	0.0000	+/-0.50	
1,4-Difluorobenzene	341486	11.54	341486	11.54	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	288973	14.21	288973	14.21	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	128462	16.47	128462	16.47	100	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL6)			Lab File ID: 1H6019.D			Analyzed: 08/06/14 21:34			
Pentafluorobenzene	204752	10.97	174839	10.98	117	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	326029	11.55	341486	11.54	95	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	271881	14.21	288973	14.21	94	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	124594	16.47	128462	16.47	97	50 - 200	0.0000	+/-0.50	
Cal Standard (AA29950-CAL7)			Lab File ID: 1H6020.D			Analyzed: 08/06/14 22:04			
Pentafluorobenzene	217731	10.97	174839	10.98	125	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	350589	11.55	341486	11.54	103	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	295503	14.2	288973	14.21	102	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	136176	16.47	128462	16.47	106	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29950
Instrument: OVGCMS1
Matrix: Water
Calibration: 1408028

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA29950-CAL8)			Lab File ID: 1H6021.D			Analyzed: 08/06/14 22:33			
Pentafluorobenzene	213579	10.97	174839	10.98	122	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	329998	11.54	341486	11.54	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	281099	14.21	288973	14.21	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	129459	16.47	128462	16.47	101	50 - 200	0.0000	+/-0.50	
Initial Cal Check (AA29950-ICV1)			Lab File ID: 1H6023.D			Analyzed: 08/06/14 23:31			
Pentafluorobenzene	214957	10.97	174839	10.98	123	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	346657	11.54	341486	11.54	102	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	287667	14.21	288973	14.21	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	126767	16.47	128462	16.47	99	50 - 200	0.0000	+/-0.50	
Initial Cal Check (AA29950-ICV2)			Lab File ID: 1H6024.D			Analyzed: 08/07/14 00:00			
Pentafluorobenzene	214721	10.97	174839	10.98	123	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	342455	11.54	341486	11.54	100	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	293018	14.21	288973	14.21	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	127485	16.47	128462	16.47	99	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29955
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29955-CCV1)			Lab File ID: 5HB027.D			Analyzed: 08/07/14 21:11			
Pentafluorobenzene	926781	10.871	639658	10.88	145	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1530259	11.521	977088	11.529	157	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	2083163	14.717	1218049	14.725	171	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	1148075	17.314	568681	17.33	202	50 - 200	-0.0160	+/-0.50	*
LCS (4H07018-BS1)			Lab File ID: 5HB028.D			Analyzed: 08/07/14 21:39			
Pentafluorobenzene	952215	10.871	639658	10.88	149	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1521144	11.52	977088	11.529	156	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1808487	14.717	1218049	14.725	148	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	1059993	17.313	568681	17.33	186	50 - 200	-0.0170	+/-0.50	
Blank (4H07018-BLK1)			Lab File ID: 5HB029.D			Analyzed: 08/07/14 22:07			
Pentafluorobenzene	1029533	10.871	639658	10.88	161	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1686588	11.52	977088	11.529	173	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1777419	14.717	1218049	14.725	146	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	1087060	17.322	568681	17.33	191	50 - 200	-0.0080	+/-0.50	
Instrument RL Check (AA29955-CRL1)			Lab File ID: 5HB030.D			Analyzed: 08/07/14 22:35			
Pentafluorobenzene	944869	10.871	639658	10.88	148	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1535161	11.52	977088	11.529	157	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1637515	14.717	1218049	14.725	134	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	984570	17.313	568681	17.33	173	50 - 200	-0.0170	+/-0.50	
TR-5TH-CSW010-0814 (A404270-11)			Lab File ID: 5HB031.D			Analyzed: 08/07/14 23:03			
Pentafluorobenzene	897522	10.863	639658	10.88	140	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1464352	11.521	977088	11.529	150	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1591181	14.717	1218049	14.725	131	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	926677	17.314	568681	17.33	163	50 - 200	-0.0160	+/-0.50	
TR-5TH-CSF06-0814 (A404270-25)			Lab File ID: 5HB032.D			Analyzed: 08/07/14 23:31			
Pentafluorobenzene	872540	10.863	639658	10.88	136	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1412228	11.521	977088	11.529	145	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1464649	14.717	1218049	14.725	120	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	807667	17.314	568681	17.33	142	50 - 200	-0.0160	+/-0.50	
TR-5TH-CSF07-0814 (A404270-26)			Lab File ID: 5HB033.D			Analyzed: 08/07/14 23:59			
Pentafluorobenzene	799019	10.871	639658	10.88	125	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1307143	11.521	977088	11.529	134	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1432812	14.717	1218049	14.725	118	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	809009	17.313	568681	17.33	142	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29955
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSF08-0814 (A404270-27)			Lab File ID: 5HB034.D			Analyzed: 08/08/14 00:27			
Pentafluorobenzene	835069	10.863	639658	10.88	131	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1362184	11.52	977088	11.529	139	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1480385	14.717	1218049	14.725	122	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	873204	17.313	568681	17.33	154	50 - 200	-0.0170	+/-0.50	
Matrix Spike (4H07018-MS1)			Lab File ID: 5HB036.D			Analyzed: 08/08/14 01:22			
Pentafluorobenzene	842378	10.871	639658	10.88	132	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1342896	11.52	977088	11.529	137	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	1506438	14.717	1218049	14.725	124	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	783818	17.322	568681	17.33	138	50 - 200	-0.0080	+/-0.50	
Matrix Spike Dup (4H07018-MSD1)			Lab File ID: 5HB037.D			Analyzed: 08/08/14 01:50			
Pentafluorobenzene	821764	10.871	639658	10.88	128	50 - 200	-0.0090	+/-0.50	
1,4-Difluorobenzene	1318977	11.521	977088	11.529	135	50 - 200	-0.0080	+/-0.50	
Chlorobenzene-d5	1488351	14.717	1218049	14.725	122	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	804386	17.313	568681	17.33	141	50 - 200	-0.0170	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29967
Instrument: OVGCMS1
Matrix: Water
Calibration: 1408028

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29967-CCV1)			Lab File ID: 1H7003.D			Analyzed: 08/07/14 10:19			
Pentafluorobenzene	205514	10.97	174839	10.98	118	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	330015	11.54	341486	11.54	97	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	283024	14.21	288973	14.21	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	125704	16.47	128462	16.47	98	50 - 200	0.0000	+/-0.50	
LCS (4H07029-BS1)			Lab File ID: 1H7004.D			Analyzed: 08/07/14 10:57			
Pentafluorobenzene	224599	10.97	174839	10.98	128	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	359007	11.54	341486	11.54	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	305623	14.21	288973	14.21	106	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	132225	16.47	128462	16.47	103	50 - 200	0.0000	+/-0.50	
LCS Dup (4H07029-BSD1)			Lab File ID: 1H7005.D			Analyzed: 08/07/14 11:27			
Pentafluorobenzene	220719	10.97	174839	10.98	126	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	357473	11.54	341486	11.54	105	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	298176	14.21	288973	14.21	103	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	128633	16.47	128462	16.47	100	50 - 200	0.0000	+/-0.50	
Blank (4H07029-BLK1)			Lab File ID: 1H7007.D			Analyzed: 08/07/14 12:26			
Pentafluorobenzene	221283	10.97	174839	10.98	127	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	353153	11.55	341486	11.54	103	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	295557	14.21	288973	14.21	102	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	128602	16.47	128462	16.47	100	50 - 200	0.0000	+/-0.50	
Instrument RL Check (AA29967-CRL1)			Lab File ID: 1H7008.D			Analyzed: 08/07/14 12:56			
Pentafluorobenzene	198647	10.97	174839	10.98	114	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	308700	11.54	341486	11.54	90	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	255079	14.21	288973	14.21	88	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	110958	16.47	128462	16.47	86	50 - 200	0.0000	+/-0.50	
TR-5TH-CS-TB-080114 (A404270-30)			Lab File ID: 1H7021.D			Analyzed: 08/07/14 19:29			
Pentafluorobenzene	212517	10.97	174839	10.98	122	50 - 200	-0.0100	+/-0.50	
1,4-Difluorobenzene	343695	11.55	341486	11.54	101	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	285844	14.21	288973	14.21	99	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	130165	16.47	128462	16.47	101	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29977
Instrument: OVGCMS5
Matrix: Soil
Calibration: 1408017

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29977-CCV1)			Lab File ID: 5HC002.D			Analyzed: 08/08/14 10:20			
Pentafluorobenzene	847256	10.863	639658	10.88	132	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1350313	11.512	977088	11.529	138	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1775782	14.709	1218049	14.725	146	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	971922	17.305	568681	17.33	171	50 - 200	-0.0250	+/-0.50	
LCS (4H08021-BS1)			Lab File ID: 5HC003.D			Analyzed: 08/08/14 10:59			
Pentafluorobenzene	913954	10.863	639658	10.88	143	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1450631	11.512	977088	11.529	148	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1651348	14.709	1218049	14.725	136	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	978860	17.305	568681	17.33	172	50 - 200	-0.0250	+/-0.50	
LCS Dup (4H08021-BSD1)			Lab File ID: 5HC004.D			Analyzed: 08/08/14 11:27			
Pentafluorobenzene	868269	10.863	639658	10.88	136	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1408659	11.512	977088	11.529	144	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1601347	14.709	1218049	14.725	131	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	940925	17.305	568681	17.33	165	50 - 200	-0.0250	+/-0.50	
Blank (4H08021-BLK1)			Lab File ID: 5HC005.D			Analyzed: 08/08/14 11:56			
Pentafluorobenzene	815011	10.863	639658	10.88	127	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1327044	11.512	977088	11.529	136	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1422573	14.709	1218049	14.725	117	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	873646	17.305	568681	17.33	154	50 - 200	-0.0250	+/-0.50	
Instrument RL Check (AA29977-CRL1)			Lab File ID: 5HC006.D			Analyzed: 08/08/14 12:24			
Pentafluorobenzene	832012	10.863	639658	10.88	130	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1343736	11.512	977088	11.529	138	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1481361	14.709	1218049	14.725	122	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	896266	17.305	568681	17.33	158	50 - 200	-0.0250	+/-0.50	
TR-5TH-CSF03-0814 (A404270-21RE1)			Lab File ID: 5HC007.D			Analyzed: 08/08/14 12:53			
Pentafluorobenzene	809035	10.863	639658	10.88	126	50 - 200	-0.0170	+/-0.50	
1,4-Difluorobenzene	1302080	11.512	977088	11.529	133	50 - 200	-0.0170	+/-0.50	
Chlorobenzene-d5	1367267	14.709	1218049	14.725	112	50 - 200	-0.0160	+/-0.50	
1,4-Dichlorobenzene-d4	791023	17.313	568681	17.33	139	50 - 200	-0.0170	+/-0.50	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29899

Instrument: OVGCMS5

Calibration: 1408017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29899-TUN1	5H4001.D	08/04/14 09:44
Cal Standard	AA29899-CAL1	5H4003.D	08/04/14 12:04
Cal Standard	AA29899-CAL2	5H4004.D	08/04/14 12:32
Cal Standard	AA29899-CAL3	5H4005.D	08/04/14 13:00
Cal Standard	AA29899-CAL4	5H4006.D	08/04/14 13:28
Cal Standard	AA29899-CAL5	5H4007.D	08/04/14 13:57
Cal Standard	AA29899-CAL6	5H4008.D	08/04/14 14:25
Cal Standard	AA29899-CAL7	5H4009.D	08/04/14 14:53
Cal Standard	AA29899-CAL8	5H4010.D	08/04/14 15:22
Initial Cal Check	AA29899-ICV1	5H4012.D	08/04/14 16:18

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29941

Instrument: OVGCMS5

Calibration: 1408017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29941-TUN1	5HA001.D	08/06/14 08:45
Calibration Check	AA29941-CCV1	5HA002.D	08/06/14 09:17
Calibration Check	AA29941-CCV2	5HA003.D	08/06/14 09:56
LCS	4H06021-BS1	5HA004.D	08/06/14 10:40
LCS Dup	4H06021-BSD1	5HA005.D	08/06/14 11:08
Blank	4H06021-BLK1	5HA006.D	08/06/14 11:37
Instrument RL Check	AA29941-CRL1	5HA007.D	08/06/14 12:05
TR-5TH-CSW01-0814	A404270-01	5HA015.D	08/06/14 15:52
TR-5TH-CSW02-0814	A404270-02	5HA016.D	08/06/14 16:21
TR-5TH-CSW03-0814	A404270-03	5HA017.D	08/06/14 16:49
TR-5TH-CSW04-0814	A404270-04	5HA018.D	08/06/14 17:18
TR-5TH-CSW05-0814	A404270-05	5HA019.D	08/06/14 17:46

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29943

Instrument: OVGCMS5

Calibration: 1408017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29943-TUN1	5HB002.D	08/07/14 09:17
Calibration Check	AA29943-CCV1	5HB003.D	08/07/14 09:48
LCS	4H06032-BS1	5HB004.D	08/07/14 10:21
Blank	4H06032-BLK1	5HB005.D	08/07/14 10:49
TR-5TH-CSW06-0814	A404270-06	5HB006.D	08/07/14 11:17
TR-5TH-CSF09-0814	A404270-28	5HB007.D	08/07/14 11:46
TR-5TH-CSF09-0814	4H06032-MS1	5HB008.D	08/07/14 12:14
TR-5TH-CSF09-0814	4H06032-MSD1	5HB009.D	08/07/14 12:42
TR-5TH-CSW07-0814	A404270-07	5HB010.D	08/07/14 13:11
TR-5TH-CSW07D-0814	A404270-08	5HB011.D	08/07/14 13:39
TR-5TH-CSW08-0814	A404270-09	5HB012.D	08/07/14 14:08
TR-5TH-CSW09-0814	A404270-10	5HB013.D	08/07/14 14:36
TR-5TH-CSW11-0814	A404270-12	5HB014.D	08/07/14 15:05
TR-5TH-CSW11D-0814	A404270-13	5HB015.D	08/07/14 15:34
TR-5TH-CSW12-0814	A404270-14	5HB016.D	08/07/14 16:02
TR-5TH-CSW13-0814	A404270-15	5HB017.D	08/07/14 16:31
TR-5TH-CSW14-0814	A404270-16	5HB018.D	08/07/14 16:59
TR-5TH-CSW15-0814	A404270-18	5HB019.D	08/07/14 17:27
TR-5TH-CSF01-0814	A404270-19	5HB020.D	08/07/14 17:55
TR-5TH-CSF02-0814	A404270-20	5HB021.D	08/07/14 18:23
TR-5TH-CSF03-0814	A404270-21	5HB022.D	08/07/14 18:51
TR-5TH-CSF04-0814	A404270-22	5HB023.D	08/07/14 19:19
TR-5TH-CSF05-0814	A404270-23	5HB024.D	08/07/14 19:47
TR-5TH-CSF05D-0814	A404270-24	5HB025.D	08/07/14 20:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29950

Instrument: OVGCMS1

Calibration: 1408028

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29950-TUN1	1H6013.D	08/06/14 18:22
Cal Standard	AA29950-CAL1	1H6014.D	08/06/14 19:09
Cal Standard	AA29950-CAL2	1H6015.D	08/06/14 19:38
Cal Standard	AA29950-CAL3	1H6016.D	08/06/14 20:07
Cal Standard	AA29950-CAL4	1H6017.D	08/06/14 20:36
Cal Standard	AA29950-CAL5	1H6018.D	08/06/14 21:05
Cal Standard	AA29950-CAL6	1H6019.D	08/06/14 21:34
Cal Standard	AA29950-CAL7	1H6020.D	08/06/14 22:04
Cal Standard	AA29950-CAL8	1H6021.D	08/06/14 22:33
Initial Cal Check	AA29950-ICV1	1H6023.D	08/06/14 23:31
Initial Cal Check	AA29950-ICV2	1H6024.D	08/07/14 00:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29955

Instrument: OVGCMS5

Calibration: 1408017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29955-TUN1	5HB026.D	08/07/14 20:43
Calibration Check	AA29955-CCV1	5HB027.D	08/07/14 21:11
LCS	4H07018-BS1	5HB028.D	08/07/14 21:39
Blank	4H07018-BLK1	5HB029.D	08/07/14 22:07
Instrument RL Check	AA29955-CRL1	5HB030.D	08/07/14 22:35
TR-5TH-CSW010-0814	A404270-11	5HB031.D	08/07/14 23:03
TR-5TH-CSF06-0814	A404270-25	5HB032.D	08/07/14 23:31
TR-5TH-CSF07-0814	A404270-26	5HB033.D	08/07/14 23:59
TR-5TH-CSF08-0814	A404270-27	5HB034.D	08/08/14 00:27
TR-5TH-CSW010-0814	4H07018-MS1	5HB036.D	08/08/14 01:22
TR-5TH-CSW010-0814	4H07018-MSD1	5HB037.D	08/08/14 01:50

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29967

Instrument: OVGCMS1

Calibration: 1408028

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29967-TUN1	1H7001.D	08/07/14 09:09
Calibration Check	AA29967-CCV1	1H7003.D	08/07/14 10:19
LCS	4H07029-BS1	1H7004.D	08/07/14 10:57
LCS Dup	4H07029-BSD1	1H7005.D	08/07/14 11:27
Blank	4H07029-BLK1	1H7007.D	08/07/14 12:26
Instrument RL Check	AA29967-CRL1	1H7008.D	08/07/14 12:56
TR-5TH-CS-TB-080114	A404270-30	1H7021.D	08/07/14 19:29

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29977

Instrument: OVGCMS5

Calibration: 1408017

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29977-TUN1	5HC001.D	08/08/14 09:49
Calibration Check	AA29977-CCV1	5HC002.D	08/08/14 10:20
LCS	4H08021-BS1	5HC003.D	08/08/14 10:59
LCS Dup	4H08021-BSD1	5HC004.D	08/08/14 11:27
Blank	4H08021-BLK1	5HC005.D	08/08/14 11:56
Instrument RL Check	AA29977-CRL1	5HC006.D	08/08/14 12:24
TR-5TH-CSF03-0814	A404270-21RE1	5HC007.D	08/08/14 12:53

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	5H4001.D	Injection Date:	08/04/14
Instrument ID:	OVGCMS5	Injection Time:	09:44
Sequence:	AA29899	Lab Sample ID:	AA29899-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	29	PASS
75	30 - 60% of 95	40.7	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.88	PASS
173	Less than 2% of 174	0.557	PASS
174	50 - 100% of 95	89.3	PASS
175	5 - 9% of 174	7.15	PASS
176	95 - 101% of 174	96.1	PASS
177	5 - 9% of 176	6.74	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	5HA001.D	Injection Date:	08/06/14
Instrument ID:	OVGCMS5	Injection Time:	08:45
Sequence:	AA29941	Lab Sample ID:	AA29941-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.5	PASS
75	30 - 60% of 95	38.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.36	PASS
173	Less than 2% of 174	0.359	PASS
174	50 - 100% of 95	88.5	PASS
175	5 - 9% of 174	7.55	PASS
176	95 - 101% of 174	98.4	PASS
177	5 - 9% of 176	7.16	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	5HB002.D	Injection Date:	08/07/14
Instrument ID:	OVGCMS5	Injection Time:	09:17
Sequence:	AA29943	Lab Sample ID:	AA29943-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.5	PASS
75	30 - 60% of 95	39.7	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.25	PASS
173	Less than 2% of 174	0.617	PASS
174	50 - 100% of 95	93.5	PASS
175	5 - 9% of 174	8.07	PASS
176	95 - 101% of 174	95.6	PASS
177	5 - 9% of 176	7.15	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	1H6013.D	Injection Date:	08/06/14
Instrument ID:	OVGCMS1	Injection Time:	18:22
Sequence:	AA29950	Lab Sample ID:	AA29950-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	15.7	PASS
75	30 - 60% of 95	43.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.54	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	75.8	PASS
175	5 - 9% of 174	7.57	PASS
176	95 - 101% of 174	95.1	PASS
177	5 - 9% of 176	6.7	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	5HB026.D	Injection Date:	08/07/14
Instrument ID:	OVGCMS5	Injection Time:	20:43
Sequence:	AA29955	Lab Sample ID:	AA29955-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.9	PASS
75	30 - 60% of 95	40.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.36	PASS
173	Less than 2% of 174	0.273	PASS
174	50 - 100% of 95	90.2	PASS
175	5 - 9% of 174	7.27	PASS
176	95 - 101% of 174	96.9	PASS
177	5 - 9% of 176	6.48	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	1H7001.D	Injection Date:	08/07/14
Instrument ID:	OVGCMS1	Injection Time:	09:09
Sequence:	AA29967	Lab Sample ID:	AA29967-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	17.3	PASS
75	30 - 60% of 95	45.4	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.58	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	72.2	PASS
175	5 - 9% of 174	7.54	PASS
176	95 - 101% of 174	96	PASS
177	5 - 9% of 176	6.66	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	5HC001.D	Injection Date:	08/08/14
Instrument ID:	OVGCMS5	Injection Time:	09:49
Sequence:	AA29977	Lab Sample ID:	AA29977-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	20.8	PASS
75	30 - 60% of 95	39.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.58	PASS
173	Less than 2% of 174	0.134	PASS
174	50 - 100% of 95	96.3	PASS
175	5 - 9% of 174	7.02	PASS
176	95 - 101% of 174	96.2	PASS
177	5 - 9% of 176	6.43	PASS

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS5	Calibration:	1408017
Lab File ID:	5HA002.D	Calibration Date:	08/05/14 15:28
Sequence:	AA29941	Injection Date:	08/06/14
Lab Sample ID:	AA29941-CCV1	Injection Time:	09:17

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	40	1.795083	1.425366		-20.6	20 *

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS5	Calibration:	1408017
Lab File ID:	5HA003.D	Calibration Date:	08/05/14 15:28
Sequence:	AA29941	Injection Date:	08/06/14
Lab Sample ID:	AA29941-CCV2	Injection Time:	09:56

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	52	1.795083	1.879857		4.7	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS5	Calibration:	1408017
Lab File ID:	5HB003.D	Calibration Date:	08/05/14 15:28
Sequence:	AA29943	Injection Date:	08/07/14
Lab Sample ID:	AA29943-CCV1	Injection Time:	09:48

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	51	1.795083	1.846149		2.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS5	Calibration:	1408017
Lab File ID:	5HB027.D	Calibration Date:	08/05/14 15:28
Sequence:	AA29955	Injection Date:	08/07/14
Lab Sample ID:	AA29955-CCV1	Injection Time:	21:11

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	45	1.795083	1.627801		-9.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS1	Calibration:	1408028
Lab File ID:	1H7003.D	Calibration Date:	08/06/14 00:29
Sequence:	AA29967	Injection Date:	08/07/14
Lab Sample ID:	AA29967-CCV1	Injection Time:	10:19

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	53	1.505519	1.598979		6.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OVGCMS5	Calibration:	1408017
Lab File ID:	5HC002.D	Calibration Date:	08/05/14 15:28
Sequence:	AA29977	Injection Date:	08/08/14
Lab Sample ID:	AA29977-CCV1	Injection Time:	10:20

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,4-Dichlorobenzene	A	50.0	48	1.795083	1.738519		-3.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INITIAL CALIBRATION STANDARDS

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29899		
Calibration:	1408017	Instrument:	OVGCMS5

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4F0379	8260 surr working	AA29899-TUN1	5H4001.D	08/04/14 09:44
A4H0064	8260 Calibration 1 ppb	AA29899-CAL1	5H4003.D	08/04/14 12:04
A4H0063	8260 Calibration 2 ppb	AA29899-CAL2	5H4004.D	08/04/14 12:32
A4H0062	8260 Calibration 5 ppb	AA29899-CAL3	5H4005.D	08/04/14 13:00
A4H0061	8260 Calibration 20 ppb	AA29899-CAL4	5H4006.D	08/04/14 13:28
A4H0060	8260 Calibration 50 ppb	AA29899-CAL5	5H4007.D	08/04/14 13:57
A4H0059	8260 Calibration 80 ppb	AA29899-CAL6	5H4008.D	08/04/14 14:25
A4H0058	8260 Calibration 100 ppb	AA29899-CAL7	5H4009.D	08/04/14 14:53
A4H0057	8260 Calibration 200 ppb	AA29899-CAL8	5H4010.D	08/04/14 15:22

INITIAL CALIBRATION STANDARDS

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29950		
Calibration:	1408028	Instrument:	OVGCMS1

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4F0379	8260 surr working	AA29950-TUN1	1H6013.D	08/06/14 18:22
A4H0146	8260 Calibration 1 ppb	AA29950-CAL1	1H6014.D	08/06/14 19:09
A4H0147	8260 Calibration 2 ppb	AA29950-CAL2	1H6015.D	08/06/14 19:38
A4H0148	8260 Calibration 5 ppb	AA29950-CAL3	1H6016.D	08/06/14 20:07
A4H0149	8260 Calibration 20 ppb	AA29950-CAL4	1H6017.D	08/06/14 20:36
A4H0150	8260 Calibration 50 ppb	AA29950-CAL5	1H6018.D	08/06/14 21:05
A4H0151	8260 Calibration 80 ppb	AA29950-CAL6	1H6019.D	08/06/14 21:34
A4H0152	8260 Calibration 100 ppb	AA29950-CAL7	1H6020.D	08/06/14 22:04
A4H0153	8260 Calibration 200 ppb	AA29950-CAL8	1H6021.D	08/06/14 22:33

INITIAL CALIBRATION DATA

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408017

Instrument: OVGCMS5

Matrix: Soil

Calibration Date: 08/05/14 15:28

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,4-Dichlorobenzene	1	1.852468	2	1.522087	5	1.557814	20	1.920355	50	1.932829	80	1.873528
Dibromofluoromethane	1	~~0.7958879~~	2	~~0.5483484~~	5	0.3595687	20	0.379921	50	0.3880933	80	0.3816795
Toluene-d8	1	~~2.595878~~	2	~~1.580913~~	5	1.156317	20	1.220674	50	1.214329	80	1.162056
4-Bromofluorobenzene	1	~~1.461879~~	2	~~0.7434881~~	5	0.4495384	20	0.4185314	50	0.3568896	80	0.3201706

INITIAL CALIBRATION DATA (Continued)

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408017

Instrument: OVGCMS5

Matrix: Soil

Calibration Date: 08/05/14 15:28

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,4-Dichlorobenzene	100	1.89031	200	1.811272								
Dibromofluoromethane	100	0.3851104	200	0.3802313								
Toluene-d8	100	1.17592	200	1.12883								
4-Bromofluorobenzene	100	0.303968	200	~~0.4201034~~								

INITIAL CALIBRATION DATA (Continued)

EPA 8260B

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Calibration:	1408017	Instrument:	OVGCMS5
Matrix:	Soil	Calibration Date:	08/05/14 15:28

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Dichlorobenzene	1.795083	9.038385	17.35038	2.400242E-02			15	
Dibromofluoromethane	0.3791007	2.656472	10.38683	5.532081E-03			15	
Toluene-d8	1.176354	3.010548	13.041	0.0134485			15	
4-Bromofluorobenzene	0.3698196	16.93879	15.9956	2.903759E-02				

INITIAL CALIBRATION DATA

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408028

Instrument: OVGCMS1

Matrix: Water

Calibration Date: 08/06/14 00:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,4-Dichlorobenzene	1	1.676934	2	1.475918	5	1.490253	20	1.47692	50	1.457092	80	1.5118
Dibromofluoromethane					5	0.6994777	25	0.5900678	50	0.6211543	60	0.5017818
Toluene-d8					5	1.275104	25	1.141997	50	1.044462	60	1.031961
4-Bromofluorobenzene					5	0.548955	25	0.5006768	50	0.4580878	60	0.4560237

INITIAL CALIBRATION DATA (Continued)

EPA 8260B

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408028
Instrument: OVGCMS1
Matrix: Water
Calibration Date: 08/06/14 00:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF	ug/L	RF
1,4-Dichlorobenzene	100	1.501751	200	1.453481								
Dibromofluoromethane	75	0.5122651	100	0.5164951								
Toluene-d8	75	1.029481	100	1.09352								
4-Bromofluorobenzene	75	0.4577934	100	0.4688828								

INITIAL CALIBRATION DATA (Continued)

EPA 8260B

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408028

Instrument: OVGCMS1

Matrix: Water

Calibration Date: 08/06/14 00:29

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Dichlorobenzene	1.505519	4.790891	16.49125	3.033703E-02			15	
Dibromofluoromethane	0.5735403	13.63069	10.55	1.258342E-02		0.9862855	0.99	*
Toluene-d8	1.102754	8.613218	12.82	2.040169E-02				
4-Bromofluorobenzene	0.4817366	7.675461	15.3	1.718374E-02				

ANALYSIS SEQUENCE

AA29941

Instrument: OVGCMS5

Calibration ID: 1408017

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29941-TUN1	QC		1		A4F0379		
AA29941-CCV1	QC		2		A4H0031	A4G0687	
AA29941-CCV2	QC		3		A4H0031	A4G0687	
4H06021-BS1	QC		4			A4G0687	
4H06021-BSD1	QC		5			A4G0687	
4H06021-BLK1	QC		6			A4G0687	
AA29941-CRL1	QC		7		A4H0032	A4G0687	
A404270-01	8260B TCL SOM01.2 DOD	B	8			A4G0687	CH2M Hill, Inc. (CH025)
A404270-02	8260B TCL SOM01.2 DOD	B	9			A4G0687	CH2M Hill, Inc. (CH025)
A404270-03	8260B TCL SOM01.2 DOD	B	10			A4G0687	CH2M Hill, Inc. (CH025)
A404270-04	8260B TCL SOM01.2 DOD	B	11			A4G0687	CH2M Hill, Inc. (CH025)
A404270-05	8260B TCL SOM01.2 DOD	B	12			A4G0687	CH2M Hill, Inc. (CH025)

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/7/2014 9:27:44AM

Analysis
8260B TCL SOM01.2 DOD [EPA 8260B]

4H06021

ENCO Orlando

Prepared using: EPA 5035_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4G0517 8260 mix full 2 working + TCL
A4H0043 8260 mix 2 working Gases/Acrolein

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
4H06021-BLK1		Blank			QC			5	5			1	
4H06021-BS1		LCS			QC			5	5	A4H0043 A4G0517	2 2	1	
4H06021-BSD1		LCS Dup			QC			5	5	A4H0043 A4G0517	2 2	1	
A404270-01	D	TR-5TH-CSW01-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.83	5			1	1,4-DCB only
A404270-02	D	TR-5TH-CSW02-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.55	5			1	1,4-DCB only
A404270-03	D	TR-5TH-CSW03-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.25	5			1	1,4-DCB only
A404270-04	D	TR-5TH-CSW04-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.49	5			1	1,4-DCB only
A404270-05	D	TR-5TH-CSW05-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.34	5			1	1,4-DCB only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

Instrument 5

Start Date _____

StopDate _____

Instrument ID _____

Standard ID#	Description	Manufacture Lot#

Samples Prepared By _____ Date _____

Samples Prepared By _____ Date _____

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time: 08/06/14 8:45
Sequence: AA29939, AA29941, AA29942, AA29943
Batch: 4H06016, 4H06021, 4H06031, 4H06032
Method: 8260/624

Surrogate ID: A4E0236
Internal ID: A4G0684
LCS ~~Halo~~ 2°: A4G0577
LCS ~~Arom~~ 2°: Ac/Ac: A4H0042
LCS Gas 2°: A4G0694

8260 Mix: A4G0583
8260 Add: A4G0416
8260 Ac/Ac: A4G0608
8260 Gases: A4G0695
Instrument #: MS-5

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HA001	BFB			1				
5HA002	CCV			2			✓	
5HA003	CCV			3			✓	
5HA004	BS			4			✓	
5HA005	BSD			5			✓	
5HA006	MB		KKW 08/06/14	6		KKW 08/06/14	✓	
5HA007	CRL			7			✓	
5HA008	A404417-02	C	1	8			✓	
5HA009	A404380-01	F	1	9			✓	
5HA010	A404387-01	C	1	10			✓	
5HA011	A404359-01	C	1	11			↓IS RRW 1X	
5HA012	A404359-02	C	1	12			✓	
5HA013	A404359-03	C	1	13			✓	
5HA014	A404359-04	C	1	14			✓	
5HA015	A404270-01	B	1	15			NO	
5HA016	A404270-02	B	1	16			NO	
5HA017	A404270-03	B	1	17			NO	
5HA018	A404270-04	B	1	18			NO	
5HA019	A404270-05	B	1	19		KKW 08/06/14	NO	
5HA020	A404270-06	B	1	20			Run Stopped	

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:
Sequence:
Batch:
Method:

Surrogate ID:
Internal ID:
LCS Halo 2^0:
LCS Arom 2^0: KKW 08/06/14
LCS Gas 2^0:

8260 Mix:
8260 Add:
8260 Ac/Ac: KKW 08/06/14
8260 Gases:
Instrument #: MS-5

See Page 57

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HA021	A404270-11	B	1	21			MS/MSD	
5HA022	MS	G	1	22				
5HA023	MSD	L	1	23				
5HA024	BS			24				
5HA025	BFB			25				
5HA026	CCV			26		KKW 08/06/14		
5HA027	BS			27				
5HA028	BLK		KKW 08/06/14	28				
5HA029	CRL			29				
5HA030	A404270-07	B	1	30				
5HA031	A404270-08	B	1	31				
5HA032	A404270-09	B	1	32				
5HA033	A404270-10	B	1	33				
5HA034	A404270-12	B	1	34				
5HA035	A404270-13	B	1	35				
5HA036	A404270-14	B	1	36				
5HA037	A404270-15	B	1	37				
5HA038	A404270-16	B	1	38				
5HA039	A404270-18	B	1	39		KKW		
5HA040	A404270-19	B	1	40		08/06/14		

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:
Sequence:
Batch:
Method:

Surrogate ID:
Internal ID:
LCS Halo 2⁰: KKW
LCS Arom 2⁰: 08/06/14
LCS Gas 2⁰:

8260 Mix:
8260 Add:
8260 Ac/Ac: KKW 08/06/14
8260 Gases:
Instrument #: MS-5

See Page 57

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HA041	A404270-20	B	1	41				
5HA042	A404270-21	B	1	42				
5HA043	A404270-22	B	1	43				
5HA044	A404270-23	B	1	44				
5HA045	A404270-24	B	1	45				
5HA046	A404270-28	B	1	46			ms/msD	
5HA047	ms	G	1	47		KKW 08/06/14		
5HA048	msD	L	1	48				

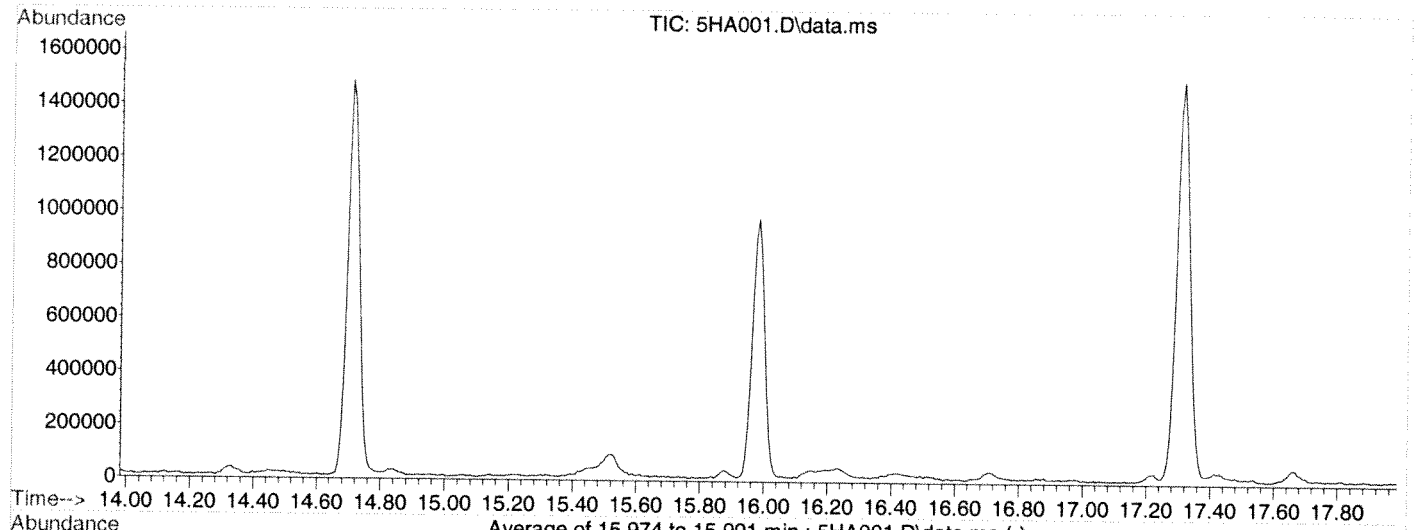
KKW 08/06/14

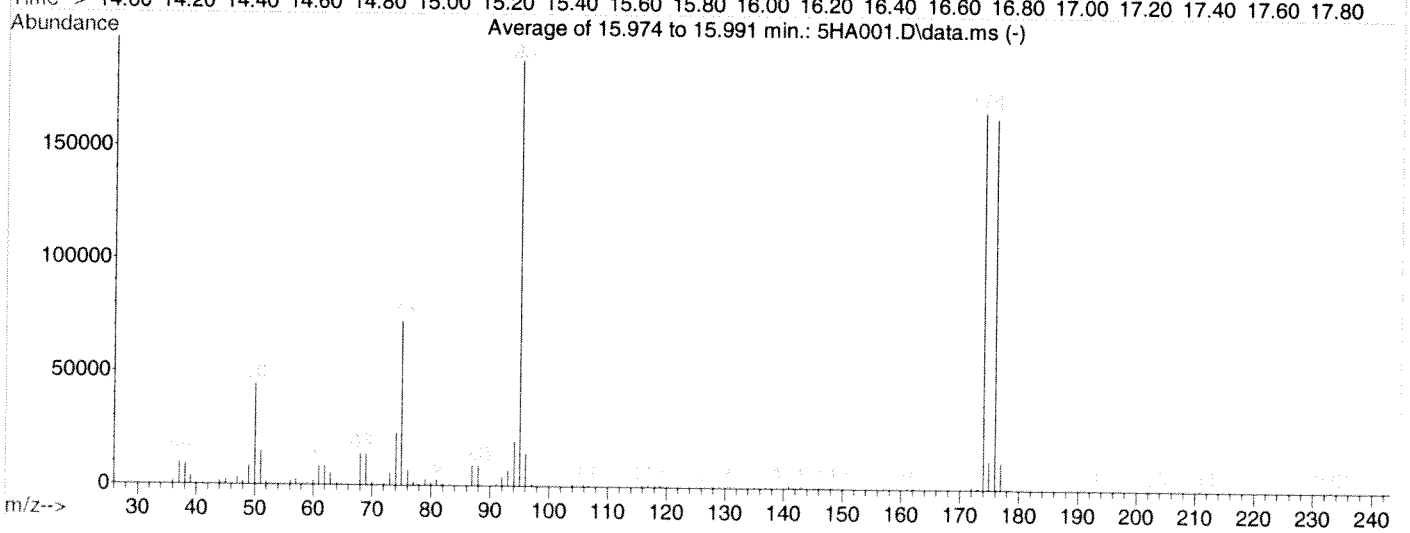
Analyst: KKW

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA001.D
Acq On : 6 Aug 2014 8:45 am
Operator : KKW
Sample : BFB
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\MS5080414.M
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
Last Update : Tue Aug 05 11:49:17 2014





AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	44197	PASS
75	95	30	60	38.5	72443	PASS
95	95	100	100	100.0	188181	PASS
96	95	5	9	7.4	13857	PASS
173	174	0.00	2	0.4	598	PASS
174	95	50	100	88.5	166464	PASS
175	174	5	9	7.6	12570	PASS
176	174	95	101	98.4	163882	PASS
177	176	5	9	7.2	11738	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA002.D
Acq On : 6 Aug 2014 9:17 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 09:49:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	939416	50.00	ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1466020	50.00	ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1738020	50.00	ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	860271	50.00	ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	296120	41.57	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 83.14%#			
42) d4-1,2-Dichloroethane	11.019	65	275361	37.10	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 74.20%			
54) D8-Toluene	13.032	98	1493306	43.30	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 86.60%			
75) Bromofluorobenzene	15.982	95	540913	46.45	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 92.90%			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.158	85	321081	40.32	ug/L	97
3) Chloromethane	4.610	50	510480	36.47	ug/L	98
4) Vinyl Chloride	4.815	62	349677	37.37	ug/L	95
5) Bromomethane	5.547	94	122558	36.41	ug/L #	94
6) Chloroethane	5.810	64	172956	45.94	ug/L	95
7) Trichlorofluoromethane	6.097	101	473286	43.04	ug/L	96
8) Diethyl ether	6.672	59	252361	40.35	ug/L #	86
9) 1,1-Dichloroethene	7.042	96	292094	44.17	ug/L	79
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	272622	41.85	ug/L	96
11) Acrolein	7.609	56	114356	301.85	ug/L	96
12) Iodomethane	7.313	142	358395	30.44	ug/L	98
13) Carbon Disulfide	7.124	76	655162	42.75	ug/L #	84
14) 3-chloropropene	7.823	41	551532	38.00	ug/L #	95
15) Acetone	8.053	43	66742	33.36	ug/L	92
16) Methylene Chloride	7.987	84	280627	40.64	ug/L #	66
17) Methyl Acetate	8.225	43	192510	34.90	ug/L #	91
18) t-1,2-Dichloroethene	8.234	96	341684	43.38	ug/L	86
19) Methyl tert-butyl ether	8.365	73	532670	36.44	ug/L	91
20) Acetonitrile	8.768	41	295639	299.40	ug/L	99
21) Diisopropyl ether	8.899	45	1269726	37.03	ug/L #	91
22) Chloroprene	9.113	88	269894	41.66	ug/L #	68
23) 1,1-Dichloroethane	9.146	63	611178	41.76	ug/L	97
24) Acrylonitrile	9.211	53	845635	302.60	ug/L	98
25) Vinyl Acetate	9.425	43	675733	32.24	ug/L #	96
26) c-1,2-Dichloroethene	9.844	96	377049	43.54	ug/L	89
27) 2,2-Dichloropropane	9.992	77	416395	44.21	ug/L	97
28) Bromochloromethane	10.099	128	177231	42.95	ug/L	97
29) Cyclohexane	10.124	56	879701	40.70	ug/L	93
30) Chloroform	10.148	83	503005	43.34	ug/L	92
32) Dibromofluoromethane	10.378	113	296120	41.57	ug/L	94
33) 2-Butanone	10.510	72	19086	35.22	ug/L #	34
34) 1,1,1-Trichloroethane	10.444	97	470547	40.94	ug/L	96
35) 1,1-Dichloropropene	10.575	75	414996	42.68	ug/L	87
36) Propionitrile	10.888	54	386417	351.49	ug/L #	65
37) Methacrylonitrile	10.904	41	1780099	348.27	ug/L	89
38) Isobutyl Alcohol	10.937	43	531240	585.59	ug/L #	96
40) Carbon Tetrachloride	10.362	117	445587	42.72	ug/L	98
41) Benzene	10.871	78	1319190	40.93	ug/L	97
43) d4-1,2-Dichloroethane	11.019	65	275361	37.10	ug/L #	69
44) 1,2-Dichloroethane	11.093	62	386807	42.24	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA002.D
Acq On : 6 Aug 2014 9:17 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 09:49:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

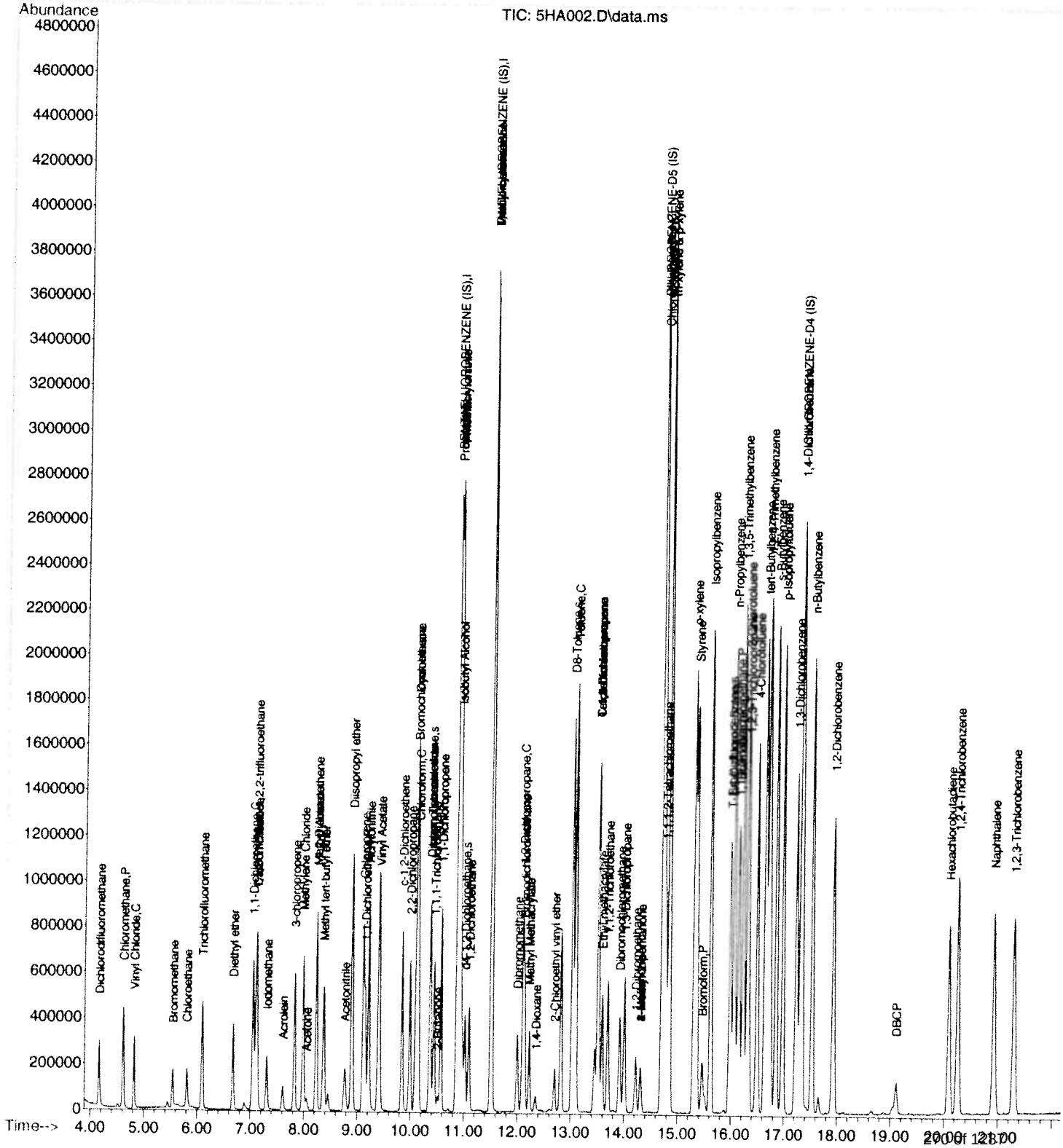
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	446517	41.27 ug/L	92
46) Methyl cyclohexane	11.520	83	655553	34.17 ug/L	90
47) Dibromomethane	11.997	93	156717	42.06 ug/L	95
48) 1,2-Dichloropropane	12.104	63	416281	41.86 ug/L	97
49) Bromodichloromethane	12.137	83	382384	42.89 ug/L	93
50) Methyl Methacrylate	12.235	69	130382	32.92 ug/L	85
51) 1,4-Dioxane	12.350	88	54176	703.28 ug/L	97
52) 2-Chloroethyl vinyl ether	12.695	63	97730	27.89 ug/L	94
53) C-1,3-Dichloropropene	13.509	75	399401	37.84 ug/L	91
55) D8-Toluene	13.032	98	1493310	43.30 ug/L #	88
56) 4-Methyl-2-pentanone	14.322	100	19355	35.03 ug/L	78
58) Toluene	13.090	92	1096835	41.47 ug/L	95
59) T-1,3-Dichloropropene	13.509	75	399401	42.48 ug/L	94
60) Tetrachloroethene	13.517	164	367089	38.71 ug/L	97
61) Ethyl methacrylate	13.591	69	290821	39.25 ug/L	97
62) 1,1,2-Trichloroethane	13.698	97	274373	42.14 ug/L	91
63) Dibromochloromethane	13.920	129	338089	43.04 ug/L #	96
64) 1,3-Dichloropropane	14.010	76	435301	39.91 ug/L	92
65) 1,2-Dibromoethane	14.216	107	270705	40.56 ug/L	98
66) 2-Hexanone	14.306	43	189719	32.02 ug/L	99
67) Ethylbenzene	14.709	106	754116	45.29 ug/L	99
68) Chlorobenzene	14.733	112	1321523	40.95 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.774	131	407036	41.72 ug/L	97
70) m-xylene & p-xylene	14.840	106	1908863	91.07 ug/L	100
71) o-xylene	15.308	106	921819	44.23 ug/L	98
72) Styrene	15.358	104	1510542	42.47 ug/L	91
73) Bromoform	15.465	173	185864	42.95 ug/L	98
74) Isopropylbenzene	15.612	105	2306588	39.35 ug/L	98
76) Bromofluorobenzene	15.982	95	540913	46.45 ug/L	94
77) n-Propylbenzene	16.064	91	2581845	38.77 ug/L	96
78) Bromobenzene	16.147	156	540560	40.53 ug/L	87
79) 1,1,2,2-Tetrachloroethane	16.130	83	299150	38.24 ug/L	95
80) 1,2,3-Trichloropropane	16.336	61	110942	39.43 ug/L #	86
81) T-1,4-Dichloro-2-Butene	15.999	53	151082	33.16 ug/L	90
83) 1,3,5-Trimethylbenzene	16.229	105	1994116	39.80 ug/L	96
84) 2-Chlorotoluene	16.311	91	1510398	40.60 ug/L	95
85) 4-Chlorotoluene	16.492	91	1546949	41.22 ug/L	95
86) tert-Butylbenzene	16.648	119	2387110	38.52 ug/L	94
87) 1,2,4-Trimethylbenzene	16.705	105	2058332	40.15 ug/L	98
88) p-Isopropyltoluene	16.976	119	2204123	37.13 ug/L	97
89) s-Butylbenzene	16.853	105	2635365	36.94 ug/L	98
90) 1,3-Dichlorobenzene	17.231	146	1257547	40.47 ug/L	96
91) 1,4-Dichlorobenzene	17.330	146	1226201	39.70 ug/L #	92
92) n-Butylbenzene	17.527	91	1902084	35.89 ug/L	95
93) 1,2-Dichlorobenzene	17.930	146	1146262	39.43 ug/L	96
94) DBCP	19.113	157	77939	35.79 ug/L	100
95) Hexachlorobutadiene	20.091	225	308995	34.83 ug/L	95
96) 1,2,4-Trichlorobenzene	20.255	180	732259	36.71 ug/L	96
97) Naphthalene	20.929	128	1640883	38.00 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	630792	35.02 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA002.D
Acq On : 6 Aug 2014 9:17 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 09:49:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA003.D
Acq On : 6 Aug 2014 9:56 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 10:35:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	788095	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1202225	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1520038	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	724463	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	294265	49.25 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 98.50%		
42) d4-1,2-Dichloroethane	11.019	65	274757	45.14 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 90.28%		
54) D8-Toluene	13.032	98	1514393	53.54 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 107.08%		
75) Bromofluorobenzene	15.982	95	553181	55.44 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 110.88%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	322911	48.34 ug/L	98
3) Chloromethane	4.610	50	545094	46.42 ug/L	99
4) Vinyl Chloride	4.816	62	361736	46.08 ug/L	95
5) Bromomethane	5.547	94	137026	48.52 ug/L #	92
6) Chloroethane	5.810	64	173227	54.85 ug/L	96
7) Trichlorofluoromethane	6.097	101	503639	54.60 ug/L	97
8) Diethyl ether	6.673	59	256740	48.93 ug/L #	85
9) 1,1-Dichloroethene	7.051	96	327816	59.09 ug/L #	78
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	298736	54.66 ug/L	94
11) Acrolein	7.601	56	116885	367.77 ug/L	95
12) Iodomethane	7.305	142	432373	43.77 ug/L	98
13) Carbon Disulfide	7.124	76	733506	57.06 ug/L #	86
14) 3-chloropropene	7.823	41	610516	50.15 ug/L #	97
15) Acetone	8.061	43	75097	44.74 ug/L	96
16) Methylene Chloride	7.987	84	307219	52.72 ug/L #	68
17) Methyl Acetate	8.226	43	198394	42.88 ug/L #	91
18) t-1,2-Dichloroethene	8.234	96	375213	56.79 ug/L	87
19) Methyl tert-butyl ether	8.373	73	557288	45.44 ug/L #	89
20) Acetonitrile	8.768	41	307586	371.31 ug/L	99
21) Diisopropyl ether	8.899	45	1360129	47.28 ug/L #	91
22) Chloroprene	9.113	88	305792	56.26 ug/L #	67
23) 1,1-Dichloroethane	9.146	63	669522	54.53 ug/L	98
24) Acrylonitrile	9.212	53	959530	409.29 ug/L	99
25) Vinyl Acetate	9.425	43	710538	40.41 ug/L #	96
26) c-1,2-Dichloroethene	9.844	96	408623	56.24 ug/L	87
27) 2,2-Dichloropropane	9.992	77	464164	58.75 ug/L	97
28) Bromochloromethane	10.099	128	184912	53.42 ug/L	100
29) Cyclohexane	10.115	56	981176	54.10 ug/L	93
30) Chloroform	10.148	83	541113	55.58 ug/L	92
32) Dibromofluoromethane	10.378	113	294265	49.25 ug/L	93
33) 2-Butanone	10.510	72	18584	40.87 ug/L #	47
34) 1,1,1-Trichloroethane	10.444	97	518149	53.74 ug/L	97
35) 1,1-Dichloropropene	10.576	75	462383	56.68 ug/L	88
36) Propionitrile	10.888	54	411370	446.03 ug/L #	63
37) Methacrylonitrile	10.904	41	1906825	444.70 ug/L	90
38) Isobutyl Alcohol	10.937	43	558757	734.19 ug/L #	96
40) Carbon Tetrachloride	10.362	117	501753	58.66 ug/L	96
41) Benzene	10.871	78	1432662	54.21 ug/L	98
43) d4-1,2-Dichloroethane	11.019	65	274757	45.14 ug/L #	70
44) 1,2-Dichloroethane	11.101	62	389021	51.80 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA003.D
Acq On : 6 Aug 2014 9:56 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 10:35:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

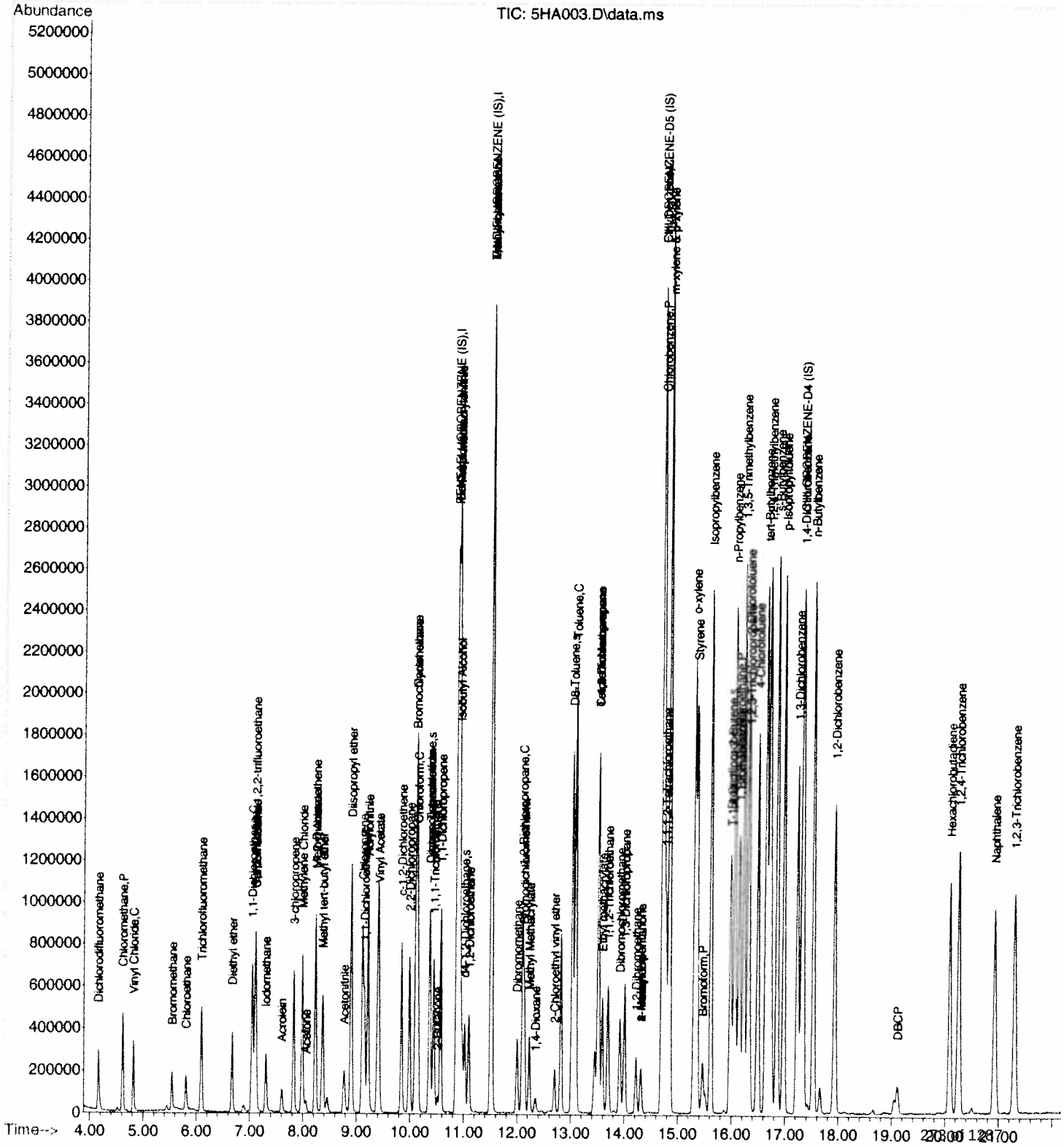
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	507122	57.16 ug/L #	87
46) Methyl cyclohexane	11.521	83	800227	50.87 ug/L	90
47) Dibromomethane	11.997	93	162646	53.23 ug/L	95
48) 1,2-Dichloropropane	12.104	63	439263	53.86 ug/L	98
49) Bromodichloromethane	12.137	83	406554	55.61 ug/L	93
50) Methyl Methacrylate	12.235	69	139415	42.92 ug/L	82
51) 1,4-Dioxane	12.342	88	56645	896.68 ug/L	99
52) 2-Chloroethyl vinyl ether	12.696	63	107414	37.38 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	419129	48.42 ug/L	91
55) D8-Toluene	13.032	98	1514393	53.54 ug/L #	88
56) 4-Methyl-2-pentanone	14.314	100	19929	43.98 ug/L	85
58) Toluene	13.090	92	1200675	51.90 ug/L	95
59) T-1,3-Dichloropropene	13.509	75	419129	50.97 ug/L	92
60) Tetrachloroethene	13.517	164	427899	51.60 ug/L	98
61) Ethyl methacrylate	13.591	69	303213	46.79 ug/L	98
62) 1,1,2-Trichloroethane	13.698	97	281820	49.49 ug/L	93
63) Dibromochloromethane	13.920	129	354509	51.60 ug/L	99
64) 1,3-Dichloropropane	14.010	76	461607	48.39 ug/L	91
65) 1,2-Dibromoethane	14.216	107	283737	48.61 ug/L	98
66) 2-Hexanone	14.306	43	207302	40.01 ug/L	99
67) Ethylbenzene	14.709	106	844612	58.00 ug/L	98
68) Chlorobenzene	14.733	112	1429881	50.66 ug/L	100
69) 1,1,1,2-Tetrachloroethane	14.774	131	441164	51.70 ug/L	98
70) m-xylene & p-xylene	14.840	106	2116488	115.46 ug/L	100
71) o-xylene	15.309	106	1032193	56.62 ug/L	100
72) Styrene	15.358	104	1639698	52.71 ug/L	91
73) Bromoform	15.465	173	192232	50.79 ug/L	98
74) Isopropylbenzene	15.613	105	2707137	52.81 ug/L	97
76) Bromofluorobenzene	15.982	95	553181	55.44 ug/L	94
77) n-Propylbenzene	16.056	91	3045380	52.29 ug/L	96
78) Bromobenzene	16.155	156	579505	49.68 ug/L	86
79) 1,1,2,2-Tetrachloroethane	16.130	83	316229	46.21 ug/L #	93
80) 1,2,3-Trichloropropane	16.336	61	119957	48.74 ug/L	90
81) T-1,4-Dichloro-2-Butene	15.999	53	167658	42.07 ug/L	94
83) 1,3,5-Trimethylbenzene	16.229	105	2352075	55.75 ug/L	97
84) 2-Chlorotoluene	16.311	91	1725831	55.09 ug/L	95
85) 4-Chlorotoluene	16.492	91	1733727	54.86 ug/L	94
86) tert-Butylbenzene	16.648	119	2886655	55.31 ug/L	95
87) 1,2,4-Trimethylbenzene	16.705	105	2386234	55.27 ug/L	92
88) p-Isopropyltoluene	16.977	119	2742018	54.85 ug/L	97
89) s-Butylbenzene	16.853	105	3324389	55.33 ug/L	98
90) 1,3-Dichlorobenzene	17.231	146	1415205	54.09 ug/L	96
91) 1,4-Dichlorobenzene	17.330	146	1361887	52.36 ug/L #	91
92) n-Butylbenzene	17.527	91	2439796	54.66 ug/L	95
93) 1,2-Dichlorobenzene	17.930	146	1297550	53.00 ug/L	96
94) DBCP	19.113	157	80464	43.88 ug/L	94
95) Hexachlorobutadiene	20.091	225	412137	55.17 ug/L	95
96) 1,2,4-Trichlorobenzene	20.255	180	889440	52.94 ug/L	97
97) Naphthalene	20.929	128	1793799	49.32 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	769430	50.72 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA003.D
Acq On : 6 Aug 2014 9:56 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 10:35:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA004.D
Acq On : 6 Aug 2014 10:40 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 11:05:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	771949	50.00	ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1189184	50.00	ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1319411	50.00	ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	678703	50.00	ug/L	-0.02

System Monitoring Compounds						
31) Dibromofluoromethane	10.378	113	279179	47.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.40%			
42) d4-1,2-Dichloroethane	11.019	65	273320	45.40	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 90.80%			
54) D8-Toluene	13.033	98	1448119	51.76	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 103.52%			
75) Bromofluorobenzene	15.982	95	521037	60.73	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 121.46%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.158	85	79415	12.14	ug/L	94
3) Chloromethane	4.610	50	155958	13.56	ug/L	99
4) Vinyl Chloride	4.816	62	108108	14.06	ug/L	98
5) Bromomethane	5.539	94	40854	14.77	ug/L #	88
6) Chloroethane	5.818	64	64803	20.95	ug/L	94
7) Trichlorofluoromethane	6.097	101	158118	17.50	ug/L	99
8) Diethyl ether	6.673	59	70997	13.81	ug/L #	86
9) 1,1-Dichloroethene	7.051	96	84481	15.55	ug/L	81
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	99677	18.62	ug/L	100
11) Acrolein	7.609	56	42109	135.26	ug/L	99
12) Iodomethane	7.305	142	131278	13.57	ug/L	96
13) Carbon Disulfide	7.125	76	218951	17.39	ug/L #	89
14) 3-chloropropene	7.823	41	221839	18.60	ug/L #	97
15) Acetone	8.061	43	28270	17.19	ug/L	93
16) Methylene Chloride	7.987	84	93050	16.59	ug/L #	70
17) Methyl Acetate	8.226	43	63747	14.07	ug/L #	87
18) t-1,2-Dichloroethene	8.234	96	114989	17.77	ug/L	86
19) Methyl tert-butyl ether	8.374	73	175346	14.60	ug/L	92
20) Acetonitrile	8.776	41	13577	16.73	ug/L #	89
21) Diisopropyl ether	8.899	45	443856	15.75	ug/L #	93
22) Chloroprene	9.113	88	102618	19.28	ug/L #	66
23) 1,1-Dichloroethane	9.146	63	220799	18.36	ug/L	96
24) Acrylonitrile	9.212	53	40490	17.63	ug/L	95
25) Vinyl Acetate	9.425	43	181987	10.57	ug/L #	96
26) c-1,2-Dichloroethene	9.844	96	129952	18.26	ug/L	87
27) 2,2-Dichloropropane	9.992	77	156858	20.27	ug/L	97
28) Bromochloromethane	10.099	128	65327	19.27	ug/L	99
29) Cyclohexane	10.116	56	273764	15.41	ug/L	91
30) Chloroform	10.148	83	190162	19.94	ug/L	97
32) Dibromofluoromethane	10.378	113	279179	47.70	ug/L	93
33) 2-Butanone	10.518	72	7492	16.82	ug/L #	38
34) 1,1,1-Trichloroethane	10.444	97	173077	18.33	ug/L	96
35) 1,1-Dichloropropene	10.576	75	151080	18.91	ug/L	89
36) Propionitrile	10.888	54	16928	18.74	ug/L #	1
37) Methacrylonitrile	10.913	41	111918	26.65	ug/L	93
38) Isobutyl Alcohol	10.937	43	115348	154.73	ug/L #	91
40) Carbon Tetrachloride	10.362	117	170740	20.18	ug/L	98
41) Benzene	10.871	78	480543	18.38	ug/L	97
43) d4-1,2-Dichloroethane	11.019	65	273320	45.40	ug/L #	74
44) 1,2-Dichloroethane	11.093	62	139991	18.85	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA004.D
Acq On : 6 Aug 2014 10:40 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 11:05:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

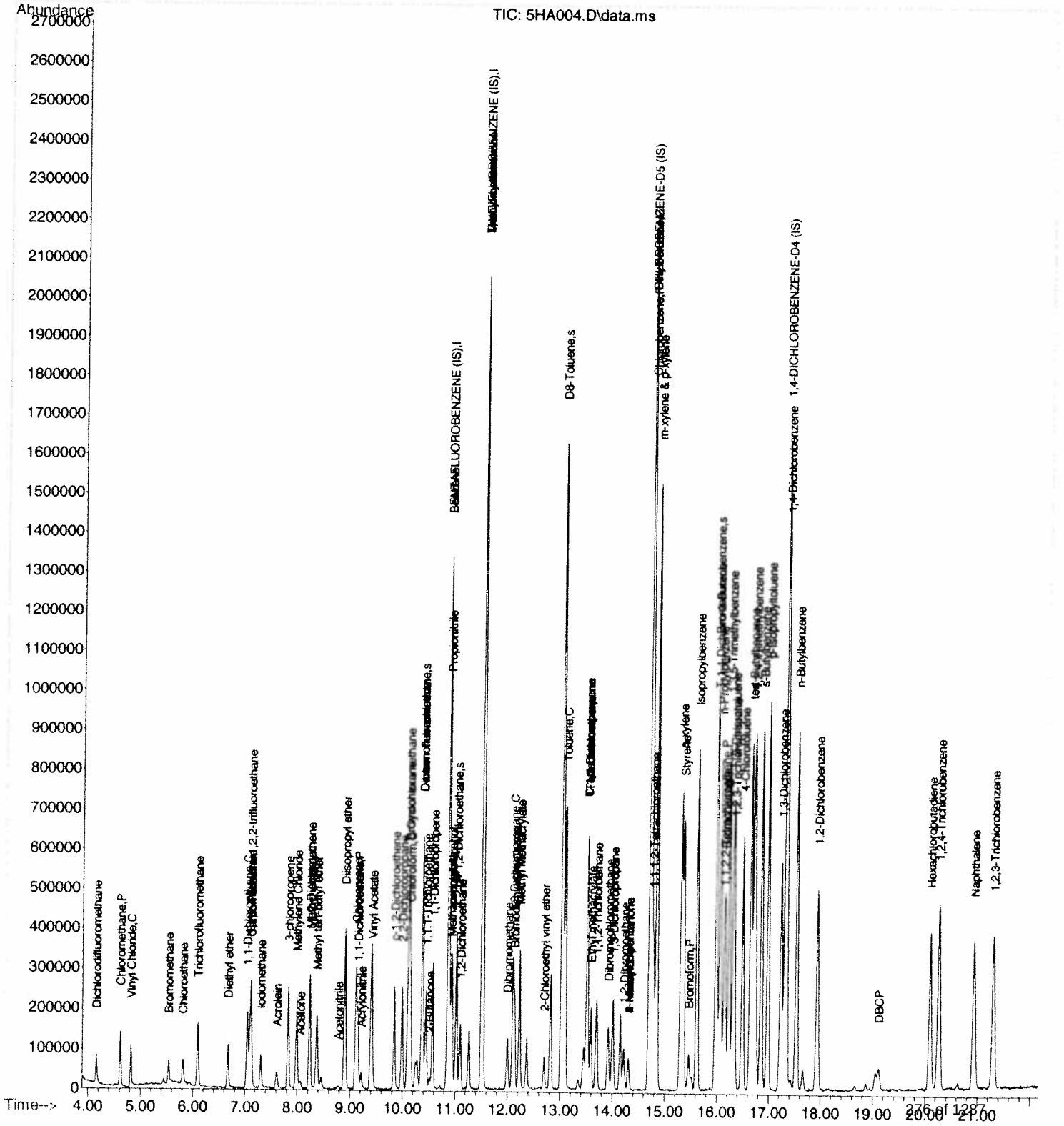
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	174318	19.86 ug/L	96
46) Methyl cyclohexane	11.521	83	255748	16.43 ug/L	89
47) Dibromomethane	11.997	93	62410	20.65 ug/L	98
48) 1,2-Dichloropropane	12.104	63	151134	18.73 ug/L	98
49) Bromodichloromethane	12.137	83	142249	19.67 ug/L	94
50) Methyl Methacrylate	12.235	69	126773	39.46 ug/L	88
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	12.696	63	39272	13.82 ug/L	93
53) C-1,3-Dichloropropene	13.501	75	161739	18.89 ug/L	95
55) D8-Toluene	13.033	98	1448119	51.76 ug/L #	86
56) 4-Methyl-2-pentanone	14.306	100	7092	15.82 ug/L	95
58) Toluene	13.082	92	417597	20.80 ug/L	94
59) T-1,3-Dichloropropene	13.501	75	161739	22.66 ug/L	92
60) Tetrachloroethene	13.517	164	151532	21.05 ug/L	95
61) Ethyl methacrylate	13.591	69	117267	20.85 ug/L	99
62) 1,1,2-Trichloroethane	13.698	97	106968	21.64 ug/L	91
63) Dibromochloromethane	13.920	129	128826	21.60 ug/L	96
64) 1,3-Dichloropropane	14.010	76	169505	20.47 ug/L	94
65) 1,2-Dibromoethane	14.216	107	107030	21.12 ug/L	99
66) 2-Hexanone	14.314	43	78203	17.39 ug/L	100
67) Ethylbenzene	14.701	106	302950	23.97 ug/L	97
68) Chlorobenzene	14.733	112	500714	20.44 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.775	131	160446	21.66 ug/L	96
70) m-xylene & p-xylene	14.840	106	754578	47.42 ug/L	99
71) o-xylene	15.309	106	352954	22.31 ug/L	98
72) Styrene	15.358	104	571914	21.18 ug/L	91
73) Bromoform	15.465	173	69506	21.16 ug/L	98
74) Isopropylbenzene	15.613	105	920659	20.69 ug/L	98
76) Bromofluorobenzene	15.982	95	521037	60.73 ug/L	93
77) n-Propylbenzene	16.056	91	1060190	20.97 ug/L	96
78) Bromobenzene	16.155	156	209918	20.73 ug/L #	86
79) 1,1,2,2-Tetrachloroethane	16.122	83	116762	19.66 ug/L #	93
80) 1,2,3-Trichloropropane	16.336	61	42766	20.02 ug/L	85
81) T-1,4-Dichloro-2-Butene	15.999	53	61032	17.64 ug/L #	63
83) 1,3,5-Trimethylbenzene	16.229	105	793876	20.09 ug/L	97
84) 2-Chlorotoluene	16.311	91	584144	19.90 ug/L	96
85) 4-Chlorotoluene	16.492	91	609578	20.59 ug/L	95
86) tert-Butylbenzene	16.648	119	980462	20.05 ug/L	94
87) 1,2,4-Trimethylbenzene	16.705	105	818681	20.24 ug/L	97
88) p-Isopropyltoluene	16.977	119	1026335	21.92 ug/L	98
89) s-Butylbenzene	16.853	105	1116759	19.84 ug/L	97
90) 1,3-Dichlorobenzene	17.231	146	488600	19.93 ug/L	95
91) 1,4-Dichlorobenzene	17.338	146	499651	20.51 ug/L	96
92) n-Butylbenzene	17.527	91	848352	20.29 ug/L	95
93) 1,2-Dichlorobenzene	17.930	146	445636	19.43 ug/L	95
94) DBCP	19.121	157	31196	18.16 ug/L	92
95) Hexachlorobutadiene	20.091	225	151402	21.63 ug/L	98
96) 1,2,4-Trichlorobenzene	20.263	180	314206	19.96 ug/L	96
97) Naphthalene	20.929	128	689713	20.24 ug/L	99
98) 1,2,3-Trichlorobenzene	21.307	180	284153	19.99 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA004.D
Acq On : 6 Aug 2014 10:40 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 11:05:03 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA005.D
Acq On : 6 Aug 2014 11:08 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 11:31:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	766692	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1158643	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1304501	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	696764	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	281490	48.42 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 96.84%		
42) d4-1,2-Dichloroethane	11.019	65	275710	47.00 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 94.00%		
54) D8-Toluene	13.024	98	1422773	52.19 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 120		Recovery = 104.38%		
75) Bromofluorobenzene	15.974	95	523305	61.80 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 123.60%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	62667	9.64 ug/L	97
3) Chloromethane	4.610	50	135597	11.87 ug/L	99
4) Vinyl Chloride	4.807	62	89375	11.70 ug/L	93
5) Bromomethane	5.539	94	35215	12.82 ug/L #	89
6) Chloroethane	5.810	64	56584	18.42 ug/L	91
7) Trichlorofluoromethane	6.089	101	142275	15.85 ug/L #	97
8) Diethyl ether	6.664	59	68372	13.39 ug/L	91
9) 1,1-Dichloroethene	7.042	96	76384	14.15 ug/L	81
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	86502	16.27 ug/L	97
11) Acrolein	7.609	56	38175	123.47 ug/L	98
12) Iodomethane	7.305	142	119194	12.40 ug/L	96
13) Carbon Disulfide	7.116	76	200278	16.01 ug/L	91
14) 3-chloropropene	7.823	41	199874	16.88 ug/L #	97
15) Acetone	8.053	43	26127	16.00 ug/L	97
16) Methylene Chloride	7.987	84	84102	15.11 ug/L	71
17) Methyl Acetate	8.226	43	67156	14.92 ug/L #	97
18) t-1,2-Dichloroethene	8.234	96	103982	16.18 ug/L	86
19) Methyl tert-butyl ether	8.365	73	163492	13.70 ug/L	94
20) Acetonitrile	8.776	41	14409	17.88 ug/L	96
21) Diisopropyl ether	8.899	45	414775	14.82 ug/L #	93
22) Chloroprene	9.105	88	87007	16.46 ug/L	77
23) 1,1-Dichloroethane	9.146	63	206307	17.27 ug/L	98
24) Acrylonitrile	9.212	53	36414	15.97 ug/L	97
25) Vinyl Acetate	9.425	43	176193	10.30 ug/L	99
26) c-1,2-Dichloroethene	9.844	96	118397	16.75 ug/L	88
27) 2,2-Dichloropropane	9.992	77	140387	18.26 ug/L	98
28) Bromochloromethane	10.099	128	61312	18.21 ug/L	99
29) Cyclohexane	10.115	56	255302	14.47 ug/L	94
30) Chloroform	10.148	83	177761	18.77 ug/L	94
32) Dibromofluoromethane	10.378	113	281490	48.42 ug/L	93
33) 2-Butanone	10.518	72	6695	15.14 ug/L #	50
34) 1,1,1-Trichloroethane	10.444	97	162368	17.31 ug/L	97
35) 1,1-Dichloropropene	10.576	75	133140	16.78 ug/L	92
36) Propionitrile	10.888	54	17970	20.03 ug/L #	1
37) Methacrylonitrile	10.912	41	103167	24.73 ug/L #	87
38) Isobutyl Alcohol	10.937	43	108472	146.51 ug/L #	85
40) Carbon Tetrachloride	10.362	117	159516	19.35 ug/L	98
41) Benzene	10.871	78	439474	17.25 ug/L	97
43) d4-1,2-Dichloroethane	11.019	65	275710	47.00 ug/L #	73
44) 1,2-Dichloroethane	11.101	62	135411	18.71 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA005.D
Acq On : 6 Aug 2014 11:08 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 11:31:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

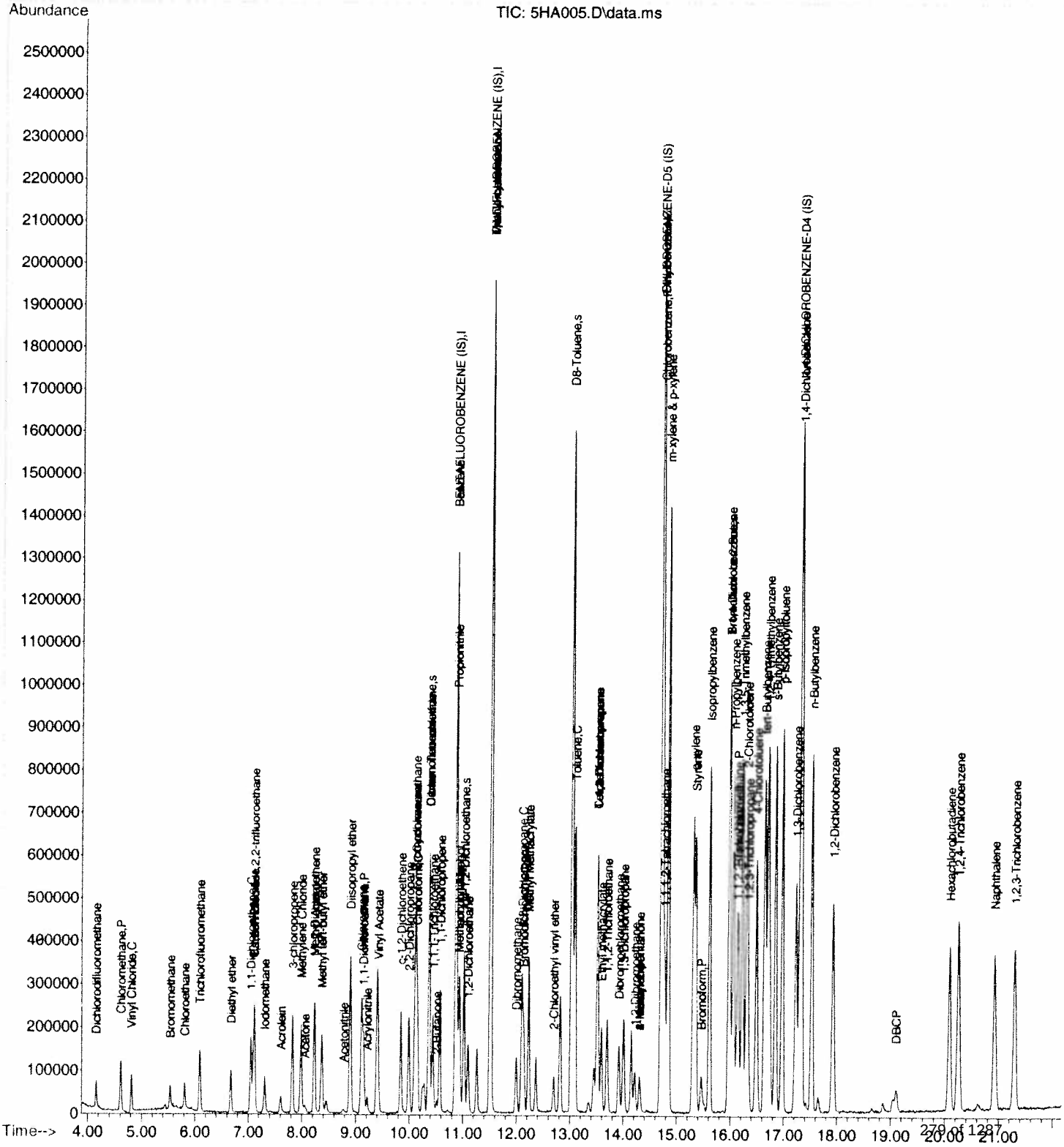
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	163870	19.17 ug/L	95
46) Methyl cyclohexane	11.521	83	231335	15.26 ug/L	91
47) Dibromomethane	11.997	93	60309	20.48 ug/L	95
48) 1,2-Dichloropropane	12.104	63	141966	18.06 ug/L	98
49) Bromodichloromethane	12.137	83	133807	18.99 ug/L	95
50) Methyl Methacrylate	12.227	69	132294	42.26 ug/L	83
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	12.696	63	40489	14.62 ug/L	96
53) C-1,3-Dichloropropene	13.509	75	159965	19.17 ug/L	98
55) D8-Toluene	13.024	98	1422773	52.19 ug/L #	86
56) 4-Methyl-2-pentanone	14.314	100	8289	18.98 ug/L #	68
58) Toluene	13.090	92	397429	20.02 ug/L	98
59) T-1,3-Dichloropropene	13.509	75	159965	22.67 ug/L	94
60) Tetrachloroethene	13.517	164	145784	20.48 ug/L	98
61) Ethyl methacrylate	13.591	69	111226	20.00 ug/L	98
62) 1,1,2-Trichloroethane	13.698	97	101412	20.75 ug/L	92
63) Dibromochloromethane	13.920	129	125034	21.21 ug/L #	94
64) 1,3-Dichloropropane	14.002	76	162013	19.79 ug/L	91
65) 1,2-Dibromoethane	14.216	107	102611	20.48 ug/L	99
66) 2-Hexanone	14.306	43	76937	17.30 ug/L #	99
67) Ethylbenzene	14.700	106	276094	22.09 ug/L	98
68) Chlorobenzene	14.733	112	474893	19.60 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.774	131	149776	20.45 ug/L	97
70) m-xylene & p-xylene	14.832	106	707993	45.00 ug/L	97
71) o-xylene	15.309	106	334879	21.41 ug/L	96
72) Styrene	15.358	104	535341	20.05 ug/L	91
73) Bromoform	15.465	173	67815	20.88 ug/L	98
74) Isopropylbenzene	15.613	105	868167	19.73 ug/L	97
76) Bromofluorobenzene	15.974	95	523305	61.80 ug/L	93
77) n-Propylbenzene	16.056	91	979819	19.60 ug/L	96
78) Bromobenzene	16.147	156	202978	20.28 ug/L	86
79) 1,1,2,2-Tetrachloroethane	16.122	83	115941	19.74 ug/L #	96
80) 1,2,3-Trichloropropane	16.344	61	44182	20.92 ug/L #	85
81) T-1,4-Dichloro-2-Butene	15.991	53	60390	17.66 ug/L #	49
83) 1,3,5-Trimethylbenzene	16.229	105	730017	17.99 ug/L	94
84) 2-Chlorotoluene	16.311	91	541013	17.96 ug/L	95
85) 4-Chlorotoluene	16.492	91	553343	18.21 ug/L	95
86) tert-Butylbenzene	16.648	119	921323	18.35 ug/L	94
87) 1,2,4-Trimethylbenzene	16.705	105	763107	18.38 ug/L	97
88) p-Isopropyltoluene	16.977	119	964980	20.07 ug/L	97
89) s-Butylbenzene	16.845	105	1042026	18.03 ug/L	98
90) 1,3-Dichlorobenzene	17.231	146	461172	18.33 ug/L	95
91) 1,4-Dichlorobenzene	17.330	146	465396	18.60 ug/L	96
92) n-Butylbenzene	17.527	91	782983	18.24 ug/L	94
93) 1,2-Dichlorobenzene	17.930	146	429570	18.24 ug/L	94
94) DBCP	19.097	157	30323	17.19 ug/L	91
95) Hexachlorobutadiene	20.091	225	142041	19.77 ug/L	94
96) 1,2,4-Trichlorobenzene	20.247	180	320226	19.82 ug/L	96
97) Naphthalene	20.921	128	655298	18.74 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	279661	19.17 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA005.D
Acq On : 6 Aug 2014 11:08 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 11:31:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA006.D
Acq On : 6 Aug 2014 11:37 am
Operator : KKW
Sample : MB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 08:48:11 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	696693	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1064770	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1098560	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	637299	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	252344	47.77 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.54%		
42) d4-1,2-Dichloroethane	11.019	65	258554	47.96 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 95.92%		
54) D8-Toluene	13.032	98	1333941	53.25 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 106.50%		
75) Bromofluorobenzene	15.982	95	486167	68.86 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 137.72%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D.	
15) Acetone	8.061	43	8785	5.92 ug/L #	84
16) Methylene Chloride	0.000	84	0	N.D. d	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	252344	47.77 ug/L	90
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	3152	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	258554	47.96 ug/L #	75
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA006.D
Acq On : 6 Aug 2014 11:37 am
Operator : KKW
Sample : MB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 08:48:11 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

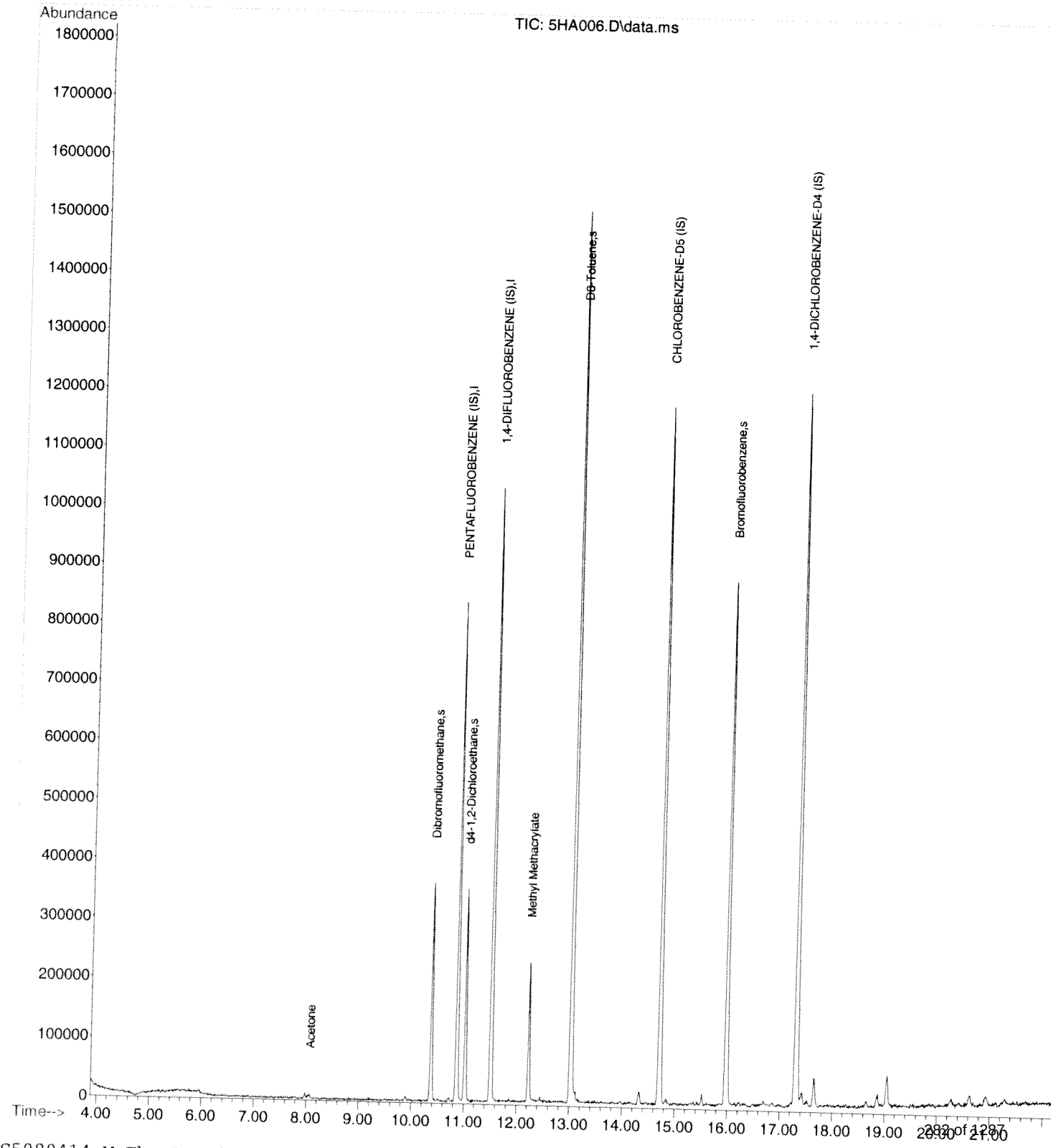
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	12.227	69	87163	30.30 ug/L	87
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1333941	53.25 ug/L #	86
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	2796	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	14.717	112	1839	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.300	106	1705	N.D.	
72) Styrene	15.366	104	2615	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.612	105	3488	N.D.	
76) Bromofluorobenzene	15.982	95	486167	68.86 ug/L	91
77) n-Propylbenzene	16.048	91	4606	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	3936	N.D.	
84) 2-Chlorotoluene	16.303	91	2274	N.D.	
85) 4-Chlorotoluene	16.492	91	3529	N.D.	
86) tert-Butylbenzene	16.640	119	2190	N.D.	
87) 1,2,4-Trimethylbenzene	16.697	105	6646	N.D.	
88) p-Isopropyltoluene	16.985	119	5816	N.D.	
89) s-Butylbenzene	16.853	105	5128	N.D.	
90) 1,3-Dichlorobenzene	17.231	146	2503	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D. d	
92) n-Butylbenzene	17.527	91	5194	N.D.	
93) 1,2-Dichlorobenzene	17.946	146	2456	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA006.D
Acq On : 6 Aug 2014 11:37 am
Operator : KKW
Sample : MB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 08:48:11 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA007.D
Acq On : 6 Aug 2014 12:05 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 08:24:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	678989	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1031126	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1087651	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	615268	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	243309	47.26 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.52%		
42) d4-1,2-Dichloroethane	11.019	65	233658	44.76 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 89.52%		
54) D8-Toluene	13.033	98	1240790	51.15 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 102.30%		
75) Bromofluorobenzene	15.982	95	452094	64.27 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 128.54%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	4837	0.84 ug/L #	94
3) Chloromethane	4.602	50	7928	0.78 ug/L #	88
4) Vinyl Chloride	4.816	62	4165	0.62 ug/L #	46
5) Bromomethane	5.539	94	1883	0.77 ug/L #	84
6) Chloroethane	5.818	64	2490	0.92 ug/L #	69
7) Trichlorofluoromethane	6.089	101	8209	1.03 ug/L #	89
8) Diethyl ether	6.664	59	3380	0.75 ug/L #	91
9) 1,1-Dichloroethene	7.042	96	2122	0.44 ug/L #	91
10) 1,1,2-Trichloro-1,2,2-...	7.116	151	2888	0.61 ug/L	91
11) Acrolein	7.618	56	1959	7.15 ug/L #	13
12) Iodomethane	7.297	142	4715	0.55 ug/L #	89
13) Carbon Disulfide	7.116	76	8728	0.79 ug/L #	77
14) 3-chloropropene	7.823	41	9650	0.92 ug/L #	86
15) Acetone	8.061	43	5358	3.71 ug/L	96
16) Methylene Chloride	7.987	84	6965	1.42 ug/L #	63
17) Methyl Acetate	8.234	43	3874	0.97 ug/L #	69
18) t-1,2-Dichloroethene	8.234	96	3469	0.61 ug/L #	74
19) Methyl tert-butyl ether	8.365	73	8028	0.76 ug/L #	46
20) Acetonitrile	8.768	41	6954	9.74 ug/L #	80
21) Diisopropyl ether	8.908	45	16036	0.65 ug/L #	88
22) Chloroprene	9.113	88	2881	0.62 ug/L	86
23) 1,1-Dichloroethane	9.138	63	6780	0.64 ug/L #	81
24) Acrylonitrile	9.220	53	15362	7.61 ug/L #	98
25) Vinyl Acetate	9.434	43	10367	0.68 ug/L #	82
26) c-1,2-Dichloroethene	9.844	96	5146	0.82 ug/L #	76
27) 2,2-Dichloropropane	9.992	77	5314	0.78 ug/L #	77
28) Bromochloromethane	10.091	128	2878	0.97 ug/L	80
29) Cyclohexane	10.116	56	7296	0.47 ug/L #	83
30) Chloroform	10.157	83	6636	0.79 ug/L #	88
32) Dibromofluoromethane	10.378	113	243309	47.26 ug/L	97
33) 2-Butanone	10.387	72	1340	3.42 ug/L #	1
34) 1,1,1-Trichloroethane	10.444	97	4160	0.50 ug/L #	77
35) 1,1-Dichloropropene	10.576	75	3846	0.55 ug/L #	74
36) Propionitrile	10.888	54	8008	10.08 ug/L #	88
37) Methacrylonitrile	10.904	41	38246	10.35 ug/L	96
38) Isobutyl Alcohol	10.945	43	9511	14.51 ug/L #	1
40) Carbon Tetrachloride	10.354	117	4400	0.60 ug/L #	75
41) Benzene	10.880	78	19290	0.85 ug/L	95
43) d4-1,2-Dichloroethane	11.019	65	233658	44.76 ug/L #	73
44) 1,2-Dichloroethane	11.093	62	5654	0.88 ug/L #	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA007.D
Acq On : 6 Aug 2014 12:05 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 08:24:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

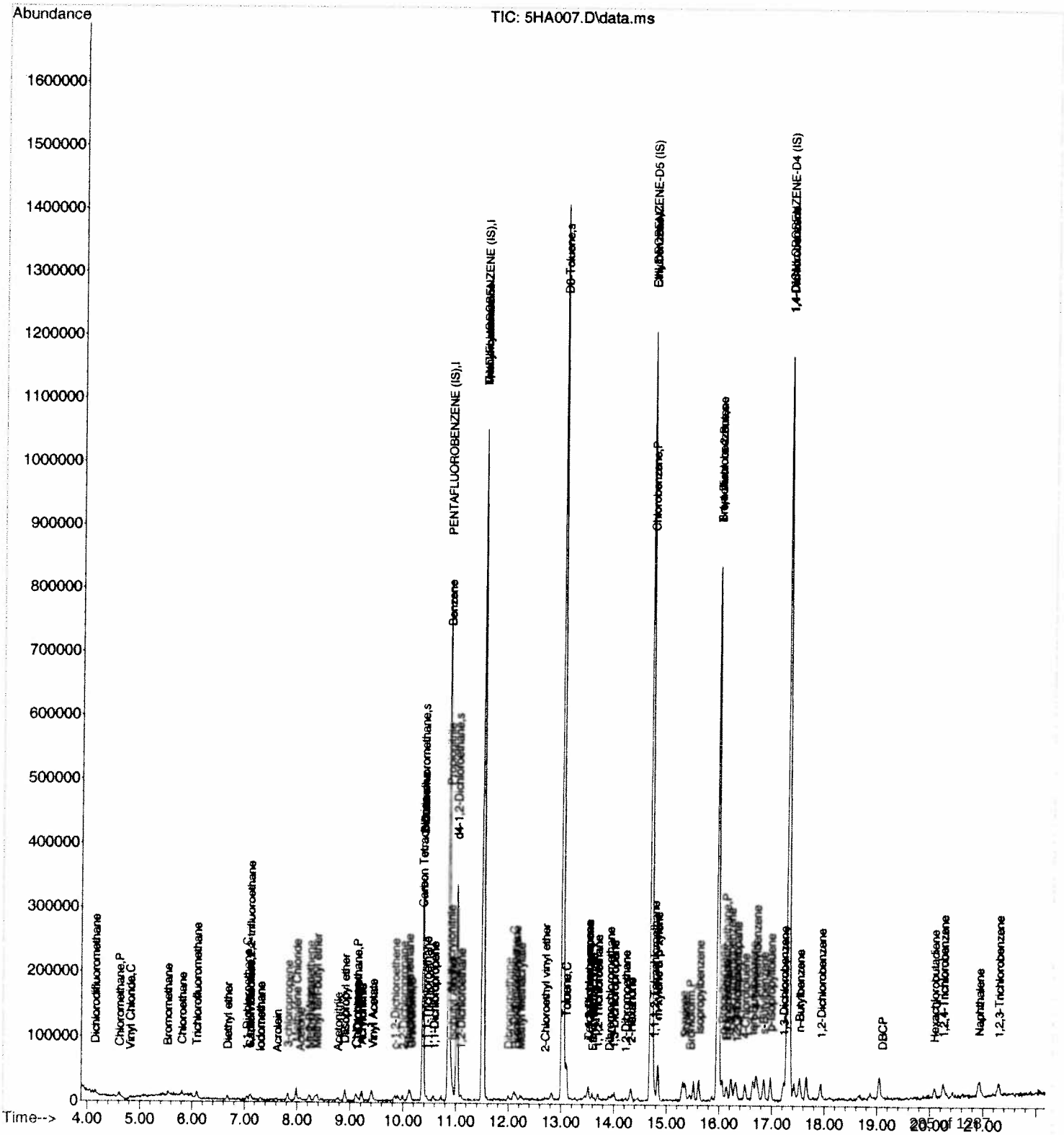
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	5369	0.71 ug/L #	1
46) Methyl cyclohexane	11.504	83	14284	1.06 ug/L #	61
47) Dibromomethane	11.997	93	1923	0.73 ug/L #	69
48) 1,2-Dichloropropane	12.104	63	6002	0.86 ug/L	96
49) Bromodichloromethane	12.137	83	5332	0.85 ug/L #	92
50) Methyl Methacrylate	12.236	69	2414	0.87 ug/L	92
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	12.704	63	1676	0.68 ug/L #	47
53) C-1,3-Dichloropropene	13.517	75	6129	0.83 ug/L	91
55) D8-Toluene	13.033	98	1240790	51.15 ug/L #	86
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	15663	0.95 ug/L	98
59) T-1,3-Dichloropropene	13.517	75	6129	1.04 ug/L #	89
60) Tetrachloroethene	13.526	164	4839	0.82 ug/L	93
61) Ethyl methacrylate	13.608	69	4602	0.99 ug/L #	46
62) 1,1,2-Trichloroethane	13.706	97	4580	1.12 ug/L	87
63) Dibromochloromethane	13.920	129	4551	0.93 ug/L #	77
64) 1,3-Dichloropropane	13.994	76	6320	0.93 ug/L #	71
65) 1,2-Dibromoethane	14.216	107	4395	1.05 ug/L #	96
66) 2-Hexanone	14.323	43	8889	2.40 ug/L #	70
67) Ethylbenzene	14.709	106	10529	1.01 ug/L #	95
68) Chlorobenzene	14.733	112	19255	0.95 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.775	131	6315	1.03 ug/L	89
70) m-xylene & p-xylene	14.840	106	25953	1.98 ug/L	97
71) o-xylene	15.317	106	12590	0.97 ug/L	97
72) Styrene	15.350	104	20842	0.94 ug/L #	92
73) Bromoform	15.465	173	3206	1.18 ug/L #	1
74) Isopropylbenzene	15.621	105	34186	0.93 ug/L #	89
76) Bromofluorobenzene	15.982	95	452094	64.27 ug/L	90
77) n-Propylbenzene	16.056	91	37046	0.89 ug/L	95
78) Bromobenzene	16.147	156	8392	1.01 ug/L	93
79) 1,1,2,2-Tetrachloroethane	16.122	83	5531	1.13 ug/L #	73
80) 1,2,3-Trichloropropane	16.344	61	2306	1.31 ug/L #	72
81) T-1,4-Dichloro-2-Butene	15.991	53	3137	1.10 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.221	105	27123	0.76 ug/L #	89
84) 2-Chlorotoluene	16.311	91	21172	0.80 ug/L	91
85) 4-Chlorotoluene	16.492	91	24255	0.90 ug/L	96
86) tert-Butylbenzene	16.648	119	34886	0.79 ug/L	93
87) 1,2,4-Trimethylbenzene	16.697	105	33886	0.92 ug/L #	93
88) p-Isopropyltoluene	16.977	119	31488	0.74 ug/L	95
89) s-Butylbenzene	16.853	105	37175	0.73 ug/L	98
90) 1,3-Dichlorobenzene	17.223	146	20774	0.93 ug/L #	94
91) 1,4-Dichlorobenzene	17.322	146	21838	0.99 ug/L #	1
92) n-Butylbenzene	17.527	91	28201	0.74 ug/L #	97
93) 1,2-Dichlorobenzene	17.930	146	20723	1.00 ug/L	99
94) DBCP	19.113	157	1332	0.86 ug/L #	11
95) Hexachlorobutadiene	20.083	225	5292	0.83 ug/L #	64
96) 1,2,4-Trichlorobenzene	20.263	180	14724	1.03 ug/L	97
97) Naphthalene	20.937	128	38140	1.23 ug/L	97
98) 1,2,3-Trichlorobenzene	21.307	180	15239	1.18 ug/L #	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA007.D
Acq On : 6 Aug 2014 12:05 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 08:24:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA015.D
Acq On : 6 Aug 2014 3:52 pm
Operator : KKW
Sample : A404270-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 07 08:59:38 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	453907	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	685738	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	768840	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	456300	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	159908	46.46 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 92.92%		
42) d4-1,2-Dichloroethane	11.027	65	175541	50.56 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 101.12%		
54) D8-Toluene	13.032	98	870726	53.97 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 107.94%		
75) Bromofluorobenzene	15.982	95	320852	64.56 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 129.12%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D. d	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	20301	21.00 ug/L	91
16) Methylene Chloride	7.995	84	2175	0.66 ug/L	87
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	159908	46.46 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	1586	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	175541	50.56 ug/L #	76
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA015.D
Acq On : 6 Aug 2014 3:52 pm
Operator : KKW
Sample : A404270-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 07 08:59:38 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

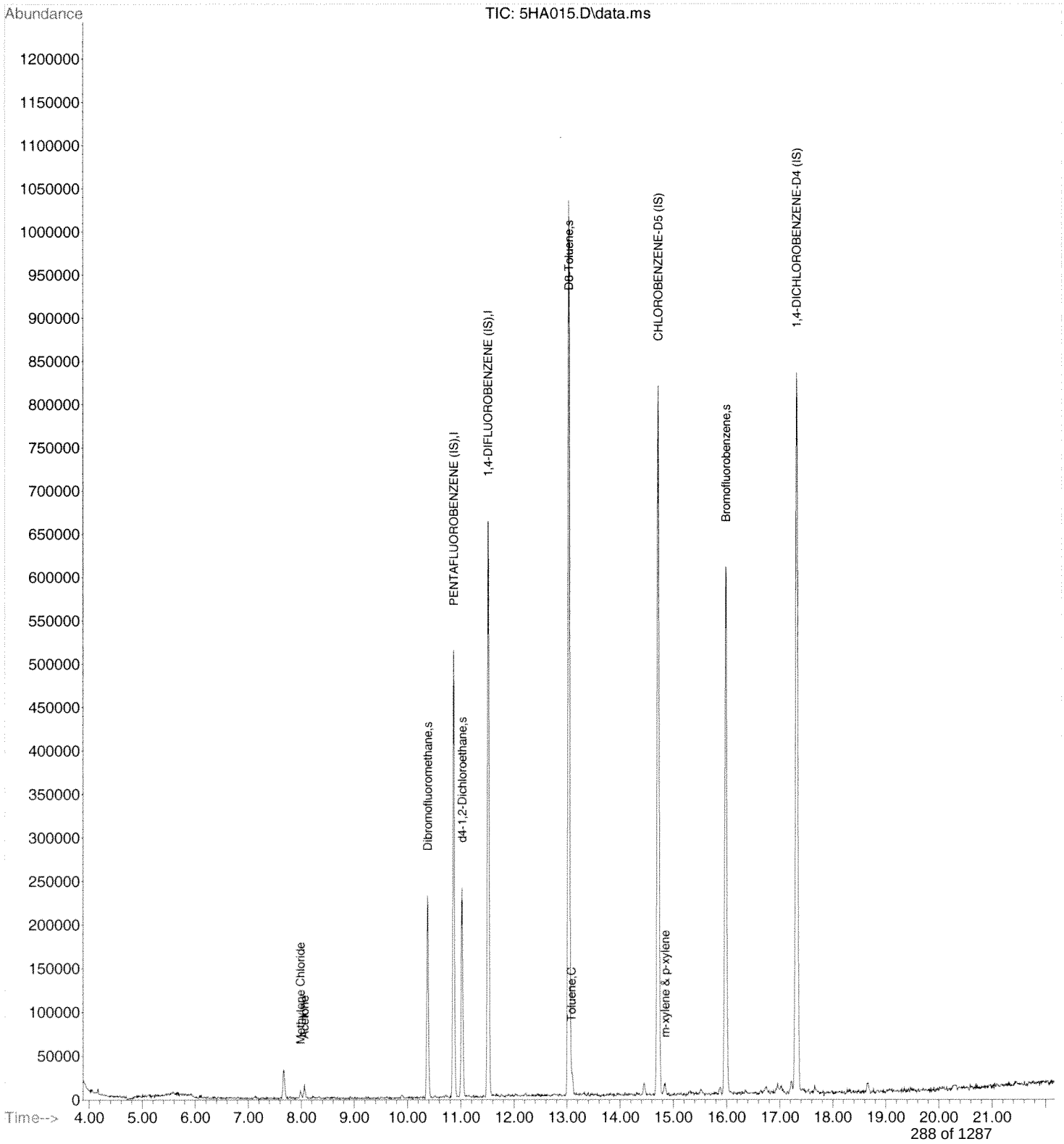
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	870726	53.97 ug/L #	83
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	8672	0.74 ug/L #	95
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	7246	0.78 ug/L #	69
71) o-xylene	15.300	106	1269	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	320852	64.56 ug/L #	82
77) n-Propylbenzene	15.974	91	1059	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.648	119	1153	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	2993	N.D.	
88) p-Isopropyltoluene	16.985	119	2213	N.D.	
89) s-Butylbenzene	16.870	105	1519	N.D.	
90) 1,3-Dichlorobenzene	17.322	146	1142	N.D.	
91) 1,4-Dichlorobenzene	17.322	146	1142	N.D.	
92) n-Butylbenzene	17.535	91	1422	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.937	128	1982	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA015.D
Acq On : 6 Aug 2014 3:52 pm
Operator : KKW
Sample : A404270-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 07 08:59:38 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA016.D
Acq On : 6 Aug 2014 4:21 pm
Operator : KKW
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 07 09:00:26 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	475897	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	725523	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	819933	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	482763	50.00 ug/L	0.00

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	171803	47.61 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.22%		
42) d4-1,2-Dichloroethane	11.028	65	191540	52.15 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 104.30%		
54) D8-Toluene	13.032	98	897258	52.57 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 105.14%		
75) Bromofluorobenzene	15.991	95	332988	62.64 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 125.28%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	1974	1.95 ug/L #	45
16) Methylene Chloride	7.995	84	2442	0.71 ug/L	81
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	171803	47.61 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	0.000	78	0	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	191540	52.15 ug/L #	78
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA016.D
Acq On : 6 Aug 2014 4:21 pm
Operator : KKW
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 07 09:00:26 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

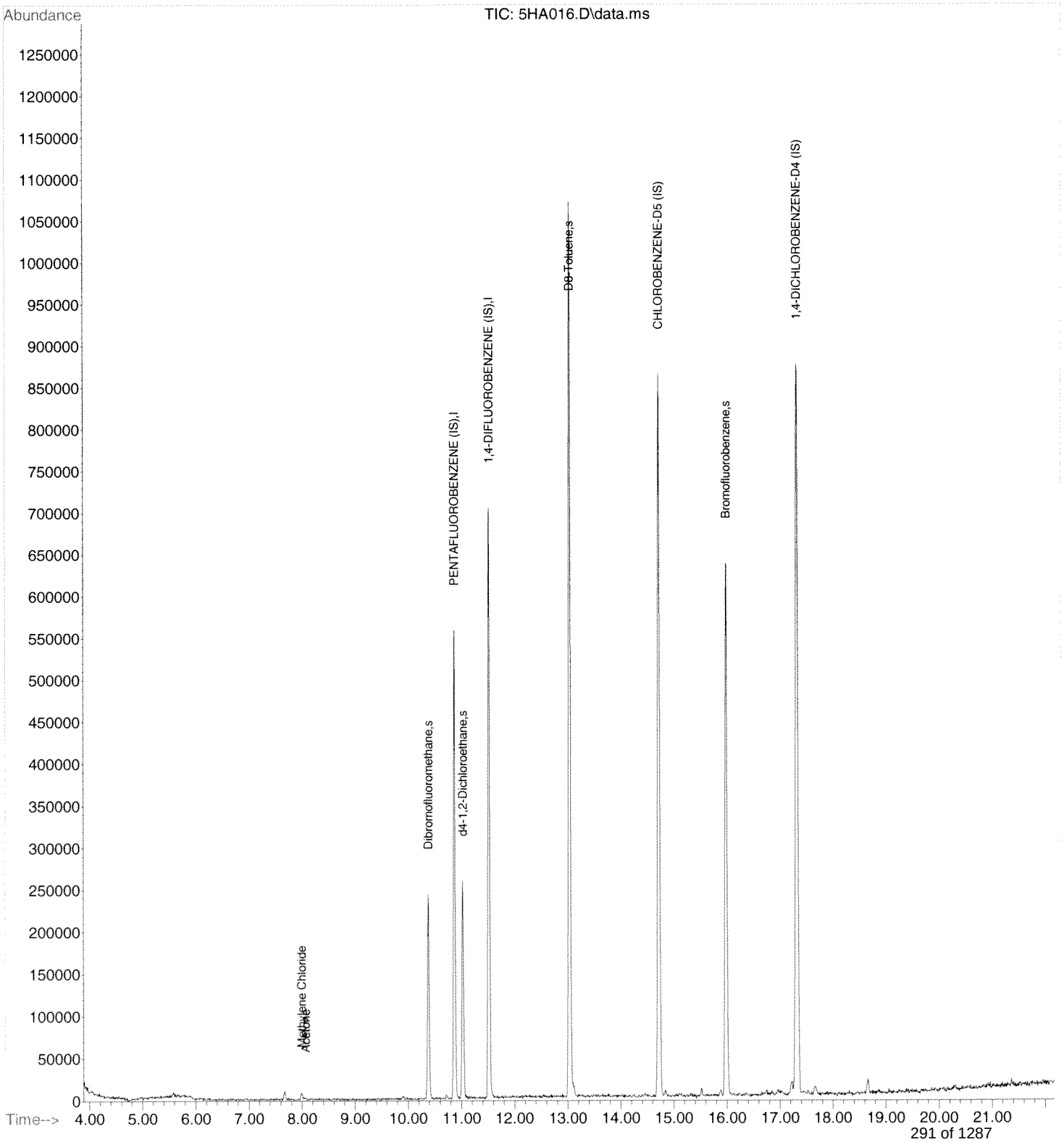
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	897258	52.57 ug/L #	83
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	1946	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.991	95	332988	62.64 ug/L #	80
77) n-Propylbenzene	15.999	91	1070	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.730	105	1770	N.D.	
88) p-Isopropyltoluene	16.977	119	1702	N.D.	
89) s-Butylbenzene	16.837	105	1444	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	17.527	91	1165	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.945	128	2116	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA016.D
Acq On : 6 Aug 2014 4:21 pm
Operator : KKW
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 07 09:00:26 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA017.D
Acq On : 6 Aug 2014 4:49 pm
Operator : KKW
Sample : A404270-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 07 09:01:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	337625	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	504486	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	591174	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	352682	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	120672	47.14 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.28%		
42) d4-1,2-Dichloroethane	11.028	65	127146	49.78 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.56%		
54) D8-Toluene	13.032	98	626234	52.76 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 105.52%		
75) Bromofluorobenzene	15.991	95	234117	60.92 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 121.84%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	5702	7.93 ug/L #	81
16) Methylene Chloride	0.000	84	0	N.D.	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	120672	47.14 ug/L	97
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	0.000	78	0	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	127146	49.78 ug/L #	73
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA017.D
Acq On : 6 Aug 2014 4:49 pm
Operator : KKW
Sample : A404270-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 07 09:01:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

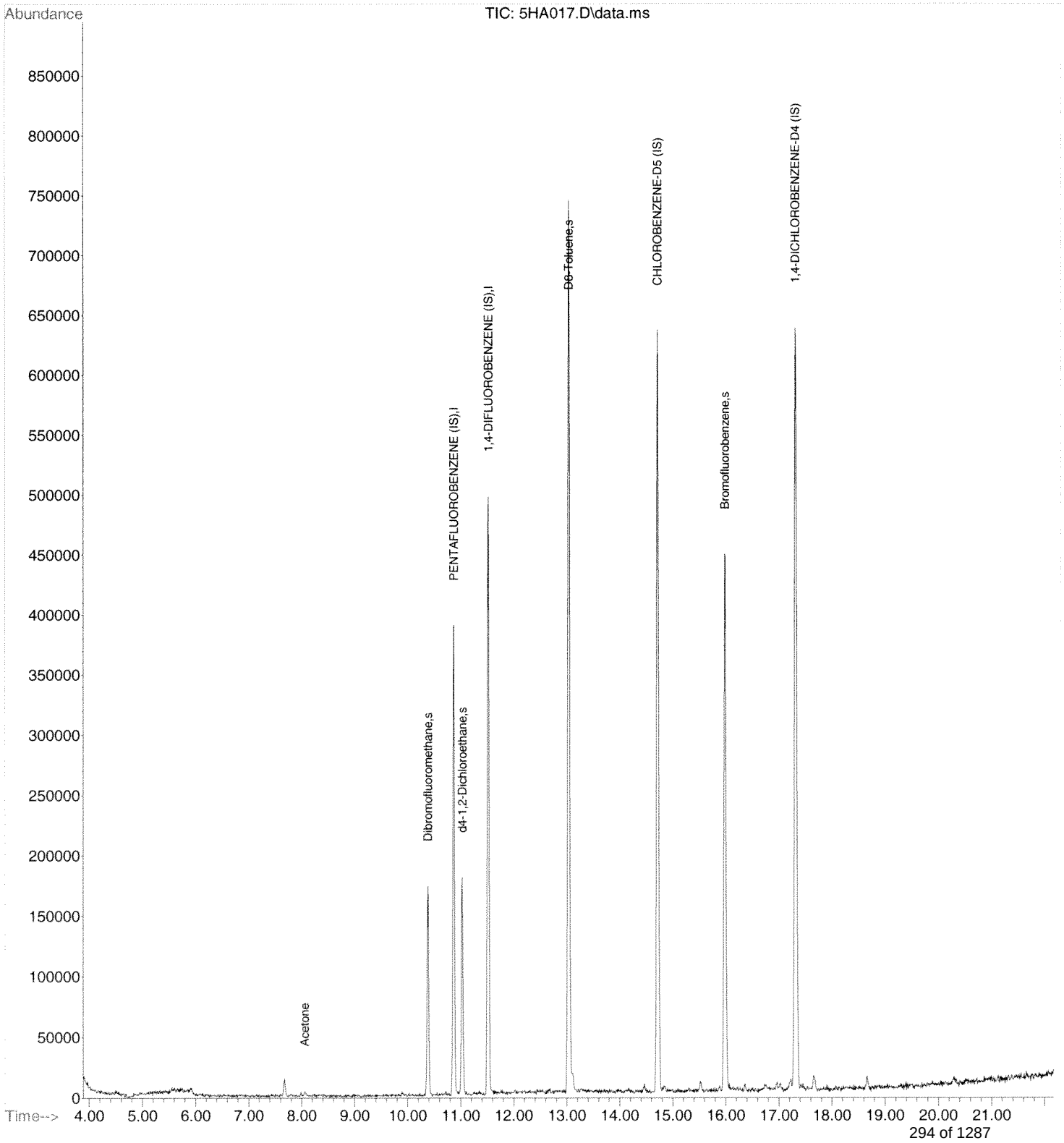
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	626234	52.76 ug/L #	82
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.991	95	234117	60.92 ug/L #	80
77) n-Propylbenzene	16.064	91	1100	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.730	105	1481	N.D.	
88) p-Isopropyltoluene	17.001	119	1937	N.D.	
89) s-Butylbenzene	16.845	105	2063	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.921	128	1883	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA017.D
Acq On : 6 Aug 2014 4:49 pm
Operator : KKW
Sample : A404270-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 07 09:01:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA018.D
Acq On : 6 Aug 2014 5:18 pm
Operator : KKW
Sample : A404270-04
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 07 09:04:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	488081	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	718751	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	799353	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	477686	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	167783	45.34 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 90.68%		
42) d4-1,2-Dichloroethane	11.027	65	186915	51.37 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 102.74%		
54) D8-Toluene	13.032	98	871919	51.56 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 103.12%		
75) Bromofluorobenzene	15.982	95	312294	60.01 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 120.02%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D.	
15) Acetone	8.069	43	3303	3.18 ug/L #	45
16) Methylene Chloride	0.000	84	0	N.D.	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.387	113	167783	45.34 ug/L	95
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	0.000	78	0	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	186915	51.37 ug/L #	80
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA018.D
Acq On : 6 Aug 2014 5:18 pm
Operator : KKW
Sample : A404270-04
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 07 09:04:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

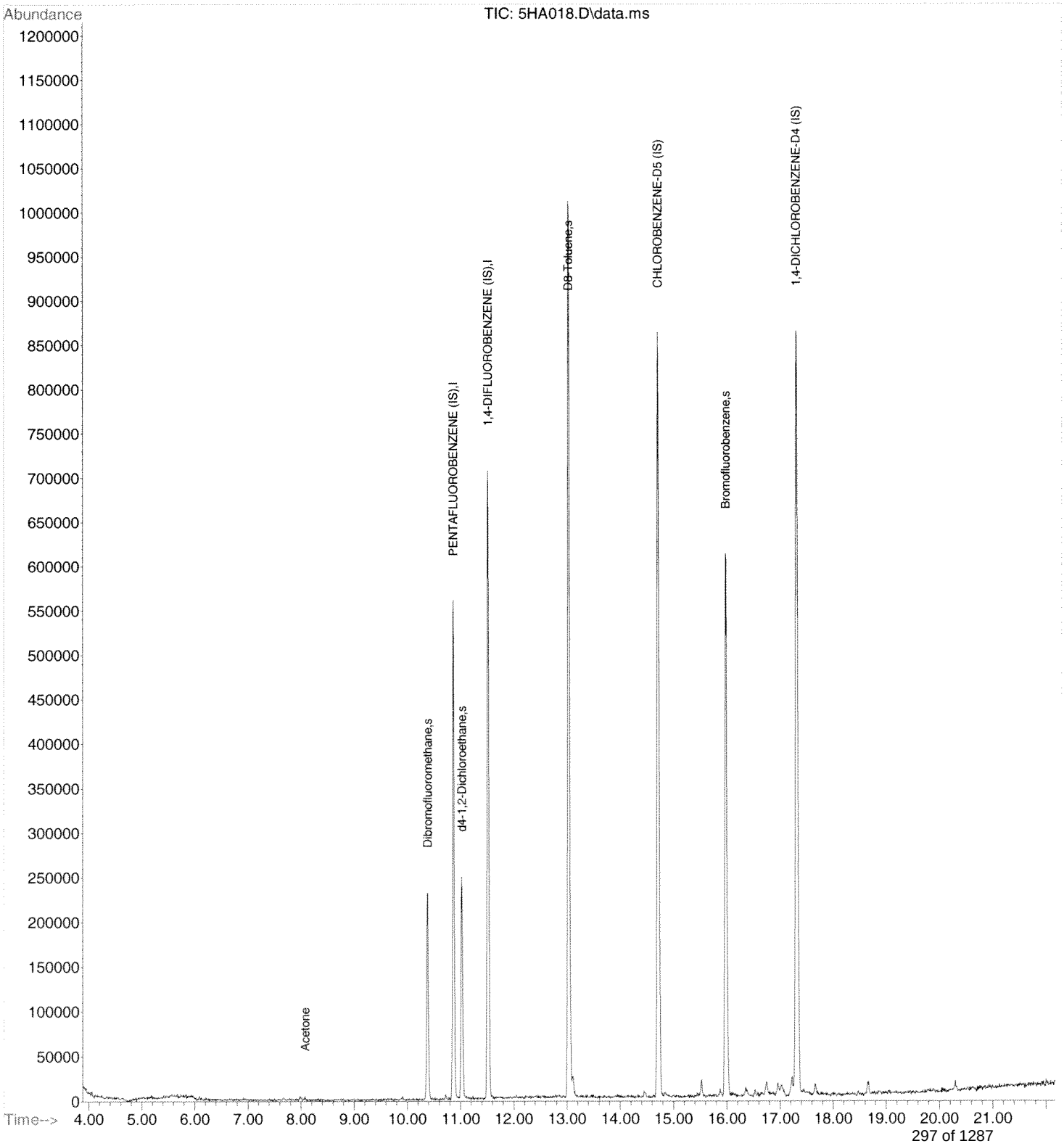
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	871919	51.56 ug/L #	82
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.840	106	1515	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	1515	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	312294	60.01 ug/L #	79
77) n-Propylbenzene	0.000	91	0	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	1188	N.D.	
88) p-Isopropyltoluene	16.993	119	1088	N.D.	
89) s-Butylbenzene	16.705	105	1188	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.937	128	2163	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA018.D
Acq On : 6 Aug 2014 5:18 pm
Operator : KKW
Sample : A404270-04
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 07 09:04:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA019.D
Acq On : 6 Aug 2014 5:46 pm
Operator : KKW
Sample : A404270-05
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 07 09:04:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	477568	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	692837	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	779187	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	446065	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	166957	46.11 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 92.22%		
42) d4-1,2-Dichloroethane	11.028	65	193930	55.29 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 110.58%		
54) D8-Toluene	13.032	98	875979	53.74 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 107.48%		
75) Bromofluorobenzene	15.982	95	321955	63.85 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 127.70%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.078	43	3040	2.99 ug/L #	45
16) Methylene Chloride	7.987	84	1761	0.51 ug/L	73
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	166957	46.11 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	0.000	78	0	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	193930	55.29 ug/L #	77
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA019.D
Acq On : 6 Aug 2014 5:46 pm
Operator : KKW
Sample : A404270-05
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 07 09:04:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

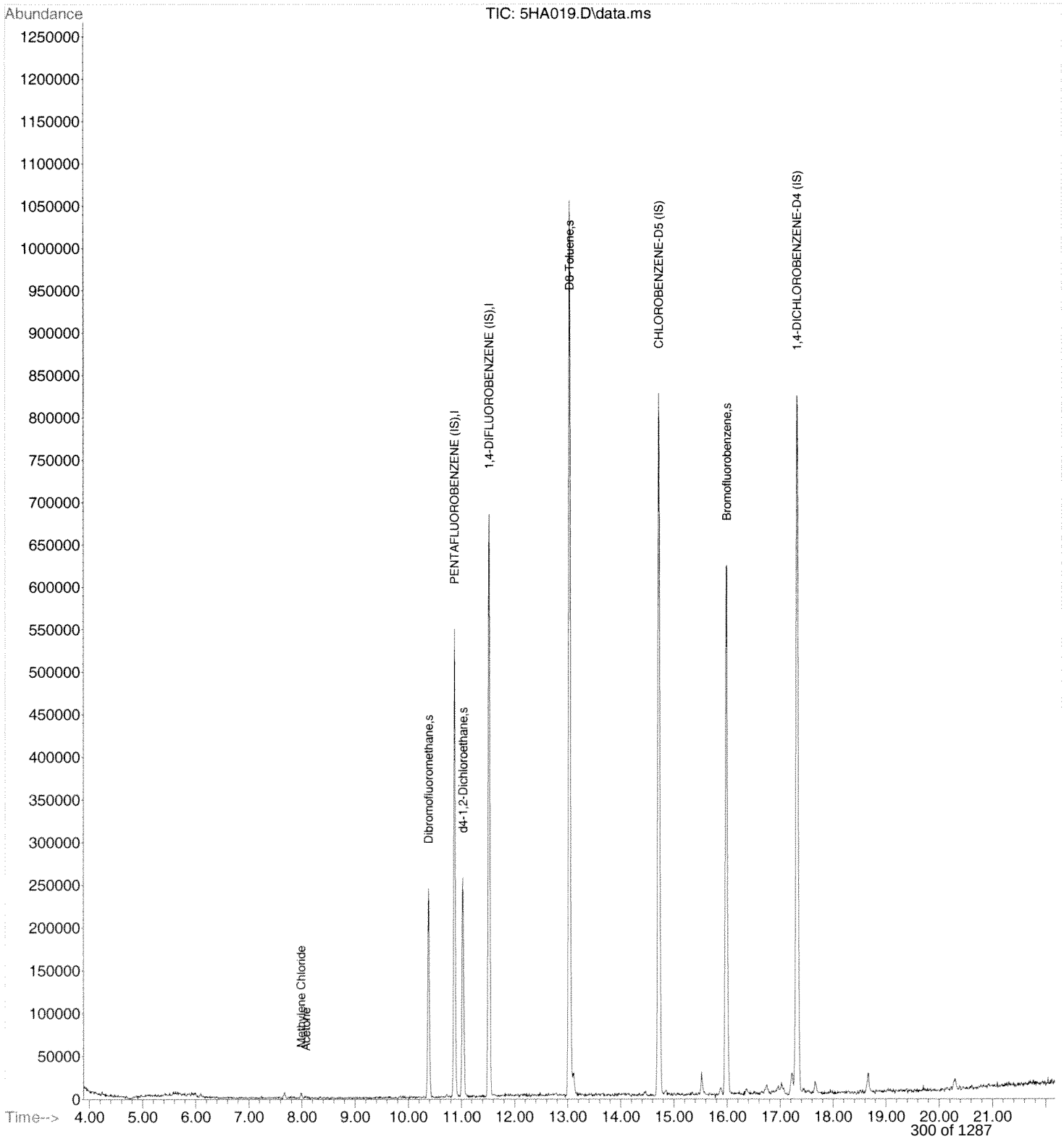
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	875979	53.74 ug/L #	82
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	321955	63.85 ug/L #	79
77) n-Propylbenzene	0.000	91	0	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.664	119	1409	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	1985	N.D.	
88) p-Isopropyltoluene	16.985	119	1637	N.D.	
89) s-Butylbenzene	16.862	105	1802	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	17.535	91	1875	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.929	128	2343	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 5HA019.D
Acq On : 6 Aug 2014 5:46 pm
Operator : KKW
Sample : A404270-05
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 07 09:04:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29943

Instrument: OVGCMS5

Calibration ID: 1408017

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29943-TUN1	QC		1		A4F0379		
AA29943-CCV1	QC		2		A4H0161	A4H0099	
4H06032-BS1	QC		3			A4H0099	
4H06032-BLK1	QC		4			A4H0099	
A404270-06	8260B TCL SOM01.2 DOD	C	5			A4H0099	CH2M Hill, Inc. (CH025)
A404270-28	8260B TCL SOM01.2 DOD	B	6			A4H0099	CH2M Hill, Inc. (CH025)
4H06032-MS1	QC		7			A4H0099	
4H06032-MSD1	QC		8			A4H0099	
A404270-07	8260B TCL SOM01.2 DOD	B	9			A4H0099	CH2M Hill, Inc. (CH025)
A404270-08	8260B TCL SOM01.2 DOD	B	10			A4H0099	CH2M Hill, Inc. (CH025)
A404270-09	8260B TCL SOM01.2 DOD	B	11			A4H0099	CH2M Hill, Inc. (CH025)
A404270-10	8260B TCL SOM01.2 DOD	B	12			A4H0099	CH2M Hill, Inc. (CH025)
A404270-12	8260B TCL SOM01.2 DOD	B	13			A4H0099	CH2M Hill, Inc. (CH025)
A404270-13	8260B TCL SOM01.2 DOD	B	14			A4H0099	CH2M Hill, Inc. (CH025)
A404270-14	8260B TCL SOM01.2 DOD	B	15			A4H0099	CH2M Hill, Inc. (CH025)
A404270-15	8260B TCL SOM01.2 DOD	B	16			A4H0099	CH2M Hill, Inc. (CH025)
A404270-16	8260B TCL SOM01.2 DOD	B	17			A4H0099	CH2M Hill, Inc. (CH025)
A404270-18	8260B TCL SOM01.2 DOD	B	18			A4H0099	CH2M Hill, Inc. (CH025)
A404270-19	8260B TCL SOM01.2 DOD	B	19			A4H0099	CH2M Hill, Inc. (CH025)
A404270-20	8260B TCL SOM01.2 DOD	B	20			A4H0099	CH2M Hill, Inc. (CH025)
A404270-21	8260B TCL SOM01.2 DOD	B	21			A4H0099	CH2M Hill, Inc. (CH025)
A404270-22	8260B TCL SOM01.2 DOD	B	22			A4H0099	CH2M Hill, Inc. (CH025)
A404270-23	8260B TCL SOM01.2 DOD	B	23			A4H0099	CH2M Hill, Inc. (CH025)
A404270-24	8260B TCL SOM01.2 DOD	B	24			A4H0099	CH2M Hill, Inc. (CH025)

Samples Loaded By _____ Date _____ Data Processed By _____ Date _____

PREPARATION BENCH SHEET

Printed: 8/7/2014 10:30:57AM

4H06032

ENCO Orlando

Prepared using: EPA 5035_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4G0517 8260 mix full 2 working + TCL
A4H0125 8260 mix 2 working Gases/Acrolein

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
A404270-21	D	TR-5TH-CSF03-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.74	5			1	1,4-DCB only
A404270-22	D	TR-5TH-CSF04-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			6.07	5			1	1,4-DCB only
A404270-23	D	TR-5TH-CSF05-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			3.94	5			1	1,4-DCB only
A404270-24	D	TR-5TH-CSF05D-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.24	5			1	1,4-DCB only
A404270-28	D	TR-5TH-CSF09-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.03	5			1	1,4-DCB only. USE for MS/MSD

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

Instrument 5

Start Date _____

StopDate _____

Instrument ID _____

Standard ID#	Description	Manufacture Lot#

Samples Prepared By _____ Date _____

Samples Prepared By _____ Date _____

PREPARATION BENCH SHEET

Printed: 8/7/2014 10:30:57AM

Analysis
8260B TCL SOM01.2 DOD [EPA 8260B]

4H06032
ENCO Orlando

Prepared using: EPA 5035_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4G0517 8260 mix full 2 working + TCL
A4H0125 8260 mix 2 working Gases/Acrolein

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
4H06032-BLK1		Blank			QC			5	5			1	
4H06032-BS1		LCS			QC			5	5	A4H0125 A4G0517	2 2	1	
4H06032-MS1		Matrix Spike [A404270-28]			QC			5	5	A4H0125 A4G0517	2 2	1	
4H06032-MSD1		Matrix Spike Dup [A404270-28]			QC			5	5	A4H0125 A4G0517	2 2	1	
A404270-06	D	TR-5TH-CSW06-0814	C[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.69	5			1	1,4-DCB only
A404270-07	D	TR-5TH-CSW07-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.63	5			1	1,4-DCB only
A404270-08	D	TR-5TH-CSW07D-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.29	5			1	1,4-DCB only
A404270-09	D	TR-5TH-CSW08-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.43	5			1	1,4-DCB only
A404270-10	D	TR-5TH-CSW09-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.29	5			1	1,4-DCB only
A404270-12	D	TR-5TH-CSW11-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.45	5			1	1,4-DCB only
A404270-13	D	TR-5TH-CSW11D-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.72	5			1	1,4-DCB only
A404270-14	D	TR-5TH-CSW12-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.19	5			1	1,4-DCB only
A404270-15	D	TR-5TH-CSW13-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.84	5			1	1,4-DCB only
A404270-16	D	TR-5TH-CSW14-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.88	5			1	1,4-DCB only
A404270-18	D	TR-5TH-CSW15-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5.17	5			1	1,4-DCB only
A404270-19	D	TR-5TH-CSF01-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.8	5			1	1,4-DCB only
A404270-20	D	TR-5TH-CSF02-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4	5			1	1,4-DCB only

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time: 08/08/14 9:17
Sequence: AA29943, AA29955, AA29966
Batch: 4H06032, 4H07018, 4H06024
Method: 8260/624

Surrogate ID: A4E0236
Internal ID: A4H0098
LCS ~~Halo~~ 2°: 8260: A4G0517
LCS ~~Arom~~ 2°: Ac/Ac: A4H0042
LCS Gas 2°: A4H0112

8260 Mix: A4G0583
8260 Add: A4H0139
8260 Ac/Ac: A4G0608
8260 Gases: A4H0137
Instrument #: MS-5

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HB001	BFB			1				
5HB002	BFB			1				
5HB003	CCV			2			✓	
5HB004	BS		KKW 08/08/14	3			✓	
5HB005	BLK			4			✓	
5HB006	A404270-06	C	1	5		KKW 08/08/14	✓	
5HB007	A404270-28	B	1	6			ms/msD ✓	
5HB008	4H06032-MS1	G	1	7			✓	
5HB009	4H06032-MSD1	L	1	8			✓	
5HB010	A404270-07	B	1	9			✓	
5HB011	A404270-08	B	1	10			✓	
5HB012	A404270-09	B	1	11			✓	
5HB013	A404270-10	B	1	12			✓	
5HB014	A404270-12	B	1	13			✓	
5HB015	A404270-13	B	1	14			✓	
5HB016	A404270-14	B	1	15			✓	
5HB017	A404270-15	B	1	16			✓	
5HB018	A404270-16	B	1	17			✓	
5HB019	A404270-18	B	1	18		KKW 08/08/14	✓	
5HB020	A404270-19	B	1	19			✓	

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:	Surrogate ID:	8260 Mix:
Sequence:	Internal ID:	8260 Add:
Batch:	LCS Halo 2⁰:	8260 Ac/Ac: KKW 08/08/14
Method:	LCS Arom 2⁰: KKW 08/08/14	8260 Gases:
	LCS Gas 2⁰:	**Instrument #:** MS-5

See Page 60

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
SHB021	A404270-20	B	1	20			✓	
SHB022	A404270-21	B	1	21			↓IS RRWIX	
SHB023	A404270-22	B	1	22			✓	
SHB024	A404270-23	B	1	23			✓	
SHB025	A404270-24	B	1	24			✓	
SHB026	BFB			25			✓	
SHB027	CCV			26			✓	
SHB028	BS			27		KKW 08/08/14	✓	
SHB029	BLK		KKW 08/08/14	28			✓	
SHB030	CRL			29			✓	
SHB031	A404270-11	B	1	30			✓	
SHB032	A404270-25	B	1	31			✓	
SHB033	A404270-26	B	1	32			✓	
SHB034	A404270-27	B	1	33			✓	
SHB035	A404359-01 RE1	B	1	34			✓ ↓IS	
SHB036	4407018-MS1	G	1	35			✓	
SHB037	4407018-MSD1	L	1	36		KKW	✓	
SHB038	MS1	G	1	37		08/08/14	✓	
SHB039	MSD1	F	1	38			✓	
~~SHB040~~	~~A404614-1~~	~~A~~	~~5~~	39	<2	N		

KKW 08/08/14

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:	Surrogate ID:	8260 Mix:
Sequence:	Internal ID:	8260 Add:
Batch:	LCS Halo 2⁰: KKW 08/08/14	8260 Ac/Ac: KKW 08/08/14
Method:	LCS Arom 2⁰:	8260 Gases:
	LCS Gas 2⁰:	Instrument #: MS.5

See Page 60

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
~~SHB044~~	~~A404615-01~~	~~A~~	~~5~~	~~40~~	~~<2~~	~~N~~		
SHB040	A404561-01	F	1	39	—	—	✓	
SHB041	A404614-01	A	5.	40	<2	N	RRW 1X	
SHB042	A404615-01	A	5	41	<2	N	RRW 1X	
SHB043	A404510-01	B	100	42	—	—	RRW 250X	
SHB044	A404510-03	B	100	43			RRW 1X	
SHB045	A404504-01	A	100	44			RRW 100X matrix	
SHB046	A404393-01	D	100	45			RRW 1X	
SHB047	A404393-02	D	100	46			RRW 1X	
SHB048	A404393-03	D	100	47			RRW 1X	
SHB049	A404393-04	D	100	48			RRW 500X Carbon Tet.	
SHB050	A404393-05	D	100	49			1X	
SHB051	A404393-06	D	100	50		KKW	100X Chloroform	
SHB052	A404393-07	D	100	51		08/08/14	100X Carbon Tet	
SHB053	A404393-08	D	100	1			5000X Carbon Tet	
								KKW 08/08/14

Analyst: KKW

Tune File : C:\msdchem\1\DATA\080714\5HB002.D
Tune Time : 7 Aug 2014 9:17 am

Daily Calibration File : C:\msdchem\1\DATA\080414\5H4007.D

								639658	977088	1218050
								568681		

File	Sample	Surrogate Recovery %					Internal Standard Responses		
5HB003.D									
	CCV	100	97	114	129*	1005690	895196	1472283	1921403
5HB004.D									
	4H06032-BS	100	93	110	144*	992511	975904	1599507	1766863
5HB005.D									
	4H06032-BL	98	95	111	154*	987464	1001464	1616567	1639733
5HB006.D									
	A404270-06	101	98	111	152*	515652	583776	955577	947091
5HB007.D									
	A404270-28	102	99	114	155*	778999	848276	1385010	1392571
5HB008.D									
	4H06032-MS	97	98	111	139*	841905	909399	1441249	1593349
5HB009.D									
	4H06032-MS	102	101	113	142*	848910	919432	1478480	1591068
5HB010.D									
	A404270-07	90	91	103	135*	893482	956568	1557590	1580379
5HB011.D									
	A404270-08	104	104	115	151*	733129	834926	1365210	1380842
5HB012.D									
	A404270-09	106	102	113	150*	802656	828425	1376413	1396837
5HB013.D									
	A404270-10	97	99	110	136*	670412	817680	1309385	1308033
5HB014.D									
	A404270-12	88	92	102	138*	977734	952222	1534167	1611396
5HB015.D									
	A404270-13	94	99	107	140*	777844	882457	1406994	1414467
5HB016.D									

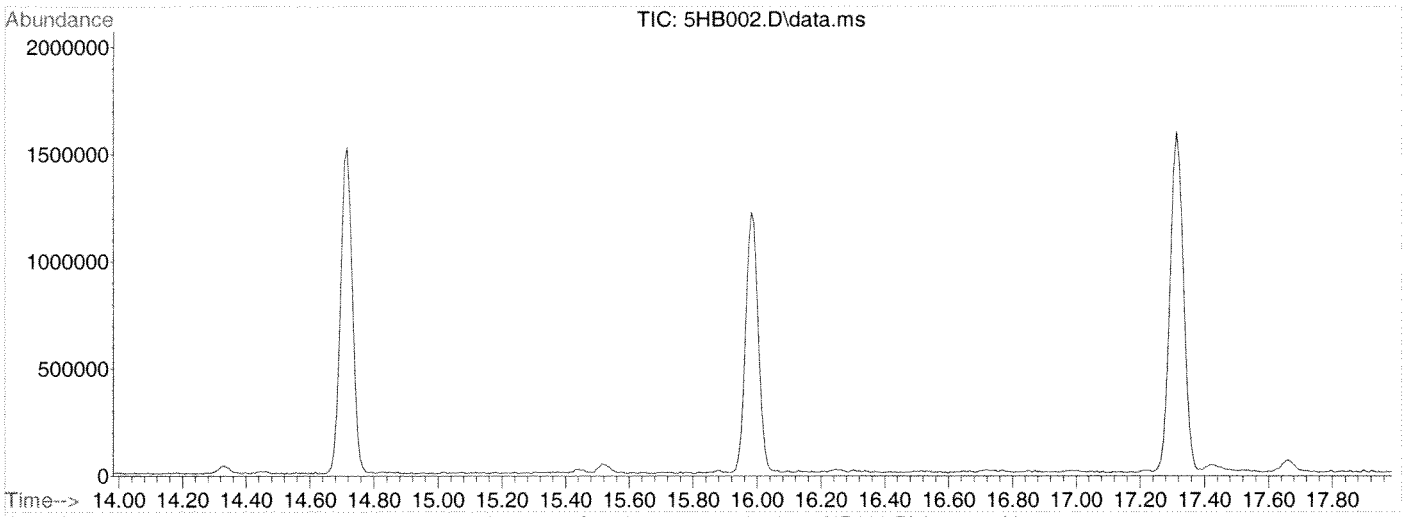
```
        A404270-14   97  104  115  145      815164    1309566    1345287
                                735311
-----------------------------------------------------------------------------
5HB017.D
        A404270-15  100  107  111  138*     775088    1264000    1284404
                                659469
-----------------------------------------------------------------------------
5HB018.D
        A404270-16   93   99  108  143*     883244    1426282    1560168
                                959400
-----------------------------------------------------------------------------
5HB019.D
        A404270-18   94   99  107  140*     728619    1212339    1287858
                                775369
-----------------------------------------------------------------------------
5HB020.D
        A404270-19  101  105  114  148*     788656    1288022    1382980
                                816832
-----------------------------------------------------------------------------
5HB021.D
        A404270-20   95  102  110  137*     846553    1358508    1480239
                                858292
-----------------------------------------------------------------------------
5HB022.D
        A404270-21   92   98   92  119      194598*    325665*    372745*
                                220124*
-----------------------------------------------------------------------------
5HB023.D
        A404270-22  109  114  121* 161*     755300    1239774    1328811
                                832314
-----------------------------------------------------------------------------
5HB024.D
        A404270-23   92  100  107  138*     827084    1327890    1409436
                                813076
-----------------------------------------------------------------------------
5HB025.D
        A404270-24  100  105  114  145*     766995    1256753    1337286
                                758370
-----------------------------------------------------------------------------
(fails) - fails 12hr time check   * - fails criteria

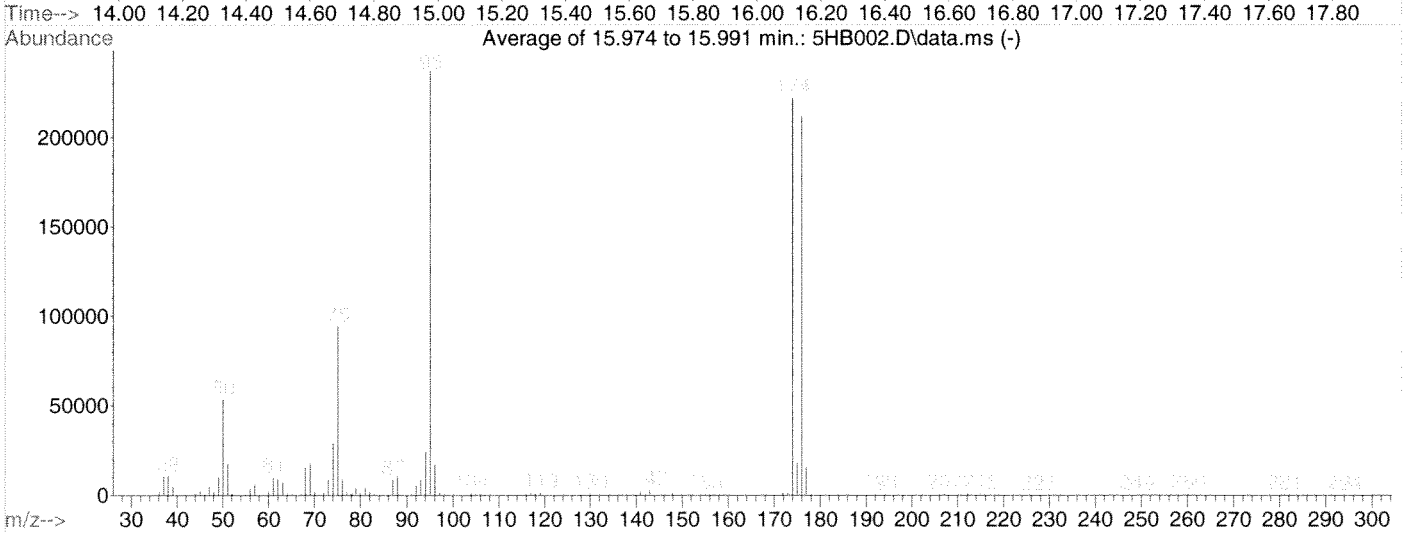
    Created: Fri Aug 08 08:25:38 2014  JVGCMS4
```

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB002.D
Acq On : 7 Aug 2014 9:17 am
Operator : KKW
Sample : BFB
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\MS5080414.M
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
Last Update : Tue Aug 05 11:49:17 2014





AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5	53429	PASS
75	95	30	60	39.7	94096	PASS
95	95	100	100	100.0	237077	PASS
96	95	5	9	7.2	17185	PASS
173	174	0.00	2	0.6	1367	PASS
174	95	50	100	93.5	221610	PASS
175	174	5	9	8.1	17877	PASS
176	174	95	101	95.6	211904	PASS
177	176	5	9	7.1	15151	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB003.D
Acq On : 7 Aug 2014 9:48 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 08 08:21:45 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	895196	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1472283	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1921403	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	1005690	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	340134	50.11 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 100.22%		
42) d4-1,2-Dichloroethane	11.028	65	362999	48.70 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 97.40%		
54) D8-Toluene	13.032	98	1969283	56.85 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.70%		
75) Bromofluorobenzene	15.982	95	800620	64.45 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 128.90%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.166	85	371545	48.97 ug/L	98
3) Chloromethane	4.610	50	527450	39.54 ug/L	100
4) Vinyl Chloride	4.816	62	296669	33.27 ug/L	99
5) Bromomethane	5.547	94	150398	46.89 ug/L #	95
6) Chloroethane	5.810	64	143041	39.87 ug/L	97
7) Trichlorofluoromethane	6.097	101	590821	56.39 ug/L	96
8) Diethyl ether	6.673	59	242590	40.70 ug/L	89
9) 1,1-Dichloroethene	7.051	96	288957	45.86 ug/L	92
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	298942	48.15 ug/L	99
11) Acrolein	7.609	56	102633	284.29 ug/L	98
12) Iodomethane	7.314	142	422894	37.69 ug/L	97
13) Carbon Disulfide	7.125	76	720217	49.32 ug/L #	91
14) 3-chloropropene	7.831	41	643513	46.53 ug/L #	93
15) Acetone	8.061	43	76514	40.13 ug/L	95
16) Methylene Chloride	7.987	84	293322	44.49 ug/L #	69
17) Methyl Acetate	8.226	43	201366	38.31 ug/L #	91
18) t-1,2-Dichloroethene	8.234	96	355874	47.41 ug/L	92
19) Methyl tert-butyl ether	8.373	73	598662	42.98 ug/L	88
20) Acetonitrile	8.776	41	321339	341.50 ug/L	98
21) Diisopropyl ether	8.899	45	1383301	42.33 ug/L #	94
22) Chloroprene	9.113	88	300877	48.74 ug/L	87
23) 1,1-Dichloroethane	9.154	63	677831	48.60 ug/L	99
24) Acrylonitrile	9.220	53	984446	369.68 ug/L	99
25) Vinyl Acetate	9.425	43	783289	39.21 ug/L	98
26) c-1,2-Dichloroethene	9.844	96	417779	50.62 ug/L	92
27) 2,2-Dichloropropane	9.992	77	557351	62.10 ug/L	95
28) Bromochloromethane	10.099	128	181001	46.04 ug/L	98
29) Cyclohexane	10.124	56	1023144	49.67 ug/L #	92
30) Chloroform	10.157	83	656608	59.37 ug/L #	94
32) Dibromofluoromethane	10.378	113	340134	50.11 ug/L	94
33) 2-Butanone	10.518	72	20787	40.25 ug/L #	48
34) 1,1,1-Trichloroethane	10.444	97	648931	59.25 ug/L	94
35) 1,1-Dichloropropene	10.576	75	512564	55.32 ug/L	90
36) Propionitrile	10.888	54	485577	463.50 ug/L #	67
37) Methacrylonitrile	10.913	41	2287424	469.64 ug/L	92
38) Isobutyl Alcohol	10.937	43	660380	763.90 ug/L #	96
40) Carbon Tetrachloride	10.362	117	556164	53.10 ug/L	98
41) Benzene	10.880	78	1574001	48.63 ug/L	99
43) d4-1,2-Dichloroethane	11.028	65	362999	48.70 ug/L #	82
44) 1,2-Dichloroethane	11.102	62	515985	56.11 ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB003.D
Acq On : 7 Aug 2014 9:48 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 08 08:21:45 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

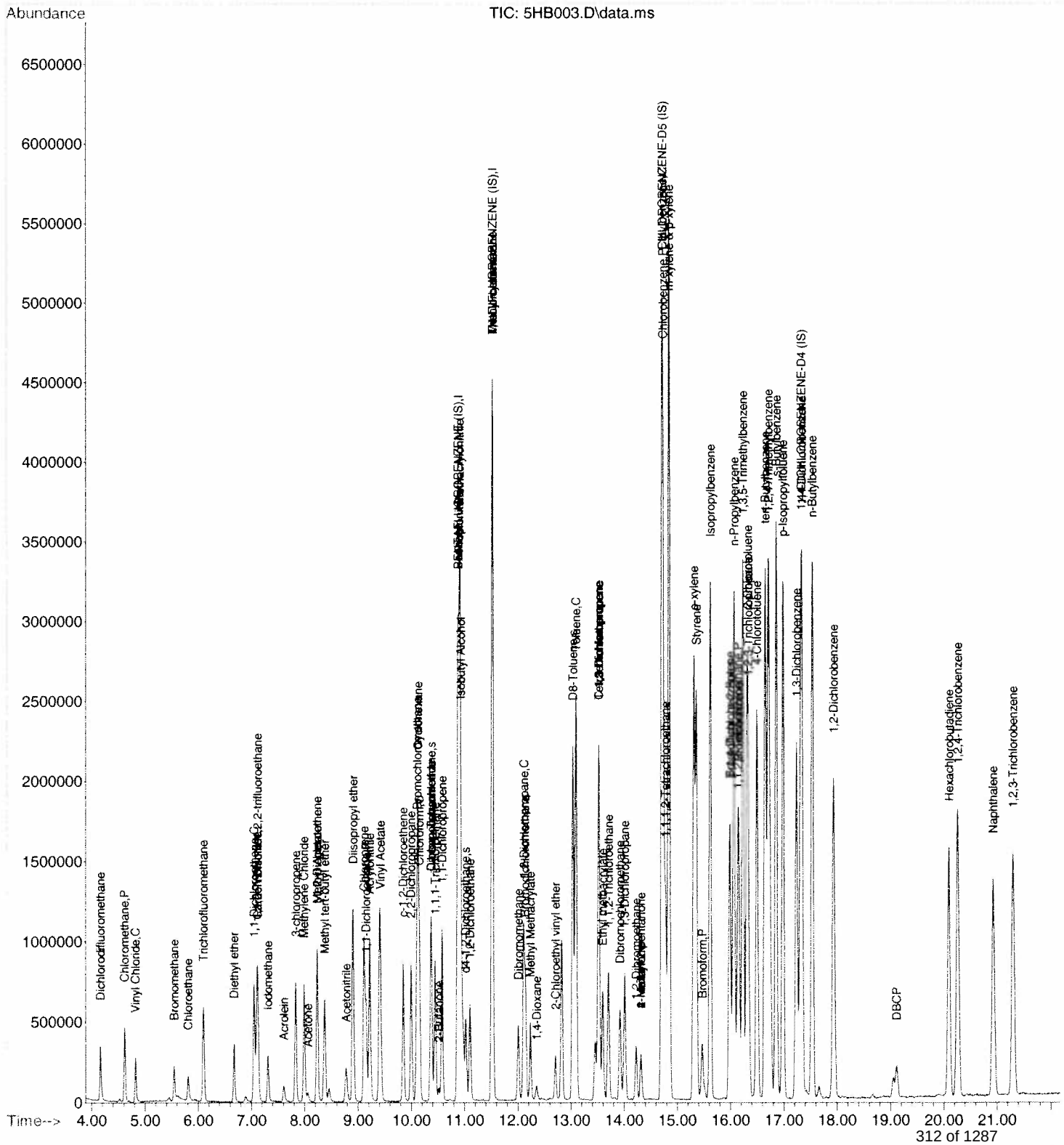
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	550112	50.63 ug/L	95
46) Methyl cyclohexane	11.529	83	939866	48.78 ug/L	89
47) Dibromomethane	12.005	93	201852	53.95 ug/L	92
48) 1,2-Dichloropropane	12.104	63	497645	49.83 ug/L	92
49) Bromodichloromethane	12.137	83	556168	62.12 ug/L #	88
50) Methyl Methacrylate	12.235	69	175354	44.09 ug/L	79
51) 1,4-Dioxane	12.342	88	79176	1023.44 ug/L	90
52) 2-Chloroethyl vinyl ether	12.704	63	140158	39.83 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	561342	52.95 ug/L	96
55) D8-Toluene	13.032	98	1969283	56.85 ug/L #	91
56) 4-Methyl-2-pentanone	14.314	100	27458	49.49 ug/L	72
58) Toluene	13.090	92	1522592	52.07 ug/L	97
59) T-1,3-Dichloropropene	13.509	75	561342	54.00 ug/L	92
60) Tetrachloroethene	13.525	164	567741	54.16 ug/L	97
61) Ethyl methacrylate	13.591	69	391136	47.75 ug/L	99
62) 1,1,2-Trichloroethane	13.706	97	377433	52.44 ug/L	92
63) Dibromochloromethane	13.920	129	450790	51.91 ug/L #	97
64) 1,3-Dichloropropane	14.010	76	590116	48.94 ug/L	87
65) 1,2-Dibromoethane	14.224	107	364211	49.36 ug/L	100
66) 2-Hexanone	14.314	43	256448	39.16 ug/L #	99
67) Ethylbenzene	14.709	106	1066034	57.91 ug/L	99
68) Chlorobenzene	14.733	112	1832214	51.35 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.783	131	573381	53.16 ug/L	99
70) m-xylene & p-xylene	14.840	106	2716126	117.22 ug/L	97
71) o-xylene	15.309	106	1342732	58.27 ug/L	98
72) Styrene	15.358	104	2138923	54.40 ug/L #	91
73) Bromoform	15.465	173	278195	58.15 ug/L	99
74) Isopropylbenzene	15.621	105	3474329	53.61 ug/L	100
76) Bromofluorobenzene	15.982	95	800620	64.45 ug/L	94
77) n-Propylbenzene	16.064	91	4061027	55.17 ug/L	99
78) Bromobenzene	16.155	156	805809	54.65 ug/L #	86
79) 1,1,2,2-Tetrachloroethane	16.130	83	457184	52.86 ug/L	98
80) 1,2,3-Trichloropropane	16.336	61	159616	51.31 ug/L #	81
81) T-1,4-Dichloro-2-Butene	15.999	53	223264	44.32 ug/L	90
83) 1,3,5-Trimethylbenzene	16.229	105	3023558	51.62 ug/L	99
84) 2-Chlorotoluene	16.311	91	2367934	54.45 ug/L	97
85) 4-Chlorotoluene	16.492	91	2409619	54.93 ug/L	98
86) tert-Butylbenzene	16.648	119	3584403	49.47 ug/L	100
87) 1,2,4-Trimethylbenzene	16.705	105	3126612	52.16 ug/L	91
88) p-Isopropyltoluene	16.977	119	3428094	49.40 ug/L	100
89) s-Butylbenzene	16.853	105	4360866	52.29 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	1911552	52.63 ug/L	97
91) 1,4-Dichlorobenzene	17.338	146	1856654	51.42 ug/L #	92
92) n-Butylbenzene	17.535	91	3352784	54.11 ug/L	98
93) 1,2-Dichlorobenzene	17.930	146	1791775	52.72 ug/L	96
94) DBCP	19.113	157	114774	45.09 ug/L	94
95) Hexachlorobutadiene	20.099	225	625136	60.28 ug/L	96
96) 1,2,4-Trichlorobenzene	20.263	180	1255914	53.85 ug/L	98
97) Naphthalene	20.929	128	2490897	49.34 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	1114899	52.94 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB003.D
Acq On : 7 Aug 2014 9:48 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 08 08:21:45 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB004.D
Acq On : 7 Aug 2014 10:21 am
Operator : KKW
Sample : 4H06032-BS1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 08:21:46 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	975904	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1599507	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1766863	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	992511	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	369264	49.91 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 99.82%		
42) d4-1,2-Dichloroethane	11.019	65	374925	46.30 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 92.60%		
54) D8-Toluene	13.033	98	2069800	55.00 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 110.00%		
75) Bromofluorobenzene	15.982	95	813594	71.92 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 143.84%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.166	85	176295	21.31 ug/L	97
3) Chloromethane	4.610	50	249271	17.14 ug/L	99
4) Vinyl Chloride	4.816	62	154476	15.89 ug/L	98
5) Bromomethane	5.547	94	67703	19.36 ug/L #	90
6) Chloroethane	5.818	64	80214	20.51 ug/L	96
7) Trichlorofluoromethane	6.097	101	241300	21.12 ug/L	93
8) Diethyl ether	6.673	59	71315	10.98 ug/L	93
9) 1,1-Dichloroethene	7.051	96	84833	12.35 ug/L	92
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	101148	14.95 ug/L	98
11) Acrolein	7.609	56	50181	127.51 ug/L	98
12) Iodomethane	7.314	142	131853	10.78 ug/L	98
13) Carbon Disulfide	7.125	76	231988	14.57 ug/L #	88
14) 3-chloropropene	7.831	41	228524	15.16 ug/L #	96
15) Acetone	8.061	43	30307	14.58 ug/L	96
16) Methylene Chloride	7.996	84	104655	14.77 ug/L #	62
17) Methyl Acetate	8.234	43	74106	12.93 ug/L #	88
18) t-1,2-Dichloroethene	8.242	96	123368	15.08 ug/L	90
19) Methyl tert-butyl ether	8.374	73	206887	13.62 ug/L	89
20) Acetonitrile	8.776	41	15476	15.09 ug/L #	93
21) Diisopropyl ether	8.908	45	470438	13.21 ug/L #	92
22) Chloroprene	9.113	88	105310	15.65 ug/L	76
23) 1,1-Dichloroethane	9.154	63	253445	16.67 ug/L	98
24) Acrylonitrile	9.220	53	43477	14.98 ug/L	97
25) Vinyl Acetate	9.434	43	199579	9.17 ug/L #	96
26) c-1,2-Dichloroethene	9.844	96	151529	16.84 ug/L	84
27) 2,2-Dichloropropane	9.992	77	201755	20.62 ug/L	97
28) Bromochloromethane	10.099	128	67693	15.79 ug/L	99
29) Cyclohexane	10.124	56	311385	13.87 ug/L #	90
30) Chloroform	10.157	83	246601	20.46 ug/L #	92
32) Dibromofluoromethane	10.378	113	369264	49.91 ug/L	94
33) 2-Butanone	10.518	72	7747	13.76 ug/L #	49
34) 1,1,1-Trichloroethane	10.444	97	225723	18.90 ug/L	94
35) 1,1-Dichloropropene	10.576	75	176224	17.45 ug/L #	85
36) Propionitrile	10.888	54	22850	20.01 ug/L #	1
37) Methacrylonitrile	10.913	41	130453	24.57 ug/L	92
38) Isobutyl Alcohol	10.937	43	138453	146.91 ug/L #	88
40) Carbon Tetrachloride	10.362	117	198856	17.48 ug/L	98
41) Benzene	10.880	78	594898	16.92 ug/L	98
43) d4-1,2-Dichloroethane	11.019	65	374925	46.30 ug/L #	83
44) 1,2-Dichloroethane	11.102	62	188077	18.82 ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB004.D
Acq On : 7 Aug 2014 10:21 am
Operator : KKW
Sample : 4H06032-BS1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 08:21:46 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

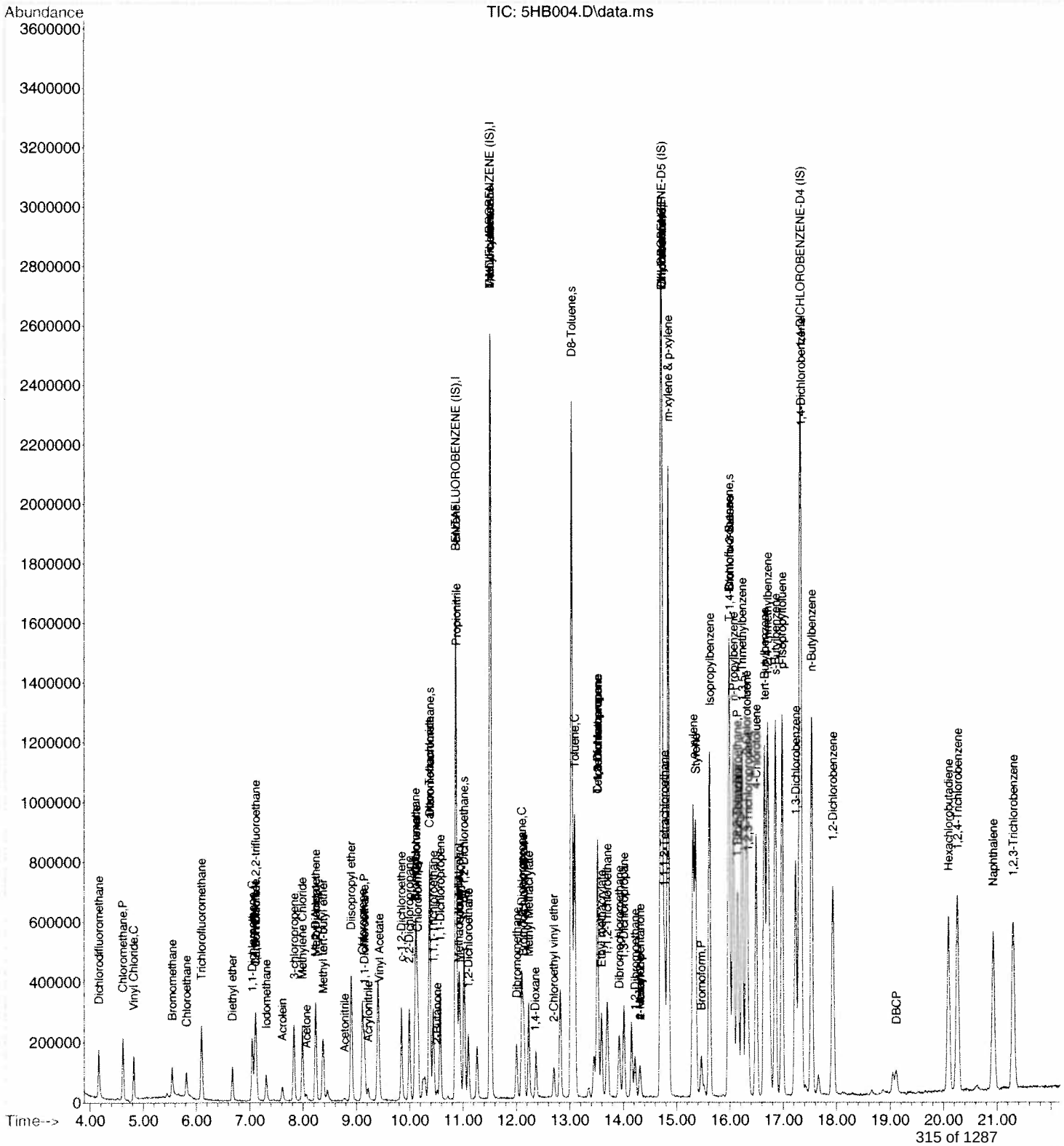
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	202448	17.15 ug/L	90
46) Methyl cyclohexane	11.521	83	329687	15.75 ug/L	84
47) Dibromomethane	12.005	93	78301	19.26 ug/L	96
48) 1,2-Dichloropropane	12.104	63	188488	17.37 ug/L #	91
49) Bromodichloromethane	12.137	83	202510	20.82 ug/L #	90
50) Methyl Methacrylate	12.235	69	125686	29.09 ug/L #	73
51) 1,4-Dioxane	12.342	88	2566	30.53 ug/L #	61
52) 2-Chloroethyl vinyl ether	12.704	63	53434	13.98 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	228040	19.80 ug/L	94
55) D8-Toluene	13.033	98	2069800	55.00 ug/L #	91
56) 4-Methyl-2-pentanone	14.314	100	13105	21.74 ug/L #	53
58) Toluene	13.090	92	560837	20.86 ug/L	96
59) T-1,3-Dichloropropene	13.509	75	228040	23.86 ug/L #	91
60) Tetrachloroethene	13.517	164	211360	21.93 ug/L	98
61) Ethyl methacrylate	13.591	69	160470	21.31 ug/L	98
62) 1,1,2-Trichloroethane	13.706	97	156082	23.58 ug/L	88
63) Dibromochloromethane	13.920	129	164628	20.61 ug/L #	96
64) 1,3-Dichloropropane	14.010	76	236796	21.36 ug/L	86
65) 1,2-Dibromoethane	14.216	107	143557	21.16 ug/L	99
66) 2-Hexanone	14.314	43	94416	15.68 ug/L #	88
67) Ethylbenzene	14.709	106	397877	23.50 ug/L	97
68) Chlorobenzene	14.733	112	683980	20.85 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.775	131	211520	21.32 ug/L	96
70) m-xylene & p-xylene	14.840	106	1003146	47.08 ug/L	97
71) o-xylene	15.317	106	468599	22.12 ug/L	95
72) Styrene	15.358	104	771790	21.35 ug/L #	90
73) Bromoform	15.465	173	101624	23.10 ug/L	98
74) Isopropylbenzene	15.621	105	1260879	21.16 ug/L	99
76) Bromofluorobenzene	15.982	95	813594	71.92 ug/L	95
77) n-Propylbenzene	16.065	91	1491341	22.03 ug/L	98
78) Bromobenzene	16.155	156	303073	22.35 ug/L #	84
79) 1,1,2,2-Tetrachloroethane	16.130	83	179929	22.62 ug/L	98
80) 1,2,3-Trichloropropane	16.344	61	61142	21.37 ug/L #	75
81) T-1,4-Dichloro-2-Butene	15.999	53	78673	16.98 ug/L #	74
83) 1,3,5-Trimethylbenzene	16.229	105	1075093	18.60 ug/L	100
84) 2-Chlorotoluene	16.311	91	822850	19.17 ug/L	98
85) 4-Chlorotoluene	16.492	91	874503	20.20 ug/L	99
86) tert-Butylbenzene	16.648	119	1259851	17.62 ug/L	99
87) 1,2,4-Trimethylbenzene	16.705	105	1127567	19.06 ug/L	91
88) p-Isopropyltoluene	16.985	119	1341406	19.59 ug/L	99
89) s-Butylbenzene	16.853	105	1531879	18.61 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	684128	19.08 ug/L	95
91) 1,4-Dichlorobenzene	17.338	146	699477	19.63 ug/L	99
92) n-Butylbenzene	17.527	91	1224345	20.02 ug/L	99
93) 1,2-Dichlorobenzene	17.938	146	643658	19.19 ug/L	95
94) DBCP	19.113	157	45578	18.14 ug/L	99
95) Hexachlorobutadiene	20.091	225	223588	21.85 ug/L	95
96) 1,2,4-Trichlorobenzene	20.263	180	470626	20.45 ug/L	97
97) Naphthalene	20.929	128	975569	19.58 ug/L	99
98) 1,2,3-Trichlorobenzene	21.307	180	418966	20.16 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB004.D
Acq On : 7 Aug 2014 10:21 am
Operator : KKW
Sample : 4H06032-BS1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 08 08:21:46 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB005.D
Acq On : 7 Aug 2014 10:49 am
Operator : KKW
Sample : 4H06032-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 08 08:30:24 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	1001464	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1616567	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1639733	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	987464	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	373335	49.17 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 98.34%		
42) d4-1,2-Dichloroethane	11.019	65	388198	47.43 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 94.86%		
54) D8-Toluene	13.032	98	2109301	55.46 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 110.92%		
75) Bromofluorobenzene	15.982	95	804260	77.04 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 154.08%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	4.627	50	1677	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.979	41	1270	N.D.	
15) Acetone	8.061	43	6477	3.04 ug/L	91
16) Methylene Chloride	7.995	84	8841	1.22 ug/L #	63
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	8.924	45	1372	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	9.877	77	1450	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	373335	49.17 ug/L	93
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	5577	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	388198	47.43 ug/L #	82
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB005.D
Acq On : 7 Aug 2014 10:49 am
Operator : KKW
Sample : 4H06032-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 08 08:30:24 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

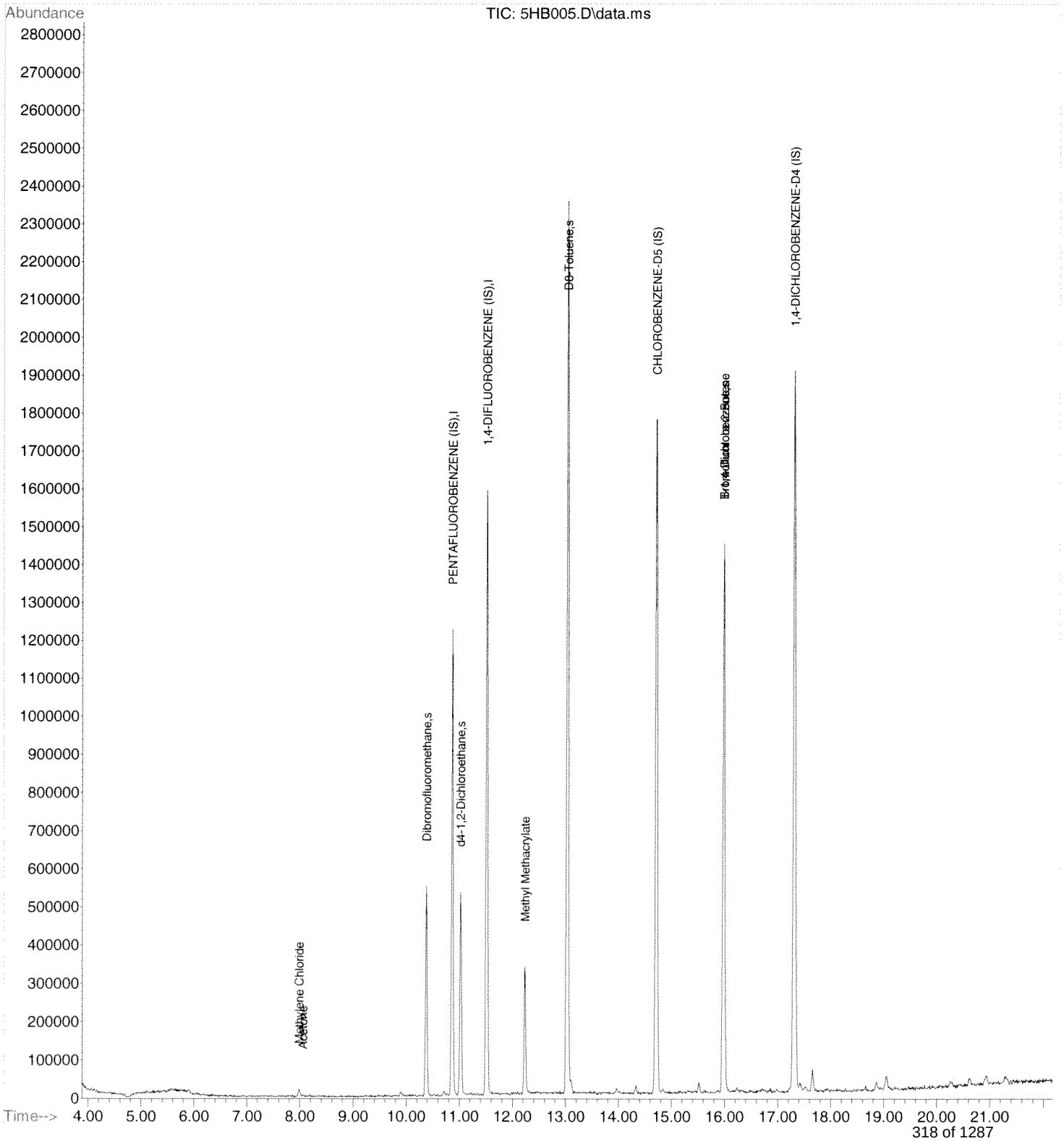
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	12.235	69	132171	30.26 ug/L	79
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	2109301	55.46 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	3870	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.700	106	1169	N.D.	
68) Chlorobenzene	14.725	112	1721	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.309	106	2391	N.D.	
72) Styrene	15.358	104	3973	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.629	105	5285	N.D.	
76) Bromofluorobenzene	15.982	95	804260	77.04 ug/L	95
77) n-Propylbenzene	16.048	91	7995	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	15.982	53	1126	0.26 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	4495	N.D.	
84) 2-Chlorotoluene	16.319	91	3649	N.D.	
85) 4-Chlorotoluene	16.500	91	5192	N.D.	
86) tert-Butylbenzene	16.648	119	3828	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	7046	N.D.	
88) p-Isopropyltoluene	16.977	119	6838	N.D.	
89) s-Butylbenzene	16.861	105	6045	N.D.	
90) 1,3-Dichlorobenzene	17.239	146	4019	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D. d	
92) n-Butylbenzene	17.535	91	9239	N.D.	
93) 1,2-Dichlorobenzene	17.946	146	4758	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB005.D
Acq On : 7 Aug 2014 10:49 am
Operator : KKW
Sample : 4H06032-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 08 08:30:24 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB006.D
Acq On : 7 Aug 2014 11:17 am
Operator : KKW
Sample : A404270-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 08:31:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	583776	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	955577	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	947091	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	515652	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	224425	50.70 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 101.40%		
42) d4-1,2-Dichloroethane	11.019	65	238160	49.23 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 98.46%		
54) D8-Toluene	13.032	98	1248019	55.51 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 111.02%		
75) Bromofluorobenzene	15.982	95	457848	75.84 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 151.68%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.806	41	1082	N.D.	
15) Acetone	8.061	43	28695	23.08 ug/L	93
16) Methylene Chloride	7.979	84	2536	0.60 ug/L	92
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	224425	50.70 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	1776	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	238160	49.23 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB006.D
Acq On : 7 Aug 2014 11:17 am
Operator : KKW
Sample : A404270-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 08:31:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

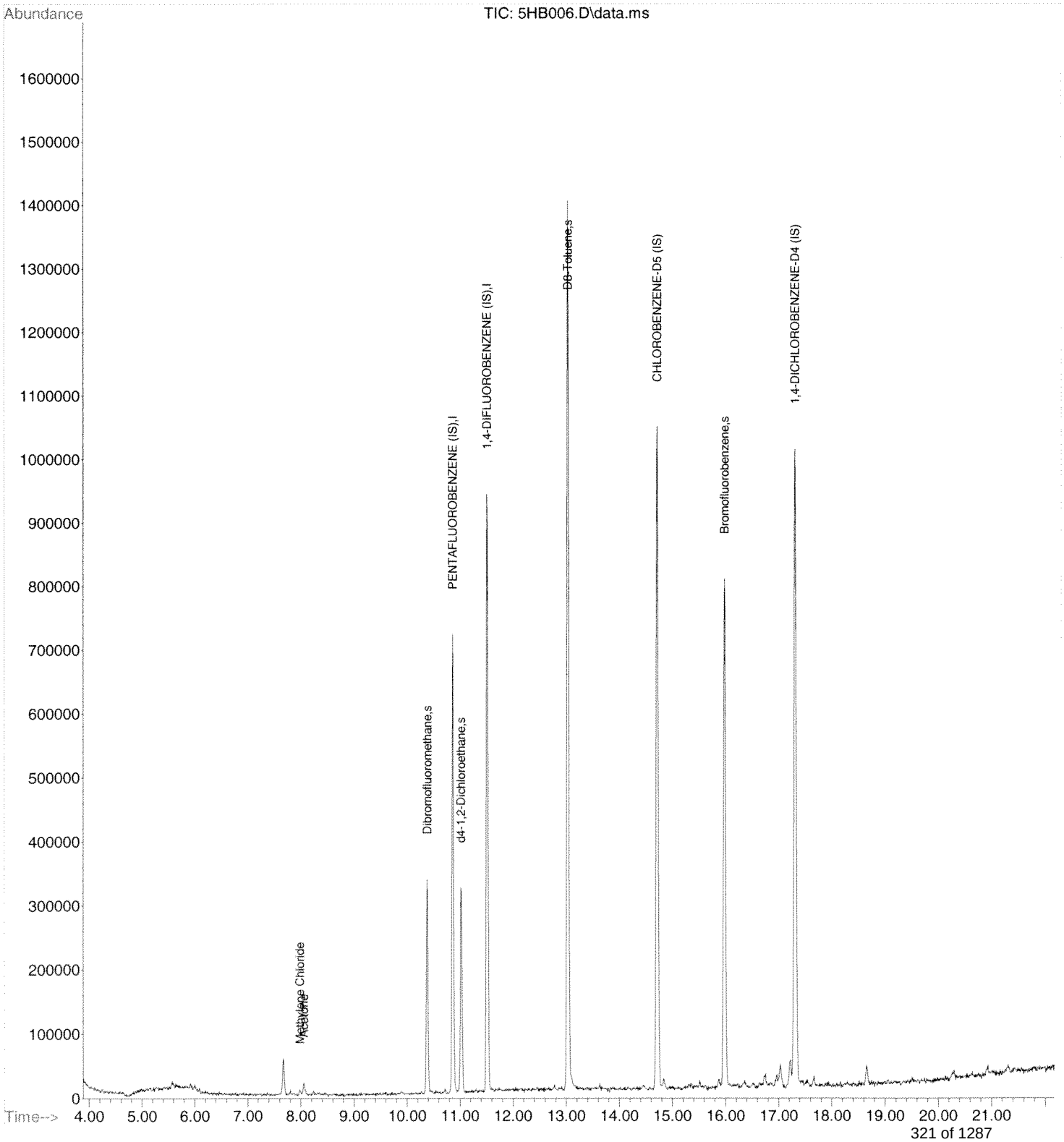
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1248019	55.51 ug/L #	94
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	2644	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D. d	
72) Styrene	15.350	104	2469	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.613	105	2420	N.D.	
76) Bromofluorobenzene	15.982	95	457848	75.84 ug/L	95
77) n-Propylbenzene	16.073	91	4301	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	2284	N.D.	
84) 2-Chlorotoluene	16.327	91	2556	N.D.	
85) 4-Chlorotoluene	16.508	91	2509	N.D.	
86) tert-Butylbenzene	16.656	119	2455	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	3429	N.D.	
88) p-Isopropyltoluene	16.977	119	3967	N.D.	
89) s-Butylbenzene	16.845	105	5048	N.D.	
90) 1,3-Dichlorobenzene	17.231	146	2160	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D. d	
92) n-Butylbenzene	17.544	91	4276	N.D.	
93) 1,2-Dichlorobenzene	17.922	146	1851	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB006.D
Acq On : 7 Aug 2014 11:17 am
Operator : KKW
Sample : A404270-06
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 08 08:31:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB007.D
Acq On : 7 Aug 2014 11:46 am
Operator : KKW
Sample : A404270-28
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 08:32:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	848276	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1385010	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1392571	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	778999	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	327224	50.88 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 101.76%		
42) d4-1,2-Dichloroethane	11.028	65	348033	49.64 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.28%		
54) D8-Toluene	13.033	98	1852156	56.84 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.68%		
75) Bromofluorobenzene	15.982	95	685787	77.38 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 154.76%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.872	41	1498	N.D.	
15) Acetone	8.061	43	34335	19.00 ug/L	97
16) Methylene Chloride	7.979	84	6753	1.10 ug/L #	57
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	327224	50.88 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D. d	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	5482	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	348033	49.64 ug/L #	82
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB007.D
Acq On : 7 Aug 2014 11:46 am
Operator : KKW
Sample : A404270-28
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 08:32:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

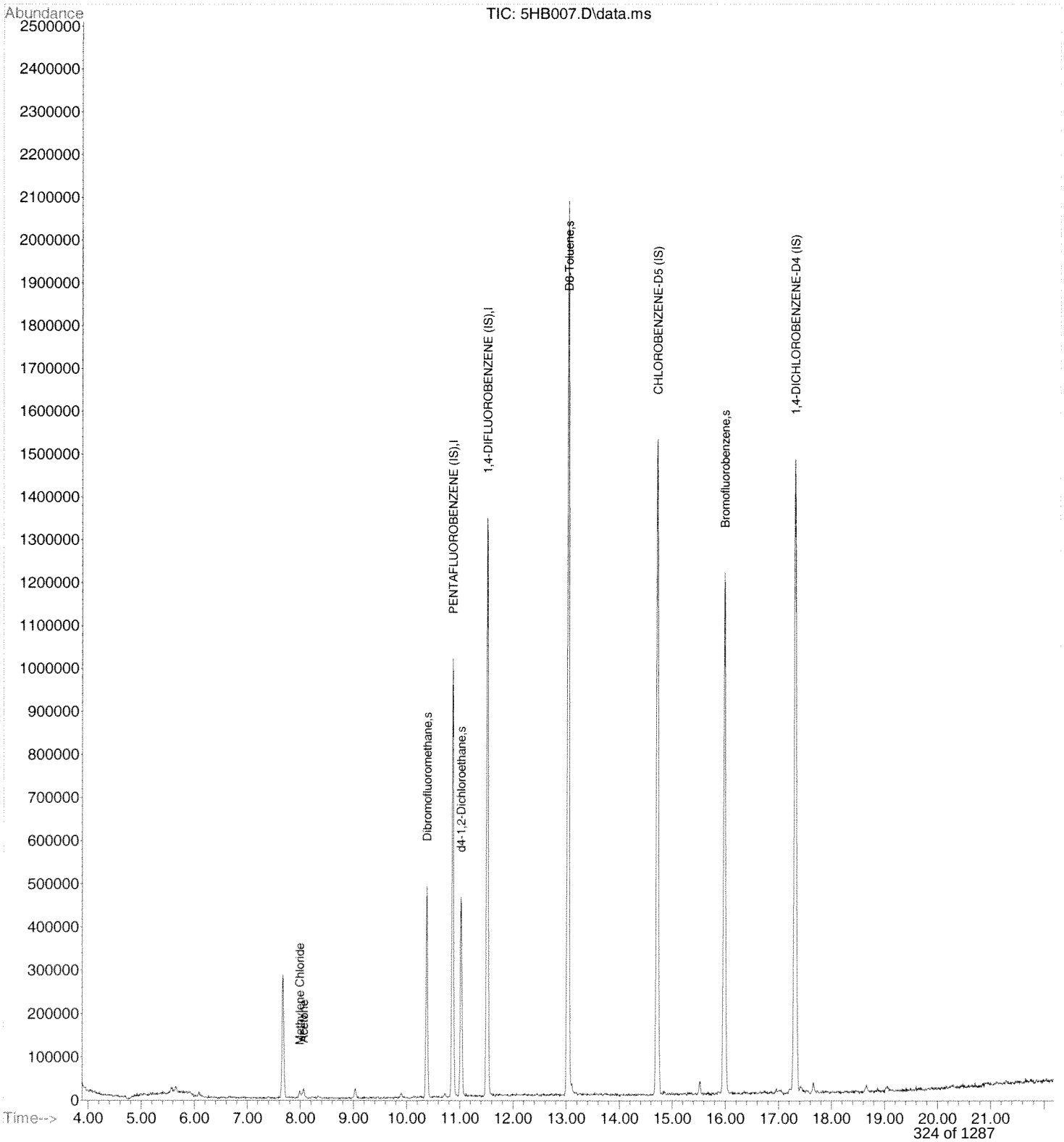
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.033	98	1851740	56.83 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	2078	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.709	106	1046	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.832	106	2645	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.613	105	2050	N.D.	
76) Bromofluorobenzene	15.982	95	685787	77.38 ug/L	95
77) n-Propylbenzene	16.089	91	3304	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	1731	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	16.492	91	1587	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	2717	N.D.	
88) p-Isopropyltoluene	16.985	119	3187	N.D.	
89) s-Butylbenzene	16.845	105	2116	N.D.	
90) 1,3-Dichlorobenzene	17.223	146	1174	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	2496	N.D.	
92) n-Butylbenzene	17.527	91	3340	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.272	180	2926	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	21.323	180	3079	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB007.D
Acq On : 7 Aug 2014 11:46 am
Operator : KKW
Sample : A404270-28
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 08 08:32:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB008.D
Acq On : 7 Aug 2014 12:14 pm
Operator : KKW
Sample : 4H06032-MS1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 08:21:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	909399	50.00	ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1441249	50.00	ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1593349	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	841905	50.00	ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	334035	48.45	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 96.90%			
42) d4-1,2-Dichloroethane	11.019	65	356805	48.90	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 97.80%			
54) D8-Toluene	13.032	98	1881049	55.48	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 110.96%			
75) Bromofluorobenzene	15.982	95	712194	69.62	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 139.24%#			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.158	85	159419	20.68	ug/L	99
3) Chloromethane	4.610	50	178029	13.14	ug/L	97
4) Vinyl Chloride	4.815	62	117715	13.00	ug/L	99
5) Bromomethane	5.539	94	30596	9.39	ug/L	89
6) Chloroethane	5.793	64	72049	19.77	ug/L	98
7) Trichlorofluoromethane	6.089	101	196132	18.43	ug/L	98
8) Diethyl ether	6.672	59	81431	13.45	ug/L	93
9) 1,1-Dichloroethene	7.042	96	91889	14.35	ug/L	85
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	106428	16.88	ug/L	98
11) Acrolein	0.000	56	0	N.D.		
12) Iodomethane	7.305	142	75143	6.59	ug/L	99
13) Carbon Disulfide	7.116	76	207837	14.01	ug/L	92
14) 3-chloropropene	7.831	41	221678	15.78	ug/L	97
15) Acetone	8.053	43	83115	42.91	ug/L	93
16) Methylene Chloride	7.987	84	106056	16.06	ug/L #	69
17) Methyl Acetate	8.225	43	186911	35.01	ug/L #	92
18) t-1,2-Dichloroethene	8.234	96	112180	14.71	ug/L	93
19) Methyl tert-butyl ether	8.373	73	232319	16.42	ug/L #	90
20) Acetonitrile	8.776	41	6861	7.18	ug/L #	53
21) Diisopropyl ether	8.907	45	509513	15.35	ug/L #	93
22) Chloroprene	9.105	88	93731	14.95	ug/L	83
23) 1,1-Dichloroethane	9.146	63	256562	18.11	ug/L	97
24) Acrylonitrile	9.211	53	20565	7.60	ug/L #	91
25) Vinyl Acetate	9.400	43	39711	1.96	ug/L #	96
26) c-1,2-Dichloroethene	9.844	96	138832	16.56	ug/L	87
27) 2,2-Dichloropropane	9.992	77	182918	20.06	ug/L	96
28) Bromochloromethane	10.099	128	71385	17.87	ug/L	94
29) Cyclohexane	10.124	56	313732	14.99	ug/L #	91
30) Chloroform	10.156	83	243887	21.71	ug/L	94
32) Dibromofluoromethane	10.378	113	334035	48.45	ug/L	93
33) 2-Butanone	10.510	72	6035	11.50	ug/L #	18
34) 1,1,1-Trichloroethane	10.444	97	237889	21.38	ug/L	95
35) 1,1-Dichloropropene	10.575	75	165080	17.54	ug/L	90
36) Propionitrile	10.896	54	10783	10.13	ug/L #	1
37) Methacrylonitrile	10.937	41	74384	15.03	ug/L #	67
38) Isobutyl Alcohol	10.937	43	143270	163.14	ug/L #	91
40) Carbon Tetrachloride	10.362	117	201180	19.62	ug/L	97
41) Benzene	10.871	78	540741	17.07	ug/L	97
43) d4-1,2-Dichloroethane	11.019	65	356805	48.90	ug/L #	81
44) 1,2-Dichloroethane	11.101	62	184416	20.49	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB008.D
Acq On : 7 Aug 2014 12:14 pm
Operator : KKW
Sample : 4H06032-MS1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 08:21:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

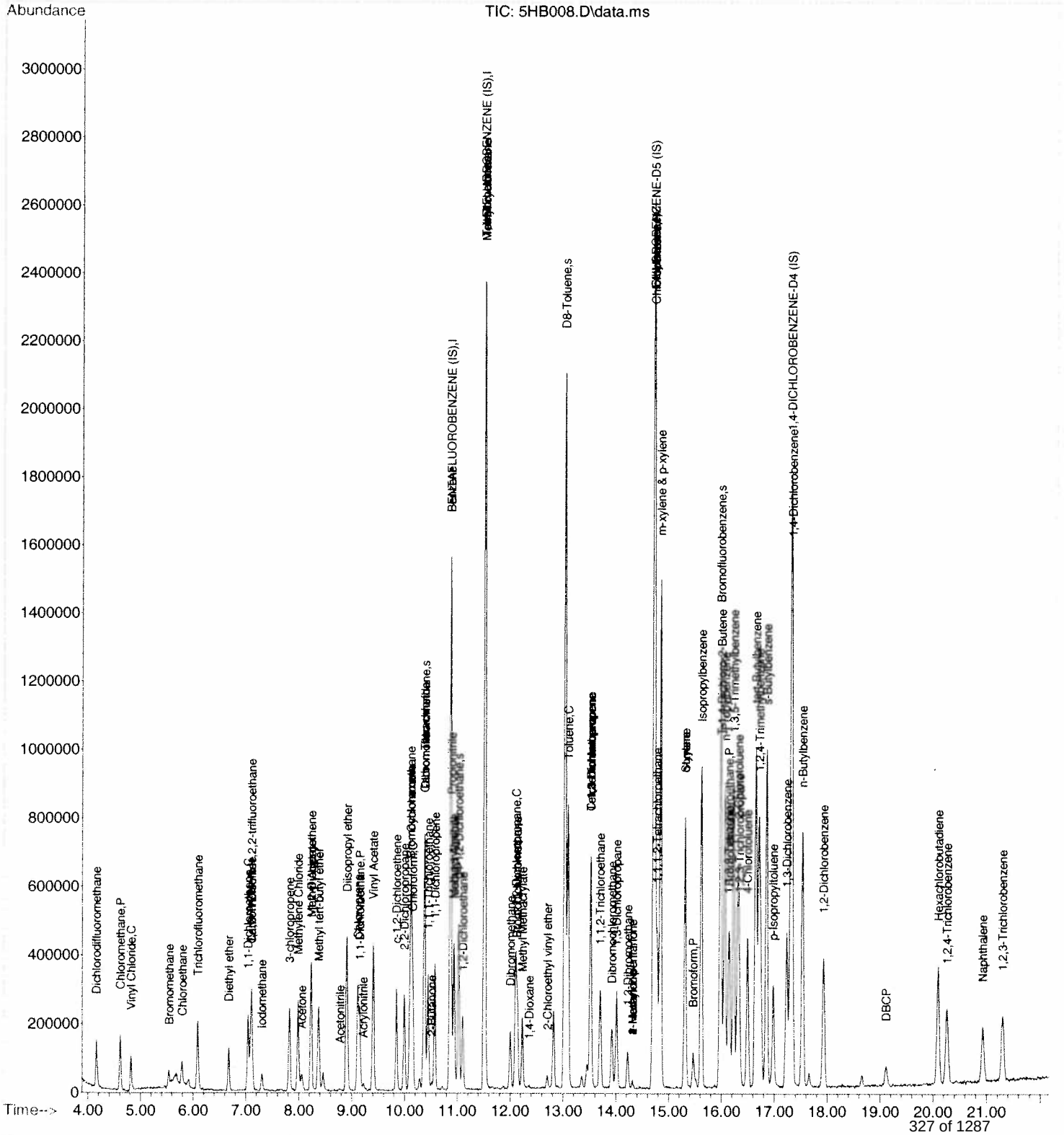
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	184233	17.32 ug/L	92
46) Methyl cyclohexane	11.529	83	308219	16.34 ug/L	88
47) Dibromomethane	12.005	93	72350	19.75 ug/L	94
48) 1,2-Dichloropropane	12.104	63	182451	18.66 ug/L	91
49) Bromodichloromethane	12.137	83	190092	21.69 ug/L #	89
50) Methyl Methacrylate	12.235	69	77003	19.78 ug/L	83
51) 1,4-Dioxane	12.350	88	1167	15.41 ug/L #	1
52) 2-Chloroethyl vinyl ether	12.704	63	18976	5.51 ug/L	97
53) C-1,3-Dichloropropene	13.509	75	145745	14.04 ug/L	96
55) D8-Toluene	13.032	98	1881049	55.48 ug/L #	92
56) 4-Methyl-2-pentanone	14.322	100	1158	2.13 ug/L #	48
58) Toluene	13.090	92	478646	19.74 ug/L	96
59) T-1,3-Dichloropropene	13.509	75	145745	16.91 ug/L	94
60) Tetrachloroethene	13.517	164	187303	21.55 ug/L	98
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	13.698	97	140659	23.57 ug/L	93
63) Dibromochloromethane	13.928	129	141091	19.59 ug/L #	93
64) 1,3-Dichloropropane	14.010	76	208430	20.85 ug/L	90
65) 1,2-Dibromoethane	14.224	107	111919	18.29 ug/L	93
66) 2-Hexanone	14.314	43	17812	3.28 ug/L #	95
67) Ethylbenzene	14.709	106	325075	21.29 ug/L	98
68) Chlorobenzene	14.733	112	489043	16.53 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.774	131	192361	21.50 ug/L	99
70) m-xylene & p-xylene	14.840	106	706605	36.77 ug/L	99
71) o-xylene	15.308	106	378176	19.79 ug/L	96
72) Styrene	15.317	104	23424	0.72 ug/L #	1
73) Bromoform	15.465	173	76388	19.25 ug/L	98
74) Isopropylbenzene	15.621	105	1013045	18.85 ug/L	100
76) Bromofluorobenzene	15.982	95	712194	69.62 ug/L	96
77) n-Propylbenzene	16.064	91	1109934	18.18 ug/L	99
78) Bromobenzene	16.155	156	189698	15.51 ug/L #	84
79) 1,1,2,2-Tetrachloroethane	16.130	83	149556	20.85 ug/L	97
80) 1,2,3-Trichloropropane	16.344	61	47967	18.59 ug/L #	70
81) T-1,4-Dichloro-2-Butene	16.007	53	33478	8.01 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	802775	16.37 ug/L	99
84) 2-Chlorotoluene	16.311	91	563226	15.47 ug/L	97
85) 4-Chlorotoluene	16.500	91	428316	11.66 ug/L	97
86) tert-Butylbenzene	16.648	119	1036206	17.08 ug/L	98
87) 1,2,4-Trimethylbenzene	16.705	105	715143	14.25 ug/L #	79
88) p-Isopropyltoluene	16.985	119	288110	4.96 ug/L	97
89) s-Butylbenzene	16.853	105	1190816	17.06 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	366689	12.06 ug/L	96
91) 1,4-Dichlorobenzene	17.338	146	346430	11.46 ug/L #	91
92) n-Butylbenzene	17.527	91	729124	14.06 ug/L	97
93) 1,2-Dichlorobenzene	17.930	146	326277	11.47 ug/L	98
94) DBCP	19.105	157	32572	15.28 ug/L	92
95) Hexachlorobutadiene	20.099	225	133774	15.41 ug/L	96
96) 1,2,4-Trichlorobenzene	20.255	180	155612	7.97 ug/L	94
97) Naphthalene	20.929	128	273856	6.48 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	135951	7.71 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB008.D
Acq On : 7 Aug 2014 12:14 pm
Operator : KKW
Sample : 4H06032-MS1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 08 08:21:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB009.D
Acq On : 7 Aug 2014 12:42 pm
Operator : KKW
Sample : 4H06032-MSD1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 08 08:21:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	919432	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1478480	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1591068	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	848910	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	356059	51.08 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 102.16%		
42) d4-1,2-Dichloroethane	11.019	65	378412	50.56 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 101.12%		
54) D8-Toluene	13.032	98	1962197	56.41 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 112.82%		
75) Bromofluorobenzene	15.982	95	723265	70.91 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 141.82%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	140673	18.05 ug/L	99
3) Chloromethane	4.610	50	147132	10.74 ug/L	100
4) Vinyl Chloride	4.815	62	115416	12.60 ug/L	100
5) Bromomethane	5.539	94	27626	8.39 ug/L #	95
6) Chloroethane	5.793	64	65846	17.87 ug/L	97
7) Trichlorofluoromethane	6.089	101	172995	16.08 ug/L	99
8) Diethyl ether	6.681	59	78033	12.75 ug/L	95
9) 1,1-Dichloroethene	7.042	96	76564	11.83 ug/L	85
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	92321	14.48 ug/L	95
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	7.313	142	59338	5.15 ug/L	98
13) Carbon Disulfide	7.116	76	180827	12.06 ug/L	92
14) 3-chloropropene	7.823	41	181054	12.75 ug/L #	96
15) Acetone	8.061	43	64480	32.93 ug/L	97
16) Methylene Chloride	7.987	84	95696	14.34 ug/L #	65
17) Methyl Acetate	8.226	43	148975	27.60 ug/L #	93
18) t-1,2-Dichloroethene	8.234	96	100947	13.10 ug/L	83
19) Methyl tert-butyl ether	8.373	73	213227	14.90 ug/L #	88
20) Acetonitrile	8.760	41	8933	9.24 ug/L #	96
21) Diisopropyl ether	8.908	45	441299	13.15 ug/L #	93
22) Chloroprene	9.113	88	76890	12.13 ug/L	78
23) 1,1-Dichloroethane	9.146	63	219631	15.33 ug/L	98
24) Acrylonitrile	9.228	53	16003	5.85 ug/L #	89
25) Vinyl Acetate	9.409	43	35931	1.75 ug/L #	82
26) c-1,2-Dichloroethene	9.844	96	117217	13.83 ug/L	92
27) 2,2-Dichloropropane	9.992	77	155880	16.91 ug/L	95
28) Bromochloromethane	10.099	128	60644	15.02 ug/L	98
29) Cyclohexane	10.124	56	263568	12.46 ug/L #	91
30) Chloroform	10.156	83	203468	17.91 ug/L	96
32) Dibromofluoromethane	10.378	113	356059	51.08 ug/L	95
33) 2-Butanone	10.510	72	3795	7.15 ug/L #	44
34) 1,1,1-Trichloroethane	10.444	97	195077	17.34 ug/L	94
35) 1,1-Dichloropropene	10.576	75	137055	14.40 ug/L	90
36) Propionitrile	10.888	54	9793	9.10 ug/L #	1
37) Methacrylonitrile	10.937	41	63173	12.63 ug/L #	53
38) Isobutyl Alcohol	10.937	43	127297	143.37 ug/L #	91
40) Carbon Tetrachloride	10.362	117	159070	15.12 ug/L	92
41) Benzene	10.880	78	445633	13.71 ug/L	96
43) d4-1,2-Dichloroethane	11.019	65	378412	50.56 ug/L #	83
44) 1,2-Dichloroethane	11.101	62	157735	17.08 ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB009.D
Acq On : 7 Aug 2014 12:42 pm
Operator : KKW
Sample : 4H06032-MSD1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 08 08:21:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

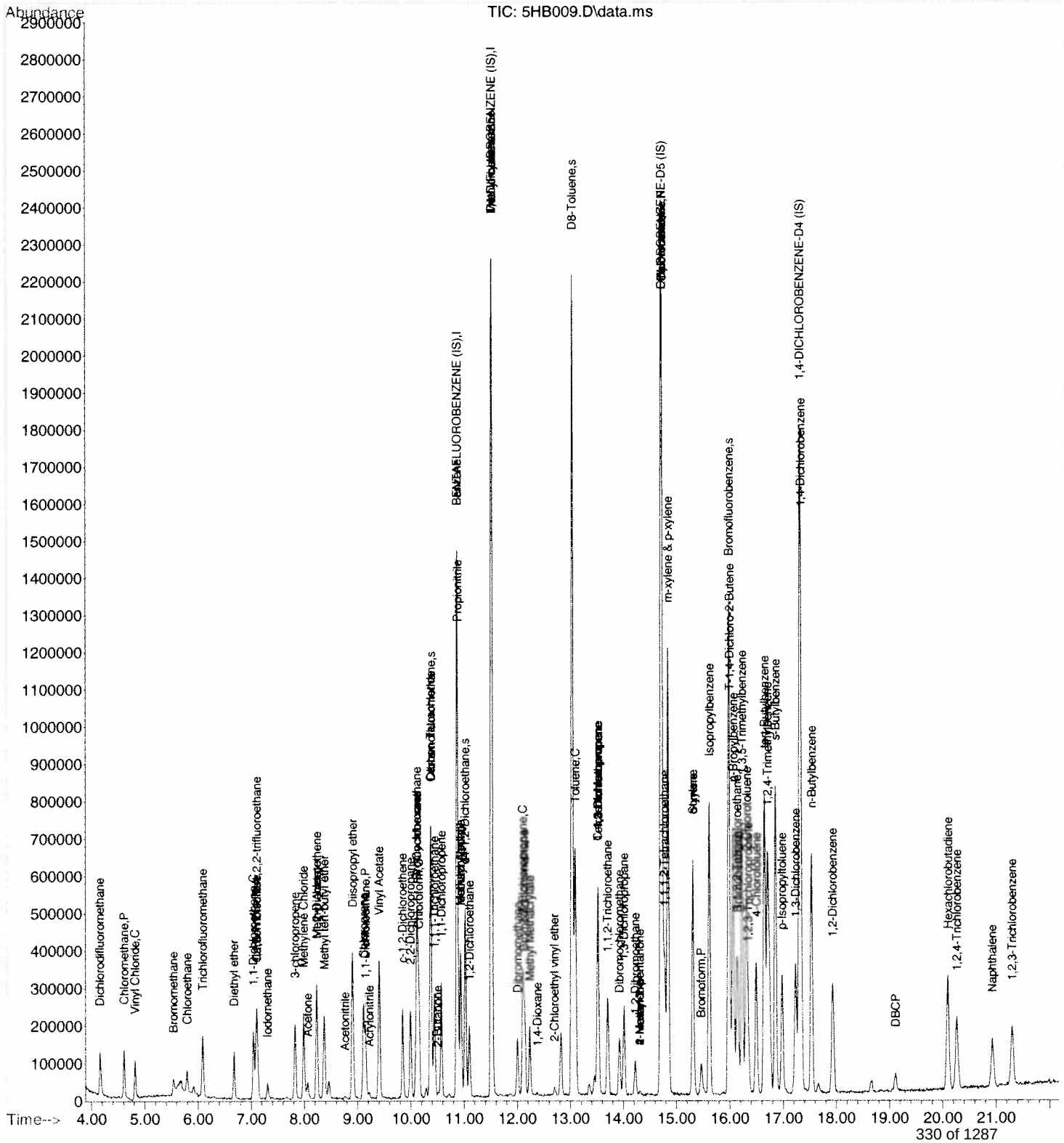
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	157462	14.43 ug/L	88
46) Methyl cyclohexane	11.520	83	266595	13.78 ug/L	87
47) Dibromomethane	12.005	93	66631	17.73 ug/L	91
48) 1,2-Dichloropropane	12.104	63	156396	15.59 ug/L #	92
49) Bromodichloromethane	12.137	83	160913	17.90 ug/L #	90
50) Methyl Methacrylate	12.235	69	64634	16.18 ug/L	88
51) 1,4-Dioxane	12.367	88	3023	38.91 ug/L #	65
52) 2-Chloroethyl vinyl ether	12.695	63	12157	3.44 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	117948	11.08 ug/L	91
55) D8-Toluene	13.032	98	1961574	56.39 ug/L #	92
56) 4-Methyl-2-pentanone	14.314	100	1127	2.02 ug/L #	52
58) Toluene	13.090	92	389472	16.08 ug/L	97
59) T-1,3-Dichloropropene	13.509	75	117948	13.70 ug/L	94
60) Tetrachloroethene	13.525	164	155437	17.91 ug/L	97
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	13.706	97	126869	21.29 ug/L	90
63) Dibromochloromethane	13.920	129	123636	17.19 ug/L #	95
64) 1,3-Dichloropropane	14.010	76	185516	18.58 ug/L #	87
65) 1,2-Dibromoethane	14.224	107	97704	15.99 ug/L #	99
66) 2-Hexanone	14.306	43	10307	1.90 ug/L #	96
67) Ethylbenzene	14.709	106	258575	16.96 ug/L	99
68) Chlorobenzene	14.733	112	378750	12.82 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.774	131	158298	17.72 ug/L	99
70) m-xylene & p-xylene	14.840	106	573418	29.88 ug/L	96
71) o-xylene	15.308	106	305649	16.02 ug/L	96
72) Styrene	15.317	104	16334	0.50 ug/L #	1
73) Bromoform	15.465	173	65040	16.42 ug/L	98
74) Isopropylbenzene	15.621	105	820195	15.28 ug/L	99
76) Bromofluorobenzene	15.982	95	723265	70.91 ug/L	95
77) n-Propylbenzene	16.064	91	893783	14.66 ug/L	99
78) Bromobenzene	16.155	156	144643	11.85 ug/L #	82
79) 1,1,2,2-Tetrachloroethane	16.130	83	135546	18.92 ug/L	99
80) 1,2,3-Trichloropropane	16.352	61	41395	16.07 ug/L #	75
81) T-1,4-Dichloro-2-Butene	16.007	53	24382	5.85 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	650670	13.16 ug/L	97
84) 2-Chlorotoluene	16.311	91	460608	12.55 ug/L	99
85) 4-Chlorotoluene	16.500	91	347589	9.39 ug/L	98
86) tert-Butylbenzene	16.648	119	829028	13.56 ug/L	99
87) 1,2,4-Trimethylbenzene	16.705	105	578107	11.43 ug/L #	88
88) p-Isopropyltoluene	16.985	119	316364	5.40 ug/L	99
89) s-Butylbenzene	16.853	105	987224	14.02 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	291027	9.49 ug/L	95
91) 1,4-Dichlorobenzene	17.338	146	275858	9.05 ug/L #	90
92) n-Butylbenzene	17.535	91	612124	11.70 ug/L	99
93) 1,2-Dichlorobenzene	17.930	146	258742	9.02 ug/L	95
94) DBCP	19.113	157	27697	12.89 ug/L	97
95) Hexachlorobutadiene	20.099	225	115489	13.19 ug/L	95
96) 1,2,4-Trichlorobenzene	20.263	180	127021	6.45 ug/L	98
97) Naphthalene	20.929	128	225741	5.30 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	116041	6.53 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB009.D
Acq On : 7 Aug 2014 12:42 pm
Operator : KKW
Sample : 4H06032-MSD1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 08 08:21:51 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB010.D
Acq On : 7 Aug 2014 1:11 pm
Operator : KKW
Sample : A404270-07
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 08 08:34:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	956568	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1557590	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1580379	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	893482	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.379	113	326283	44.99 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 89.98%		
42) d4-1,2-Dichloroethane	11.019	65	356832	45.25 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 90.50%		
54) D8-Toluene	13.033	98	1880472	51.32 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 102.64%		
75) Bromofluorobenzene	15.982	95	685499	67.36 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 134.72%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.675	41	1503	N.D.	
15) Acetone	0.000	43	0	N.D. d	
16) Methylene Chloride	0.000	84	0	N.D.	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.379	113	326283	44.99 ug/L	91
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D. d	
37) Methacrylonitrile	10.765	41	1004	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.872	78	2341	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	356832	45.25 ug/L #	82
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB010.D
Acq On : 7 Aug 2014 1:11 pm
Operator : KKW
Sample : A404270-07
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 08 08:34:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

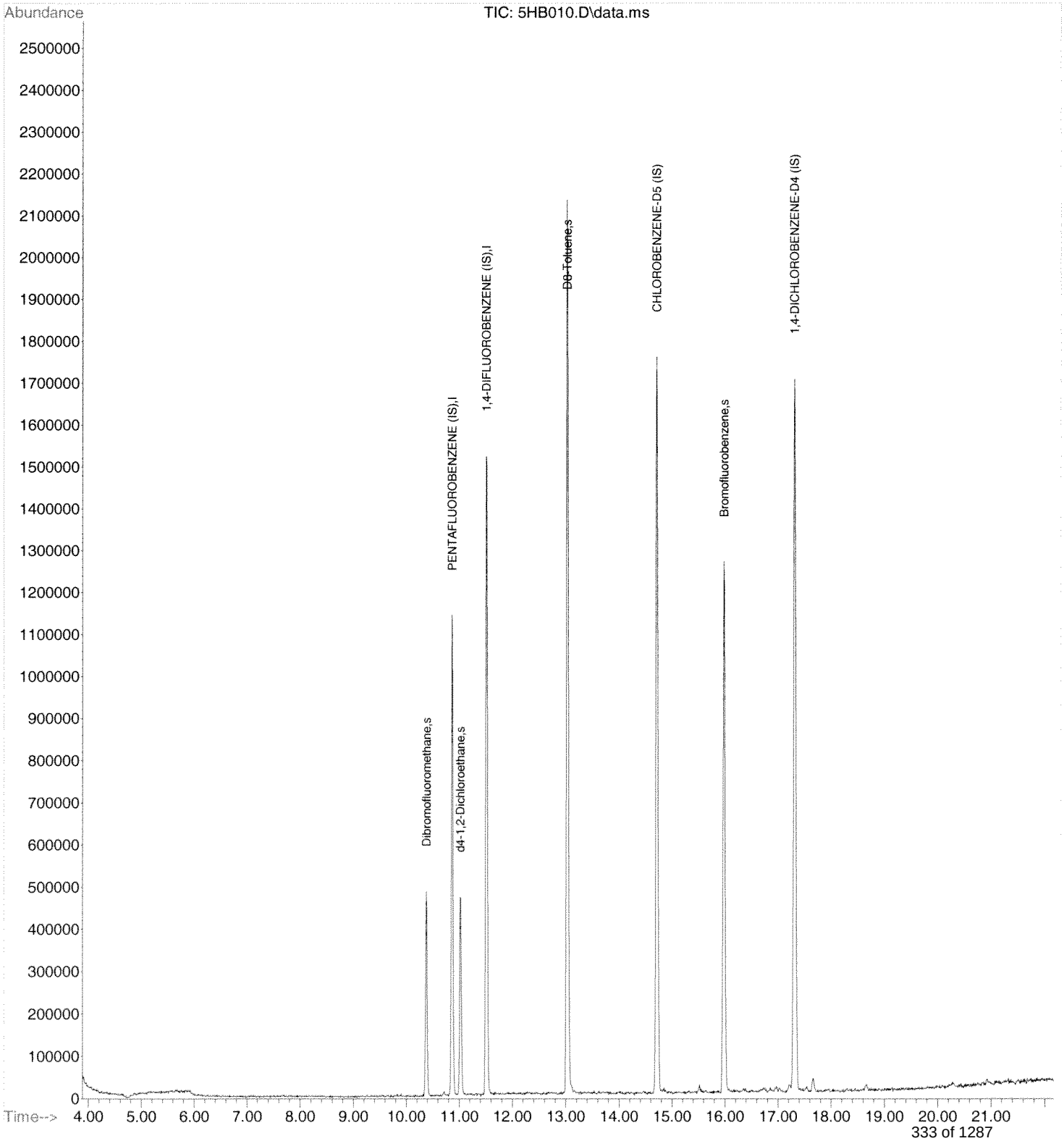
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.033	98	1880075	51.30 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	1001	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.709	106	1148	N.D.	
68) Chlorobenzene	14.725	112	1360	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.849	106	3110	N.D.	
71) o-xylene	15.317	106	1104	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.637	105	4372	N.D.	
76) Bromofluorobenzene	15.982	95	685499	67.36 ug/L	93
77) n-Propylbenzene	16.065	91	7287	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D. d	
83) 1,3,5-Trimethylbenzene	16.229	105	3568	N.D.	
84) 2-Chlorotoluene	16.319	91	2104	N.D.	
85) 4-Chlorotoluene	16.492	91	2785	N.D.	
86) tert-Butylbenzene	16.640	119	4966	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	3911	N.D.	
88) p-Isopropyltoluene	16.977	119	3197	N.D.	
89) s-Butylbenzene	16.862	105	5378	N.D.	
90) 1,3-Dichlorobenzene	17.231	146	2189	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	4739	N.D.	
92) n-Butylbenzene	17.527	91	8425	N.D.	
93) 1,2-Dichlorobenzene	17.938	146	1528	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	20.083	225	1461	N.D.	
96) 1,2,4-Trichlorobenzene	20.288	180	3350	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB010.D
Acq On : 7 Aug 2014 1:11 pm
Operator : KKW
Sample : A404270-07
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 08 08:34:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB011.D
Acq On : 7 Aug 2014 1:39 pm
Operator : KKW
Sample : A404270-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 08 08:35:33 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	834926	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1365210	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1380842	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	733129	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	329944	52.12 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 104.24%		
42) d4-1,2-Dichloroethane	11.027	65	358588	51.88 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 103.76%		
54) D8-Toluene	13.032	98	1839835	57.28 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 114.56%		
75) Bromofluorobenzene	15.982	95	663727	75.37 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 150.74%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.765	41	1139	N.D.	
15) Acetone	8.061	43	5678	3.19 ug/L #	86
16) Methylene Chloride	7.995	84	4660	0.77 ug/L #	50
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	10.156	83	1589	N.D.	
32) Dibromofluoromethane	10.378	113	329944	52.12 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.896	78	2681	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	358588	51.88 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB011.D
Acq On : 7 Aug 2014 1:39 pm
Operator : KKW
Sample : A404270-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 08 08:35:33 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

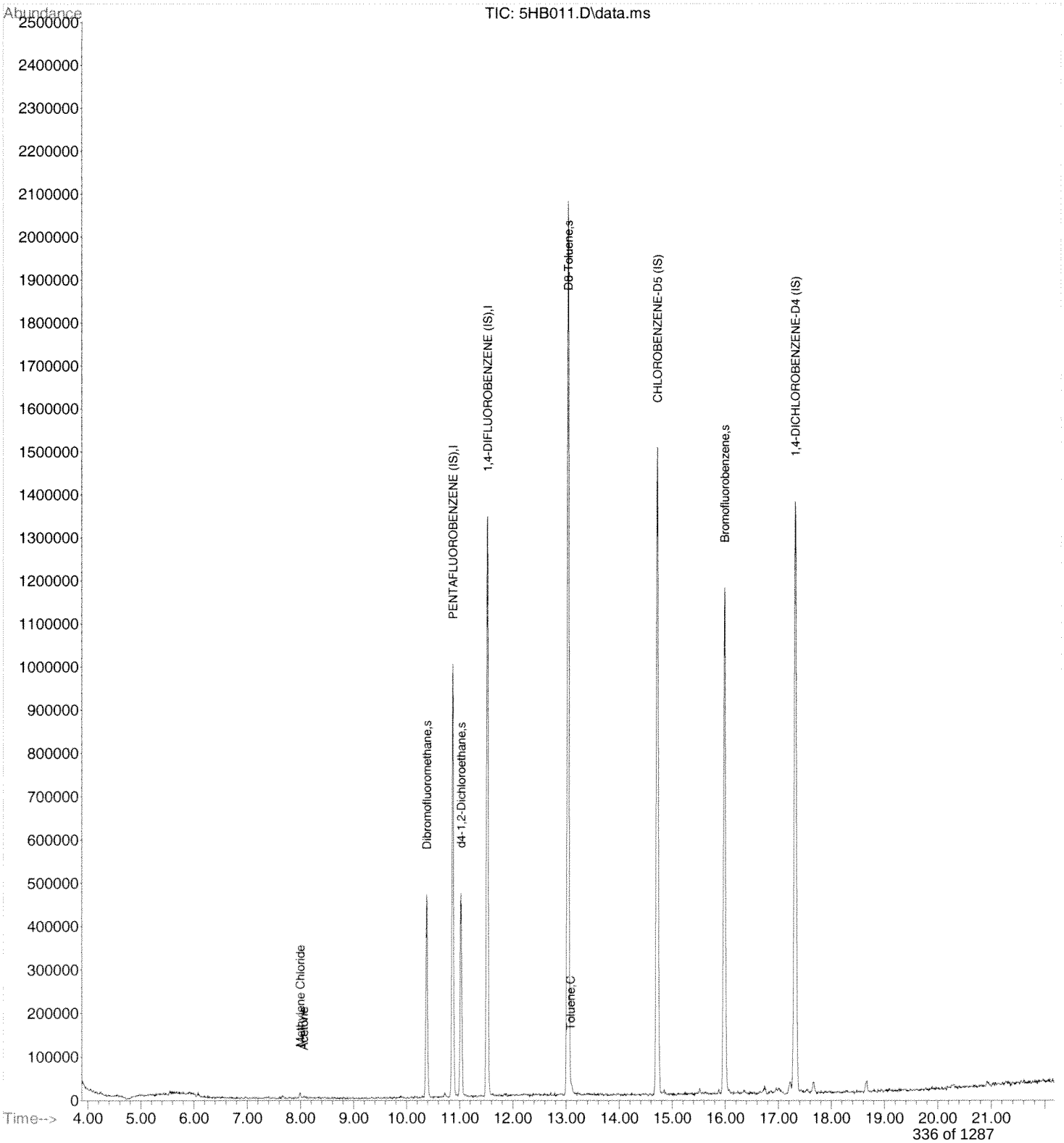
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1839835	57.28 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	6526	0.31 ug/L #	86
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.725	106	1085	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.317	106	1018	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	3021	N.D.	
76) Bromofluorobenzene	15.982	95	663727	75.37 ug/L	94
77) n-Propylbenzene	16.056	91	5443	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	2633	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	16.483	91	1393	N.D.	
86) tert-Butylbenzene	16.640	119	3082	N.D.	
87) 1,2,4-Trimethylbenzene	16.697	105	2927	N.D.	
88) p-Isopropyltoluene	16.976	119	2872	N.D.	
89) s-Butylbenzene	16.861	105	4844	N.D.	
90) 1,3-Dichlorobenzene	17.313	146	3592	N.D.	
91) 1,4-Dichlorobenzene	17.313	146	3592	N.D.	
92) n-Butylbenzene	17.535	91	4045	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.247	180	1329	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	21.299	180	1248	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB011.D
Acq On : 7 Aug 2014 1:39 pm
Operator : KKW
Sample : A404270-08
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 08 08:35:33 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB012.D
Acq On : 7 Aug 2014 2:08 pm
Operator : KKW
Sample : A404270-09
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 08 08:36:31 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	828425	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1376413	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1396837	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	802656	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	332829	52.99 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 105.98%		
42) d4-1,2-Dichloroethane	11.027	65	356959	51.23 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 102.46%		
54) D8-Toluene	13.032	98	1829799	56.51 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.02%		
75) Bromofluorobenzene	15.982	95	669299	75.11 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 150.22%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.938	41	1245	N.D.	
15) Acetone	8.061	43	3890	2.20 ug/L #	45
16) Methylene Chloride	7.995	84	4176	0.70 ug/L	87
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	8.423	73	1452	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	8.891	45	1097	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	332829	52.99 ug/L	95
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D. d	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.855	78	2923	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	356959	51.23 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB012.D
Acq On : 7 Aug 2014 2:08 pm
Operator : KKW
Sample : A404270-09
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 08 08:36:31 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

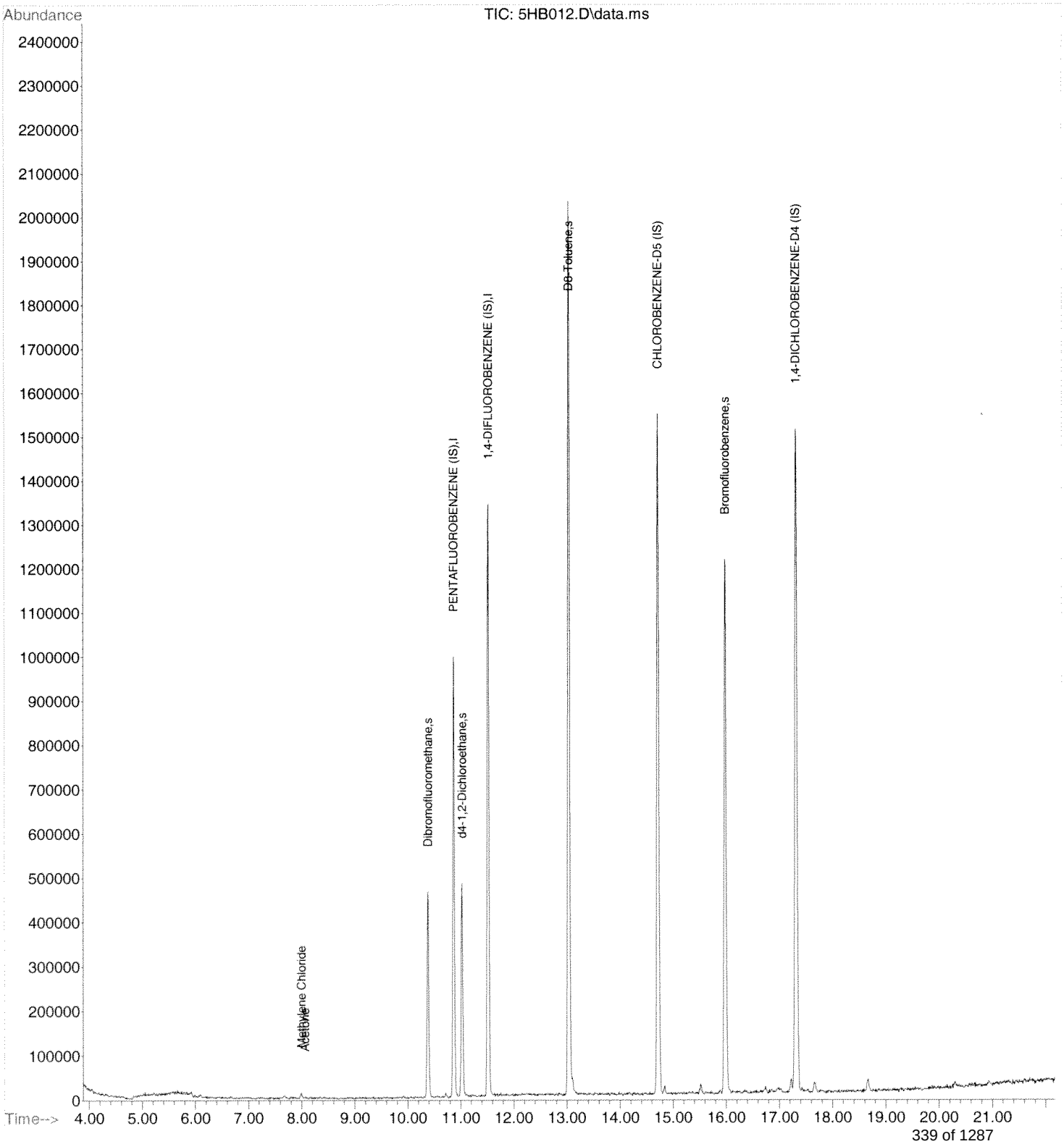
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1829188	56.49 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.300	106	1050	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	3089	N.D.	
76) Bromofluorobenzene	15.982	95	669299	75.11 ug/L	92
77) n-Propylbenzene	16.056	91	4400	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D. d	
83) 1,3,5-Trimethylbenzene	16.237	105	1876	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	16.631	91	1048	N.D.	
86) tert-Butylbenzene	16.672	119	2072	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	3064	N.D.	
88) p-Isopropyltoluene	16.993	119	3895	N.D.	
89) s-Butylbenzene	16.861	105	4242	N.D.	
90) 1,3-Dichlorobenzene	17.338	146	2156	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	2156	N.D.	
92) n-Butylbenzene	17.535	91	4228	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.255	180	1341	N.D.	
97) Naphthalene	20.921	128	6030	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB012.D
Acq On : 7 Aug 2014 2:08 pm
Operator : KKW
Sample : A404270-09
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 08 08:36:31 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB013.D
Acq On : 7 Aug 2014 2:36 pm
Operator : KKW
Sample : A404270-10
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 08 08:37:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	817680	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1309385	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1308033	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	670412	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	299219	48.26 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 96.52%		
42) d4-1,2-Dichloroethane	11.028	65	329369	49.69 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.38%		
54) D8-Toluene	13.041	98	1692491	54.94 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 109.88%		
75) Bromofluorobenzene	15.991	95	571908	67.95 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 135.90%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.807	41	1060	N.D.	
15) Acetone	0.000	43	0	N.D. d	
16) Methylene Chloride	7.987	84	2000	0.34 ug/L #	64
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	9.918	77	1576	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	299219	48.26 ug/L	92
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	2254	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	329369	49.69 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB013.D
Acq On : 7 Aug 2014 2:36 pm
Operator : KKW
Sample : A404270-10
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 08 08:37:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

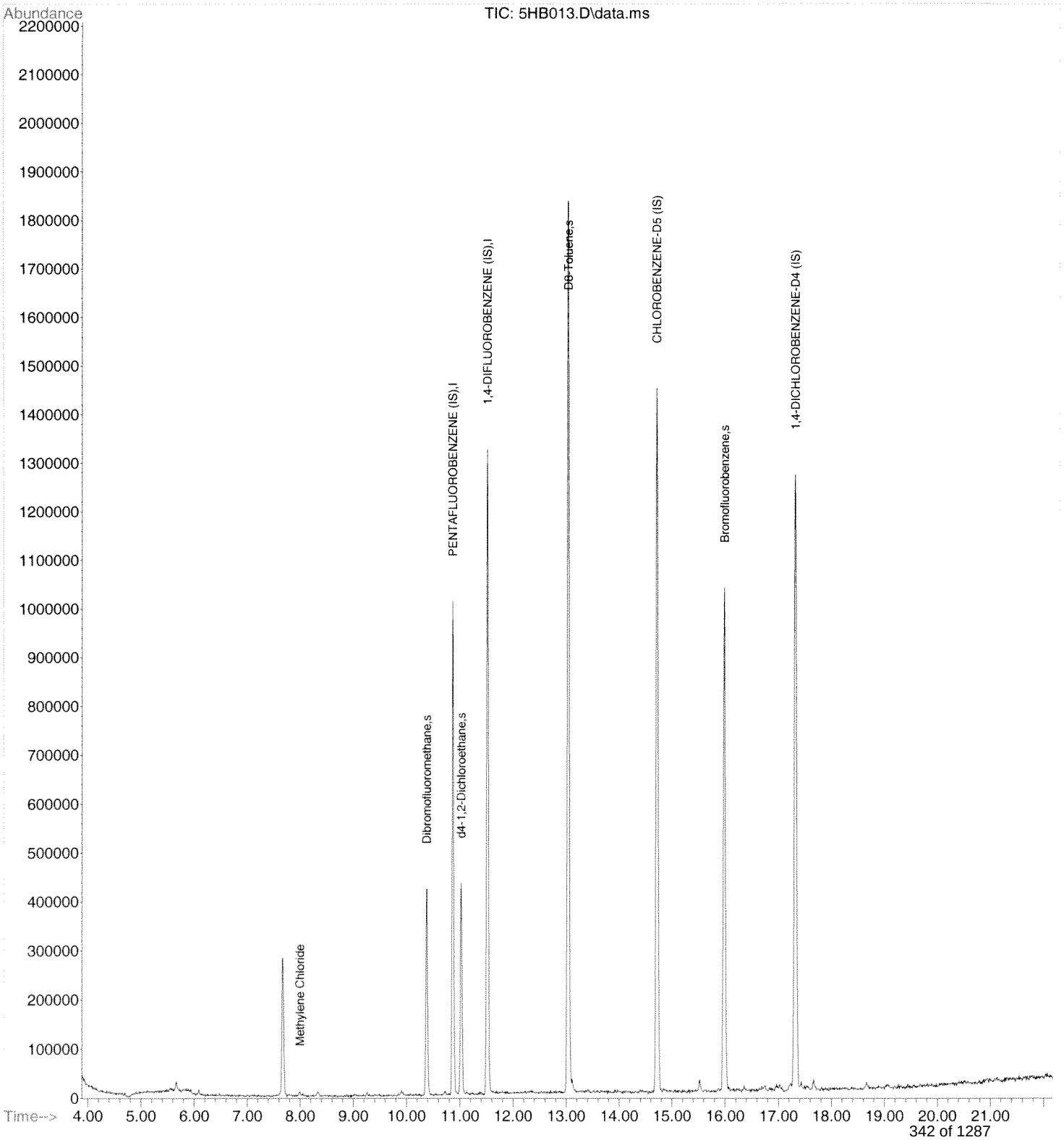
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.041	98	1692491	54.94 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.840	106	1129	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	1129	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	2312	N.D.	
76) Bromofluorobenzene	15.991	95	571908	67.95 ug/L	95
77) n-Propylbenzene	16.073	91	3494	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.245	105	2343	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.648	119	2008	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	4022	N.D.	
88) p-Isopropyltoluene	16.985	119	2923	N.D.	
89) s-Butylbenzene	16.845	105	4230	N.D.	
90) 1,3-Dichlorobenzene	17.322	146	2397	N.D.	
91) 1,4-Dichlorobenzene	17.322	146	2397	N.D.	
92) n-Butylbenzene	17.544	91	3444	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.937	128	5483	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB013.D
Acq On : 7 Aug 2014 2:36 pm
Operator : KKW
Sample : A404270-10
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 08 08:37:47 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB014.D
Acq On : 7 Aug 2014 3:05 pm
Operator : KKW
Sample : A404270-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 08 08:38:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	952222	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1534167	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1611396	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	977734	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	318821	44.16 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 88.32%		
42) d4-1,2-Dichloroethane	11.028	65	355419	45.76 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 91.52%		
54) D8-Toluene	13.041	98	1833946	50.81 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 101.62%		
75) Bromofluorobenzene	15.991	95	714180	68.97 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 137.94%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.659	41	2195	N.D.	
15) Acetone	0.000	43	0	N.D. d	
16) Methylene Chloride	7.995	84	5000	0.73 ug/L #	67
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.387	113	318821	44.16 ug/L	94
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.888	78	2222	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	355419	45.76 ug/L #	81
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB014.D
Acq On : 7 Aug 2014 3:05 pm
Operator : KKW
Sample : A404270-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 08 08:38:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

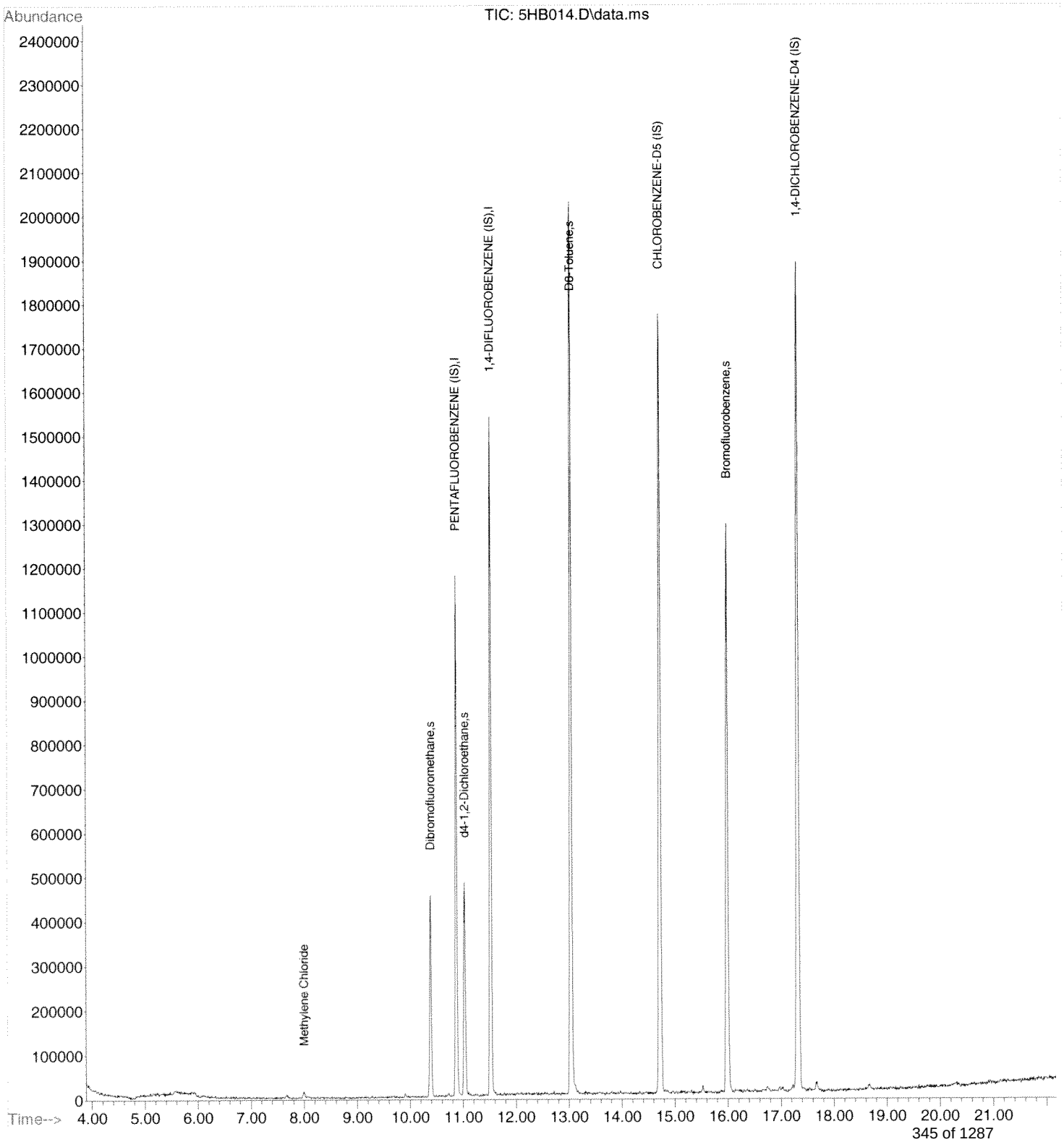
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.041	98	1833956	50.81 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	3904	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.840	106	2041	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	2041	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.637	105	2037	N.D.	
76) Bromofluorobenzene	15.991	95	714180	68.97 ug/L	95
77) n-Propylbenzene	16.073	91	2083	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.237	105	2378	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.722	105	2683	N.D.	
88) p-Isopropyltoluene	16.993	119	2697	N.D.	
89) s-Butylbenzene	16.853	105	2651	N.D.	
90) 1,3-Dichlorobenzene	17.338	146	1636	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	1636	N.D.	
92) n-Butylbenzene	17.552	91	2571	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.912	128	4730	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB014.D
Acq On : 7 Aug 2014 3:05 pm
Operator : KKW
Sample : A404270-12
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 08 08:38:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB015.D
Acq On : 7 Aug 2014 3:34 pm
Operator : KKW
Sample : A404270-13
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 08 08:39:40 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	882457	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1406994	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1414467	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	777844	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	313380	46.84 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.68%		
42) d4-1,2-Dichloroethane	11.027	65	353487	49.63 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.26%		
54) D8-Toluene	13.041	98	1778683	53.73 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 107.46%		
75) Bromofluorobenzene	15.990	95	633571	69.78 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 139.56%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D. d	
6) Chloroethane	0.000	64	0	N.D. d	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.774	41	1067	N.D.	
15) Acetone	8.078	43	54353	28.92 ug/L	97
16) Methylene Chloride	7.995	84	5429	0.85 ug/L #	61
17) Methyl Acetate	8.234	43	102043	19.70 ug/L #	88
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	10.156	83	1880	N.D.	
32) Dibromofluoromethane	10.378	113	313380	46.84 ug/L	94
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	4208	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	353487	49.63 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB015.D
Acq On : 7 Aug 2014 3:34 pm
Operator : KKW
Sample : A404270-13
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 08 08:39:40 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

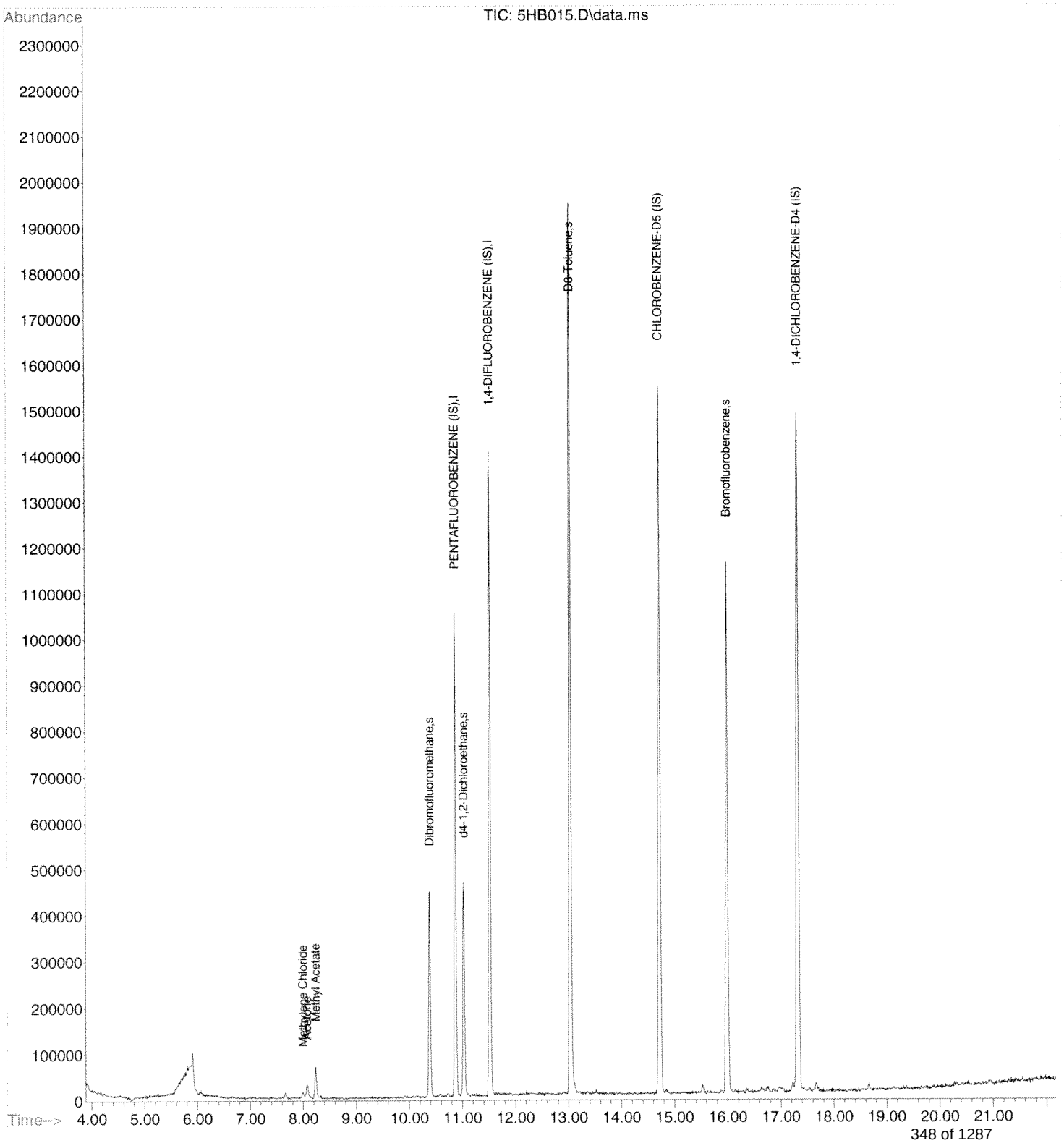
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.041	98	1778683	53.73 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	13.493	69	1072	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.865	106	2981	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.637	105	1995	N.D.	
76) Bromofluorobenzene	15.990	95	633571	69.78 ug/L	93
77) n-Propylbenzene	16.056	91	2745	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.237	105	1865	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.664	119	1599	N.D.	
87) 1,2,4-Trimethylbenzene	16.697	105	2327	N.D.	
88) p-Isopropyltoluene	16.977	119	3501	N.D.	
89) s-Butylbenzene	16.853	105	3863	N.D.	
90) 1,3-Dichlorobenzene	17.330	146	1893	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	1893	N.D.	
92) n-Butylbenzene	17.527	91	3306	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.937	128	4101	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB015.D
Acq On : 7 Aug 2014 3:34 pm
Operator : KKW
Sample : A404270-13
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 08 08:39:40 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB016.D
Acq On : 7 Aug 2014 4:02 pm
Operator : KKW
Sample : A404270-14
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 08 08:40:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	813184	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1309388	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1343287	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	735311	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	300185	48.69 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 97.38%		
42) d4-1,2-Dichloroethane	11.028	65	344260	51.93 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 103.86%		
54) D8-Toluene	13.041	98	1734486	56.30 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 112.60%		
75) Bromofluorobenzene	15.991	95	623155	72.51 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 145.02%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.675	41	1070	N.D.	
15) Acetone	0.000	43	0	N.D. d	
16) Methylene Chloride	0.000	84	0	N.D. d	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.387	113	300185	48.69 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	2087	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	344260	51.93 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB016.D
Acq On : 7 Aug 2014 4:02 pm
Operator : KKW
Sample : A404270-14
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 08 08:40:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

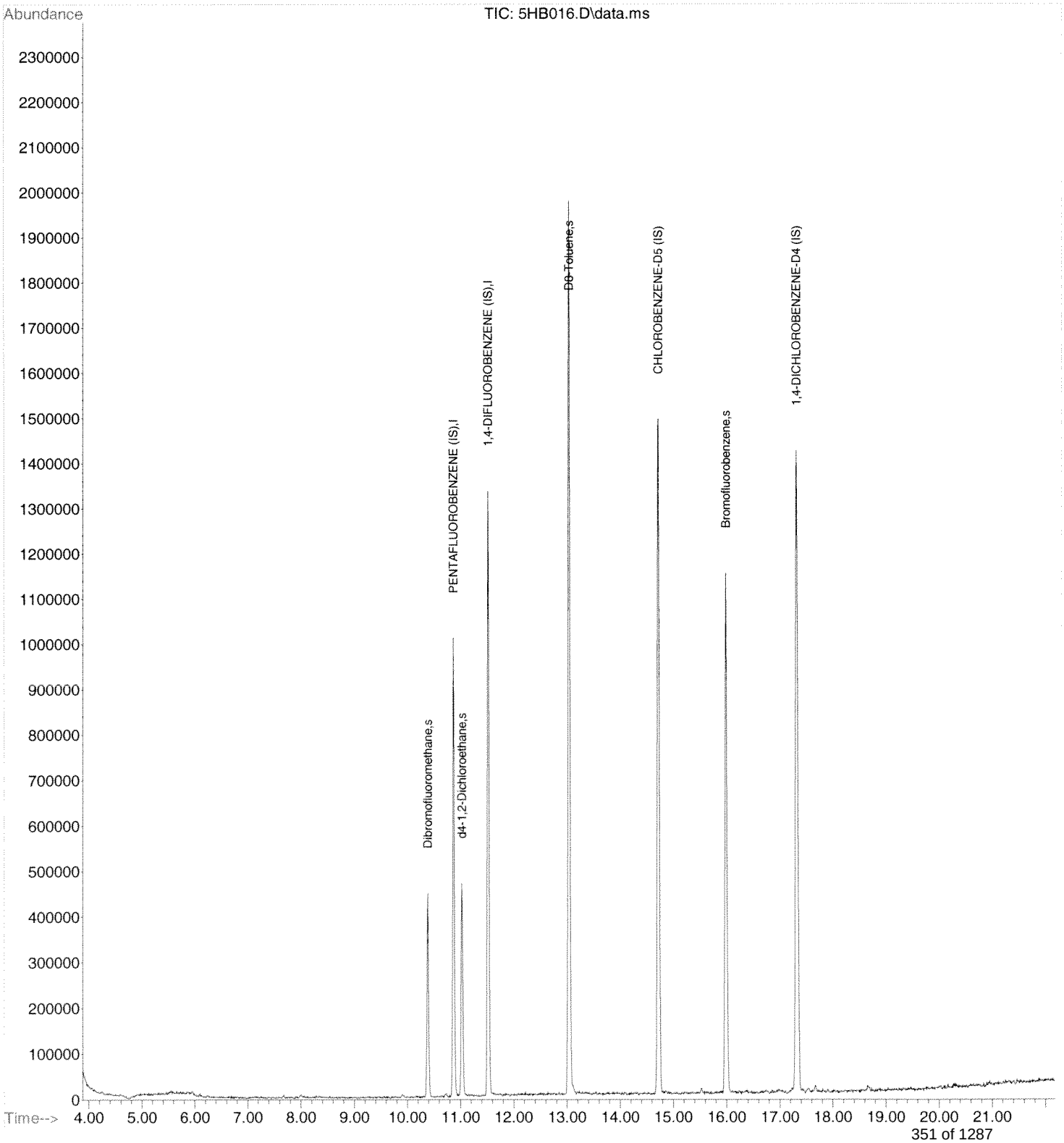
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.041	98	1734486	56.30 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	1798	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.865	106	1456	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.865	106	1456	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.629	105	1033	N.D.	
76) Bromofluorobenzene	15.991	95	623155	72.51 ug/L	93
77) n-Propylbenzene	0.000	91	0	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.237	105	1586	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	16.648	91	1018	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	1997	N.D.	
88) p-Isopropyltoluene	16.985	119	2764	N.D.	
89) s-Butylbenzene	16.862	105	3498	N.D.	
90) 1,3-Dichlorobenzene	17.322	146	2037	N.D.	
91) 1,4-Dichlorobenzene	17.322	146	2037	N.D.	
92) n-Butylbenzene	17.552	91	3445	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.937	128	4244	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB016.D
Acq On : 7 Aug 2014 4:02 pm
Operator : KKW
Sample : A404270-14
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 08 08:40:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB017.D
Acq On : 7 Aug 2014 4:31 pm
Operator : KKW
Sample : A404270-15
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 08 08:41:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	775088	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1264000	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1284404	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	659469	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	293802	49.99 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 99.98%		
42) d4-1,2-Dichloroethane	11.028	65	342893	53.58 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 107.16%		
54) D8-Toluene	13.033	98	1645423	55.33 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 110.66%		
75) Bromofluorobenzene	15.982	95	571171	69.23 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 138.46%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D. d	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D. d	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	0.000	43	0	N.D.	
16) Methylene Chloride	8.004	84	2975	0.53 ug/L #	69
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	8.374	73	1175	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	293802	49.99 ug/L	94
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	3347	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	342893	53.58 ug/L #	86
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB017.D
Acq On : 7 Aug 2014 4:31 pm
Operator : KKW
Sample : A404270-15
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 08 08:41:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

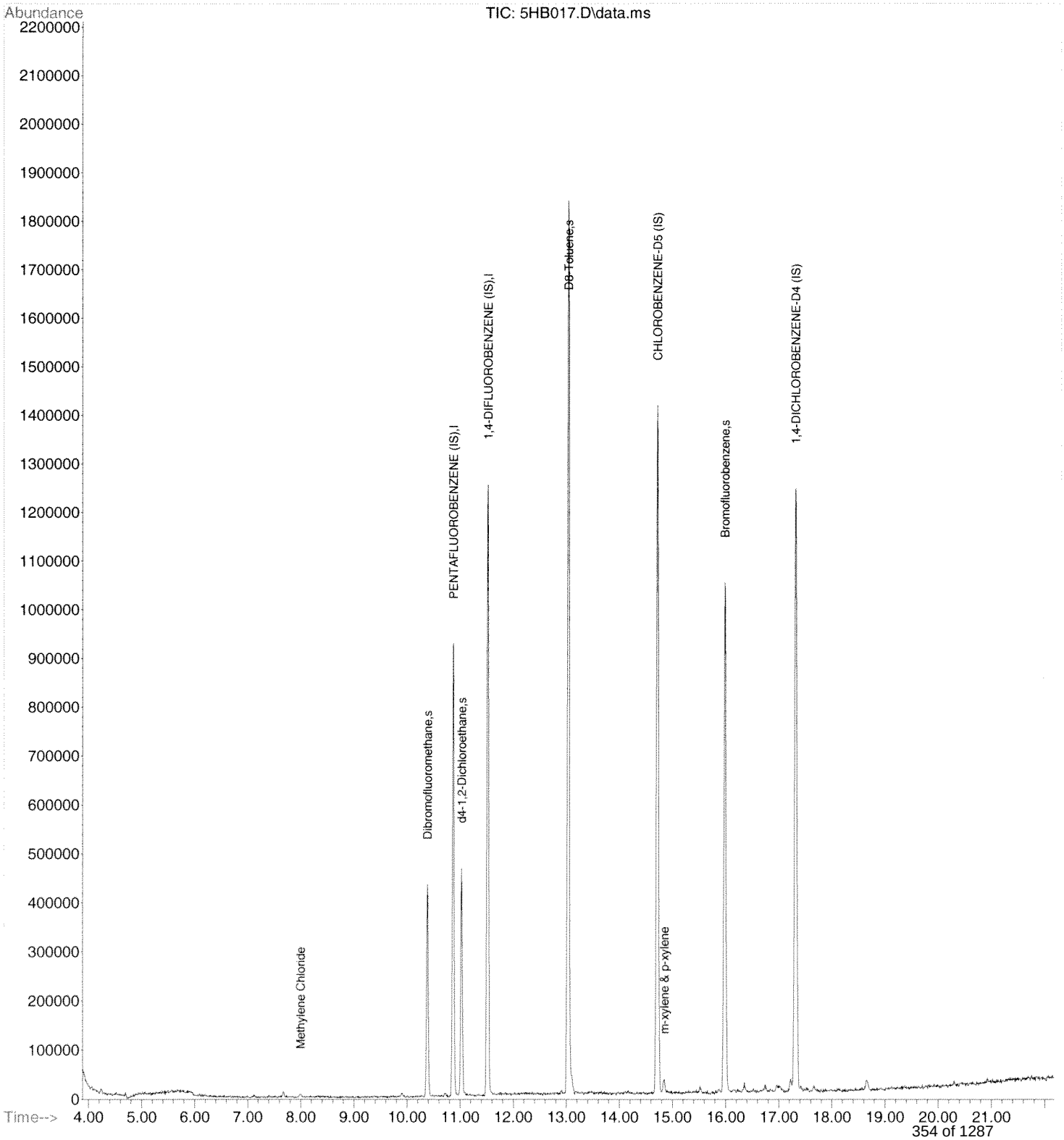
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.033	98	1645423	55.33 ug/L #	90
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.709	106	1822	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.848	106	14638	0.95 ug/L	94
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	571171	69.23 ug/L	91
77) n-Propylbenzene	16.065	91	3088	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.237	105	2803	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.656	119	1938	N.D.	
87) 1,2,4-Trimethylbenzene	16.706	105	4297	N.D.	
88) p-Isopropyltoluene	16.985	119	8034	N.D.	
89) s-Butylbenzene	16.837	105	3710	N.D.	
90) 1,3-Dichlorobenzene	17.322	146	1877	N.D.	
91) 1,4-Dichlorobenzene	17.322	146	1877	N.D.	
92) n-Butylbenzene	17.527	91	4213	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.945	128	5832	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB017.D
Acq On : 7 Aug 2014 4:31 pm
Operator : KKW
Sample : A404270-15
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 08 08:41:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB018.D
Acq On : 7 Aug 2014 4:59 pm
Operator : KKW
Sample : A404270-16
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 08 08:42:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	883244	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1426282	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1560168	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	959400	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	309907	46.28 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 92.56%		
42) d4-1,2-Dichloroethane	11.019	65	359220	49.75 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.50%		
54) D8-Toluene	13.032	98	1817351	54.16 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 108.32%		
75) Bromofluorobenzene	15.982	95	714091	71.45 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 142.90%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	11794	6.27 ug/L #	84
16) Methylene Chloride	7.979	84	2631	0.41 ug/L	81
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	309907	46.28 ug/L	91
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	2735	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	359220	49.75 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB018.D
Acq On : 7 Aug 2014 4:59 pm
Operator : KKW
Sample : A404270-16
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 08 08:42:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

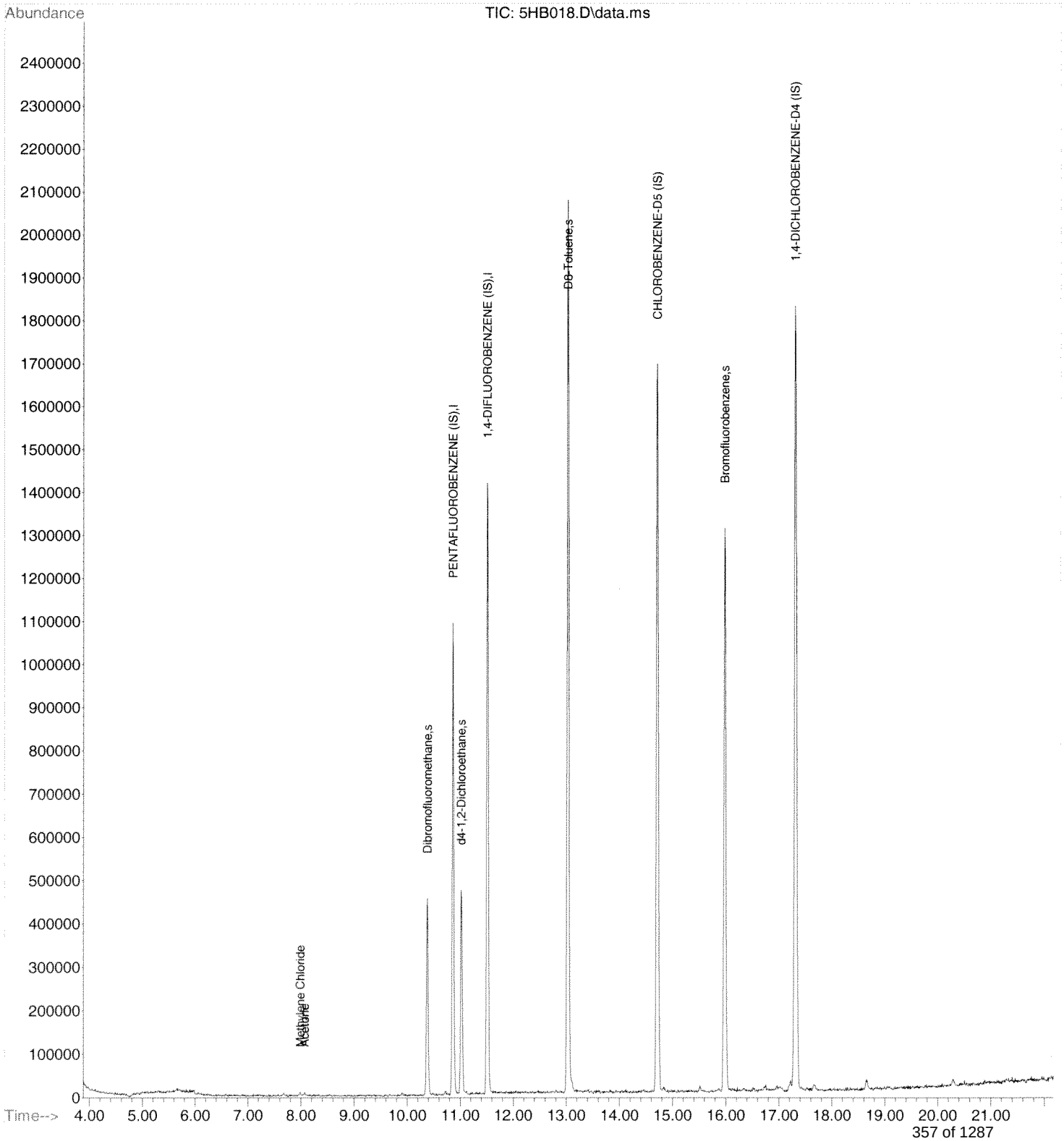
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1816862	54.14 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.848	106	2401	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.848	106	2401	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	15.350	104	1037	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	714091	71.45 ug/L	93
77) n-Propylbenzene	16.064	91	1058	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.147	105	1622	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.640	119	1919	N.D.	
87) 1,2,4-Trimethylbenzene	16.722	105	2962	N.D.	
88) p-Isopropyltoluene	16.977	119	3263	N.D.	
89) s-Butylbenzene	16.862	105	3604	N.D.	
90) 1,3-Dichlorobenzene	17.313	146	1689	N.D.	
91) 1,4-Dichlorobenzene	17.313	146	1689	N.D.	
92) n-Butylbenzene	17.527	91	3379	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.255	180	1335	N.D.	
97) Naphthalene	20.912	128	5000	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB018.D
Acq On : 7 Aug 2014 4:59 pm
Operator : KKW
Sample : A404270-16
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 08 08:42:07 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB019.D
Acq On : 7 Aug 2014 5:27 pm
Operator : KKW
Sample : A404270-18
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 08 08:42:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	728619	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1212339	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1287858	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	775369	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	260187	47.10 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.20%		
42) d4-1,2-Dichloroethane	11.019	65	302534	49.29 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 98.58%		
54) D8-Toluene	13.032	98	1522175	53.37 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 106.74%		
75) Bromofluorobenzene	15.982	95	577617	69.88 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 139.76%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	8332	5.37 ug/L	95
16) Methylene Chloride	7.979	84	3408	0.65 ug/L	77
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	260187	47.10 ug/L	95
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	2040	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	302534	49.29 ug/L #	85
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB019.D
Acq On : 7 Aug 2014 5:27 pm
Operator : KKW
Sample : A404270-18
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 08 08:42:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

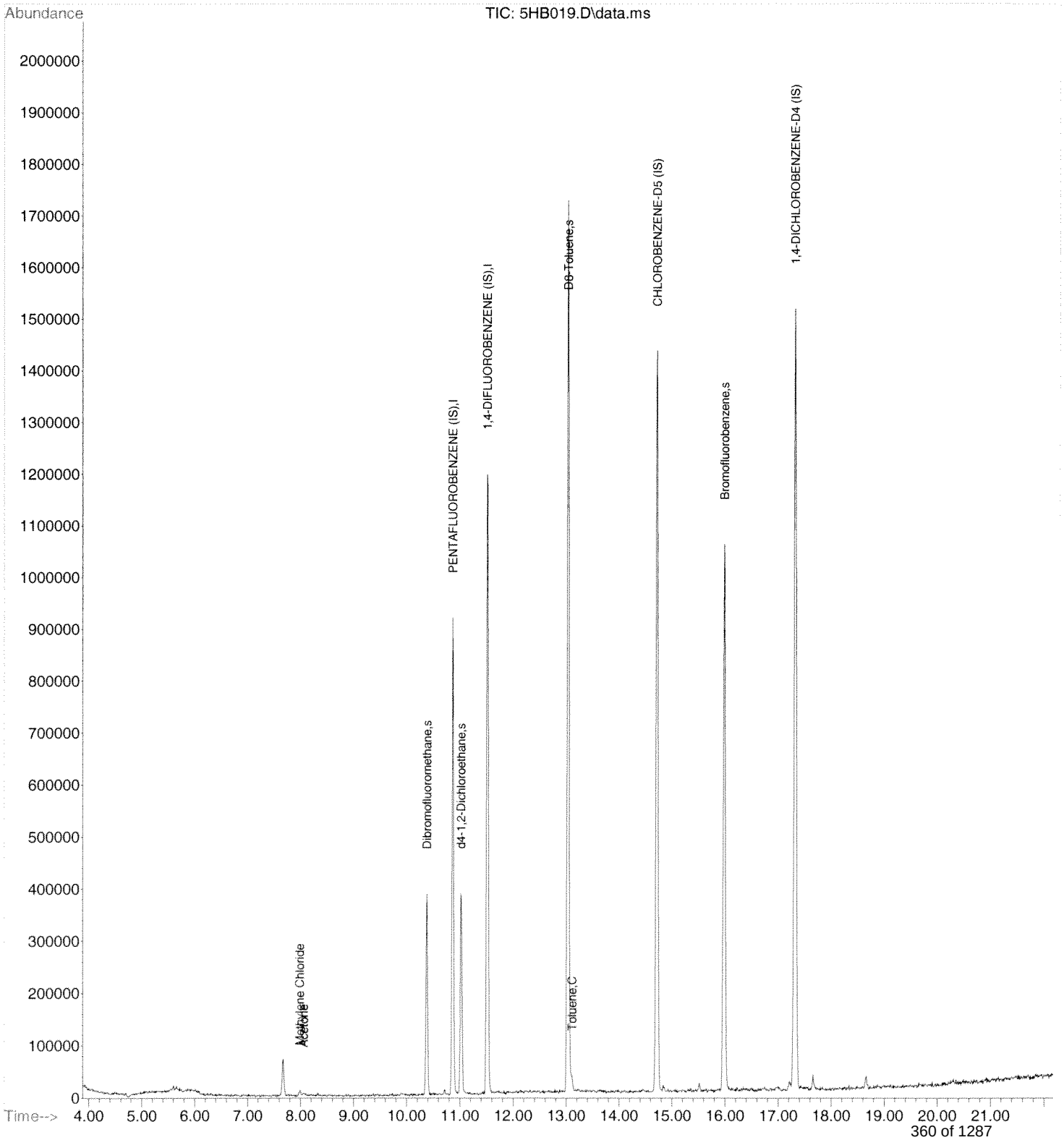
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1522175	53.37 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.106	92	11145	0.57 ug/L	81
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.692	106	1317	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	577617	69.88 ug/L	92
77) n-Propylbenzene	16.064	91	1326	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.631	119	1523	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	1754	N.D.	
88) p-Isopropyltoluene	16.993	119	3119	N.D.	
89) s-Butylbenzene	16.878	105	2045	N.D.	
90) 1,3-Dichlorobenzene	17.330	146	1725	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	1725	N.D.	
92) n-Butylbenzene	17.527	91	1382	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.929	128	4327	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB019.D
Acq On : 7 Aug 2014 5:27 pm
Operator : KKW
Sample : A404270-18
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 08 08:42:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB020.D
Acq On : 7 Aug 2014 5:55 pm
Operator : KKW
Sample : A404270-19
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 08 08:43:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	788656	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1288022	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1382980	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	816832	50.00 ug/L	0.00

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	300537	50.26 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 100.52%		
42) d4-1,2-Dichloroethane	11.027	65	341290	52.34 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 104.68%		
54) D8-Toluene	13.032	98	1732448	57.17 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 114.34%		
75) Bromofluorobenzene	15.982	95	652168	73.81 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 147.62%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.069	43	20820	12.40 ug/L	97
16) Methylene Chloride	7.995	84	5752	1.01 ug/L #	58
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	300537	50.26 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	10.732	75	1058	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.904	78	1981	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	341290	52.34 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB020.D
Acq On : 7 Aug 2014 5:55 pm
Operator : KKW
Sample : A404270-19
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 08 08:43:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

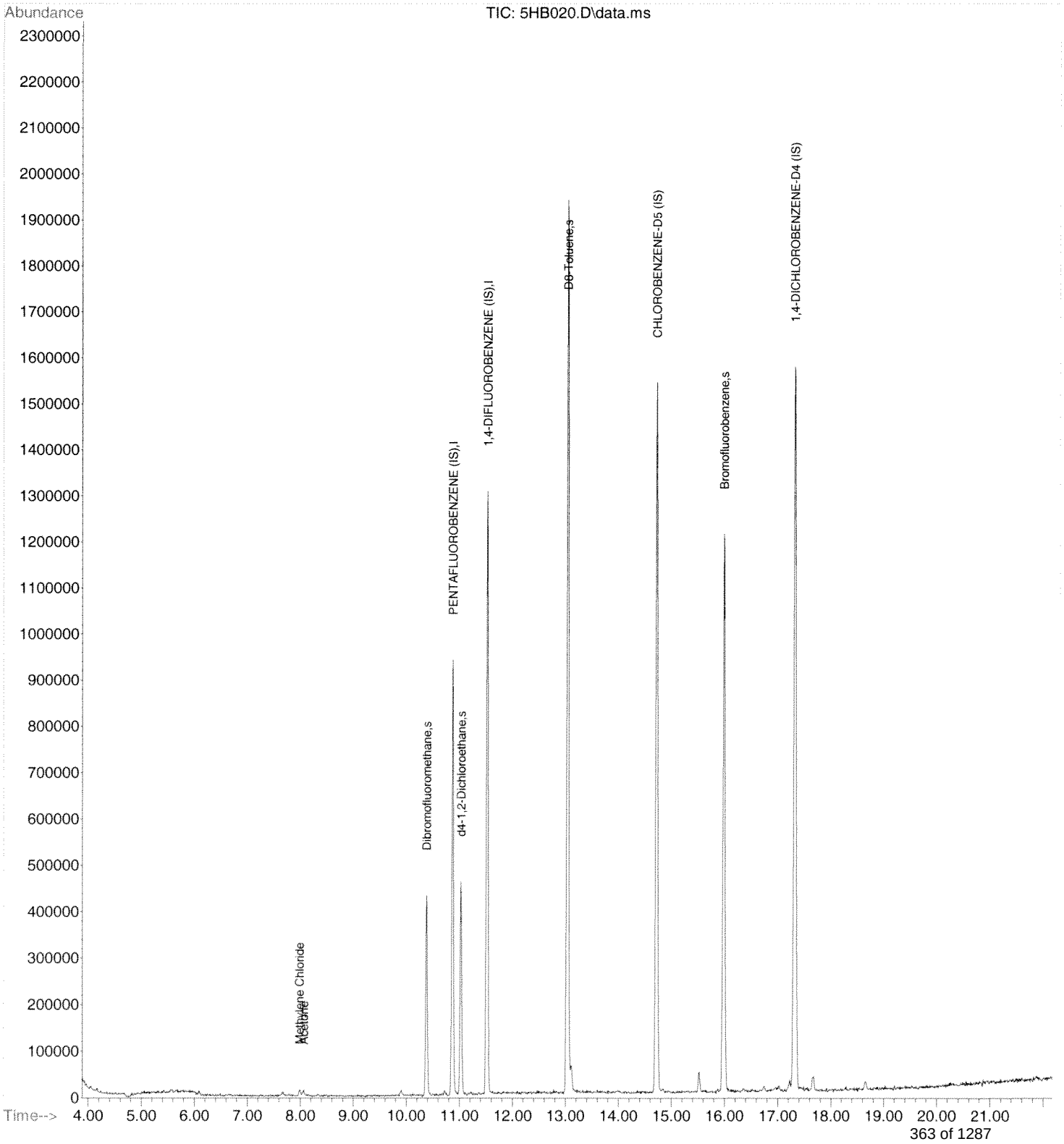
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1732448	57.17 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.692	106	1648	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.856	106	3021	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	652168	73.81 ug/L	91
77) n-Propylbenzene	15.999	91	1550	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	1301	N.D.	
88) p-Isopropyltoluene	16.968	119	2802	N.D.	
89) s-Butylbenzene	16.853	105	1465	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	17.543	91	1504	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.929	128	3830	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB020.D
Acq On : 7 Aug 2014 5:55 pm
Operator : KKW
Sample : A404270-19
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 08 08:43:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB021.D
Acq On : 7 Aug 2014 6:23 pm
Operator : KKW
Sample : A404270-20
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 08 08:44:53 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	846553	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1358508	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1480239	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	858292	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	306255	47.71 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.42%		
42) d4-1,2-Dichloroethane	11.027	65	349157	50.77 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 101.54%		
54) D8-Toluene	13.032	98	1754162	54.88 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 109.76%		
75) Bromofluorobenzene	15.982	95	652975	68.62 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 137.24%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	0.000	43	0	N.D. d	
16) Methylene Chloride	0.000	84	0	N.D. d	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	306255	47.71 ug/L #	91
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	2083	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	349157	50.77 ug/L #	85
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB021.D
Acq On : 7 Aug 2014 6:23 pm
Operator : KKW
Sample : A404270-20
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 08 08:44:53 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

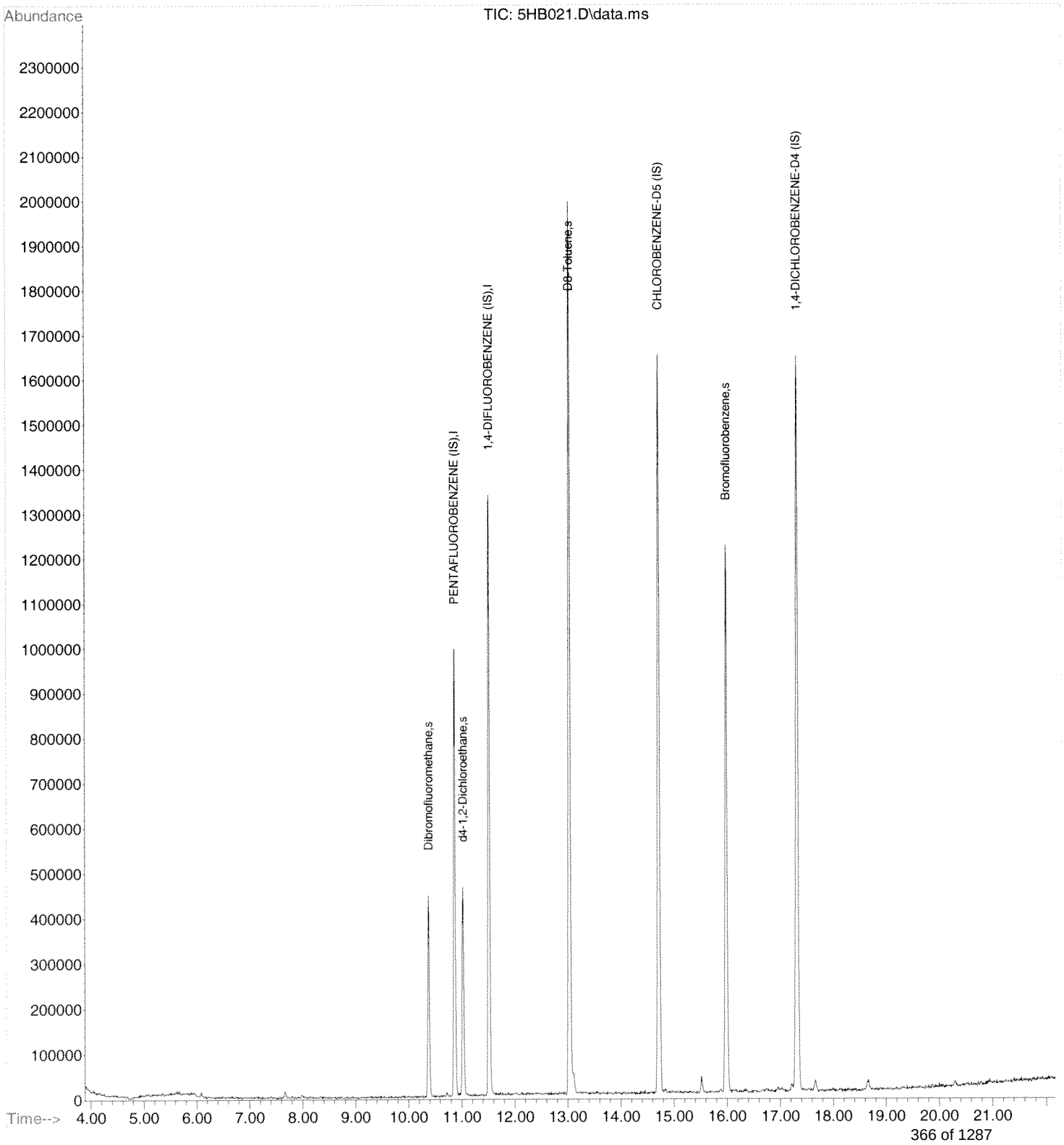
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1754162	54.88 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.840	106	2888	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	652975	68.62 ug/L	90
77) n-Propylbenzene	15.990	91	1851	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.697	105	1618	N.D.	
88) p-Isopropyltoluene	16.968	119	2468	N.D.	
89) s-Butylbenzene	16.853	105	1940	N.D.	
90) 1,3-Dichlorobenzene	17.338	146	1386	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	1386	N.D.	
92) n-Butylbenzene	17.560	91	2647	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.929	128	2271	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB021.D
Acq On : 7 Aug 2014 6:23 pm
Operator : KKW
Sample : A404270-20
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 08 08:44:53 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB022.D
Acq On : 7 Aug 2014 6:51 pm
Operator : KKW
Sample : A404270-21
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 08 08:45:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	194598	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	325665	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	372745	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	220124	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	67600	45.82 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 91.64%		
42) d4-1,2-Dichloroethane	11.028	65	80798	49.01 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 98.02%		
54) D8-Toluene	13.032	98	354066	46.21 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 92.42%		
75) Bromofluorobenzene	15.982	95	144975	59.71 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 119.42%		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	8318	20.07 ug/L	97
16) Methylene Chloride	0.000	84	0	N.D.	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	67600	45.82 ug/L #	97
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.929	78	1065	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	80798	49.01 ug/L #	80
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB022.D
Acq On : 7 Aug 2014 6:51 pm
Operator : KKW
Sample : A404270-21
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 08 08:45:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

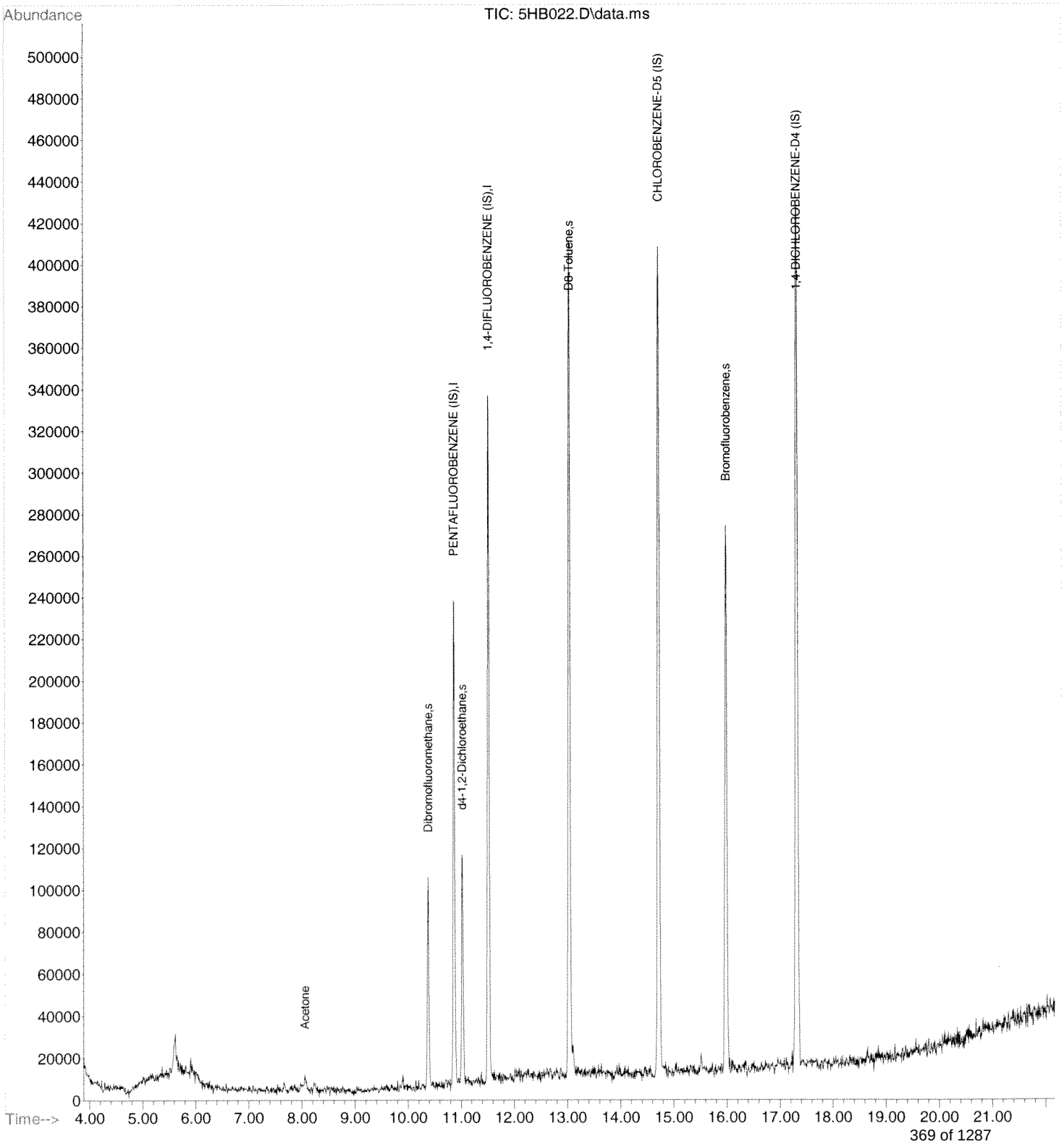
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	354066	46.21 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	144975	59.71 ug/L	93
77) n-Propylbenzene	0.000	91	0	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.221	105	1063	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.722	105	1708	N.D.	
88) p-Isopropyltoluene	16.977	119	2311	N.D.	
89) s-Butylbenzene	16.878	105	1768	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB022.D
Acq On : 7 Aug 2014 6:51 pm
Operator : KKW
Sample : A404270-21
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 08 08:45:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB023.D
Acq On : 7 Aug 2014 7:19 pm
Operator : KKW
Sample : A404270-22
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 08 08:46:42 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	755300	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1239774	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1328811	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	832314	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	313415	54.73 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 109.46%		
42) d4-1,2-Dichloroethane	11.027	65	356932	56.87 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 113.74%		
54) D8-Toluene	13.032	98	1764876	60.51 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 121.02%#		
75) Bromofluorobenzene	15.982	95	678049	80.42 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 160.84%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.815	41	1607	N.D.	
15) Acetone	8.086	43	3020	1.88 ug/L #	45
16) Methylene Chloride	7.987	84	2745	0.50 ug/L	85
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	313415	54.73 ug/L	95
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.863	78	3203	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	356932	56.87 ug/L #	86
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB023.D
Acq On : 7 Aug 2014 7:19 pm
Operator : KKW
Sample : A404270-22
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 08 08:46:42 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

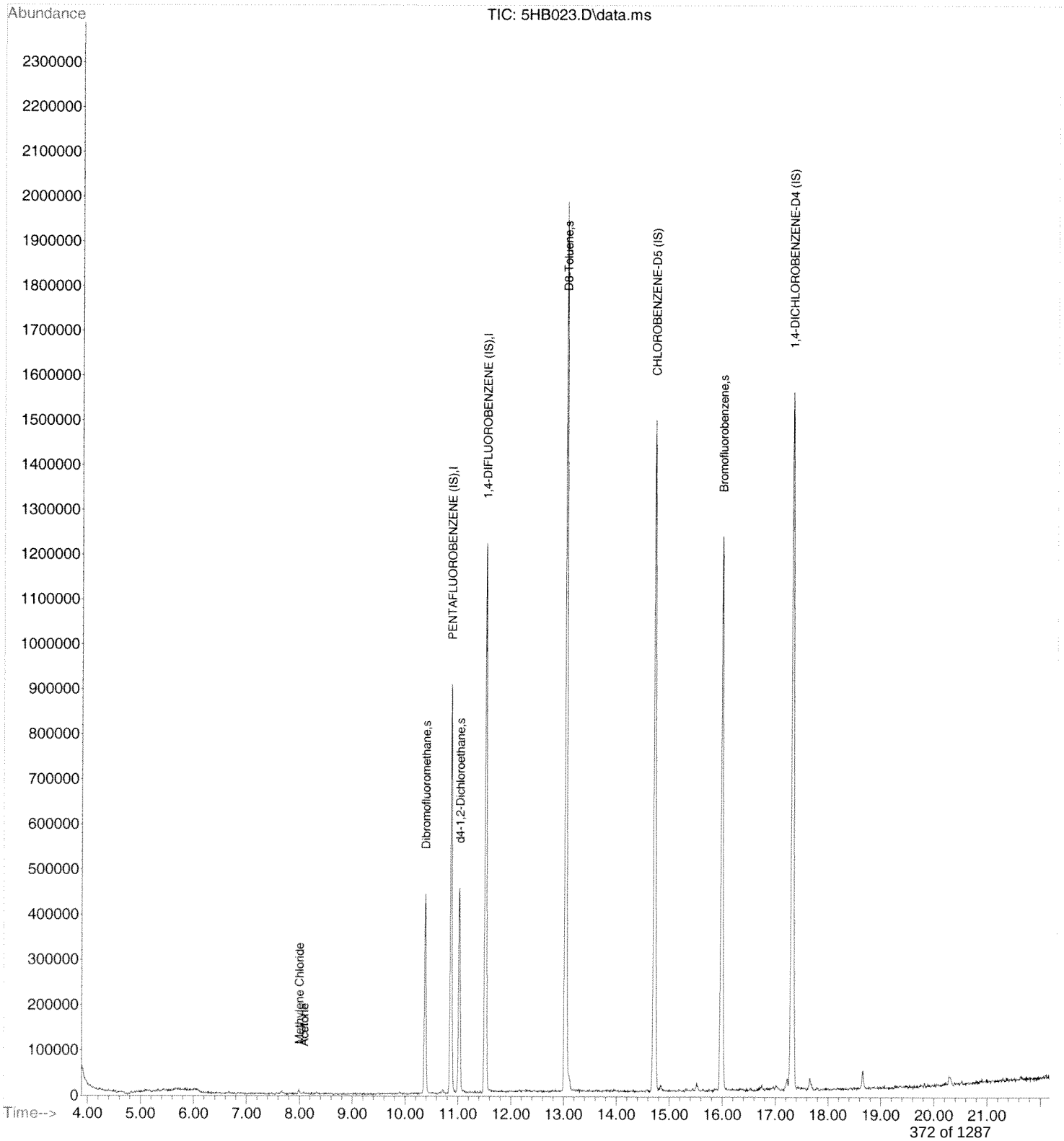
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1764876	60.51 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	678049	80.42 ug/L	92
77) n-Propylbenzene	15.982	91	1078	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	1358	N.D.	
88) p-Isopropyltoluene	16.993	119	1845	N.D.	
89) s-Butylbenzene	16.714	105	1358	N.D.	
90) 1,3-Dichlorobenzene	17.330	146	1444	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	1444	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.929	128	4205	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB023.D
Acq On : 7 Aug 2014 7:19 pm
Operator : KKW
Sample : A404270-22
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 08 08:46:42 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB024.D
Acq On : 7 Aug 2014 7:47 pm
Operator : KKW
Sample : A404270-23
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 08 08:48:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	827084	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1327890	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.717	117	1409436	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	813076	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	288332	45.98 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 91.96%		
42) d4-1,2-Dichloroethane	11.027	65	335193	49.86 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.72%		
54) D8-Toluene	13.032	98	1671909	53.52 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 107.04%		
75) Bromofluorobenzene	15.982	95	623814	68.87 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 137.74%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.782	41	1197	N.D.	
15) Acetone	8.061	43	7368	4.18 ug/L #	89
16) Methylene Chloride	7.979	84	3882	0.65 ug/L	89
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	288332	45.98 ug/L	90
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D. d	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	3027	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	335193	49.86 ug/L #	87
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB024.D
Acq On : 7 Aug 2014 7:47 pm
Operator : KKW
Sample : A404270-23
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 08 08:48:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

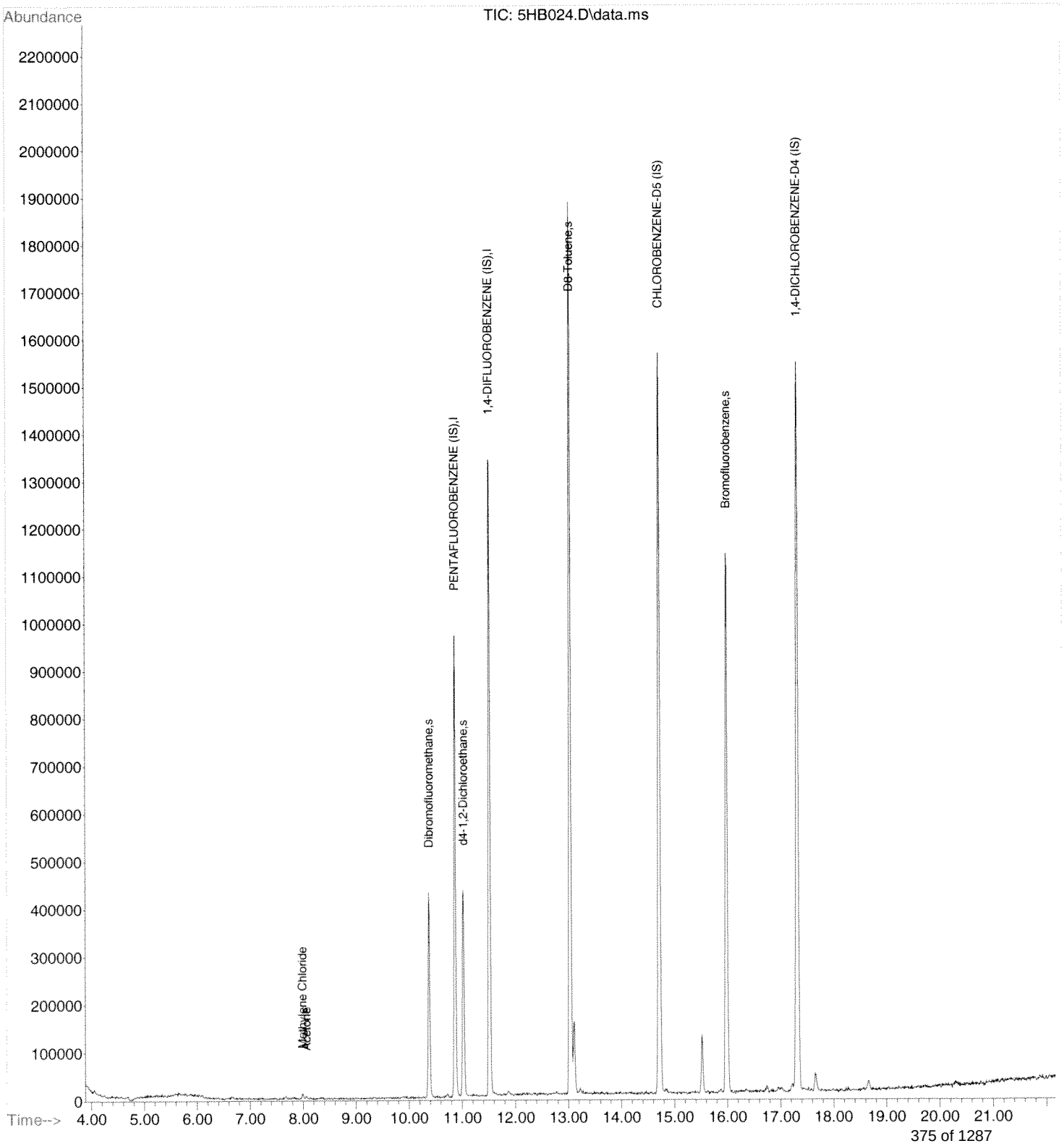
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1671584	53.51 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	1439	N.D.	
76) Bromofluorobenzene	15.982	95	623814	68.87 ug/L	92
77) n-Propylbenzene	15.982	91	1588	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.664	119	1509	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	1729	N.D.	
88) p-Isopropyltoluene	16.985	119	2650	N.D.	
89) s-Butylbenzene	16.861	105	1503	N.D.	
90) 1,3-Dichlorobenzene	17.346	146	1673	N.D.	
91) 1,4-Dichlorobenzene	17.346	146	1673	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.921	128	2237	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB024.D
Acq On : 7 Aug 2014 7:47 pm
Operator : KKW
Sample : A404270-23
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 08 08:48:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB025.D
Acq On : 7 Aug 2014 8:15 pm
Operator : KKW
Sample : A404270-24
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 08 08:49:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	766995	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1256753	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1337286	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	758370	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	291537	50.13 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 100.26%		
42) d4-1,2-Dichloroethane	11.019	65	333218	52.37 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 104.74%		
54) D8-Toluene	13.032	98	1678766	56.78 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.56%		
75) Bromofluorobenzene	15.982	95	620706	72.55 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 145.10%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	17941	10.98 ug/L	98
16) Methylene Chloride	7.995	84	2704	0.49 ug/L #	62
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	10.099	77	1093	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D. d	
32) Dibromofluoromethane	10.378	113	291537	50.13 ug/L	95
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	1752	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	333218	52.37 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB025.D
Acq On : 7 Aug 2014 8:15 pm
Operator : KKW
Sample : A404270-24
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 08 08:49:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

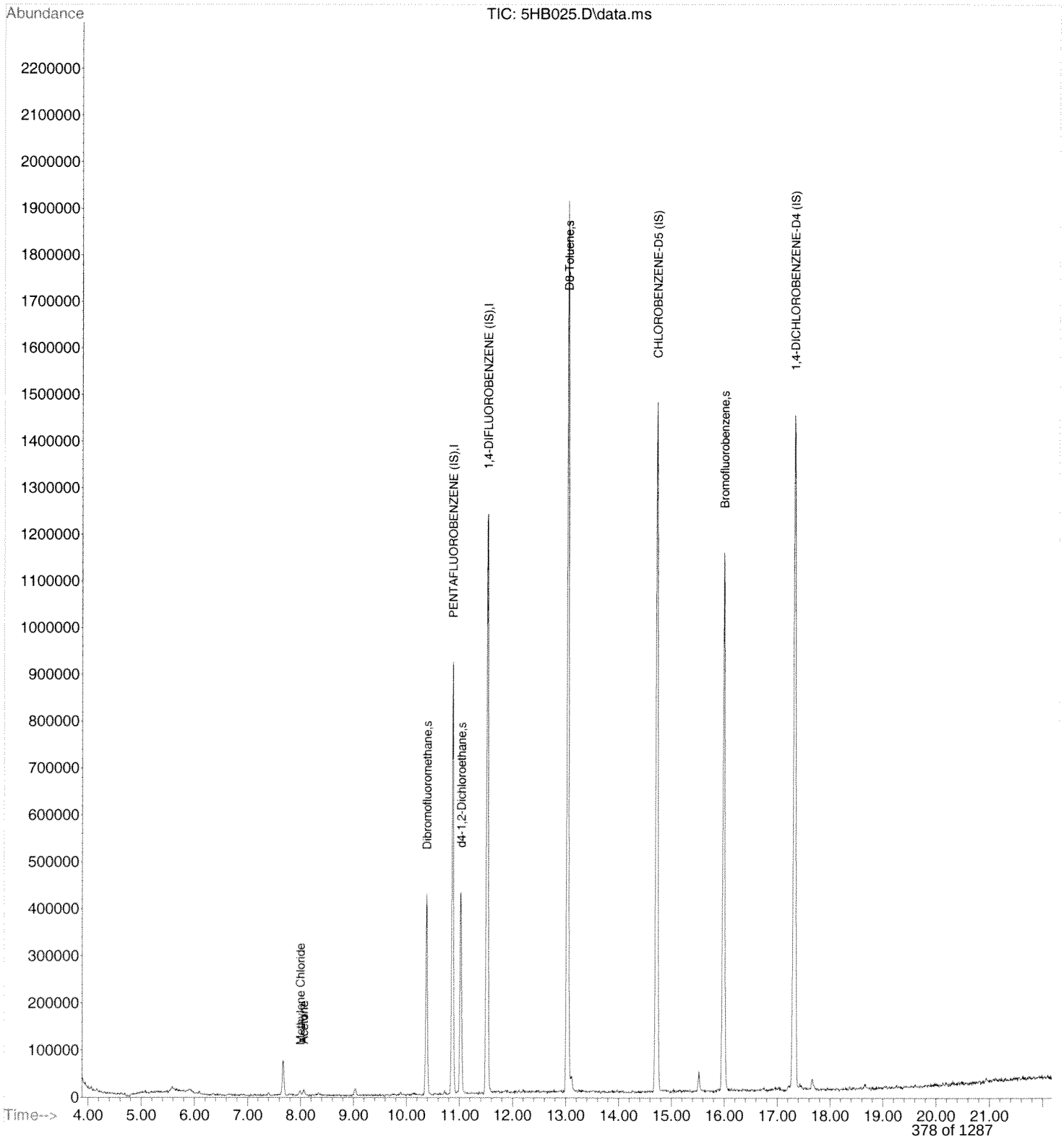
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1678771	56.78 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.106	92	1577	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	0.000	106	0	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	0.000	105	0	N.D.	
76) Bromofluorobenzene	15.982	95	620706	72.55 ug/L	92
77) n-Propylbenzene	15.958	91	2044	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	1232	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D.	
87) 1,2,4-Trimethylbenzene	0.000	105	0	N.D.	
88) p-Isopropyltoluene	16.977	119	2493	N.D.	
89) s-Butylbenzene	16.853	105	1234	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	17.519	91	1836	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D.	
97) Naphthalene	20.921	128	3200	N.D.	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB025.D
Acq On : 7 Aug 2014 8:15 pm
Operator : KKW
Sample : A404270-24
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 08 08:49:39 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29955

Instrument: OVGCMS5

Calibration ID: 1408017

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29955-TUN1	QC		1		A4F0379		
AA29955-CCV1	QC		2		A4H0161	A4H0099	
4H07018-BS1	QC		3			A4H0099	
4H07018-BLK1	QC		4			A4H0099	
AA29955-CRL1	QC		5		A4H0032	A4H0099	
A404270-11	8260B TCL SOM01.2 DOD	B	6			A4H0099	CH2M Hill, Inc. (CH025)
A404270-25	8260B TCL SOM01.2 DOD	B	7			A4H0099	CH2M Hill, Inc. (CH025)
A404270-26	8260B TCL SOM01.2 DOD	B	8			A4H0099	CH2M Hill, Inc. (CH025)
A404270-27	8260B TCL SOM01.2 DOD	B	9			A4H0099	CH2M Hill, Inc. (CH025)
4H07018-MS1	QC		10			A4H0099	
4H07018-MSD1	QC		11			A4H0099	

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/8/2014 8:13:54AM

Analysis
8260B TCL SOM01.2 DOD [EPA 8260B]

4H07018

ENCO Orlando

Prepared using: EPA 5035_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4G0517 8260 mix full 2 working + TCL
A4H0125 8260 mix 2 working Gases/Acrolein

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
4H07018-BLK1		Blank			QC			5	5			1	
4H07018-BS1		LCS			QC			5	5	A4H0125 A4G0517	2 2	1	
4H07018-MS1		Matrix Spike [A404270-11]			QC			5	5	A4H0125 A4G0517	2 2	1	
4H07018-MSD1		Matrix Spike Dup [A404270-11]			QC			5	5	A4H0125 A4G0517	2 2	1	
A404270-11	D	TR-5TH-CSW010-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.71	5			1	1,4-DCB only. USE for MS/MSD
A404270-25	D	TR-5TH-CSF06-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.62	5			1	1,4-DCB only
A404270-26	D	TR-5TH-CSF07-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.82	5			1	1,4-DCB only
A404270-27	D	TR-5TH-CSF08-0814	B[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			4.26	5			1	1,4-DCB only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

Instrument 5

Start Date _____

StopDate _____

Instrument ID _____

Standard ID#	Description	Manufacture Lot#

Samples Prepared By _____ Date

Samples Prepared By _____ Date

GC/MS QA-QC Check Report

Tune File : C:\msdchem\1\DATA\080714\5HB026.D
Tune Time : 7 Aug 2014 8:43 pm

Daily Calibration File : C:\msdchem\1\DATA\080414\5H4007.D

639658 977088 1218050

568681

File	Sample	Surrogate Recovery %					Internal Standard Responses		
5HB027.D									
	CCV	93	97	108	123*	1148075*	926781	1530259	2083163
5HB028.D									
	BS	99	109	114	144*	1059993	952215	1521144	1808487
5HB029.D									
	BLK	94	94	105	146*	1087060	1029533	1686588	1777419
5HB030.D									
	CRL	95	98	112	148*	984570	944869	1535161	1637515
5HB031.D									
	A404270-11	99	101	113	148*	926677	897522	1464352	1591181
5HB032.D									
	A404270-25	97	105	111	143*	807667	872540	1412228	1464649
5HB033.D									
	A404270-26	103	105	116	148*	809009	799019	1307143	1432812
5HB034.D									
	A404270-27	98	103	115	151*	873204	835069	1362184	1480385
5HB035.D									
	A404359-01	93	103	102	130*	108774*	106596*	177661*	195582*
5HB036.D									
	4H07018-MS	101	106	116	134*	783818	842378	1342896	1506438
5HB037.D									
	4H07018-MS	104	106	118	145*	804386	821764	1318977	1488351
5HB038.D									
	4H07026-MS	107	109	124*	140*	775869	799559	1272970	1510385
5HB039.D									
	4H07026-MS	88	90	103	127*	1065955	1006883	1610032	1845840
5HB040.D									

```
        A404561-01   97  100  115  149*     792580    1277988    1365910
                                 771916
-----------------------------------------------------------------------------
(fails) - fails 12hr time check   * - fails criteria

    Created: Fri Aug 08 08:59:02 2014  JVGCMS4
```

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time: 08/02/14 9:17	Surrogate ID: A4E0236	8260 Mix: A4G0583
Sequence: AA29943, AA29955, AA29964	Internal ID: A4H0098	8260 Add: A4H0139
Batch: 4H06032, 4H07018, 4H08024 KKW 08/07/14	LCS ~~Halo~~ 2°: 8260 : A4G0517	8260 Ac/Ac: A4G0608
Method: 8260/624 KKW 08/08/14	LCS ~~Arom~~ 2°: Ac/Ac : A4H0042	8260 Gases: A4H0137
	LCS Gas 2°: A4H0112	Instrument #: MS-5

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HB001	BFB			1				
5HB002	BFB			1				
5HB003	CCV			2			✓	
5HB004	BS		KKW 08/08/14	3			✓	
5HB005	BLK			4			✓	
5HB006	A404270-06	C	1	5		KKW 08/08/14	✓	
5HB007	A404270-28	B	1	6			ms/msD ✓	
5HB008	4H06032-MS1	G	1	7			✓	
5HB009	4H06032-MSD1	L	1	8			✓	
5HB010	A404270-07	B	1	9			✓	
5HB011	A404270-08	B	1	10			✓	
5HB012	A404270-09	B	1	11			✓	
5HB013	A404270-10	B	1	12			✓	
5HB014	A404270-12	B	1	13			✓	
5HB015	A404270-13	B	1	14			✓	
5HB016	A404270-14	B	1	15			✓	
5HB017	A404270-15	B	1	16			✓	
5HB018	A404270-16	B	1	17			✓	
5HB019	A404270-18	B	1	18		KKW 08/08/14	✓	
5HB020	A404270-19	B	1	19			✓	

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:	Surrogate ID:	8260 Mix:
Sequence:	Internal ID:	8260 Add:
Batch:	LCS Halo 2⁰:	8260 Ac/Ac: KKW 08/08/14
Method:	LCS Arom 2⁰: KKW 08/08/14	8260 Gases:
	LCS Gas 2⁰:	**Instrument #:** MS-5

See Page 60

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
SHB021	A404270-20	B	1	20			✓	
SHB022	A404270-21	B	1	21			↓IS RRWIX	
SHB023	A404270-22	B	1	22			✓	
SHB024	A404270-23	B	1	23			✓	
SHB025	A404270-24	B	1	24			✓	
SHB026	BFB			25			✓	
SHB027	CCV			26			✓	
SHB028	BS			27	KKW 08/08/14		✓	
SHB029	BLK		KKW 08/08/14	28			✓	
SHB030	CRL			29			✓	
SHB031	A404270-11	B	1	30			✓	
SHB032	A404270-25	B	1	31			✓	
SHB033	A404270-26	B	1	32			✓	
SHB034	A404270-27	B	1	33			✓	
SHB035	A404359-01 RE1	B	1	34			✓ ↓IS	
SHB036	4H07018-MS1	G	1	35			✓	
SHB037	4H07018-MSD1	L	1	36	KKW 08/08/14		✓	
SHB038	MS1	G	1	37			✓	
SHB039	MSD1	F	1	38			✓	
~~SHB040~~	~~A404614-1~~	~~A~~	~~5~~	39	<2	N		

KKW 08/08/14

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:	Surrogate ID:	8260 Mix:
Sequence:	Internal ID:	8260 Add:
Batch:	LCS Halo 2⁰: KKW 08/08/14	8260 Ac/Ac: KKW 08/08/14
Method:	LCS Arom 2⁰:	8260 Gases:
	LCS Gas 2⁰:	Instrument #: MS-5

See Page 60

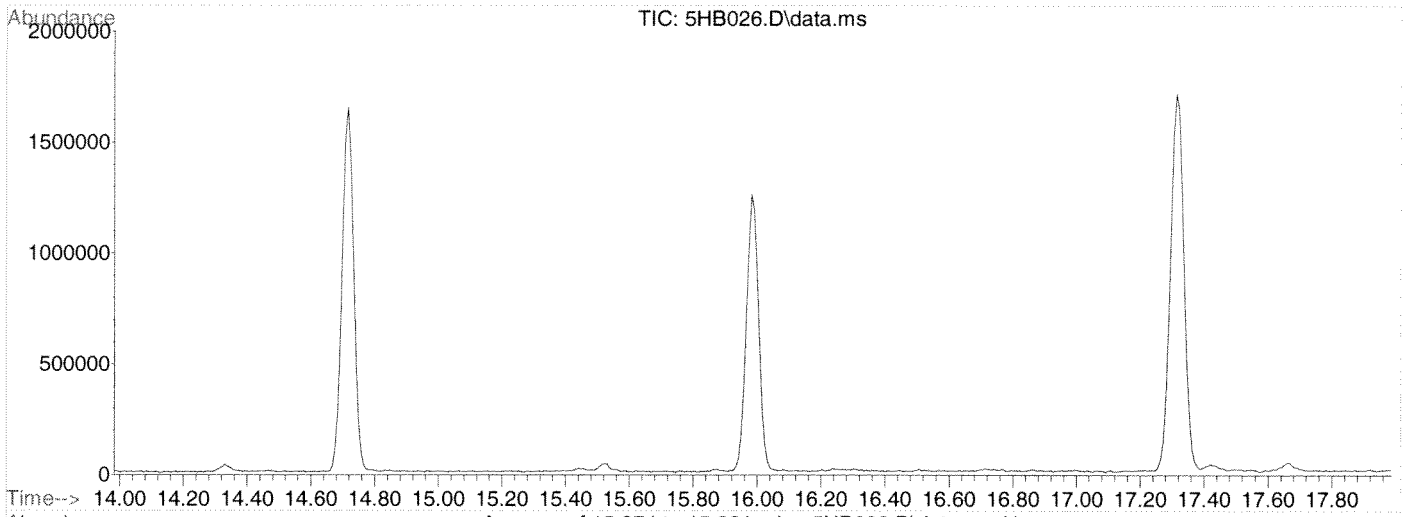
Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
~~SHB044~~	~~A404615-01~~	~~A~~	~~5~~	~~40~~	~~<2~~	~~N~~		
SHB040	A404561-01	F	1	39	—	—	✓	
SHB041	A404614-01	A	5.	40	<2	N	RRW 1X	
SHB042	A404615-01	A	5	41	<2	N	RRW 1X	
SHB043	A404510-01	B	100	42	—	—	RRW 250X	
SHB044	A404510-03	B	100	43			RRW 1X	
SHB045	A404504-01	A	100	44			RRW 100X matrix	
SHB046	A404393-01	D	100	45			RRW 1X	
SHB047	A404393-02	D	100	46			RRW 1X	
SHB048	A404393-03	D	100	47			RRW 1X	
SHB049	A404393-04	D	100	48			RRW 500X Carbon Tet.	
SHB050	A404393-05	D	100	49			1X	
SHB051	A404393-06	D	100	50		KKW	100X Chloroform	
SHB052	A404393-07	D	100	51		08/08/14	100X Carbon Tet	
SHB053	A404393-08	D	100	1			5000X Carbon Tet	
								KKW 08/08/14

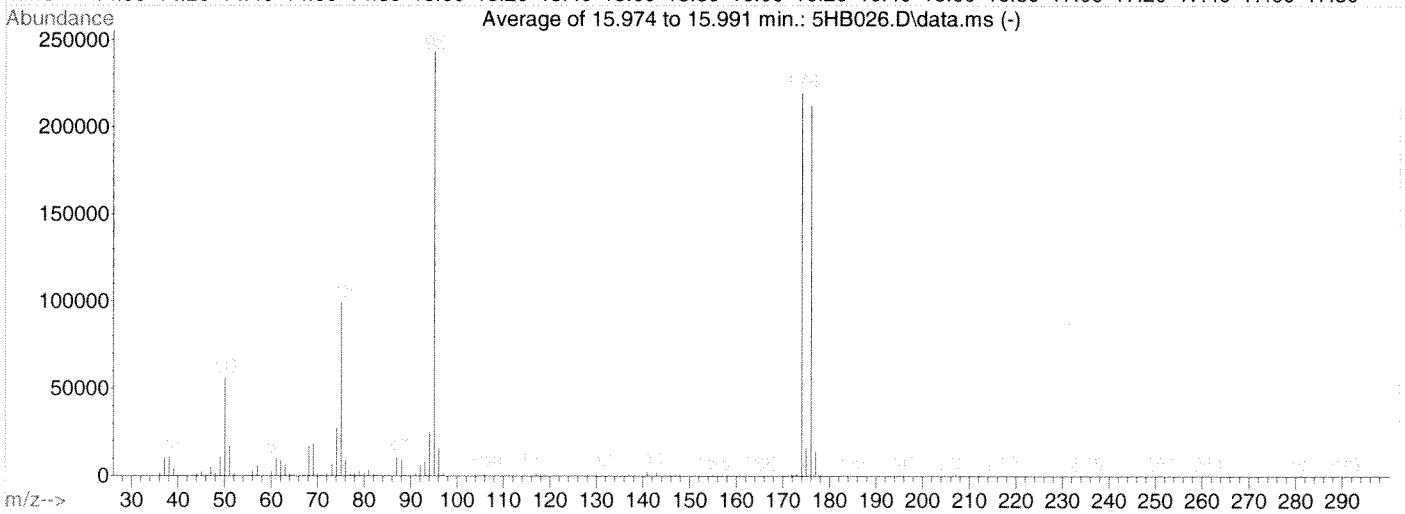
Analyst: KKW

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB026.D
Acq On : 7 Aug 2014 8:43 pm
Operator : KKW
Sample : BFB
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\MS5080414.M
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
Last Update : Tue Aug 05 11:49:17 2014





AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.9	55593	PASS
75	95	30	60	40.8	99261	PASS
95	95	100	100	100.0	243157	PASS
96	95	5	9	6.4	15456	PASS
173	174	0.00	2	0.3	599	PASS
174	95	50	100	90.2	219306	PASS
175	174	5	9	7.3	15952	PASS
176	174	95	101	96.9	212501	PASS
177	176	5	9	6.5	13770	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB027.D
Acq On : 7 Aug 2014 9:11 pm
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 08 08:22:09 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	926781	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1530259	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	2083163	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	1148075	50.00	ug/L	-0.02

System Monitoring Compounds						
31) Dibromofluoromethane	10.378	113	326266	46.43	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 92.86%			
42) d4-1,2-Dichloroethane	11.028	65	377553	48.73	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 97.46%			
54) D8-Toluene	13.032	98	1948729	54.13	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 108.26%			
75) Bromofluorobenzene	15.982	95	830877	61.40	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 122.80%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.158	85	358830	45.68	ug/L	98
3) Chloromethane	4.610	50	509669	36.91	ug/L	98
4) Vinyl Chloride	4.816	62	288694	31.27	ug/L	99
5) Bromomethane	5.547	94	152886	46.04	ug/L #	93
6) Chloroethane	5.810	64	151595	40.82	ug/L	97
7) Trichlorofluoromethane	6.097	101	600180	55.33	ug/L	96
8) Diethyl ether	6.673	59	250758	40.64	ug/L	92
9) 1,1-Dichloroethene	7.051	96	268118	41.10	ug/L	94
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	280366	43.62	ug/L	99
11) Acrolein	7.609	56	123986	331.73	ug/L	98
12) Iodomethane	7.314	142	375771	32.35	ug/L	94
13) Carbon Disulfide	7.125	76	587115	38.84	ug/L	94
14) 3-chloropropene	7.831	41	563970	39.39	ug/L	93
15) Acetone	8.061	43	85305	43.22	ug/L	94
16) Methylene Chloride	7.987	84	273315	40.13	ug/L	80
17) Methyl Acetate	8.226	43	234954	43.18	ug/L #	94
18) t-1,2-Dichloroethene	8.234	96	328095	42.22	ug/L	93
19) Methyl tert-butyl ether	8.373	73	661443	45.86	ug/L #	88
20) Acetonitrile	8.776	41	347633	356.85	ug/L	99
21) Diisopropyl ether	8.908	45	1400810	41.41	ug/L	97
22) Chloroprene	9.113	88	248406	38.87	ug/L	90
23) 1,1-Dichloroethane	9.154	63	642350	44.49	ug/L	99
24) Acrylonitrile	9.220	53	1143413	414.74	ug/L	99
25) Vinyl Acetate	9.433	43	800725	38.72	ug/L	100
26) c-1,2-Dichloroethene	9.844	96	387750	45.38	ug/L	94
27) 2,2-Dichloropropane	9.992	77	518985	55.86	ug/L	93
28) Bromochloromethane	10.099	128	181290	44.54	ug/L	100
29) Cyclohexane	10.124	56	951314	44.61	ug/L	93
30) Chloroform	10.157	83	646611	56.48	ug/L	97
32) Dibromofluoromethane	10.378	113	326266	46.43	ug/L	94
33) 2-Butanone	10.518	72	22826	42.69	ug/L #	53
34) 1,1,1-Trichloroethane	10.452	97	636187	56.11	ug/L	95
35) 1,1-Dichloropropene	10.576	75	467097	48.69	ug/L	92
36) Propionitrile	10.888	54	531380	489.93	ug/L #	75
37) Methacrylonitrile	10.913	41	2460652	487.99	ug/L	97
38) Isobutyl Alcohol	10.945	43	767691	857.77	ug/L #	86
40) Carbon Tetrachloride	10.370	117	535550	49.19	ug/L	97
41) Benzene	10.880	78	1454990	43.25	ug/L	98
43) d4-1,2-Dichloroethane	11.028	65	377553	48.73	ug/L #	83
44) 1,2-Dichloroethane	11.102	62	543045	56.81	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB027.D
Acq On : 7 Aug 2014 9:11 pm
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 08 08:22:09 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

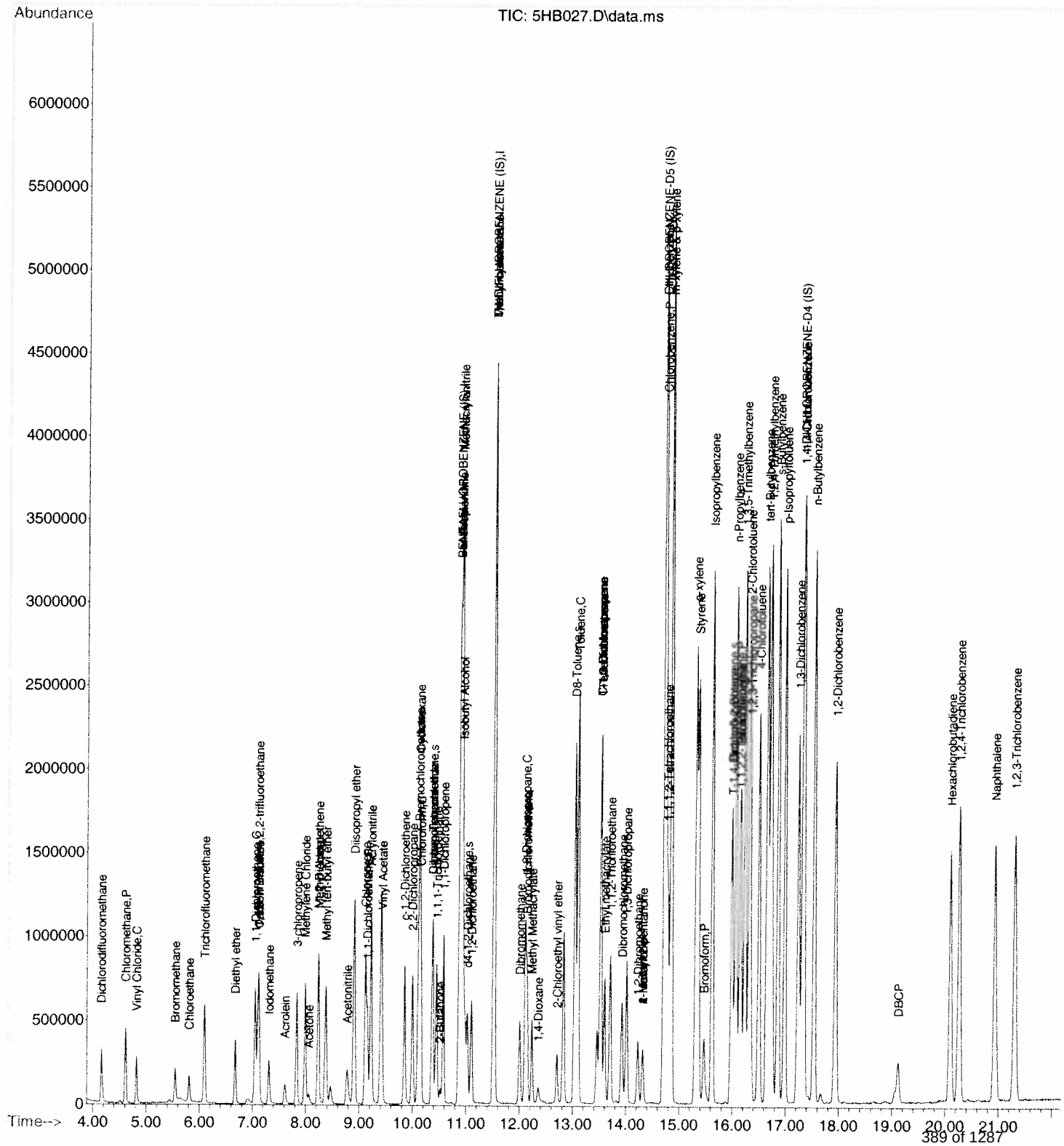
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	524592	46.46 ug/L	97
46) Methyl cyclohexane	11.529	83	871973	43.54 ug/L	90
47) Dibromomethane	12.005	93	212305	54.59 ug/L	94
48) 1,2-Dichloropropane	12.104	63	474652	45.72 ug/L #	92
49) Bromodichloromethane	12.145	83	554713	59.61 ug/L #	89
50) Methyl Methacrylate	12.235	69	181409	43.88 ug/L	85
51) 1,4-Dioxane	12.359	88	93717	1165.51 ug/L	95
52) 2-Chloroethyl vinyl ether	12.704	63	148769	40.67 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	591707	53.70 ug/L	90
55) D8-Toluene	13.032	98	1948729	54.13 ug/L #	90
56) 4-Methyl-2-pentanone	14.314	100	30018	52.05 ug/L	80
58) Toluene	13.090	92	1506573	47.52 ug/L	99
59) T-1,3-Dichloropropene	13.509	75	591707	52.50 ug/L	92
60) Tetrachloroethene	13.525	164	569675	50.12 ug/L	97
61) Ethyl methacrylate	13.599	69	420429	47.34 ug/L	98
62) 1,1,2-Trichloroethane	13.706	97	406211	52.05 ug/L	95
63) Dibromochloromethane	13.928	129	485179	51.53 ug/L #	96
64) 1,3-Dichloropropane	14.010	76	654200	50.04 ug/L	87
65) 1,2-Dibromoethane	14.224	107	407520	50.94 ug/L	99
66) 2-Hexanone	14.314	43	296292	41.73 ug/L	99
67) Ethylbenzene	14.709	106	1028871	51.55 ug/L	98
68) Chlorobenzene	14.742	112	1809975	46.79 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.783	131	584569	49.98 ug/L	99
70) m-xylene & p-xylene	14.840	106	2661941	105.96 ug/L	99
71) o-xylene	15.317	106	1327521	53.14 ug/L	98
72) Styrene	15.358	104	2126969	49.89 ug/L #	91
73) Bromoform	15.473	173	316007	60.93 ug/L	99
74) Isopropylbenzene	15.621	105	3393647	48.30 ug/L	99
76) Bromofluorobenzene	15.982	95	830877	61.40 ug/L	95
77) n-Propylbenzene	16.065	91	3959209	49.61 ug/L	99
78) Bromobenzene	16.155	156	827064	51.73 ug/L #	85
79) 1,1,2,2-Tetrachloroethane	16.130	83	521758	55.64 ug/L	97
80) 1,2,3-Trichloropropane	16.344	61	180033	53.38 ug/L #	79
81) T-1,4-Dichloro-2-Butene	16.007	53	226772	41.52 ug/L	89
83) 1,3,5-Trimethylbenzene	16.237	105	2981766	44.60 ug/L	100
84) 2-Chlorotoluene	16.311	91	2336576	47.06 ug/L	98
85) 4-Chlorotoluene	16.500	91	2348328	46.89 ug/L	97
86) tert-Butylbenzene	16.648	119	3472273	41.98 ug/L	99
87) 1,2,4-Trimethylbenzene	16.705	105	3093710	45.21 ug/L	99
88) p-Isopropyltoluene	16.985	119	3323247	41.95 ug/L	99
89) s-Butylbenzene	16.853	105	4279775	44.95 ug/L	99
90) 1,3-Dichlorobenzene	17.240	146	1935059	46.67 ug/L	97
91) 1,4-Dichlorobenzene	17.338	146	1868838	45.34 ug/L #	92
92) n-Butylbenzene	17.535	91	3218782	45.50 ug/L	97
93) 1,2-Dichlorobenzene	17.938	146	1847976	47.63 ug/L	95
94) DBCP	19.121	157	150963	51.95 ug/L	97
95) Hexachlorobutadiene	20.099	225	603952	51.02 ug/L	97
96) 1,2,4-Trichlorobenzene	20.263	180	1271248	47.75 ug/L	97
97) Naphthalene	20.937	128	2876445	49.91 ug/L	99
98) 1,2,3-Trichlorobenzene	21.307	180	1198859	49.87 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB027.D
Acq On : 7 Aug 2014 9:11 pm
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 08 08:22:09 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB028.D
Acq On : 7 Aug 2014 9:39 pm
Operator : KKW
Sample : BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 08 08:22:10 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	952215	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1521144	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1808487	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	1059993	50.00	ug/L	-0.02

System Monitoring Compounds						
31) Dibromofluoromethane	10.378	113	356877	49.43	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 98.86%			
42) d4-1,2-Dichloroethane	11.027	65	419078	54.42	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 108.84%			
54) D8-Toluene	13.032	98	2035764	56.88	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.76%			
75) Bromofluorobenzene	15.982	95	832435	71.89	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 143.78%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.158	85	171888	21.30	ug/L	97
3) Chloromethane	4.610	50	244045	17.20	ug/L	98
4) Vinyl Chloride	4.815	62	150141	15.83	ug/L	97
5) Bromomethane	5.547	94	69526	20.38	ug/L #	95
6) Chloroethane	5.818	64	77197	20.23	ug/L	98
7) Trichlorofluoromethane	6.097	101	243042	21.81	ug/L	94
8) Diethyl ether	6.681	59	79046	12.47	ug/L	89
9) 1,1-Dichloroethene	7.050	96	88722	13.24	ug/L	83
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	102309	15.49	ug/L	99
11) Acrolein	7.609	56	54089	140.85	ug/L	99
12) Iodomethane	7.313	142	134821	11.30	ug/L	99
13) Carbon Disulfide	7.124	76	214522	13.81	ug/L #	91
14) 3-chloropropene	7.831	41	225005	15.30	ug/L	96
15) Acetone	8.069	43	37670	18.57	ug/L	97
16) Methylene Chloride	7.987	84	107742	15.58	ug/L	71
17) Methyl Acetate	8.234	43	89641	16.03	ug/L #	92
18) t-1,2-Dichloroethene	8.242	96	118162	14.80	ug/L	89
19) Methyl tert-butyl ether	8.373	73	216569	14.62	ug/L	91
20) Acetonitrile	8.784	41	16715	16.70	ug/L #	85
21) Diisopropyl ether	8.907	45	481962	13.87	ug/L	94
22) Chloroprene	9.113	88	98288	14.97	ug/L	80
23) 1,1-Dichloroethane	9.146	63	242536	16.35	ug/L #	97
24) Acrylonitrile	9.220	53	48377	17.08	ug/L #	91
25) Vinyl Acetate	9.433	43	218004	10.26	ug/L	97
26) c-1,2-Dichloroethene	9.844	96	139526	15.89	ug/L	93
27) 2,2-Dichloropropane	9.992	77	180455	18.90	ug/L	96
28) Bromochloromethane	10.099	128	66466	15.89	ug/L	97
29) Cyclohexane	10.124	56	310177	14.16	ug/L	93
30) Chloroform	10.156	83	243704	20.72	ug/L #	93
32) Dibromofluoromethane	10.378	113	356877	49.43	ug/L	92
33) 2-Butanone	10.526	72	8729	15.89	ug/L	67
34) 1,1,1-Trichloroethane	10.444	97	239131	20.53	ug/L	93
35) 1,1-Dichloropropene	10.575	75	167528	17.00	ug/L	91
36) Propionitrile	10.896	54	29542	26.51	ug/L #	1
37) Methacrylonitrile	10.921	41	154461	29.81	ug/L	89
38) Isobutyl Alcohol	10.937	43	151204	164.43	ug/L #	32
40) Carbon Tetrachloride	10.370	117	196518	18.16	ug/L	98
41) Benzene	10.879	78	561578	16.79	ug/L	99
43) d4-1,2-Dichloroethane	11.027	65	419078	54.42	ug/L #	86
44) 1,2-Dichloroethane	11.101	62	197587	20.80	ug/L	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB028.D
Acq On : 7 Aug 2014 9:39 pm
Operator : KKW
Sample : BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 08 08:22:10 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

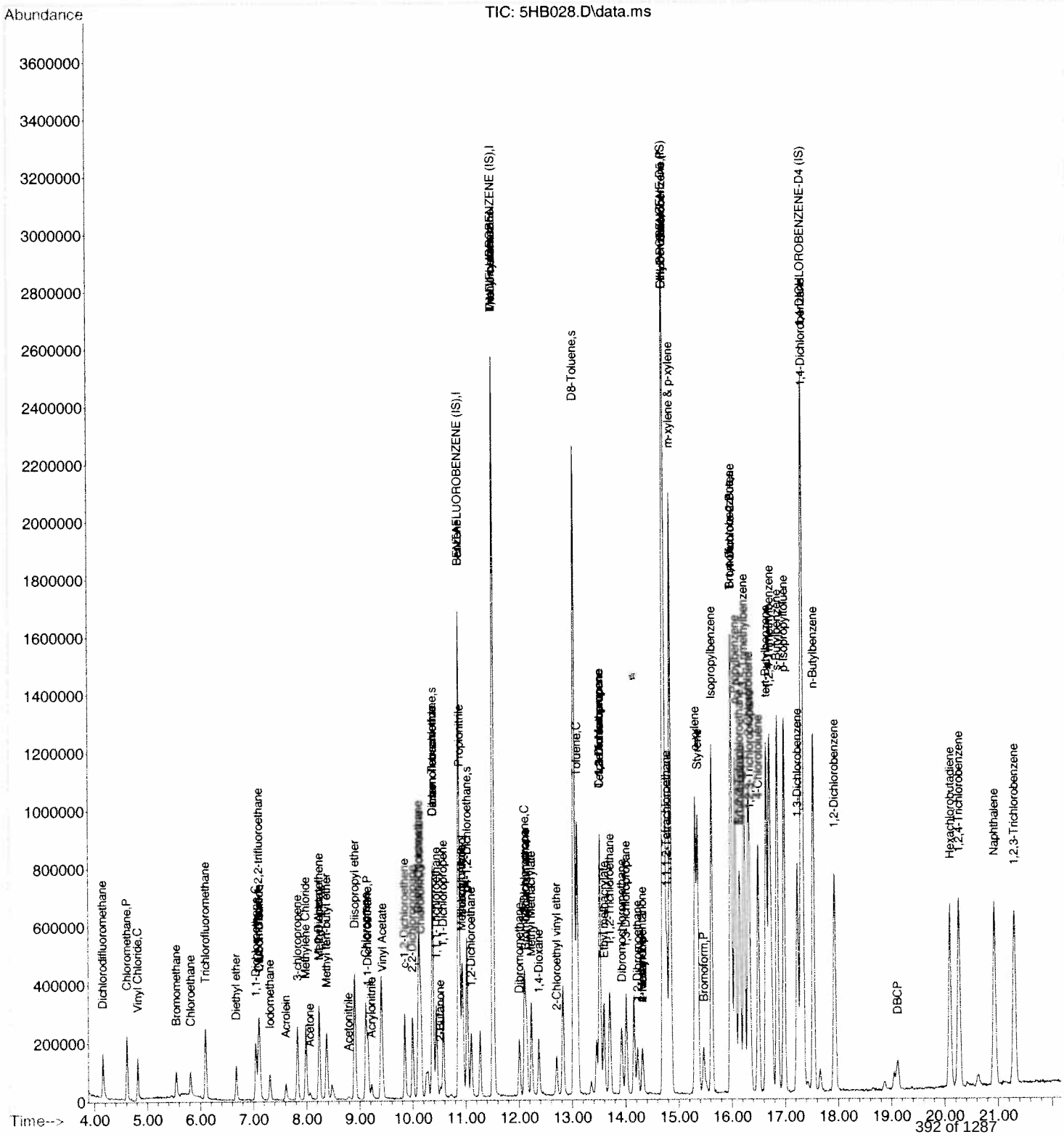
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	195998	17.46 ug/L	92
46) Methyl cyclohexane	11.529	83	312998	15.72 ug/L	86
47) Dibromomethane	12.005	93	84691	21.91 ug/L	93
48) 1,2-Dichloropropane	12.104	63	190003	18.41 ug/L #	92
49) Bromodichloromethane	12.137	83	214236	23.16 ug/L #	87
50) Methyl Methacrylate	12.235	69	118510	28.84 ug/L	82
51) 1,4-Dioxane	12.383	88	2431	30.41 ug/L #	30
52) 2-Chloroethyl vinyl ether	12.704	63	67021	18.43 ug/L	94
53) C-1,3-Dichloropropene	13.509	75	250156	22.84 ug/L	95
55) D8-Toluene	13.032	98	2035764	56.88 ug/L #	90
56) 4-Methyl-2-pentanone	14.314	100	15808	27.57 ug/L	70
58) Toluene	13.090	92	567870	20.63 ug/L	99
59) T-1,3-Dichloropropene	13.509	75	250156	25.57 ug/L #	90
60) Tetrachloroethene	13.525	164	221957	22.49 ug/L	98
61) Ethyl methacrylate	13.591	69	185783	24.10 ug/L	97
62) 1,1,2-Trichloroethane	13.706	97	167291	24.69 ug/L	96
63) Dibromochloromethane	13.920	129	185597	22.71 ug/L #	95
64) 1,3-Dichloropropane	14.010	76	265010	23.35 ug/L #	88
65) 1,2-Dibromoethane	14.224	107	171327	24.67 ug/L	99
66) 2-Hexanone	14.314	43	143120	23.22 ug/L #	97
67) Ethylbenzene	14.709	106	398465	23.00 ug/L	98
68) Chlorobenzene	14.733	112	688774	20.51 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.783	131	231016	22.75 ug/L	97
70) m-xylene & p-xylene	14.840	106	1006231	46.14 ug/L	99
71) o-xylene	15.317	106	482521	22.25 ug/L	96
72) Styrene	15.358	104	788842	21.32 ug/L #	90
73) Bromoform	15.473	173	118359	26.29 ug/L	98
74) Isopropylbenzene	15.621	105	1252329	20.53 ug/L	98
76) Bromofluorobenzene	15.982	95	832435	71.89 ug/L	95
77) n-Propylbenzene	16.064	91	1501985	21.68 ug/L	99
78) Bromobenzene	16.155	156	320992	23.13 ug/L #	84
79) 1,1,2,2-Tetrachloroethane	16.138	83	224953	27.63 ug/L	97
80) 1,2,3-Trichloropropane	16.344	61	75996	25.95 ug/L #	83
81) T-1,4-Dichloro-2-Butene	15.999	53	94848	20.01 ug/L #	68
83) 1,3,5-Trimethylbenzene	16.229	105	1098432	17.79 ug/L	99
84) 2-Chlorotoluene	16.311	91	849958	18.54 ug/L	99
85) 4-Chlorotoluene	16.492	91	867141	18.75 ug/L	98
86) tert-Butylbenzene	16.648	119	1310431	17.16 ug/L	99
87) 1,2,4-Trimethylbenzene	16.713	105	1132272	17.92 ug/L #	95
88) p-Isopropyltoluene	16.985	119	1349138	18.45 ug/L	99
89) s-Butylbenzene	16.853	105	1590141	18.09 ug/L	100
90) 1,3-Dichlorobenzene	17.239	146	696462	18.19 ug/L	96
91) 1,4-Dichlorobenzene	17.338	146	690074	18.13 ug/L	98
92) n-Butylbenzene	17.527	91	1219478	18.67 ug/L	98
93) 1,2-Dichlorobenzene	17.930	146	675480	18.86 ug/L	95
94) DBCP	19.113	157	61478	22.91 ug/L	92
95) Hexachlorobutadiene	20.107	225	247449	22.64 ug/L	97
96) 1,2,4-Trichlorobenzene	20.263	180	464841	18.91 ug/L	98
97) Naphthalene	20.929	128	1157119	21.75 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	460103	20.73 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB028.D
Acq On : 7 Aug 2014 9:39 pm
Operator : KKW
Sample : BS
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 08 08:22:10 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB029.D
Acq On : 7 Aug 2014 10:07 pm
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 08 08:58:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	1029533	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1686588	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1777419	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	1087060	50.00 ug/L	0.00

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	366906	47.00 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.00%		
42) d4-1,2-Dichloroethane	11.027	65	401051	46.97 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 93.94%		
54) D8-Toluene	13.032	98	2083542	52.51 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 105.02%		
75) Bromofluorobenzene	15.990	95	828682	72.90 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 145.80%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.963	41	2260	N.D.	
15) Acetone	8.061	43	3269	1.49 ug/L #	45
16) Methylene Chloride	7.987	84	15328	2.06 ug/L	71
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D. d	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	10.000	77	1175	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	366906	47.00 ug/L	94
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	4599	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	401051	46.97 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB029.D
Acq On : 7 Aug 2014 10:07 pm
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 08 08:58:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

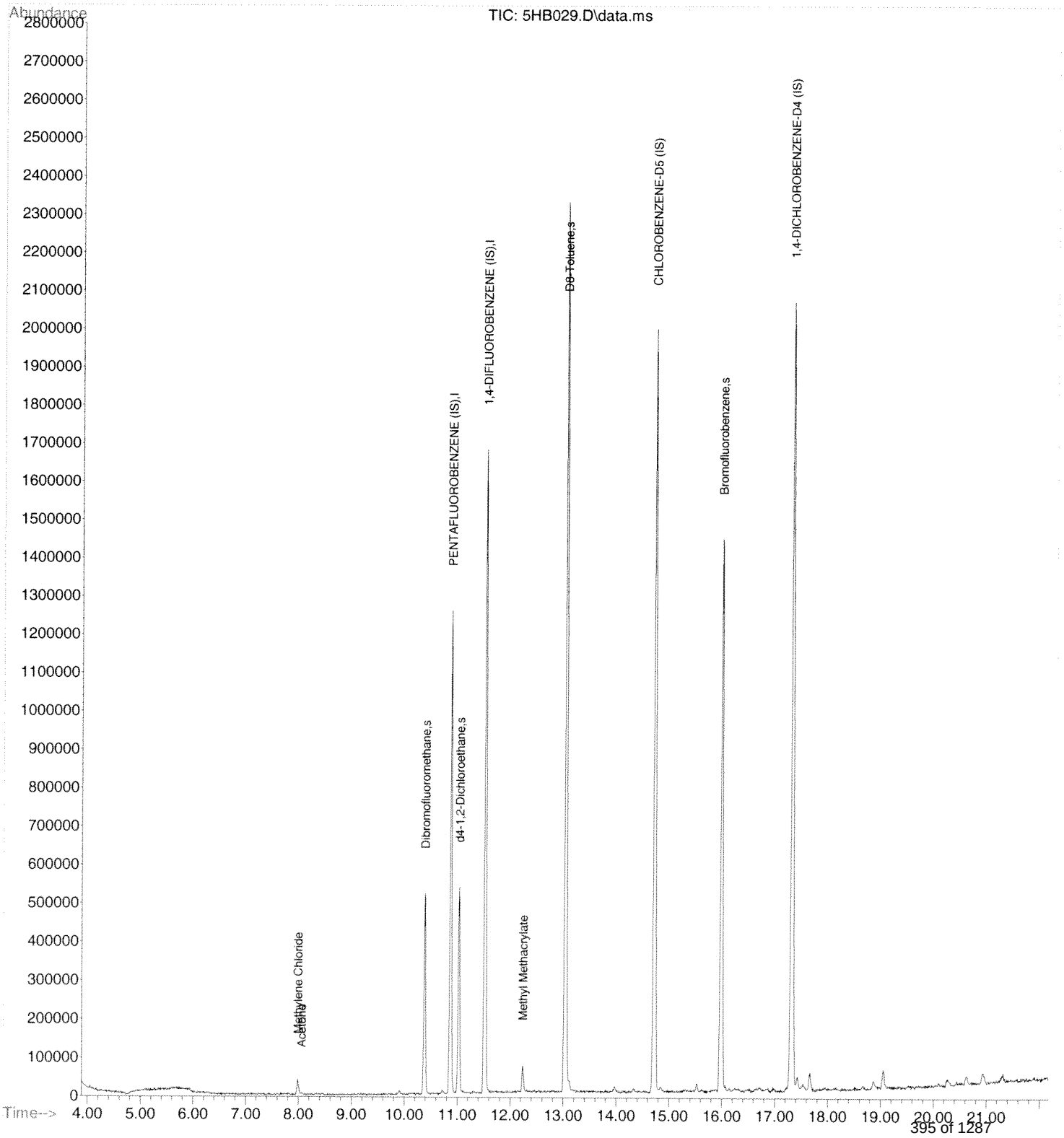
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	12.235	69	24983	5.48 ug/L	90
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	2082866	52.49 ug/L #	90
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	2533	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.700	106	2027	N.D.	
68) Chlorobenzene	14.741	112	2211	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.317	106	3220	N.D.	
72) Styrene	15.382	104	4570	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.612	105	5255	N.D.	
76) Bromofluorobenzene	15.990	95	828682	72.90 ug/L	95
77) n-Propylbenzene	16.064	91	10300	N.D.	
78) Bromobenzene	16.163	156	1793	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.237	105	5086	N.D.	
84) 2-Chlorotoluene	16.319	91	3644	N.D.	
85) 4-Chlorotoluene	16.500	91	6491	N.D.	
86) tert-Butylbenzene	16.648	119	4860	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	6823	N.D.	
88) p-Isopropyltoluene	16.976	119	9178	N.D.	
89) s-Butylbenzene	16.837	105	8663	N.D.	
90) 1,3-Dichlorobenzene	17.248	146	4530	N.D.	
91) 1,4-Dichlorobenzene	17.330	146	7534	N.D.	
92) n-Butylbenzene	17.543	91	10613	N.D.	
93) 1,2-Dichlorobenzene	17.938	146	5996	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	20.115	225	2031	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB029.D
Acq On : 7 Aug 2014 10:07 pm
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 08 08:58:06 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB030.D
Acq On : 7 Aug 2014 10:35 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 08 08:22:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	944869	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1535161	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1637515	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	984570	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	341054	47.61 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.22%		
42) d4-1,2-Dichloroethane	11.027	65	379252	48.80 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 97.60%		
54) D8-Toluene	13.032	98	2019980	55.93 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 111.86%		
75) Bromofluorobenzene	15.982	95	775916	74.20 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 148.40%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.166	85	7819	0.98 ug/L #	90
3) Chloromethane	4.610	50	13630	0.97 ug/L	93
4) Vinyl Chloride	4.815	62	6707	0.71 ug/L	93
5) Bromomethane	5.547	94	3486	1.03 ug/L #	90
6) Chloroethane	5.810	64	3991	1.05 ug/L #	88
7) Trichlorofluoromethane	6.097	101	11804	1.07 ug/L #	87
8) Diethyl ether	6.672	59	5400	0.86 ug/L	87
9) 1,1-Dichloroethene	7.050	96	4678	0.70 ug/L	89
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	4977	0.76 ug/L	96
11) Acrolein	7.617	56	2898	7.61 ug/L	95
12) Iodomethane	7.305	142	5851	0.49 ug/L #	80
13) Carbon Disulfide	7.124	76	9590	0.62 ug/L #	78
14) 3-chloropropene	7.831	41	9761	0.67 ug/L #	73
15) Acetone	8.078	43	8116	4.03 ug/L	94
16) Methylene Chloride	7.987	84	7386	1.08 ug/L	85
17) Methyl Acetate	8.234	43	7834	1.41 ug/L #	78
18) t-1,2-Dichloroethene	8.242	96	7007	0.88 ug/L	87
19) Methyl tert-butyl ether	8.382	73	16495	1.12 ug/L #	90
20) Acetonitrile	8.801	41	9829	9.90 ug/L #	82
21) Diisopropyl ether	8.907	45	26991	0.78 ug/L #	93
22) Chloroprene	9.121	88	3993	0.61 ug/L	77
23) 1,1-Dichloroethane	9.146	63	12172	0.83 ug/L #	86
24) Acrylonitrile	9.220	53	23361	8.31 ug/L #	100
25) Vinyl Acetate	9.433	43	13834	0.66 ug/L #	95
26) c-1,2-Dichloroethene	9.844	96	7156	0.82 ug/L	86
27) 2,2-Dichloropropane	10.000	77	10357	1.09 ug/L	92
28) Bromochloromethane	10.099	128	3972	0.96 ug/L	92
29) Cyclohexane	10.115	56	14566	0.67 ug/L #	85
30) Chloroform	10.148	83	14498	1.24 ug/L	92
32) Dibromofluoromethane	10.378	113	341054	47.61 ug/L	92
33) 2-Butanone	10.378	72	1397	2.56 ug/L #	1
34) 1,1,1-Trichloroethane	10.444	97	11888	1.03 ug/L	88
35) 1,1-Dichloropropene	10.584	75	7136	0.73 ug/L	96
36) Propionitrile	10.896	54	11251	10.17 ug/L #	53
37) Methacrylonitrile	10.912	41	54872	10.67 ug/L	98
38) Isobutyl Alcohol	10.937	43	16572	18.16 ug/L #	81
40) Carbon Tetrachloride	10.370	117	11210	1.03 ug/L #	80
41) Benzene	10.871	78	31161	0.92 ug/L #	72
43) d4-1,2-Dichloroethane	11.027	65	379252	48.80 ug/L #	85
44) 1,2-Dichloroethane	11.101	62	12331	1.29 ug/L #	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB030.D
Acq On : 7 Aug 2014 10:35 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 08 08:22:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

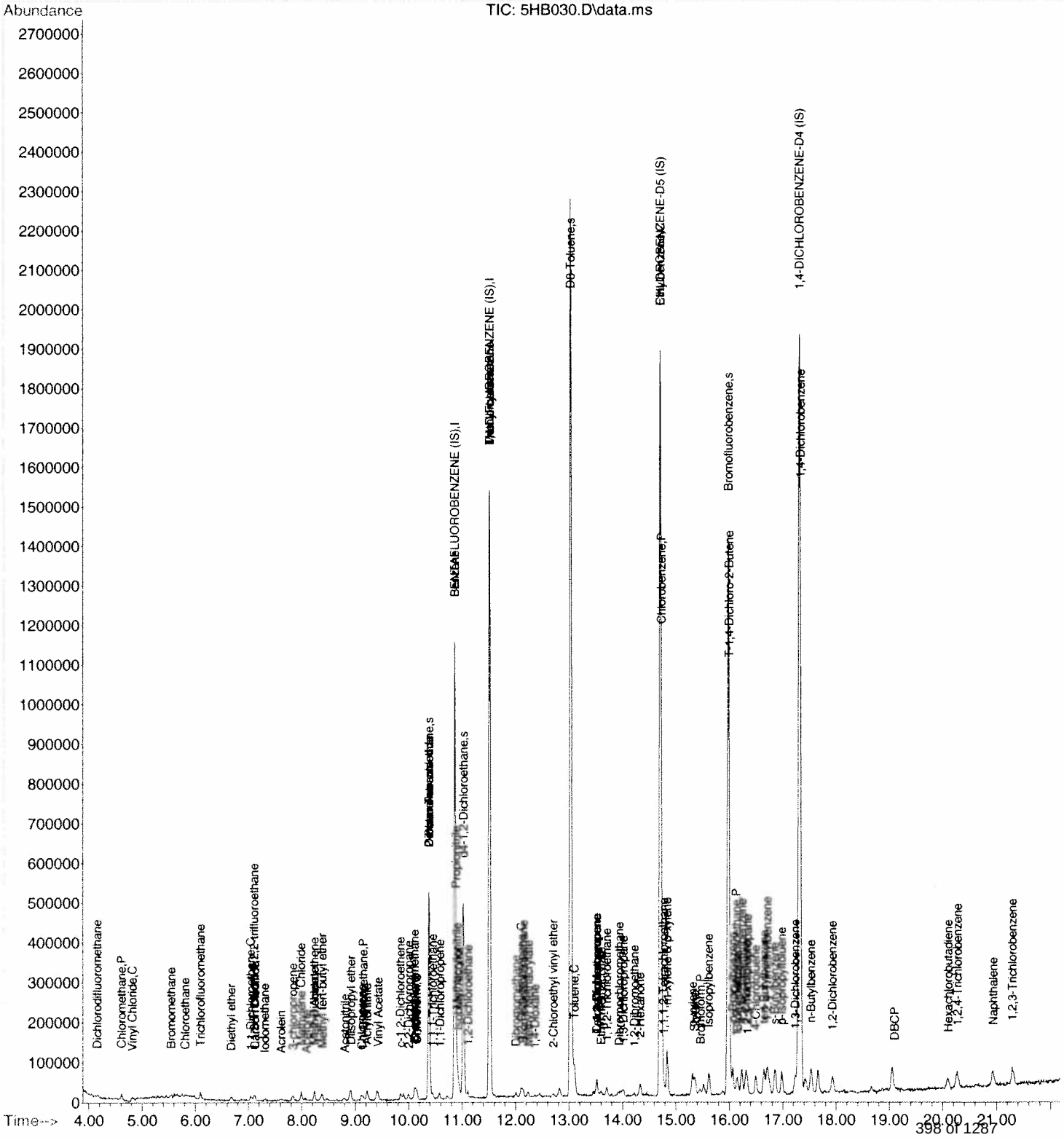
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	10564	0.93 ug/L #	1
46) Methyl cyclohexane	11.520	83	26879	1.34 ug/L #	58
47) Dibromomethane	12.005	93	4150	1.06 ug/L #	76
48) 1,2-Dichloropropane	12.104	63	9210	0.88 ug/L #	89
49) Bromodichloromethane	12.145	83	12507	1.34 ug/L #	84
50) Methyl Methacrylate	12.244	69	4145	1.00 ug/L	94
51) 1,4-Dioxane	12.359	88	2448	30.35 ug/L	96
52) 2-Chloroethyl vinyl ether	12.704	63	3292	0.90 ug/L #	75
53) C-1,3-Dichloropropene	13.509	75	11369	1.03 ug/L #	78
55) D8-Toluene	13.032	98	2019986	55.93 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	33020	1.32 ug/L #	89
59) T-1,3-Dichloropropene	13.509	75	11369	1.28 ug/L	95
60) Tetrachloroethene	13.525	164	10544	1.18 ug/L	93
61) Ethyl methacrylate	13.599	69	7069	1.01 ug/L	91
62) 1,1,2-Trichloroethane	13.698	97	8947	1.46 ug/L	90
63) Dibromochloromethane	13.928	129	9313	1.26 ug/L	94
64) 1,3-Dichloropropane	14.010	76	13997	1.36 ug/L	83
65) 1,2-Dibromoethane	14.232	107	8617	1.37 ug/L #	97
66) 2-Hexanone	14.331	43	15607	2.80 ug/L #	69
67) Ethylbenzene	14.709	106	20876	1.33 ug/L #	88
68) Chlorobenzene	14.741	112	35950	1.18 ug/L #	88
69) 1,1,1,2-Tetrachloroethane	14.783	131	10787	1.17 ug/L #	83
70) m-xylene & p-xylene	14.840	106	52745	2.67 ug/L	100
71) o-xylene	15.308	106	26600	1.35 ug/L	99
72) Styrene	15.350	104	37457	1.12 ug/L	92
73) Bromoform	15.473	173	5108	1.25 ug/L #	1
74) Isopropylbenzene	15.621	105	58761	1.06 ug/L #	90
76) Bromofluorobenzene	15.982	95	775916	74.20 ug/L	94
77) n-Propylbenzene	16.064	91	74591	1.19 ug/L	99
78) Bromobenzene	16.155	156	16468	1.31 ug/L	90
79) 1,1,2,2-Tetrachloroethane	16.122	83	12209	1.66 ug/L #	87
80) 1,2,3-Trichloropropane	16.352	61	3643	1.37 ug/L #	61
81) T-1,4-Dichloro-2-Butene	16.007	53	4954	1.15 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	49748	0.87 ug/L #	87
84) 2-Chlorotoluene	16.311	91	43651	1.03 ug/L	97
85) 4-Chlorotoluene	16.492	91	42682	0.99 ug/L	93
86) tert-Butylbenzene	16.648	119	58850	0.83 ug/L	96
87) 1,2,4-Trimethylbenzene	16.705	105	56809	0.97 ug/L #	84
88) p-Isopropyltoluene	16.976	119	53635	0.79 ug/L	99
89) s-Butylbenzene	16.845	105	70551	0.86 ug/L	95
90) 1,3-Dichlorobenzene	17.231	146	36652	1.03 ug/L	97
91) 1,4-Dichlorobenzene	17.338	146	37353	1.06 ug/L #	1
92) n-Butylbenzene	17.535	91	51711	0.85 ug/L	95
93) 1,2-Dichlorobenzene	17.930	146	35449	1.07 ug/L	98
94) DBCP	19.105	157	3660	1.47 ug/L	94
95) Hexachlorobutadiene	20.107	225	10153	1.00 ug/L #	57
96) 1,2,4-Trichlorobenzene	20.263	180	27875	1.22 ug/L	97
97) Naphthalene	20.937	128	65104	1.32 ug/L	98
98) 1,2,3-Trichlorobenzene	21.299	180	24916	1.21 ug/L	90

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB030.D
Acq On : 7 Aug 2014 10:35 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 08 08:22:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB031.D
Acq On : 7 Aug 2014 11:03 pm
Operator : KKW
Sample : A404270-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 08 09:03:55 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	897522	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1464352	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1591181	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	926677	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	338527	49.75 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 99.50%		
42) d4-1,2-Dichloroethane	11.028	65	374241	50.48 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.96%		
54) D8-Toluene	13.033	98	1952052	56.66 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 113.32%		
75) Bromofluorobenzene	15.982	95	751454	73.93 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 147.86%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	7.856	41	1025	N.D.	
15) Acetone	8.061	43	7289	3.81 ug/L	94
16) Methylene Chloride	7.979	84	4442	0.69 ug/L #	59
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	338527	49.75 ug/L	93
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.896	78	3747	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	374241	50.48 ug/L #	83
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB031.D
Acq On : 7 Aug 2014 11:03 pm
Operator : KKW
Sample : A404270-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 08 09:03:55 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

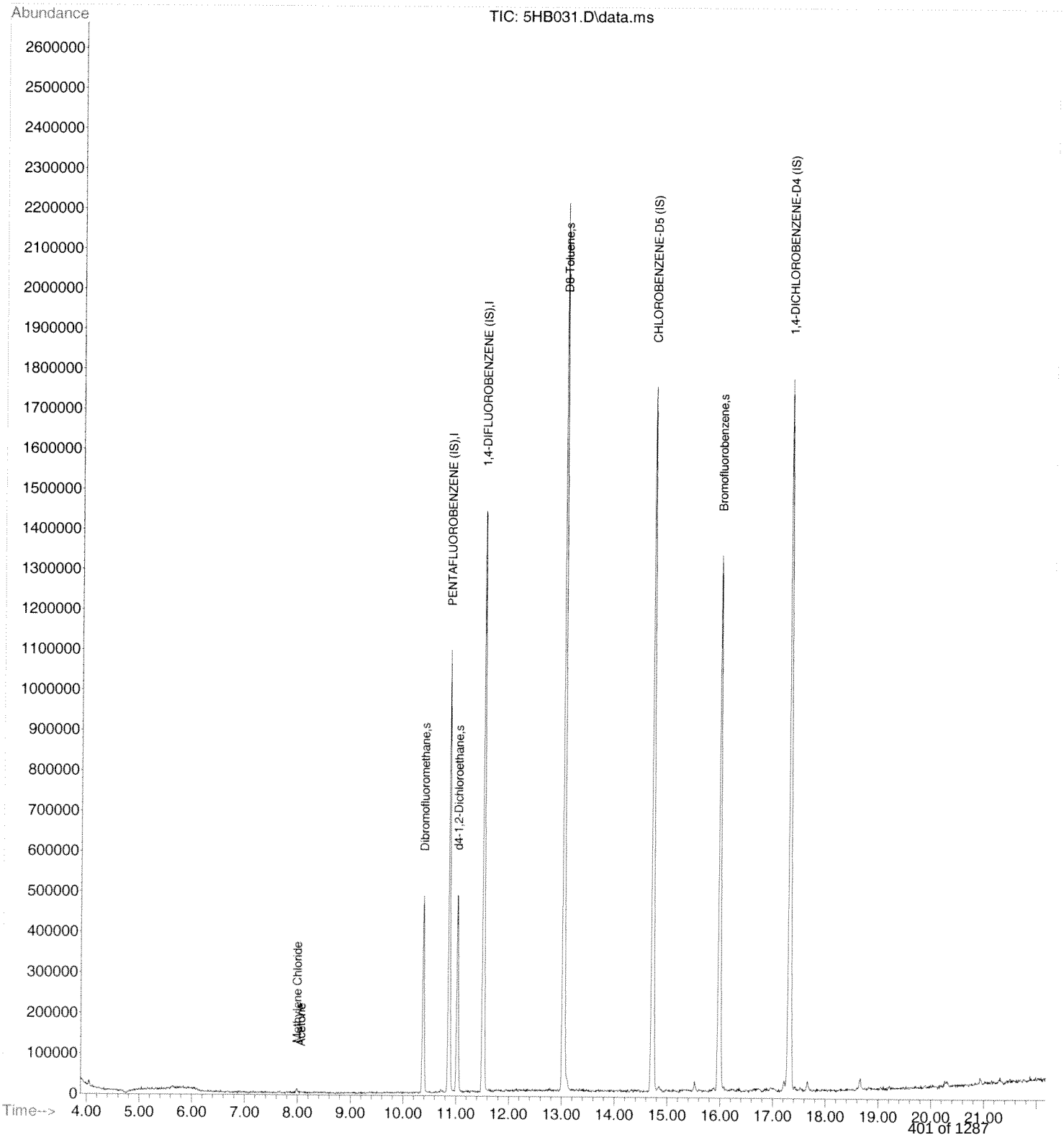
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.033	98	1952052	56.66 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.317	106	1435	N.D.	
72) Styrene	15.374	104	1171	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	4461	N.D.	
76) Bromofluorobenzene	15.982	95	751454	73.93 ug/L	96
77) n-Propylbenzene	16.056	91	6953	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.245	105	3308	N.D.	
84) 2-Chlorotoluene	16.303	91	1821	N.D.	
85) 4-Chlorotoluene	16.492	91	3062	N.D.	
86) tert-Butylbenzene	16.648	119	3579	N.D.	
87) 1,2,4-Trimethylbenzene	16.722	105	4057	N.D.	
88) p-Isopropyltoluene	16.977	119	5036	N.D.	
89) s-Butylbenzene	16.862	105	5749	N.D.	
90) 1,3-Dichlorobenzene	17.223	146	1644	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	3191	N.D.	
92) n-Butylbenzene	17.527	91	5782	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.288	180	2939	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB031.D
Acq On : 7 Aug 2014 11:03 pm
Operator : KKW
Sample : A404270-11
Misc :
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Aug 08 09:03:55 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB032.D
Acq On : 7 Aug 2014 11:31 pm
Operator : KKW
Sample : A404270-25
Misc :
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 08 09:05:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	872540	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1412228	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1464649	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.314	152	807667	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	322502	48.75 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 97.50%		
42) d4-1,2-Dichloroethane	11.028	65	375211	52.48 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 104.96%		
54) D8-Toluene	13.033	98	1848459	55.63 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 111.26%		
75) Bromofluorobenzene	15.982	95	669949	71.40 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 142.80%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.069	43	5253	2.83 ug/L	96
16) Methylene Chloride	0.000	84	0	N.D. d	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	8.382	73	1158	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	0.000	77	0	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	322502	48.75 ug/L	91
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	2213	N.D.	
43) d4-1,2-Dichloroethane	11.028	65	375211	52.48 ug/L #	87
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB032.D
Acq On : 7 Aug 2014 11:31 pm
Operator : KKW
Sample : A404270-25
Misc :
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 08 09:05:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

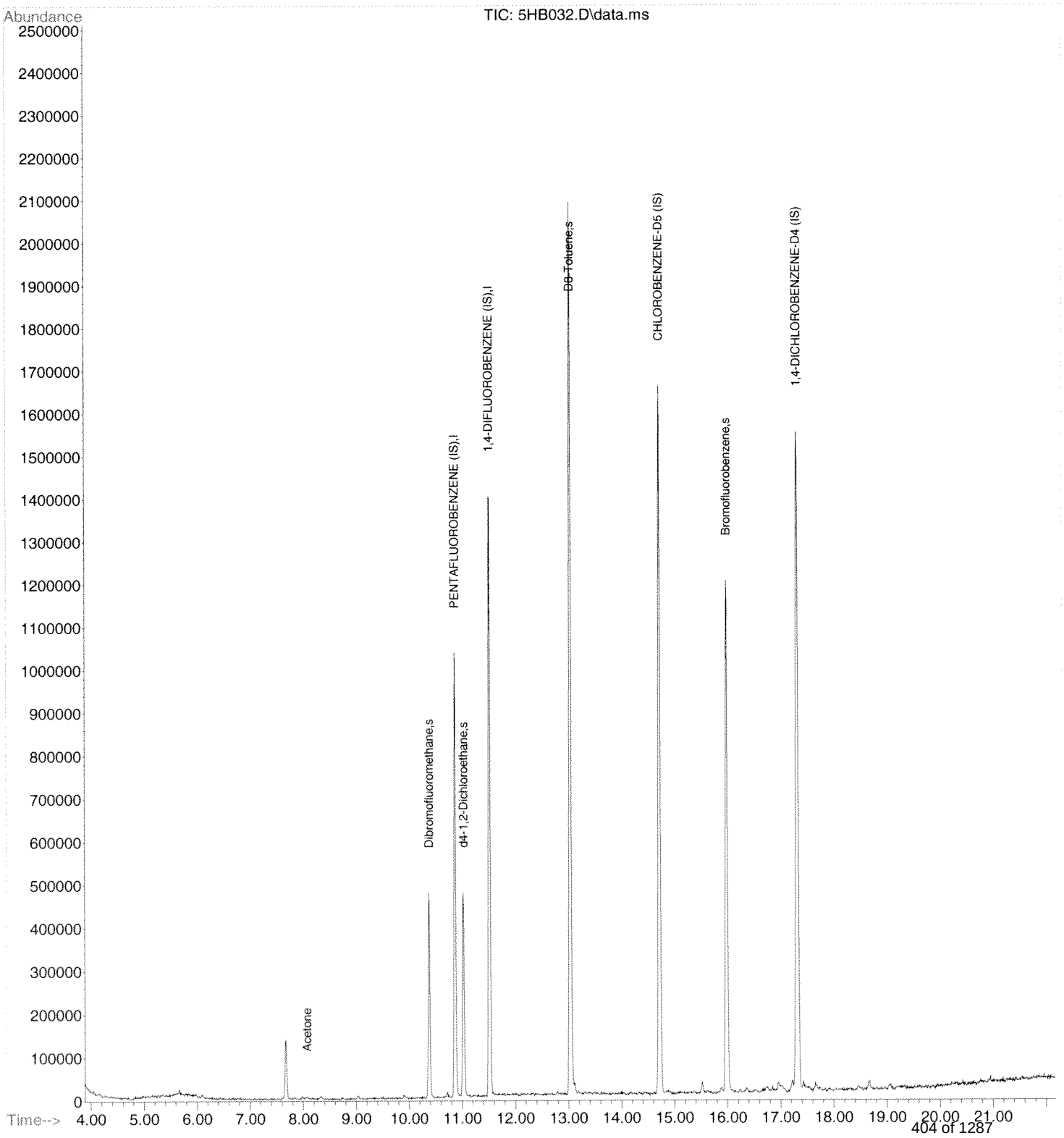
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.033	98	1848463	55.63 ug/L #	92
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	2608	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.848	106	2270	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	14.848	106	2437	N.D.	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	15.358	104	1372	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.613	105	3634	N.D.	
76) Bromofluorobenzene	15.982	95	669949	71.40 ug/L	95
77) n-Propylbenzene	16.065	91	5061	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.229	105	3605	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.656	119	3660	N.D.	
87) 1,2,4-Trimethylbenzene	16.714	105	3617	N.D.	
88) p-Isopropyltoluene	16.977	119	6602	N.D.	
89) s-Butylbenzene	16.845	105	5995	N.D.	
90) 1,3-Dichlorobenzene	17.256	146	1961	N.D.	
91) 1,4-Dichlorobenzene	17.314	146	2613	N.D.	
92) n-Butylbenzene	17.527	91	4259	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.280	180	2202	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	21.274	180	1044	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB032.D
Acq On : 7 Aug 2014 11:31 pm
Operator : KKW
Sample : A404270-25
Misc :
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Aug 08 09:05:12 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB033.D
Acq On : 7 Aug 2014 11:59 pm
Operator : KKW
Sample : A404270-26
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 08 09:05:59 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	799019	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1307143	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1432812	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	809009	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	310567	51.26 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 102.52%		
42) d4-1,2-Dichloroethane	11.019	65	345808	52.26 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 104.52%		
54) D8-Toluene	13.032	98	1777106	57.79 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 115.58%		
75) Bromofluorobenzene	15.982	95	676129	73.87 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 147.74%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	4498	2.64 ug/L #	45
16) Methylene Chloride	7.987	84	4783	0.83 ug/L	78
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	9.910	77	1136	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.378	113	310567	51.26 ug/L	94
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D. d	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	2231	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	345808	52.26 ug/L #	86
44) 1,2-Dichloroethane	11.036	62	1147	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB033.D
Acq On : 7 Aug 2014 11:59 pm
Operator : KKW
Sample : A404270-26
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 08 09:05:59 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

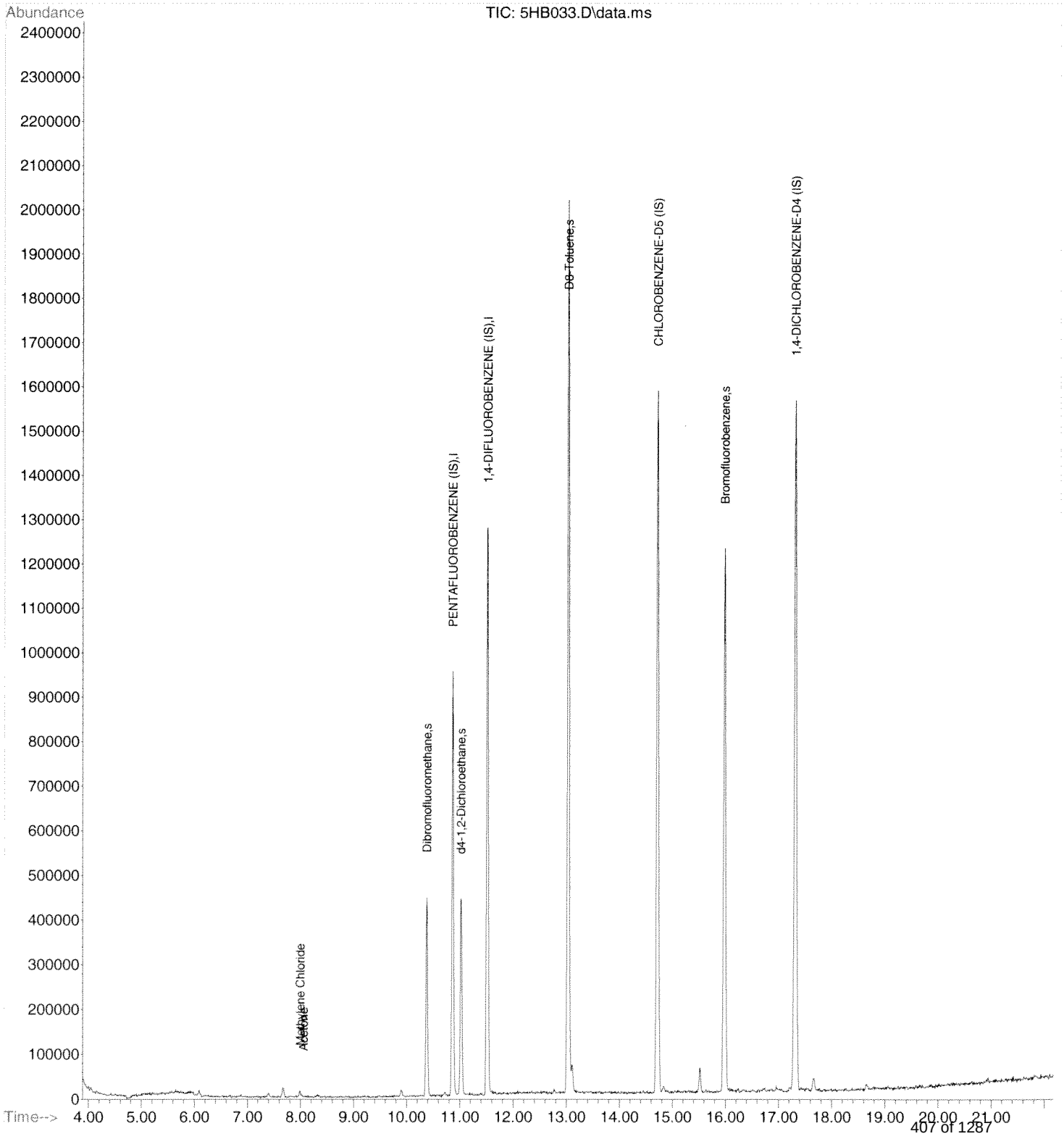
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1777106	57.79 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D.	
67) Ethylbenzene	14.725	106	1042	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	0.000	106	0	N.D.	
72) Styrene	0.000	104	0	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.621	105	2509	N.D.	
76) Bromofluorobenzene	15.982	95	676129	73.87 ug/L	92
77) n-Propylbenzene	16.073	91	3198	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.245	105	3287	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	0.000	91	0	N.D.	
86) tert-Butylbenzene	16.648	119	3043	N.D.	
87) 1,2,4-Trimethylbenzene	16.705	105	3145	N.D.	
88) p-Isopropyltoluene	16.977	119	4828	N.D.	
89) s-Butylbenzene	16.853	105	5235	N.D.	
90) 1,3-Dichlorobenzene	0.000	146	0	N.D.	
91) 1,4-Dichlorobenzene	0.000	146	0	N.D.	
92) n-Butylbenzene	17.527	91	4538	N.D.	
93) 1,2-Dichlorobenzene	0.000	146	0	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.255	180	1605	N.D.	
97) Naphthalene	20.921	128	6807	N.D.	
98) 1,2,3-Trichlorobenzene	21.299	180	2162	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB033.D
Acq On : 7 Aug 2014 11:59 pm
Operator : KKW
Sample : A404270-26
Misc :
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Aug 08 09:05:59 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB034.D
Acq On : 8 Aug 2014 12:27 am
Operator : KKW
Sample : A404270-27
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 08 09:07:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	835069	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1362184	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1480385	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	873204	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	309940	48.95 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 97.90%		
42) d4-1,2-Dichloroethane	11.027	65	356383	51.68 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 103.36%		
54) D8-Toluene	13.032	98	1846830	57.63 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 115.26%		
75) Bromofluorobenzene	15.982	95	712159	75.44 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 150.88%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D. d	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.061	43	10603	5.96 ug/L #	86
16) Methylene Chloride	7.971	84	1572	0.26 ug/L #	61
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	10.107	77	1157	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	10.156	83	1446	N.D.	
32) Dibromofluoromethane	10.378	113	309940	48.95 ug/L	91
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.888	78	1743	N.D.	
43) d4-1,2-Dichloroethane	11.027	65	356383	51.68 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB034.D
Acq On : 8 Aug 2014 12:27 am
Operator : KKW
Sample : A404270-27
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 08 09:07:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

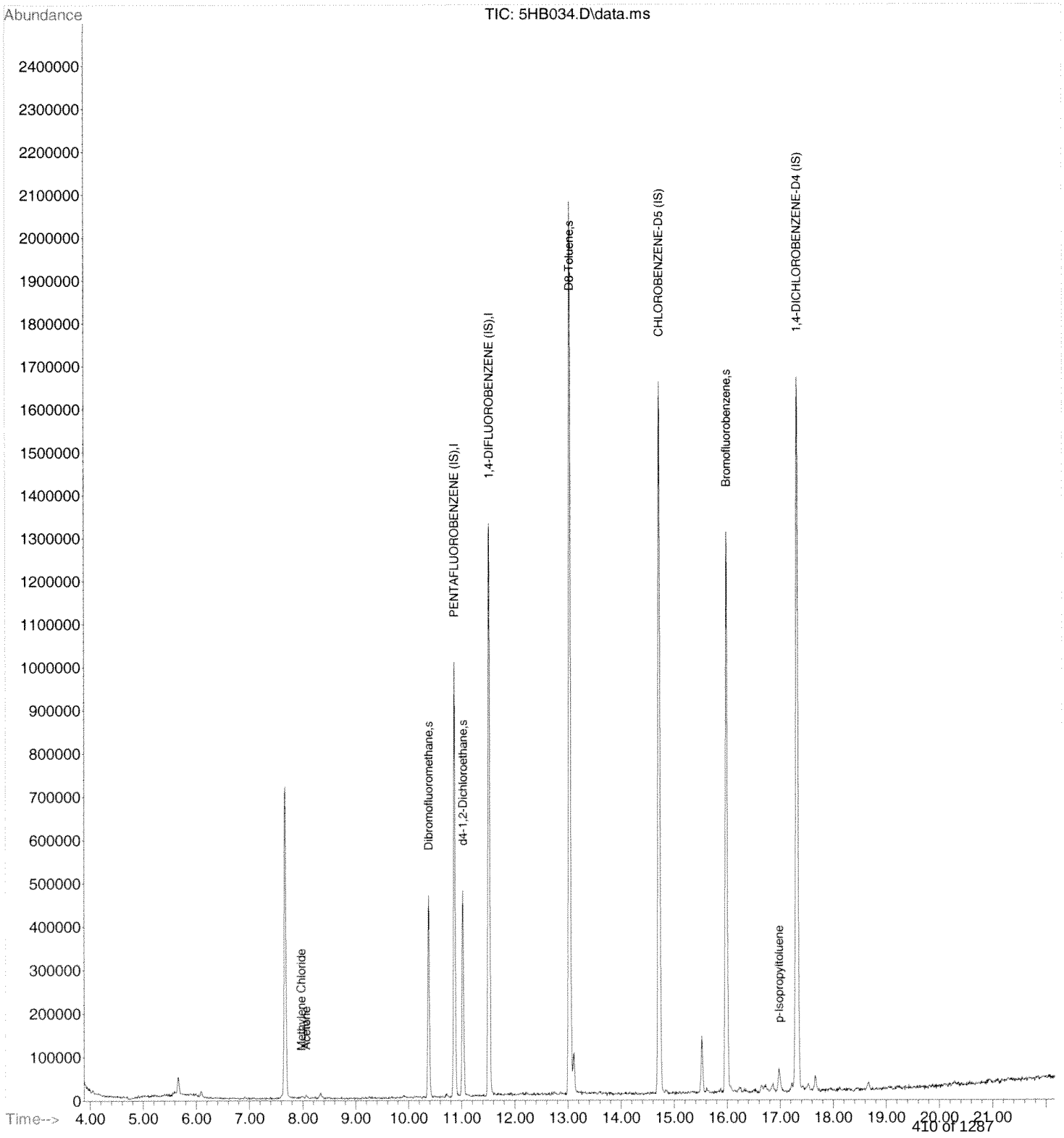
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1845368	57.58 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	13.591	69	1041	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	0.000	106	0	N.D. d	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.308	106	2281	N.D.	
72) Styrene	15.399	104	2476	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.612	105	7373	N.D.	
76) Bromofluorobenzene	15.982	95	712159	75.44 ug/L	94
77) n-Propylbenzene	0.000	91	0	N.D. d	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	0.000	105	0	N.D. d	
84) 2-Chlorotoluene	16.319	91	2831	N.D.	
85) 4-Chlorotoluene	16.508	91	3514	N.D.	
86) tert-Butylbenzene	0.000	119	0	N.D. d	
87) 1,2,4-Trimethylbenzene	0.000	105	0	N.D. d	
88) p-Isopropyltoluene	16.976	119	47283	0.78 ug/L	99
89) s-Butylbenzene	0.000	105	0	N.D. d	
90) 1,3-Dichlorobenzene	17.239	146	1481	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	4316	N.D.	
92) n-Butylbenzene	0.000	91	0	N.D. d	
93) 1,2-Dichlorobenzene	17.938	146	3617	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D. d	
96) 1,2,4-Trichlorobenzene	20.263	180	2585	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	21.315	180	2074	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB034.D
Acq On : 8 Aug 2014 12:27 am
Operator : KKW
Sample : A404270-27
Misc :
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Aug 08 09:07:44 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB036.D
Acq On : 8 Aug 2014 1:22 am
Operator : KKW
Sample : 4H07018-MS1
Misc :
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 08 08:22:18 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	842378	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.520	114	1342896	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1506438	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	783818	50.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	10.378	113	322775	50.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 101.08%			
42) d4-1,2-Dichloroethane	11.027	65	359969	52.95	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 105.90%			
54) D8-Toluene	13.032	98	1831594	57.97	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 115.94%			
75) Bromofluorobenzene	15.982	95	652217	67.22	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 134.44%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.158	85	95737	13.41	ug/L	94
3) Chloromethane	4.610	50	71223	5.67	ug/L	97
4) Vinyl Chloride	4.815	62	87372	10.41	ug/L	98
5) Bromomethane	5.555	94	10813	3.58	ug/L #	86
6) Chloroethane	5.810	64	53106	15.73	ug/L	97
7) Trichlorofluoromethane	6.097	101	187135	18.98	ug/L	97
8) Diethyl ether	6.672	59	61901	11.04	ug/L	95
9) 1,1-Dichloroethene	7.050	96	64584	10.89	ug/L	93
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	82206	14.07	ug/L	98
11) Acrolein	0.000	56	0	N.D.		
12) Iodomethane	7.313	142	18139	1.72	ug/L #	93
13) Carbon Disulfide	7.116	76	123809	9.01	ug/L	97
14) 3-chloropropene	7.831	41	135848	10.44	ug/L	94
15) Acetone	8.061	43	30089	16.77	ug/L	94
16) Methylene Chloride	7.987	84	86138	14.09	ug/L	72
17) Methyl Acetate	8.225	43	13072	2.64	ug/L #	55
18) t-1,2-Dichloroethene	8.234	96	82598	11.69	ug/L	93
19) Methyl tert-butyl ether	8.373	73	179424	13.69	ug/L	93
20) Acetonitrile	8.801	41	2852	3.22	ug/L #	62
21) Diisopropyl ether	8.907	45	415068	13.50	ug/L	96
22) Chloroprene	9.105	88	56788	9.78	ug/L	92
23) 1,1-Dichloroethane	9.154	63	195173	14.87	ug/L	99
24) Acrylonitrile	9.113	53	164252	65.55	ug/L #	40
25) Vinyl Acetate	9.409	43	33231	1.77	ug/L #	82
26) c-1,2-Dichloroethene	9.844	96	97846	12.60	ug/L	90
27) 2,2-Dichloropropane	9.992	77	130412	15.44	ug/L	95
28) Bromochloromethane	10.107	128	51141	13.82	ug/L	96
29) Cyclohexane	10.124	56	222405	11.47	ug/L	91
30) Chloroform	10.156	83	196169	18.85	ug/L #	91
32) Dibromofluoromethane	10.378	113	322775	50.54	ug/L	95
33) 2-Butanone	10.575	72	5661	11.65	ug/L #	1
34) 1,1,1-Trichloroethane	10.452	97	193792	18.80	ug/L	95
35) 1,1-Dichloropropene	10.575	75	112732	12.93	ug/L	92
36) Propionitrile	10.871	54	1547	1.57	ug/L #	1
37) Methacrylonitrile	10.945	41	46386	10.12	ug/L #	44
38) Isobutyl Alcohol	10.937	43	111919	137.58	ug/L #	92
40) Carbon Tetrachloride	10.370	117	160044	16.75	ug/L	98
41) Benzene	10.879	78	379867	12.87	ug/L	99
43) d4-1,2-Dichloroethane	11.027	65	359969	52.95	ug/L #	85
44) 1,2-Dichloroethane	11.101	62	148211	17.67	ug/L #	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB036.D
Acq On : 8 Aug 2014 1:22 am
Operator : KKW
Sample : 4H07018-MS1
Misc :
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 08 08:22:18 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

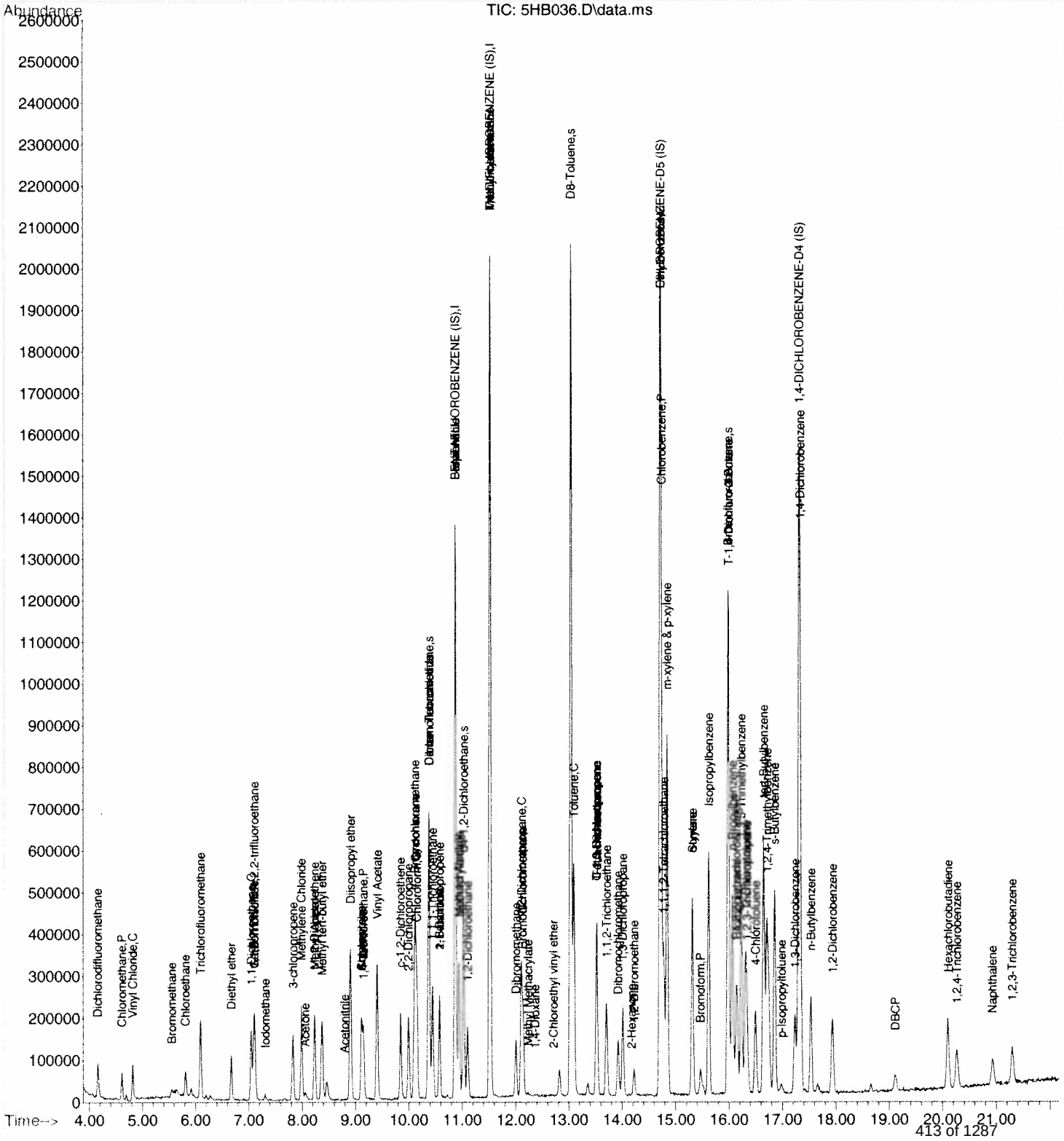
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	126824	12.80 ug/L	88
46) Methyl cyclohexane	11.520	83	203485	11.58 ug/L	90
47) Dibromomethane	12.005	93	57805	16.94 ug/L	90
48) 1,2-Dichloropropane	12.112	63	138889	15.25 ug/L #	90
49) Bromodichloromethane	12.137	83	145036	17.76 ug/L #	90
50) Methyl Methacrylate	12.235	69	3666	1.01 ug/L	84
51) 1,4-Dioxane	12.367	88	2124	30.10 ug/L #	61
52) 2-Chloroethyl vinyl ether	12.712	63	1678	0.52 ug/L #	47
53) C-1,3-Dichloropropene	13.509	75	48712	5.04 ug/L	92
55) D8-Toluene	13.032	98	1831445	57.97 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	319400	13.93 ug/L	94
59) T-1,3-Dichloropropene	13.509	75	48712	5.98 ug/L	94
60) Tetrachloroethene	13.525	164	133018	16.18 ug/L	97
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	13.706	97	106978	18.96 ug/L	92
63) Dibromochloromethane	13.928	129	101315	14.88 ug/L #	97
64) 1,3-Dichloropropane	14.010	76	151724	16.05 ug/L	90
65) 1,2-Dibromoethane	14.224	107	68309	11.81 ug/L	97
66) 2-Hexanone	14.166	43	1447	0.28 ug/L #	32
67) Ethylbenzene	14.709	106	197021	13.65 ug/L	99
68) Chlorobenzene	14.741	112	280849	10.04 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.791	131	145278	17.18 ug/L	97
70) m-xylene & p-xylene	14.840	106	412385	22.70 ug/L	97
71) o-xylene	15.317	106	229704	12.71 ug/L	97
72) Styrene	15.308	104	13185	0.43 ug/L #	1
73) Bromoform	15.473	173	51301	13.68 ug/L	96
74) Isopropylbenzene	15.621	105	611838	12.04 ug/L	98
76) Bromofluorobenzene	15.982	95	652217	67.22 ug/L	91
77) n-Propylbenzene	16.064	91	569933	9.87 ug/L	98
78) Bromobenzene	16.155	156	92746	8.02 ug/L #	83
79) 1,1,2,2-Tetrachloroethane	16.130	83	108474	16.00 ug/L	97
80) 1,2,3-Trichloropropane	16.344	61	32945	13.51 ug/L #	71
81) T-1,4-Dichloro-2-Butene	15.999	53	8515	2.16 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.237	105	464438	10.17 ug/L	100
84) 2-Chlorotoluene	16.311	91	299096	8.82 ug/L	99
85) 4-Chlorotoluene	16.500	91	201426	5.89 ug/L	97
86) tert-Butylbenzene	16.648	119	603968	10.70 ug/L	98
87) 1,2,4-Trimethylbenzene	16.705	105	362699	7.76 ug/L #	81
88) p-Isopropyltoluene	16.976	119	18372	0.34 ug/L #	92
89) s-Butylbenzene	16.853	105	586974	9.03 ug/L	98
90) 1,3-Dichlorobenzene	17.239	146	159997	5.65 ug/L	97
91) 1,4-Dichlorobenzene	17.338	146	153590	5.46 ug/L #	75
92) n-Butylbenzene	17.535	91	221394	4.58 ug/L	99
93) 1,2-Dichlorobenzene	17.930	146	159227	6.01 ug/L	92
94) DBCP	19.121	157	21235	10.70 ug/L	93
95) Hexachlorobutadiene	20.099	225	67306	8.33 ug/L #	94
96) 1,2,4-Trichlorobenzene	20.263	180	60874	3.35 ug/L	98
97) Naphthalene	20.929	128	108265	2.75 ug/L	98
98) 1,2,3-Trichlorobenzene	21.299	180	59028	3.60 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB036.D
Acq On : 8 Aug 2014 1:22 am
Operator : KKW
Sample : 4H07018-MS1
Misc :
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Aug 08 08:22:18 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB037.D
Acq On : 8 Aug 2014 1:50 am
Operator : KKW
Sample : 4H07018-MSD1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Aug 08 08:22:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	821764	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1318977	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.717	117	1488351	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	804386	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	322839	51.81 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 103.62%		
42) d4-1,2-Dichloroethane	11.028	65	353126	52.88 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 105.76%		
54) D8-Toluene	13.032	98	1832766	59.06 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 118.12%		
75) Bromofluorobenzene	15.982	95	688896	72.33 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 144.66%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.158	85	90424	12.98 ug/L	96
3) Chloromethane	4.610	50	77251	6.31 ug/L	96
4) Vinyl Chloride	4.816	62	93298	11.40 ug/L	98
5) Bromomethane	5.539	94	10001	3.40 ug/L	89
6) Chloroethane	5.818	64	55371	16.81 ug/L	98
7) Trichlorofluoromethane	6.097	101	184704	19.20 ug/L	97
8) Diethyl ether	6.681	59	54902	10.03 ug/L	94
9) 1,1-Dichloroethene	7.042	96	42692	7.38 ug/L	99
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	54078	9.49 ug/L	98
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	7.305	142	14407	1.40 ug/L #	90
13) Carbon Disulfide	7.124	76	93534	6.98 ug/L	97
14) 3-chloropropene	7.831	41	102179	8.05 ug/L	94
15) Acetone	8.069	43	32833	18.76 ug/L	97
16) Methylene Chloride	7.987	84	66867	11.23 ug/L	79
17) Methyl Acetate	8.234	43	12629	2.62 ug/L #	68
18) t-1,2-Dichloroethene	8.234	96	55155	8.01 ug/L	94
19) Methyl tert-butyl ether	8.373	73	164470	12.86 ug/L	91
20) Acetonitrile	8.735	41	3862	4.47 ug/L #	62
21) Diisopropyl ether	8.908	45	333585	11.12 ug/L	98
22) Chloroprene	9.121	88	40470	7.14 ug/L	100
23) 1,1-Dichloroethane	9.154	63	145829	11.39 ug/L	98
24) Acrylonitrile	9.113	53	124208	50.81 ug/L #	41
25) Vinyl Acetate	9.401	43	24624	1.34 ug/L #	82
26) c-1,2-Dichloroethene	9.844	96	74838	9.88 ug/L	95
27) 2,2-Dichloropropane	9.992	77	95515	11.59 ug/L	94
28) Bromochloromethane	10.099	128	45801	12.69 ug/L	97
29) Cyclohexane	10.124	56	154064	8.15 ug/L #	90
30) Chloroform	10.156	83	150558	14.83 ug/L #	91
32) Dibromofluoromethane	10.378	113	322839	51.81 ug/L	96
33) 2-Butanone	10.576	72	2771	5.84 ug/L #	1
34) 1,1,1-Trichloroethane	10.444	97	136533	13.58 ug/L	95
35) 1,1-Dichloropropene	10.576	75	84749	9.96 ug/L	91
36) Propionitrile	10.888	54	2421	2.52 ug/L #	1
37) Methacrylonitrile	10.937	41	41857	9.36 ug/L #	46
38) Isobutyl Alcohol	10.937	43	99859	125.84 ug/L #	93
40) Carbon Tetrachloride	10.370	117	109327	11.65 ug/L	96
41) Benzene	10.880	78	281144	9.70 ug/L	99
43) d4-1,2-Dichloroethane	11.028	65	353126	52.88 ug/L #	85
44) 1,2-Dichloroethane	11.101	62	132770	16.12 ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB037.D
Acq On : 8 Aug 2014 1:50 am
Operator : KKW
Sample : 4H07018-MSD1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Aug 08 08:22:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

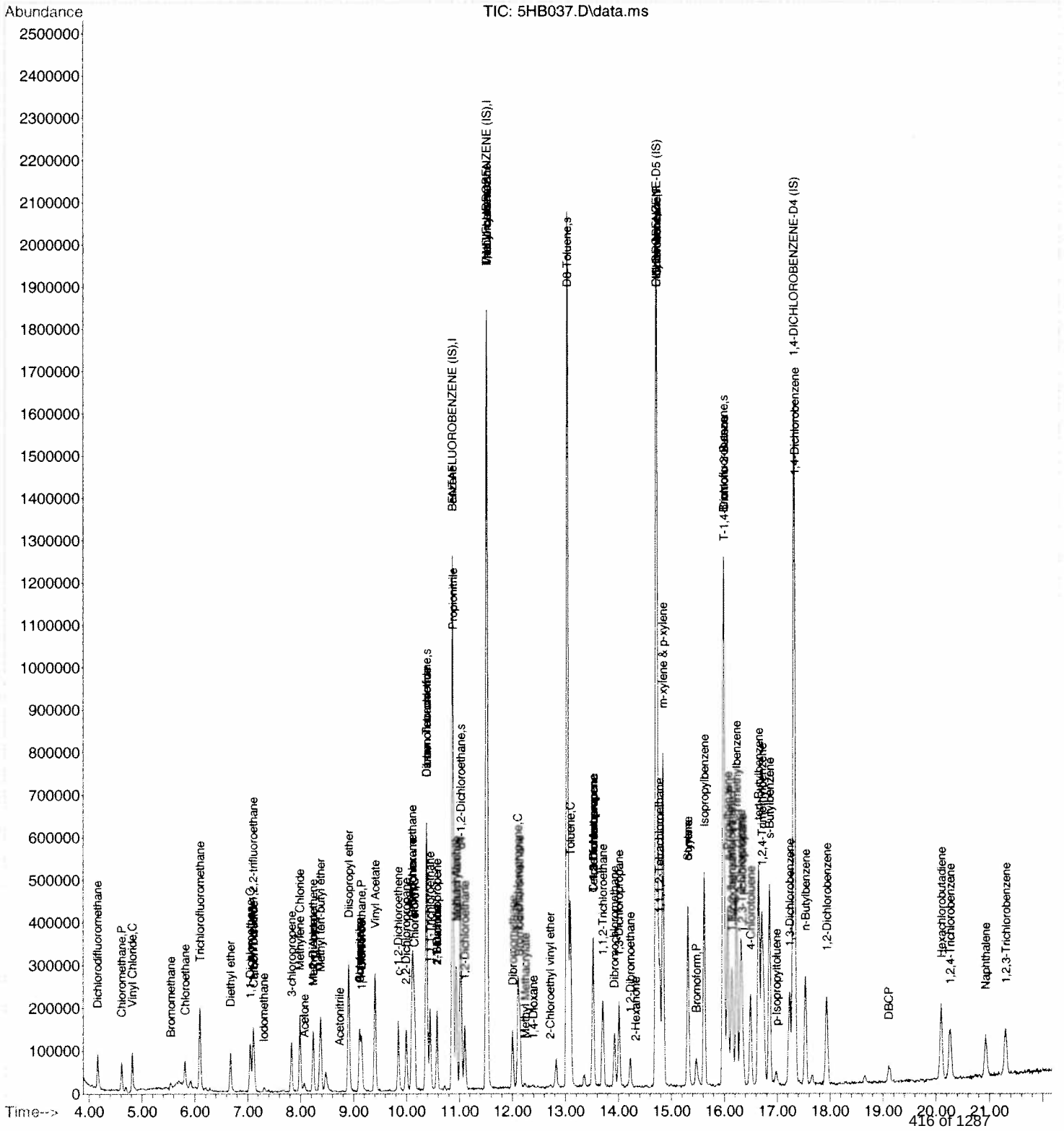
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	99706	10.24 ug/L #	85
46) Methyl cyclohexane	11.529	83	164742	9.54 ug/L	86
47) Dibromomethane	12.005	93	56168	16.76 ug/L	97
48) 1,2-Dichloropropane	12.104	63	110635	12.36 ug/L #	87
49) Bromodichloromethane	12.137	83	125423	15.64 ug/L #	89
50) Methyl Methacrylate	12.244	69	2491	0.70 ug/L #	61
51) 1,4-Dioxane	12.383	88	2332	33.65 ug/L #	78
52) 2-Chloroethyl vinyl ether	12.704	63	1589	0.50 ug/L #	47
53) C-1,3-Dichloropropene	13.517	75	56731	5.97 ug/L	90
55) D8-Toluene	13.032	98	1832766	59.06 ug/L #	90
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	255626	11.29 ug/L	99
59) T-1,3-Dichloropropene	13.517	75	56731	7.05 ug/L	99
60) Tetrachloroethene	13.525	164	104938	12.92 ug/L	99
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	13.698	97	101435	18.19 ug/L	90
63) Dibromochloromethane	13.920	129	96944	14.41 ug/L	97
64) 1,3-Dichloropropane	14.010	76	139656	14.95 ug/L	95
65) 1,2-Dibromoethane	14.224	107	68542	11.99 ug/L	97
66) 2-Hexanone	14.314	43	1147	0.23 ug/L #	32
67) Ethylbenzene	14.709	106	167051	11.71 ug/L	100
68) Chlorobenzene	14.733	112	269237	9.74 ug/L	96
69) 1,1,1,2-Tetrachloroethane	14.774	131	118947	14.24 ug/L	99
70) m-xylene & p-xylene	14.840	106	371539	20.70 ug/L	97
71) o-xylene	15.317	106	207078	11.60 ug/L	97
72) Styrene	15.309	104	10730	0.35 ug/L #	1
73) Bromoform	15.473	173	50234	13.56 ug/L	97
74) Isopropylbenzene	15.621	105	519369	10.35 ug/L	98
76) Bromofluorobenzene	15.982	95	688896	72.33 ug/L	93
77) n-Propylbenzene	16.064	91	539037	9.45 ug/L	97
78) Bromobenzene	16.155	156	100103	8.76 ug/L #	83
79) 1,1,2,2-Tetrachloroethane	16.130	83	103650	15.47 ug/L	97
80) 1,2,3-Trichloropropane	16.344	61	31491	13.07 ug/L #	68
81) T-1,4-Dichloro-2-Butene	15.999	53	7128	1.83 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	416577	8.89 ug/L	99
84) 2-Chlorotoluene	16.311	91	295452	8.49 ug/L	99
85) 4-Chlorotoluene	16.500	91	205419	5.85 ug/L	97
86) tert-Butylbenzene	16.648	119	533911	9.21 ug/L	100
87) 1,2,4-Trimethylbenzene	16.714	105	349101	7.28 ug/L #	82
88) p-Isopropyltoluene	16.985	119	29144	0.53 ug/L	96
89) s-Butylbenzene	16.853	105	551574	8.27 ug/L	98
90) 1,3-Dichlorobenzene	17.231	146	187929	6.47 ug/L	97
91) 1,4-Dichlorobenzene	17.338	146	179205	6.21 ug/L #	79
92) n-Butylbenzene	17.535	91	242233	4.89 ug/L	97
93) 1,2-Dichlorobenzene	17.930	146	180865	6.65 ug/L	96
94) DBCP	19.113	157	24286	11.93 ug/L	99
95) Hexachlorobutadiene	20.099	225	71753	8.65 ug/L	94
96) 1,2,4-Trichlorobenzene	20.263	180	81292	4.36 ug/L	98
97) Naphthalene	20.929	128	163107	4.04 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	78696	4.67 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 5HB037.D
Acq On : 8 Aug 2014 1:50 am
Operator : KKW
Sample : 4H07018-MSD1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Aug 08 08:22:19 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29967

Instrument: OVGCMS1

Calibration ID: 1408028

Printed: 8/7/2014 4:23:29PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
AA29967-TUN1	QC		1		A4F0379			
AA29967-CCV1	QC		2		A4H0177	A4G0687		
4H07029-BS1	QC		3			A4G0687		
4H07029-BSD1	QC		4			A4G0687		
4H07029-BLK1	QC		5			A4G0687		
AA29967-CRL1	QC		6		A4H0156	A4G0687		
A404270-30	8260B TCL SOM01.2 DOD	A	7			A4G0687	CH2M Hill, Inc. (CH025)	1,4-DCB only

Samples Loaded By Date

Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/7/2014 4:16:43PM

Analysis
8260B TCL SOM01.2 DOD [EPA 8260B]

4H07029

ENCO Orlando

Prepared using: EPA 5030B_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4G0517 8260 mix full 2 working + TCL
A4H0125 8260 mix 2 working Gases/Acrolein

Matrix: Water

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (mL)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
4H07029-BLK1		Blank		QC			5	5			1	
4H07029-BS1		LCS		QC			5	5	A4H0125 A4G0517	2 2	1	
4H07029-BSD1		LCS Dup		QC			5	5	A4H0125 A4G0517	2 2	1	
A404270-30	D	TR-5TH-CS-TB-080114 A[MS37	08-Aug-14	8260B TCL SOM01.2 DOD			5	5			1	1,4-DCB only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

Instrument 1

Start Date _____

StopDate _____

Instrument ID _____

Standard ID#	Description	Manufacture Lot#

Samples Prepared By Date

Samples Prepared By Date

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624, SW-846 Method 8260
SW-846 5030B, SW-846 5035

Tune Start Date/Time: 080714 @ 0909
Tune End Date/Time:
Preventive Maintenance: N/A
Method: 624/8260B
Workgroup: AH06046; A4H06047, ~~A4H0727~~
Seq: AA29946; ~~AA29965~~; AA29969; AA29967 → 4H07037; 4H07029

Surrogate ID: A4E0236
Internal ID: A4G0687
8/7/14 LCS Acrolein 2°: Gam: A4H0125
JPL LCS 8260 2°: A4G0577
Other Standard: N/A

8260 Mix: A4G0583
8260 Add: A4H0139
8260 Ac/Ac: A4G0608
8260 Gases: A4H0137
Instrument #: 1, 2, 3, or 4

Filename	Time	JPL 8/7/14 ENCO No.	Amount	Pos.	pH (<2)	RC	Analyst	Comments	LIMS
1H7001	09:09	BFB	5ml	1			JL	Autopan @ 0909	✓
1H7002	:	20 CCV	5ml	2			JL		✓
1H7003	:	20/50 CCV	5ml	3			JL	20gam/50 all else	✓
1H7004	JPL	-BS1	5ml	4	JPL		JL		✓
1H7005	080714	-BSD1	5ml	5	080714		JL		✓
1H7006	:	RINSE	5ml	6			JL		✓
1H7007	12:26	-BLK1	5ml	7			JL		✓
1H7008	12:56	-CRL	5ml	8			JL		✓
1H7009	:	A404407-01RE1 (c)	5ml	9	✓	N	JL		✓
1H7010	:	A404407-02RE1 (c)	5ml	10	✓	N	JL		✓
1H7011	:	-BLK2	50ul/5ml	11	✓	N	JL	TCLP BLK (100x)	✓
1H7012	JPL	A404418-01 (A03)	50ul/5ml	12	✓	N	JL	(100x) TCLP	✓
1H7013	080714	A404403-01 A ~~A404270-30~~ JPL A	1,000,000x ~~5ml~~ JPL	13	✓	N	JL	1,000,000x (MMA)	✓
1H7014	:	A404386-02 C	5ml	14	✓	N	JL		✓
1H7015	:	A404386-03 C	5ml	15	✓	N	JL		✓
1H7016	:	A404386-04 C	5ml	16	✓	N	JL		✓
1H7017	:	A404386-05 C	5ml	17	✓	N	JL		✓
1H7018	:	A404386-06 C	5ml	18	✓	N	JL		✓
1H7019	:	A404386-07 C	5ml	19	✓	N	JL		✓
1H7020	:	A404386-08 C	5ml	20	✓	N	JL		✓

Volatiles
EPA Method 624, SW-846 Method 8260
SW-846 5030B, SW-846 5035

Tune Start Date/Time:	Surrogate ID:	See	8260 Mix :		
Tune End Date/Time:	Internal ID:		~~8260 Add:~~		
Preventive Maintenance:	LCS Acrolein 2°:	Page	8260 Ac/Ac:		
Method:	~~LCS 8260 2°:~~		8260 Gases:		
Workgroup:	Other Standard:	146	**Instrument #: 1, 2, 3, or 4**		

Filename	Time	ENCO No.		Amount	Pos.	pH (<2)	RC	Analyst	Comments	LIMS
1H7 021	:	A404270-30	A	5ml	21	✓	N	JL		✓
1H7 022	9/8/4	A404473-03	B	40ml / 5ml	22	NA	NA	JL	250x	✓
1H7 023	:	A404473-04	B	50ml / 5ml	23	NA	NA	JL	200x	✓
	:									
	:									
	:									
	:									
	:									
	:									
	:									
	:									
	:									
	:									
	:									
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	:									
	:									
	:									

GC/MS QA-QC Check Report

Tune File : C:\HPCHEM\1\DATA\080714\1H7001.D
Tune Time : 7 Aug 2014 9:09

Daily Calibration File : C:\HPCHEM\1\DATA\080614\1H6018.D

						174839	341486	288973
						128462		

File	Sample	Surrogate Recovery %				Internal Standard Responses		
1H7003.D	20/50 CC	93	99	96	96	205514	330015	283024
				125704				
1H7004.D	BS	91	96	93	93	224599	359007	305623
				132225				
1H7005.D	BSD	91	94	93	94	220719	357473	298176
				128633				
1H7006.D	RINSE	92	97	94	97	201804	328192	278041
				124039				
1H7007.D	BLK	89	95	96	97	221283	353153	295557
				128602				
1H7008.D	CRL	82	87	93	94	198647	308700	255079
				110958				
1H7009.D	A404407-	91	99	96	98	214457	343379	293795
				130155				
1H7010.D	A404407-	94	102	97	100	208836	337581	285926
				127184				
1H7011.D	BLK2	87	93	92	94	214401	340905	287529
				127564				
1H7012.D	A404418-	90	97	95	1*	217138	346406	294960
				128472				
1H7013.D	A404403-	87	92	94	96	210904	340252	292298
				129958				
1H7014.D	A404386-	100	109	103	105	193434	313655	269956
				119661				
1H7015.D	A404386-	99	107	100	105	202572	331295	282536
				129275				
1H7016.D	A404386-	99	110	100	104	212213	343224	293565
				131243				
1H7017.D	A404386-	97	106	99	103	211740	343506	291468
				132349				
1H7018.D	A404386-	96	107	99	102	214423	348215	297173
				130832				
1H7019.D	A404386-	96	106	98	101	215877	347599	294096
				130628				
1H7020.D	A404386-	96	105	98	101	208611	336703	287388
				127910				
1H7021.D	A404270-	95	102	97	103	212517	343695	285844
				130165				
1H7022.D	A404473-	90	96	94	134	200639	325639	254316
				114327				

1H7023.D A404473- 88 91 96 101 211267 337542 278831
118057

---

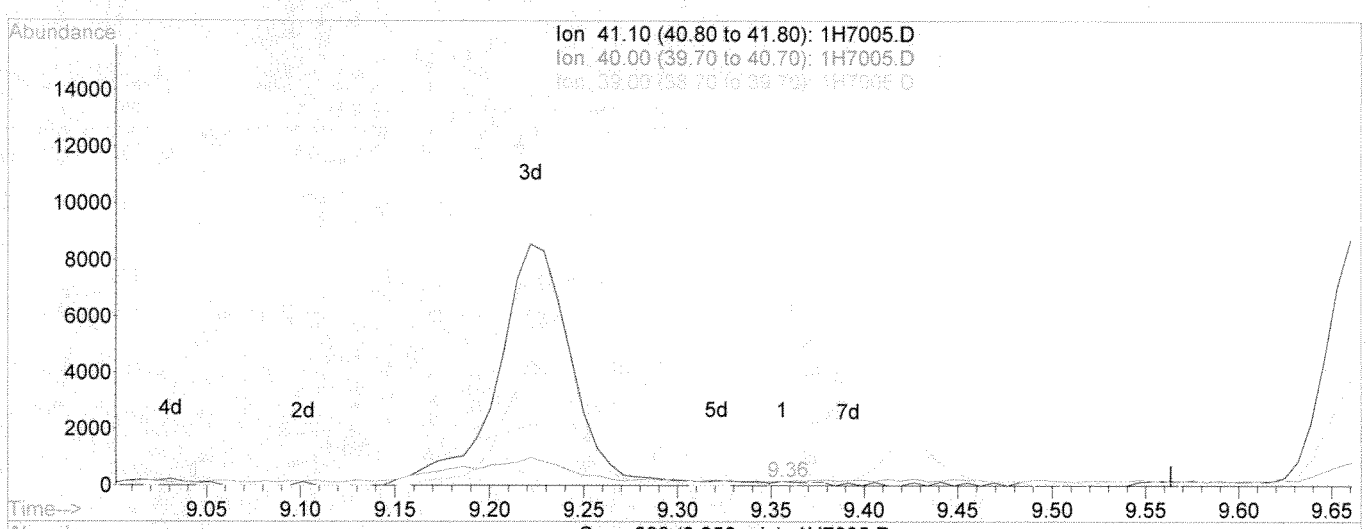
t - fails 12hr time check * - fails criteria

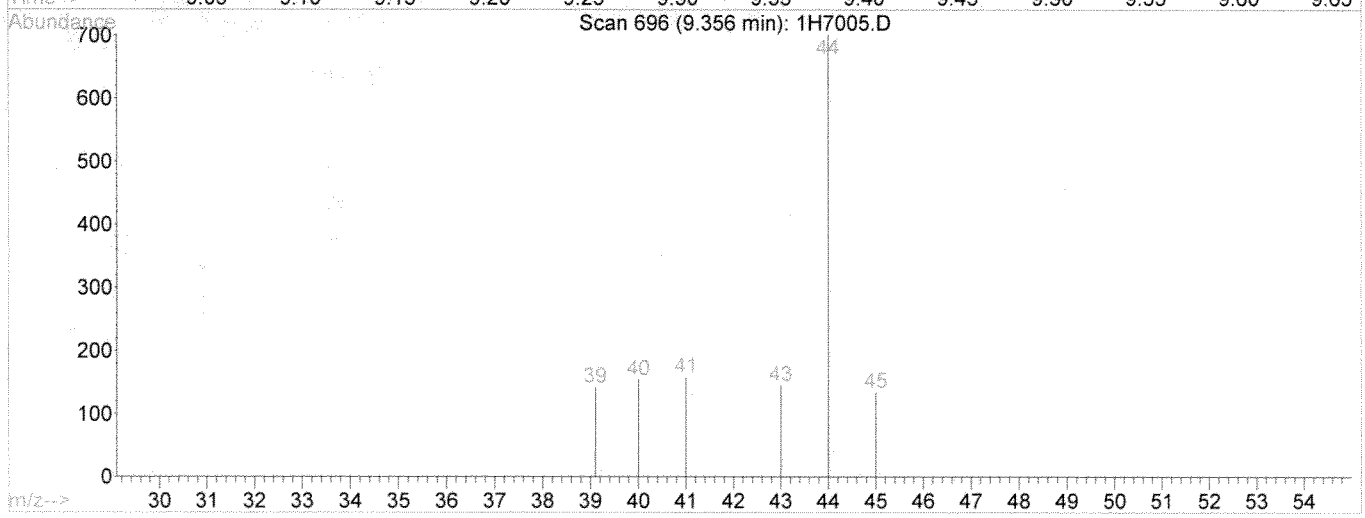
Created: Fri Aug 08 08:44:24 2014 OVGCMS1

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D Vial: 5
Acq On : 7 Aug 2014 11:27 Operator: JFL
Sample : BSD Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Multiple Level Calibration





TIC: 1H7005.D

(13) Acetonitrile

9.36min 1.23ug/kg

response 217

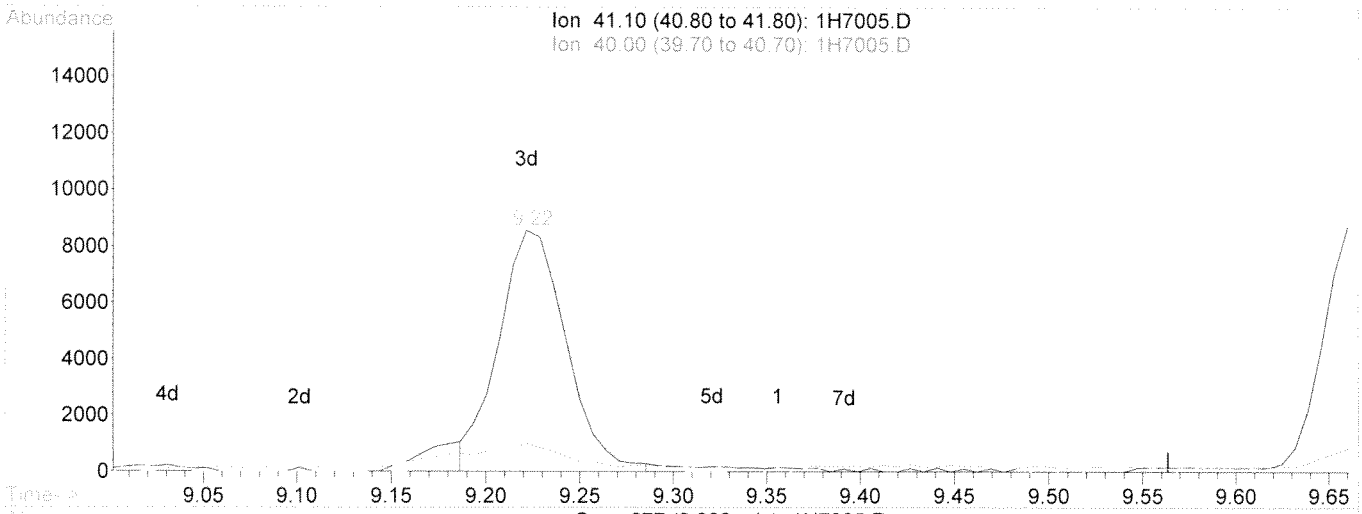
Ion	Exp%	Act%
41.10	100	100
40.00	68.90	54.84
39.00	16.00	27.65
0.00	0.00	0.00

Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[✓] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/8/14
Review by/Date: [illegible] 8/8/14

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D Vial: 5
Acq On : 7 Aug 2014 11:27 Operator: JFL
Sample : BSD Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 15:01 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Multiple Level Calibration



TIC: 1H7005.D

(13) Acetonitrile

9.22min 120.87ug/kg m

response 21350

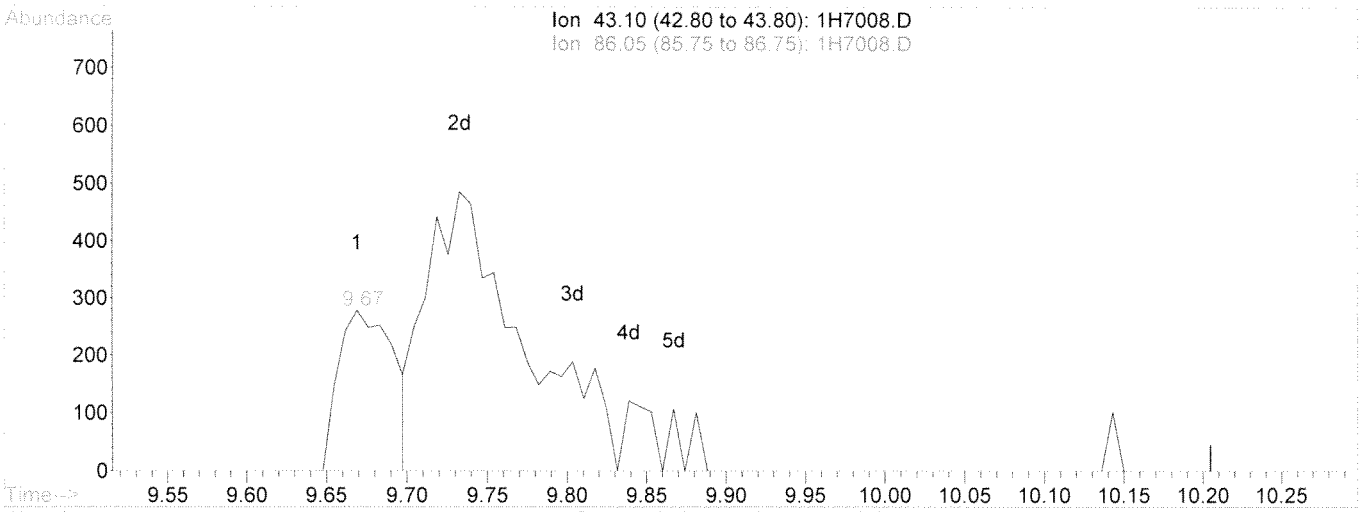
Ion	Exp%	Act%
41.10	100	100
40.00	68.90	0.56#
39.00	16.00	0.28
0.00	0.00	0.00

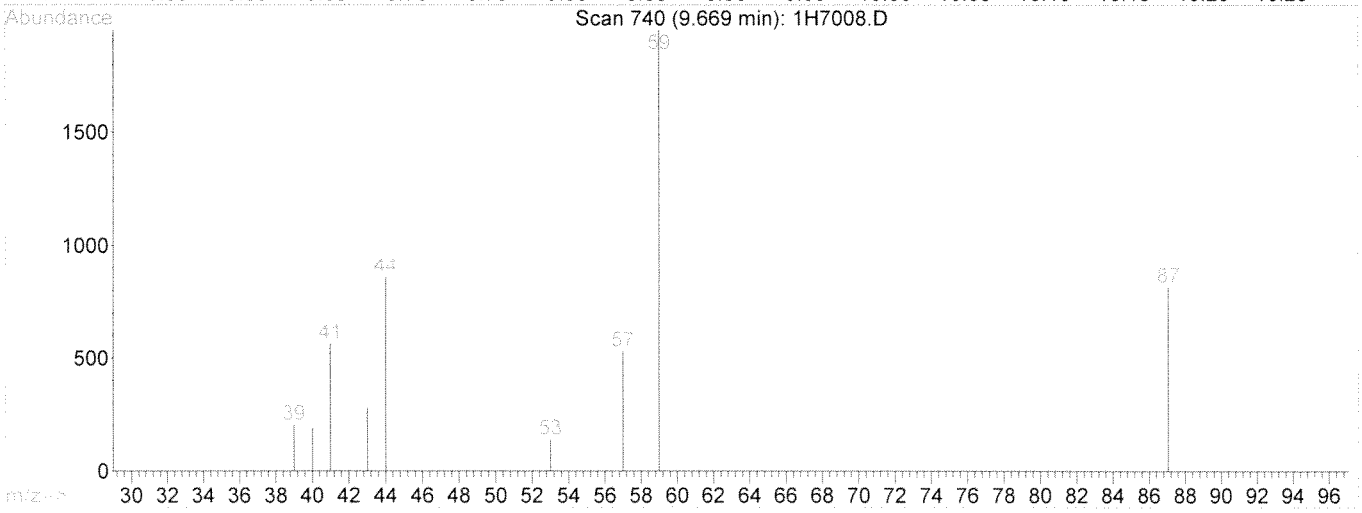
Select One:
[ ] Original Integration [X] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date MC 8/8/14
Review by/Date: [illegible] 8/8/14

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D Vial: 8
Acq On : 7 Aug 2014 12:56 Operator: JFL
Sample : CRL Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:40 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Multiple Level Calibration





TIC: 1H7008.D

(23) Vinyl Acetate

9.67min 0.16ug/kg

response 659

Ion	Exp%	Act%
43.10	100	100
86.05	7.90	0.00
0.00	0.00	0.00
0.00	0.00	0.00

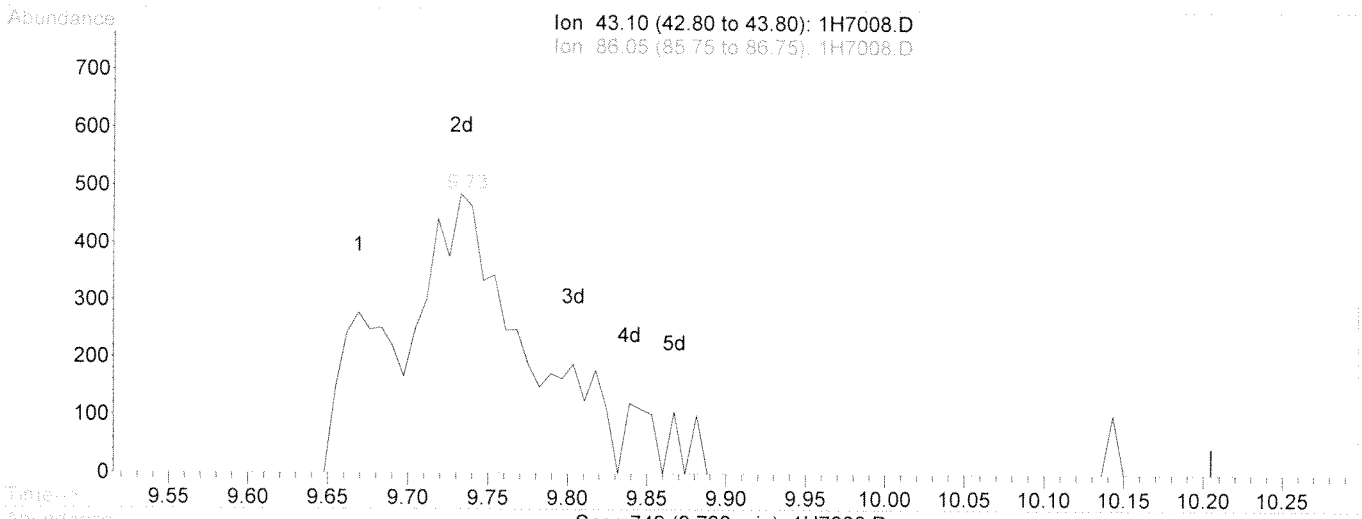
Select One:
[X] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/8/14
Review by/Date: BS 8/8/14

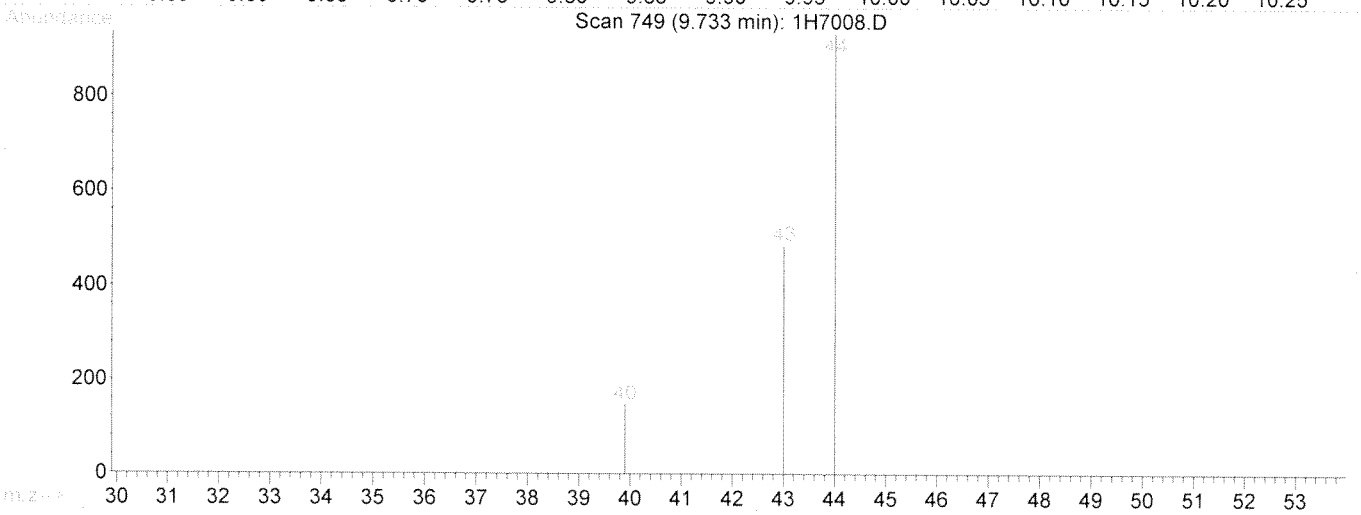
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:50 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Multiple Level Calibration





TIC: 1H7008.D

(23) Vinyl Acetate

9.73min 0.67ug/kg m

response 2682

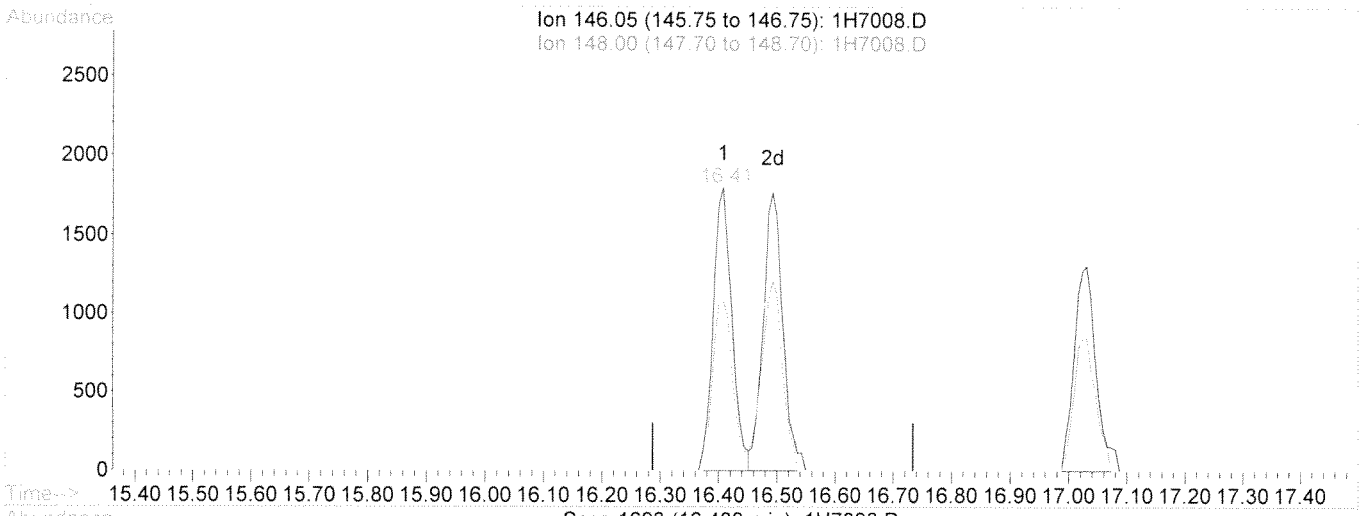
Ion	Exp%	Act%
43.10	100	100
86.05	7.90	0.00
0.00	0.00	0.00
0.00	0.00	0.00

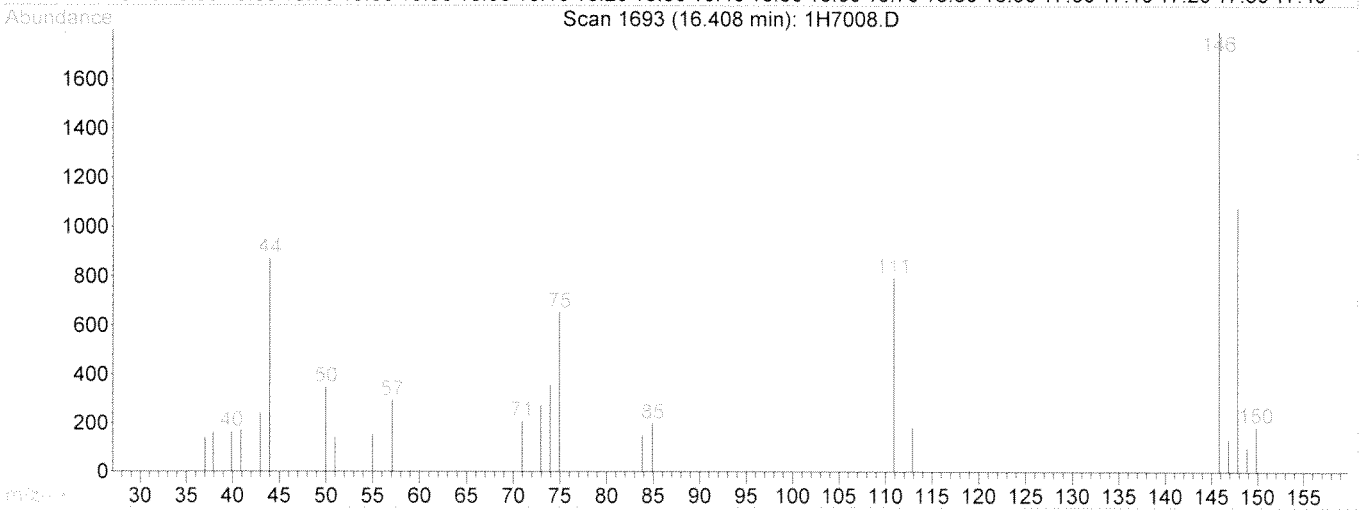
Select One:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date NC 8/8/14
Review by/Date: 8/8/14

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D Vial: 8
Acq On : 7 Aug 2014 12:56 Operator: JFL
Sample : CRL Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:50 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Multiple Level Calibration





TIC: 1H7008.D

(91) 1,4-Dichlorobenzene

16.41min 1.20ug/kg

response 4009

Ion	Exp%	Act%
146.05	100	100
148.00	64.40	64.48
111.00	43.30	48.22
0.00	0.00	0.00

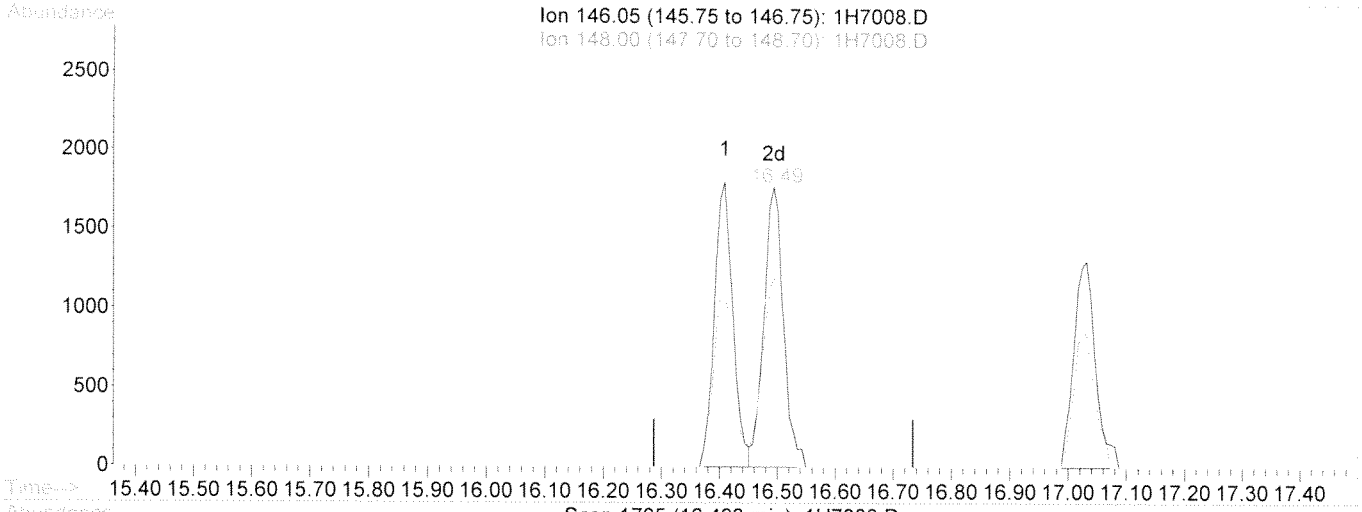
Select one:
[X] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: NC 8/8/14
Review by/Date: 8/8/14

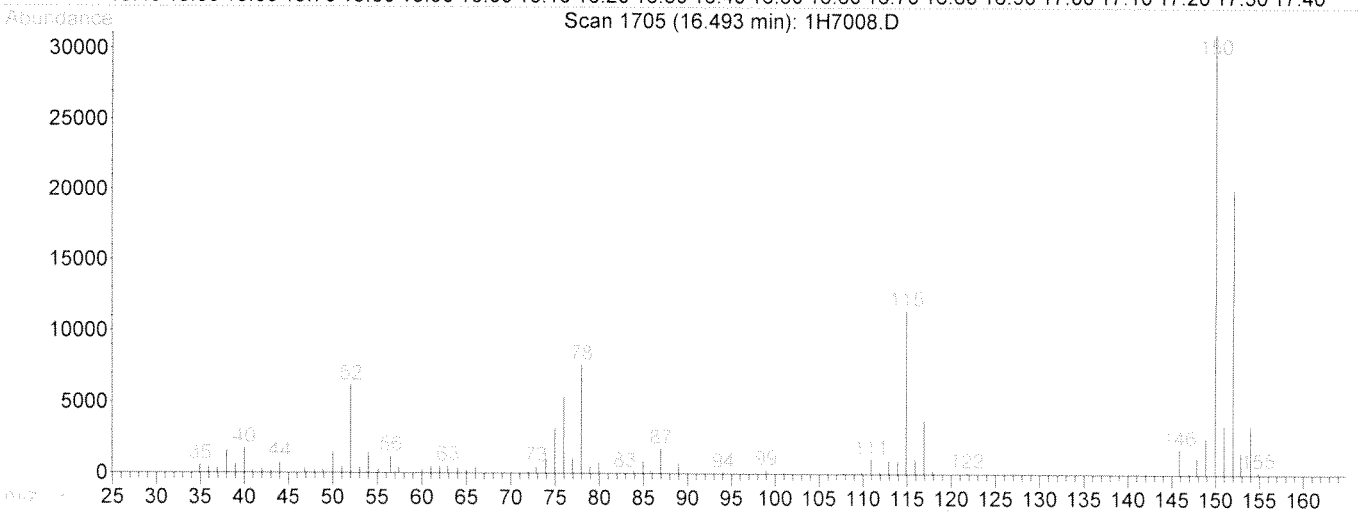
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:51 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Multiple Level Calibration





TIC: 1H7008.D

(91) 1,4-Dichlorobenzene

16.49min 1.25ug/kg m

response 4169

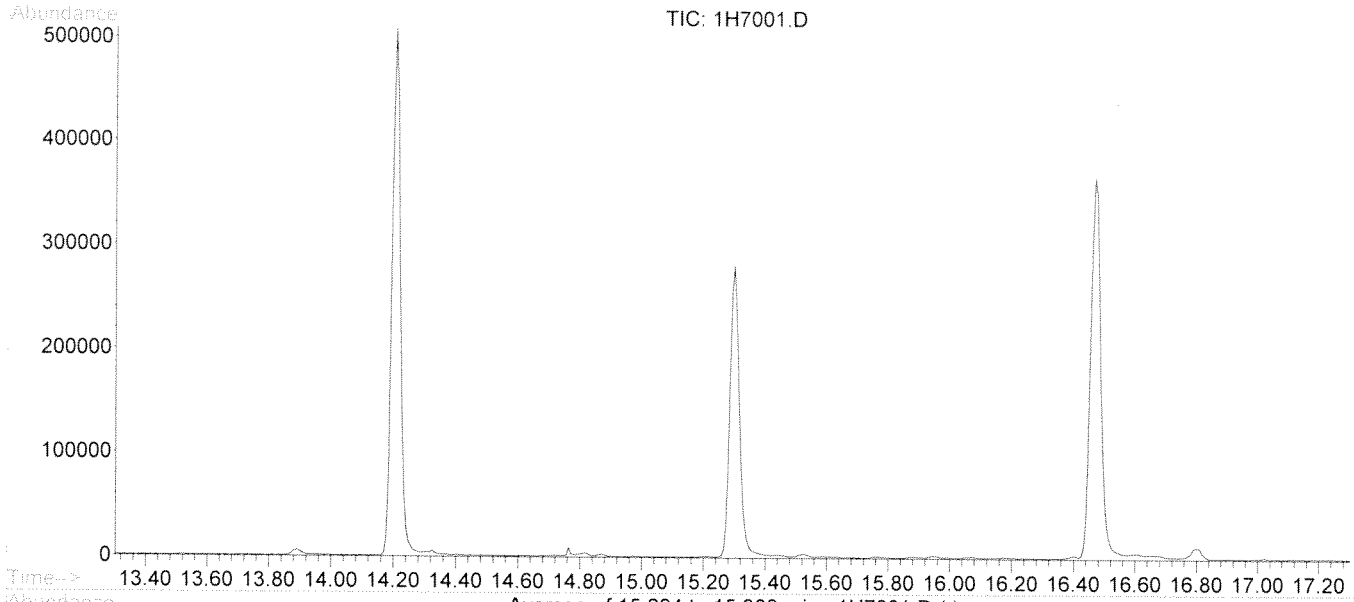
Ion	Exp%	Act%
146.05	100	100
148.00	64.40	62.01
111.00	43.30	46.37
0.00	0.00	0.00

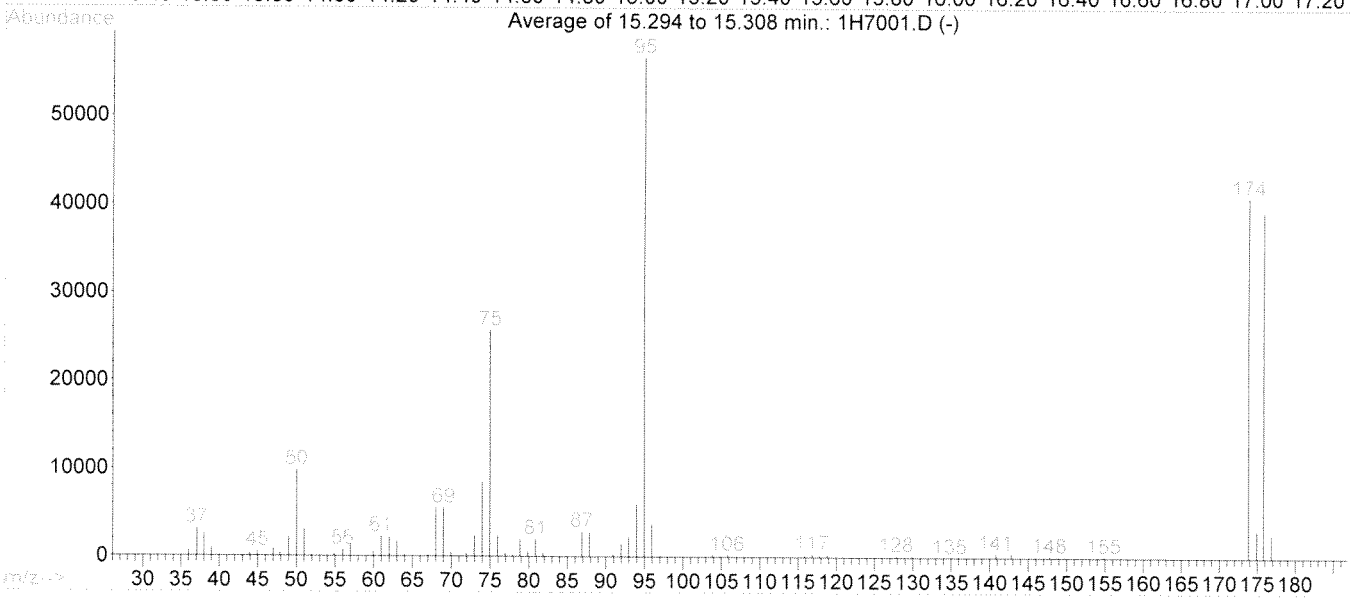
Select One:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date NC 8/8/14
Review by/Date: RS 8/8/14

BFB

Data File : C:\HPCHEM\1\DATA\080714\1H7001.D
Acq On : 7 Aug 2014 9:09
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029

Vial: 1
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00





Spectrum Information: Average of 15.294 to 15.308 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	9811	PASS
75	95	30	60	45.4	25765	PASS
95	95	100	100	100.0	56736	PASS
96	95	5	9	6.6	3732	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	72.2	40973	PASS
175	174	5	9	7.5	3091	PASS
176	174	95	101	96.0	39347	PASS
177	176	5	9	6.7	2621	PASS

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7003.D
Acq On : 7 Aug 2014 10:19
Sample : 20/50 CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 3
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	205514	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	330015	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	283024	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	125704	50.00 ug/kg	0.00

System Monitoring Compounds

30) Dibromofluoromethane	10.55	113	104841	46.52 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 93.04%		
44) 1,2-Dichloroethane-d4	11.12	65	85546	49.51 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 99.02%		
56) D8-Toluene	12.82	98	337705	48.20 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 96.40%		
77) Bromofluorobenzene	15.30	95	126401	48.24 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 96.48%		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.62	85	59037	20.02 ug/kg	99
3) Chloromethane	5.12	50	65626	21.84 ug/kg	99
4) Vinyl Chloride	5.35	62	52312	23.16 ug/kg	71
5) Bromomethane	6.11	94	17295	13.01 ug/kg	99
6) Chloroethane	6.37	64	31734	23.75 ug/kg	99
7) Trichlorofluoromethane	6.66	101	87249	24.34 ug/kg	99
8) Trichlorotrifluoroethane	7.62	101	134808	57.04 ug/kg	98
9) acrolein	8.11	56	39391	523.83 ug/kg	100
10) Acetone	8.52	43	22420	53.00 ug/kg	99
11) 1,1-Dichloroethene	7.58	96	126835	56.03 ug/kg	100
12) 3-Chloropropene	8.29	76	58016	51.81 ug/kg	96
13) Acetonitrile	9.16	41	85522	520.00 ug/kg	92
14) Iodomethane	7.83	142	97769	40.67 ug/kg	99
15) Carbon disulfide	7.65	76	365289	53.09 ug/kg	100
16) Methylene Chloride	8.44	84	140262	57.76 ug/kg	99
17) Methyl tert-butyl ether	8.77	73	248529	51.67 ug/kg	98
18) Acrylonitrile	9.54	53	208908	512.36 ug/kg	98
19) T-1,2-Dichloroethene	8.66	96	136418	54.03 ug/kg	99
20) Isopropyl Ether	9.22	45	358995	50.01 ug/kg#	100
21) C-1,2-Dichloroethene	10.08	96	135577	51.46 ug/kg	99
22) 1,1-Dichloroethane	9.46	63	194708	51.97 ug/kg	100
23) Vinyl Acetate	9.70	43	211583	50.72 ug/kg	99
24) Chloroprene	9.42	53	148848	51.31 ug/kg	99
25) 2-Butanone	10.69	72	6642	47.65 ug/kg	75
26) Propionitrile	11.01	54	77887	475.02 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	181117	54.48 ug/kg	100
28) Methacrylonitrile	11.03	67	254542	485.54 ug/kg	99
29) Chloroform	10.35	83	218459	51.30 ug/kg	100
31) Dibromofluoromethane	10.55	113	104841	46.52 ug/kg	100
32) Bromochloromethane	10.31	128	51971	51.84 ug/kg	97
33) 1,1,1-Trichloroethane	10.61	97	186554	54.12 ug/kg	100
34) 1,1-Dichloropropene	10.72	75	172638	54.48 ug/kg	99
35) Diethyl Ether	7.22	59	77946	51.09 ug/kg	99
36) Methyl Acetate	8.65	74	14000	45.85 ug/kg	99
37) Cyclohexane	10.32	56	195164	54.83 ug/kg	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7003.D
Acq On : 7 Aug 2014 10:19
Sample : 20/50 CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 3
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.54	55	160036	61.23 ug/kg	99
40) Carbon Tetrachloride	10.54	117	157298	58.40 ug/kg	99
41) 1,2-Dichloroethane	11.19	62	115382	52.32 ug/kg	99
42) Benzene	10.99	78	435735	51.23 ug/kg	98
43) Isobutyl Alcohol	11.03	43	153992	2057.62 ug/kg#	9
45) 1,2-Dichloroethane-d4	11.12	65	85546	49.51 ug/kg#	96
46) Trichloroethene	11.54	130	120302	55.57 ug/kg	99
47) 1,2-Dichloropropane	12.06	63	103807	52.40 ug/kg	99
48) Methyl Methacrylate	12.14	100	24029	49.28 ug/kg	98
49) 1,4-Dioxane	12.27	88	18078	915.09 ug/kg	100
50) Bromodichloromethane	12.08	83	159487	55.66 ug/kg	100
51) Dibromomethane	11.98	93	68857	53.63 ug/kg	99
52) 4-Methyl-2-Pentanone	13.16	100	12121	51.89 ug/kg	99
53) 2-Chloroethyl vinyl ether	12.54	63	15812	37.24 ug/kg	96
54) 2-Hexanone	13.87	43	61344	51.08 ug/kg	99
55) C-1,3-Dichloropropene	12.65	75	181995	55.33 ug/kg	99
57) D8-Toluene	12.82	98	337705	48.20 ug/kg	94
59) Toluene	12.87	92	282731	51.82 ug/kg	99
60) Ethyl Methacrylate	13.26	69	106629	49.98 ug/kg	100
61) T-1,3-Dichloropropene	13.21	75	140213	56.21 ug/kg	100
62) 1,1,2-Trichloroethane	13.37	97	82770	51.76 ug/kg	99
63) 1,3-Dichloropropane	13.63	76	149229	51.61 ug/kg	100
64) Tetrachloroethene	13.23	164	96749	55.04 ug/kg	98
65) Dibromochloromethane	13.55	129	107920	56.15 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	91953	54.18 ug/kg	99
67) Chlorobenzene	14.22	112	306510	52.36 ug/kg	99
68) 1,1,1,2-Tetrachloroethane	14.25	131	96222	53.18 ug/kg	99
69) Ethylbenzene	14.19	106	160776	53.70 ug/kg	98
70) m-xylene & p-xylene	14.31	106	400239	106.49 ug/kg	99
71) O-Xylene	14.71	106	192066	51.99 ug/kg	99
72) Bromoform	14.85	173	62692	49.88 ug/kg	99
73) Styrene	14.75	104	301765	55.98 ug/kg	99
74) Isopropylbenzene	14.97	105	524323	52.89 ug/kg	100
75) 1,2,3-Trichloropropane	15.62	75	112567	52.19 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	111040	51.80 ug/kg	100
78) Bromofluorobenzene	15.30	95	126401	48.24 ug/kg#	69
79) T-1,4-dichloro-2-butene	15.61	53	22004	53.07 ug/kg	97
80) N-Propylbenzene	15.36	91	636990	53.22 ug/kg	99
82) Bromobenzene	15.45	156	111529	53.62 ug/kg	97
83) 1,3,5-Trimethylbenzene	15.52	105	406712	53.05 ug/kg	98
84) 2-Chlorotoluene	15.58	91	364017	51.44 ug/kg	99
85) 4-Chlorotoluene	15.74	91	357913	52.26 ug/kg	100
86) 1,2,4-Trimethylbenzene	15.94	105	387595	54.69 ug/kg	100
87) s-Butylbenzene	16.06	105	567899	53.70 ug/kg	100
88) tert-Butylbenzene	15.88	119	346187	52.45 ug/kg	99
89) p-Isopropyltoluene	16.18	119	389633	55.58 ug/kg	99
90) 1,3-Dichlorobenzene	16.39	146	207720	53.77 ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	200998	53.10 ug/kg	99
92) 1,2-Dichlorobenzene	17.02	146	188770	53.29 ug/kg	100
93) N-Butylbenzene	16.66	91	410463	55.49 ug/kg	99
94) DBCP	18.10	75	17278	51.71 ug/kg	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7003.D
Acq On : 7 Aug 2014 10:19
Sample : 20/50 CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 3
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.87	128	190448	53.59 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	112677	57.13 ug/kg	99
97) Hexachlorobutadiene	19.05	225	63410	54.04 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	96012	53.20 ug/kg	100

(#) = qualifier out of range (m) = manual integration
1H7003.D 080614.M Fri Aug 08 11:58:22 2014

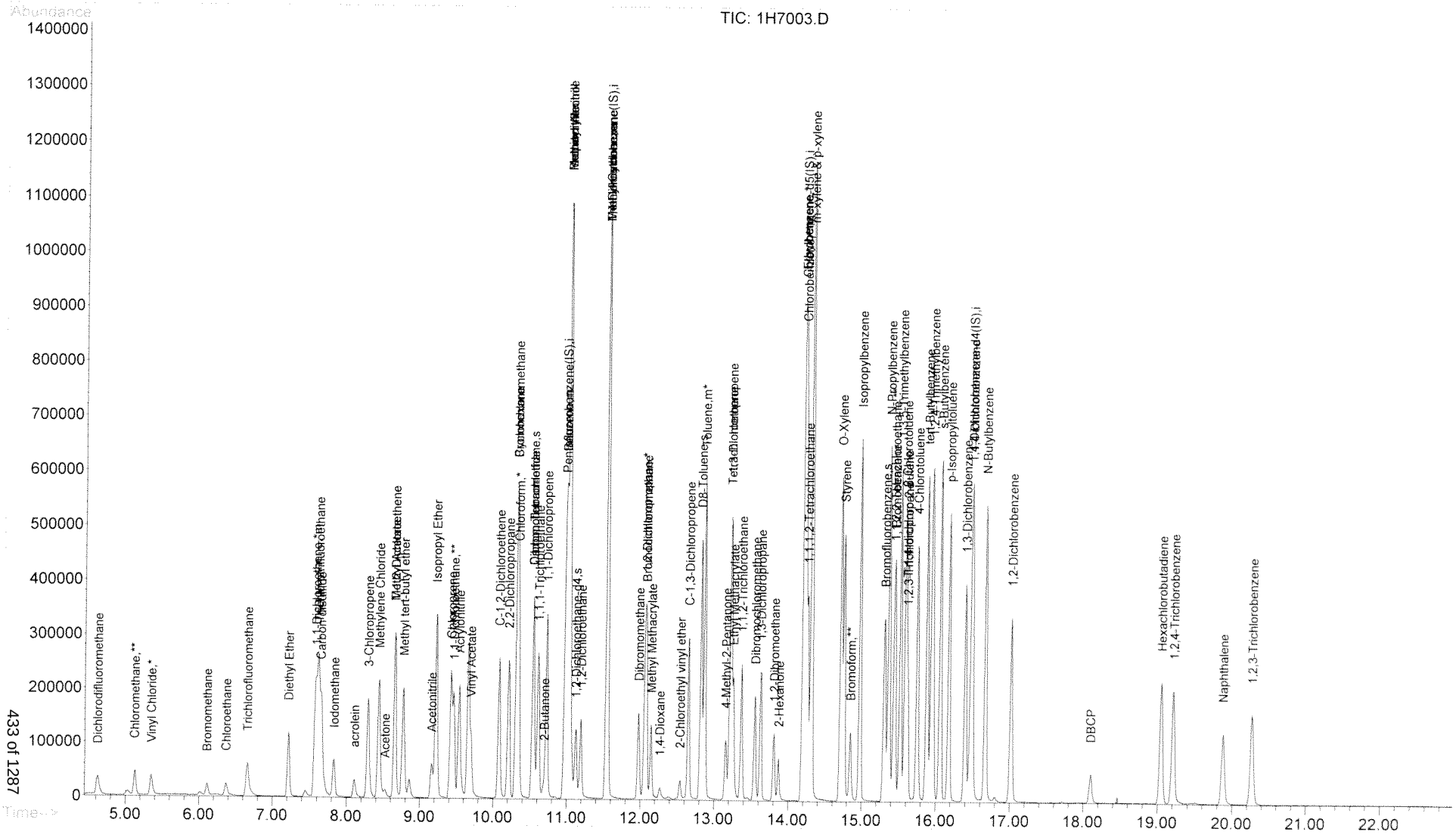
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7003.D
Acq On : 7 Aug 2014 10:19
Sample : 20/50 CCV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 3
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



1H7003.D 080614.M Fri Aug 08 11:58:23 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7004.D
Acq On : 7 Aug 2014 10:57
Sample : BS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 4
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	224599	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	359007	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	305623	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	132225	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	111700	45.35 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 90.70%		
44) 1,2-Dichloroethane-d4	11.13	65	89760	47.76 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 95.52%		
56) D8-Toluene	12.82	98	356055	46.72 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 93.44%		
77) Bromofluorobenzene	15.30	95	131960	46.64 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 93.28%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.62	85	65286	20.27 ug/kg	99
3) Chloromethane	5.13	50	63098	19.22 ug/kg	98
4) Vinyl Chloride	5.35	62	49885	20.11 ug/kg	83
5) Bromomethane	6.11	94	14682	10.07 ug/kg	97
6) Chloroethane	6.38	64	36812	25.21 ug/kg	98
7) Trichlorofluoromethane	6.66	101	83584	21.34 ug/kg	100
8) Trichlorotrifluoroethane	7.62	101	50033	19.37 ug/kg	98
9) acrolein	8.11	56	17338	210.97 ug/kg	100
10) Acetone	8.53	43	9019	19.51 ug/kg	99
11) 1,1-Dichloroethene	7.58	96	40628	16.42 ug/kg	99
12) 3-Chloropropene	8.29	76	23787	19.44 ug/kg	97
13) Acetonitrile	9.22	41	25473	141.72 ug/kg#	33
14) Iodomethane	7.83	142	39275	14.95 ug/kg	99
15) Carbon disulfide	7.66	76	123375	16.41 ug/kg	99
16) Methylene Chloride	8.44	84	47840	18.03 ug/kg	99
17) Methyl tert-butyl ether	8.77	73	91602	17.43 ug/kg	97
18) Acrylonitrile	9.55	53	10178	22.84 ug/kg	93
19) T-1,2-Dichloroethene	8.66	96	50442	18.28 ug/kg	98
20) Isopropyl Ether	9.22	45	143250	18.26 ug/kg#	100
21) C-1,2-Dichloroethene	10.08	96	53373	18.54 ug/kg	98
22) 1,1-Dichloroethane	9.46	63	81002	19.78 ug/kg	100
23) Vinyl Acetate	9.70	43	66010	14.48 ug/kg	99
24) Chloroprene	9.42	53	57952	18.28 ug/kg	99
25) 2-Butanone	10.72	72	5824	38.16 ug/kg#	1
26) Propionitrile	11.03	54	4460	24.89 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	73185	20.14 ug/kg	100
28) Methacrylonitrile	11.03	67	12539	21.89 ug/kg#	51
29) Chloroform	10.35	83	92621	19.90 ug/kg	99
31) Dibromofluoromethane	10.55	113	111700	45.35 ug/kg	100
32) Bromochloromethane	10.31	128	21491	19.62 ug/kg	99
33) 1,1,1-Trichloroethane	10.61	97	75611	20.07 ug/kg	99
34) 1,1-Dichloropropene	10.72	75	67612	19.52 ug/kg	100
35) Diethyl Ether	7.22	59	25933	15.55 ug/kg	99
36) Methyl Acetate	8.66	74	5383	15.50 ug/kg	96
37) Cyclohexane	10.32	56	69966	17.99 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7004.D
Acq On : 7 Aug 2014 10:57
Sample : BS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 4
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	61532	21.64 ug/kg	97
40) Carbon Tetrachloride	10.54	117	61943	21.14 ug/kg	99
41) 1,2-Dichloroethane	11.19	62	47651	19.86 ug/kg	98
42) Benzene	10.99	78	180162	19.47 ug/kg	74
43) Isobutyl Alcohol	11.03	43	37722	463.33 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	89760	47.76 ug/kg#	94
46) Trichloroethene	11.54	130	50256	21.34 ug/kg	96
47) 1,2-Dichloropropane	12.06	63	45854	21.28 ug/kg	99
48) Methyl Methacrylate	12.15	100	10977	20.69 ug/kg	98
49) 1,4-Dioxane	12.30	88	388	18.05 ug/kg	97
50) Bromodichloromethane	12.08	83	68373	21.93 ug/kg	100
51) Dibromomethane	11.97	93	29684	21.25 ug/kg	98
52) 4-Methyl-2-Pentanone	13.16	100	5062	19.92 ug/kg	96
53) 2-Chloroethyl vinyl ether	12.54	63	6341	13.73 ug/kg	96
54) 2-Hexanone	13.87	43	26327	20.15 ug/kg	96
55) C-1,3-Dichloropropene	12.65	75	75081	20.98 ug/kg	100
57) D8-Toluene	12.82	98	356055	46.72 ug/kg	93
59) Toluene	12.87	92	119786	20.33 ug/kg	99
60) Ethyl Methacrylate	13.26	69	50494	21.92 ug/kg	100
61) T-1,3-Dichloropropene	13.21	75	67401	25.02 ug/kg	99
62) 1,1,2-Trichloroethane	13.37	97	37878	21.93 ug/kg	99
63) 1,3-Dichloropropane	13.63	76	66309	21.24 ug/kg	99
64) Tetrachloroethene	13.23	164	42051	22.15 ug/kg	98
65) Dibromochloromethane	13.55	129	46829	22.56 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	40499	22.10 ug/kg	98
67) Chlorobenzene	14.22	112	130790	20.69 ug/kg	99
68) 1,1,1,2-Tetrachloroethane	14.26	131	43274	22.15 ug/kg	98
69) Ethylbenzene	14.19	106	70764	21.89 ug/kg	99
70) m-xylene & p-xylene	14.31	106	172284	42.45 ug/kg	99
71) O-Xylene	14.71	106	83463	20.92 ug/kg	99
72) Bromoform	14.85	173	27597	20.33 ug/kg	99
73) Styrene	14.75	104	134882	23.17 ug/kg	92
74) Isopropylbenzene	14.97	105	228600	21.36 ug/kg	100
75) 1,2,3-Trichloropropane	15.62	75	52695	22.62 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	50782	21.94 ug/kg	100
78) Bromofluorobenzene	15.30	95	131960	46.64 ug/kg#	77
79) T-1,4-dichloro-2-butene	15.62	53	11394	25.45 ug/kg#	83
80) N-Propylbenzene	15.36	91	283601	21.94 ug/kg	100
82) Bromobenzene	15.45	156	50182	22.93 ug/kg	97
83) 1,3,5-Trimethylbenzene	15.52	105	175916	21.81 ug/kg	98
84) 2-Chlorotoluene	15.59	91	155726	20.92 ug/kg	99
85) 4-Chlorotoluene	15.75	91	157507	21.87 ug/kg	100
86) 1,2,4-Trimethylbenzene	15.94	105	169108	22.68 ug/kg	100
87) s-Butylbenzene	16.06	105	246971	22.20 ug/kg	100
88) tert-Butylbenzene	15.88	119	150182	21.63 ug/kg	99
89) p-Isopropyltoluene	16.18	119	189614	25.71 ug/kg	99
90) 1,3-Dichlorobenzene	16.39	146	90128	22.18 ug/kg	100
91) 1,4-Dichlorobenzene	16.49	146	92986	23.36 ug/kg	100
92) 1,2-Dichlorobenzene	17.02	146	83009	22.28 ug/kg	100
93) N-Butylbenzene	16.67	91	182720	23.48 ug/kg	100
94) DBCP	18.11	75	7412	21.09 ug/kg	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7004.D
Acq On : 7 Aug 2014 10:57
Sample : BS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 4
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	93882	25.12 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	51337	24.75 ug/kg	100
97) Hexachlorobutadiene	19.05	225	30381	24.61 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	45223	23.82 ug/kg	100

(#) = qualifier out of range (m) = manual integration
1H7004.D 080614.M Fri Aug 08 11:58:26 2014

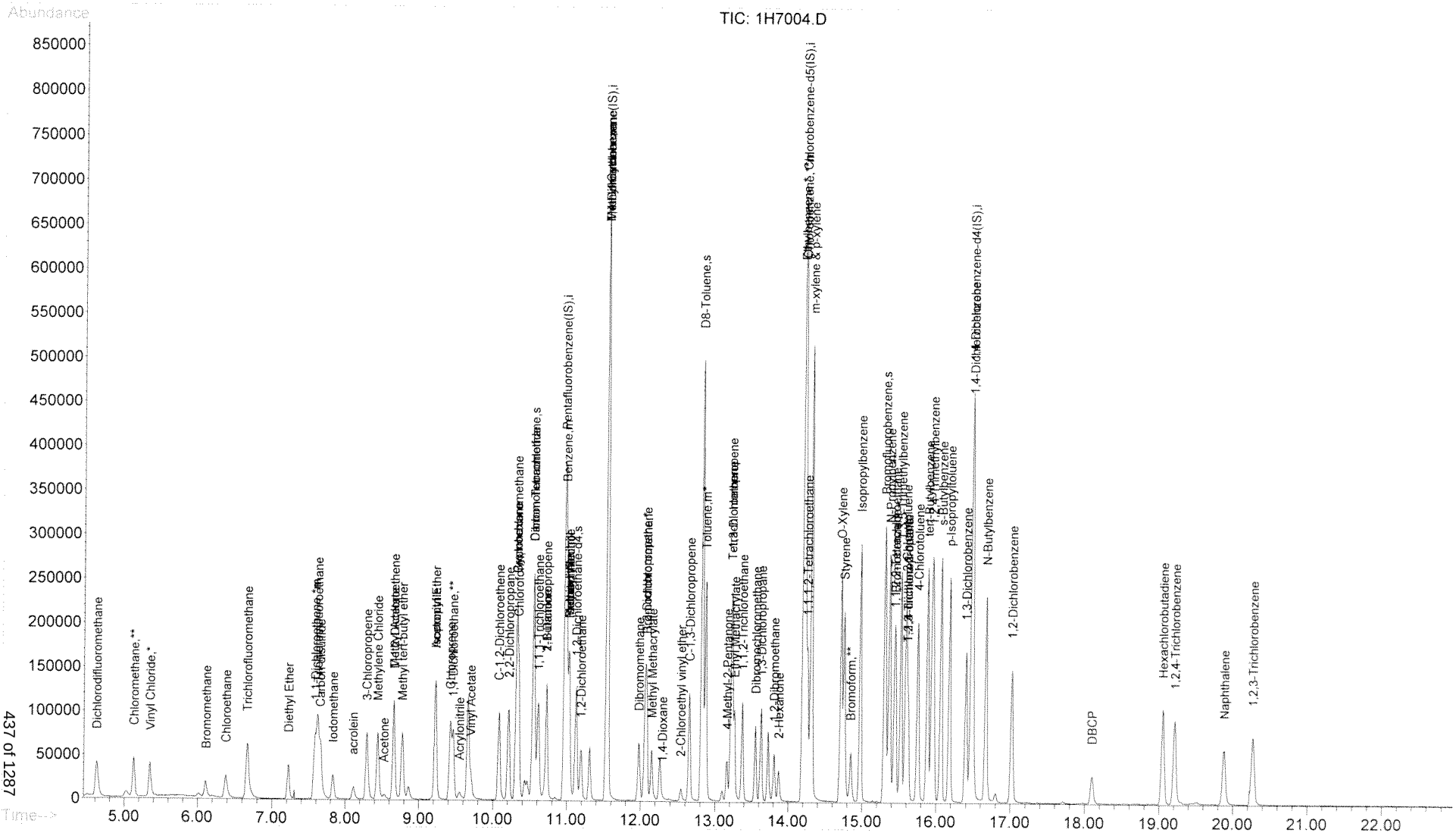
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7004.D
Acq On : 7 Aug 2014 10:57
Sample : BS
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 14:57 2014

Vial: 4
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



1H7004.D 080614.M Fri Aug 08 11:58:27 2014

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D
Acq On : 7 Aug 2014 11:27
Sample : BSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 15:01 2014

Vial: 5
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	220719	50.00 ug/kg	-0.01
38) 1,4-Difluorobenzene(IS)	11.54	114	357473	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	298176	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	128633	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	110500	45.65 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 91.30%		
44) 1,2-Dichloroethane-d4	11.12	65	87854	46.94 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 93.88%		
56) D8-Toluene	12.82	98	352973	46.51 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 93.02%		
77) Bromofluorobenzene	15.30	95	130280	47.20 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 94.40%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.63	85	63457	20.03 ug/kg	100
3) Chloromethane	5.13	50	62883	19.49 ug/kg	100
4) Vinyl Chloride	5.35	62	46335	18.97 ug/kg	86
5) Bromomethane	6.11	94	15409	10.77 ug/kg	96
6) Chloroethane	6.38	64	36665	25.55 ug/kg	98
7) Trichlorofluoromethane	6.67	101	82556	21.45 ug/kg	99
8) Trichlorotrifluoroethane	7.62	101	49393	19.46 ug/kg	98
9) acrolein	8.11	56	15979	197.85 ug/kg	96
10) Acetone	8.53	43	9239	20.33 ug/kg	97
11) 1,1-Dichloroethene	7.58	96	39672	16.32 ug/kg	99
12) 3-Chloropropene	8.30	76	23362	19.43 ug/kg	96
13) Acetonitrile	9.22	41	21350m	120.87 ug/kg	81
14) Iodomethane	7.84	142	39210	15.19 ug/kg	97
15) Carbon disulfide	7.66	76	122237	16.54 ug/kg	99
16) Methylene Chloride	8.44	84	49955	19.15 ug/kg	97
17) Methyl tert-butyl ether	8.78	73	87145	16.87 ug/kg	98
18) Acrylonitrile	9.55	53	9041	20.65 ug/kg	98
19) T-1,2-Dichloroethene	8.66	96	49655	18.31 ug/kg	99
20) Isopropyl Ether	9.22	45	136374	17.69 ug/kg#	100
21) C-1,2-Dichloroethene	10.08	96	51187	18.09 ug/kg	99
22) 1,1-Dichloroethane	9.46	63	78701	19.56 ug/kg	99
23) Vinyl Acetate	9.70	43	63130	14.09 ug/kg	98
24) Chloroprene	9.43	53	57426	18.43 ug/kg	99
25) 2-Butanone	10.73	72	5806	38.72 ug/kg#	1
26) Propionitrile	11.02	54	3487	19.80 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	72278	20.24 ug/kg	100
28) Methacrylonitrile	11.03	67	11171	19.84 ug/kg#	44
29) Chloroform	10.35	83	91297	19.96 ug/kg	99
31) Dibromofluoromethane	10.55	113	110500	45.65 ug/kg	100
32) Bromochloromethane	10.32	128	21164	19.66 ug/kg	98
33) 1,1,1-Trichloroethane	10.61	97	74887	20.23 ug/kg	99
34) 1,1-Dichloropropene	10.73	75	66524	19.55 ug/kg	99
35) Diethyl Ether	7.22	59	24446	14.92 ug/kg	99
36) Methyl Acetate	8.66	74	4906	14.36 ug/kg	97
37) Cyclohexane	10.32	56	68384	17.89 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D
Acq On : 7 Aug 2014 11:27
Sample : BSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 15:01 2014

Vial: 5
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	61429	21.70 ug/kg	98
40) Carbon Tetrachloride	10.54	117	61252	20.99 ug/kg	99
41) 1,2-Dichloroethane	11.19	62	47026	19.69 ug/kg	99
42) Benzene	10.99	78	176061	19.11 ug/kg	74
43) Isobutyl Alcohol	11.02	43	34998	431.72 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.12	65	87854	46.94 ug/kg#	94
46) Trichloroethene	11.54	130	50124	21.37 ug/kg	95
47) 1,2-Dichloropropane	12.06	63	44005	20.51 ug/kg	99
48) Methyl Methacrylate	12.15	100	10178	19.27 ug/kg	98
49) 1,4-Dioxane	12.30	88	316	14.77 ug/kg	85
50) Bromodichloromethane	12.08	83	66520	21.43 ug/kg	100
51) Dibromomethane	11.98	93	28673	20.62 ug/kg	98
52) 4-Methyl-2-Pentanone	13.16	100	4958	19.59 ug/kg	92
53) 2-Chloroethyl vinyl ether	12.55	63	5831	12.68 ug/kg	97
54) 2-Hexanone	13.87	43	25691	19.75 ug/kg#	95
55) C-1,3-Dichloropropene	12.65	75	73945	20.75 ug/kg	99
57) D8-Toluene	12.82	98	352973	46.51 ug/kg	93
59) Toluene	12.87	92	118818	20.67 ug/kg	99
60) Ethyl Methacrylate	13.26	69	48524	21.59 ug/kg	96
61) T-1,3-Dichloropropene	13.21	75	65507	24.93 ug/kg	98
62) 1,1,2-Trichloroethane	13.37	97	36882	21.89 ug/kg	100
63) 1,3-Dichloropropane	13.63	76	64803	21.27 ug/kg	100
64) Tetrachloroethene	13.22	164	42043	22.70 ug/kg	98
65) Dibromochloromethane	13.55	129	45901	22.67 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	39495	22.09 ug/kg	98
67) Chlorobenzene	14.23	112	128260	20.80 ug/kg	98
68) 1,1,1,2-Tetrachloroethane	14.26	131	42988	22.55 ug/kg	98
69) Ethylbenzene	14.19	106	69289	21.97 ug/kg	99
70) m-xylene & p-xylene	14.31	106	171078	43.21 ug/kg	98
71) O-Xylene	14.71	106	82723	21.25 ug/kg	97
72) Bromoform	14.84	173	26737	20.19 ug/kg	99
73) Styrene	14.75	104	130155	22.92 ug/kg	94
74) Isopropylbenzene	14.97	105	228648	21.89 ug/kg	100
75) 1,2,3-Trichloropropane	15.61	75	51443	22.64 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	49030	21.71 ug/kg	100
78) Bromofluorobenzene	15.30	95	130280	47.20 ug/kg#	78
79) T-1,4-dichloro-2-butene	15.61	53	11034	25.26 ug/kg#	87
80) N-Propylbenzene	15.37	91	281782	22.35 ug/kg	99
82) Bromobenzene	15.44	156	50126	23.55 ug/kg	95
83) 1,3,5-Trimethylbenzene	15.52	105	173626	22.13 ug/kg	98
84) 2-Chlorotoluene	15.59	91	155346	21.45 ug/kg	99
85) 4-Chlorotoluene	15.75	91	156738	22.37 ug/kg	100
86) 1,2,4-Trimethylbenzene	15.94	105	168647	23.25 ug/kg	100
87) s-Butylbenzene	16.06	105	244518	22.60 ug/kg	100
88) tert-Butylbenzene	15.88	119	149983	22.21 ug/kg	99
89) p-Isopropyltoluene	16.18	119	186070	25.94 ug/kg	99
90) 1,3-Dichlorobenzene	16.40	146	88699	22.44 ug/kg	100
91) 1,4-Dichlorobenzene	16.49	146	89875	23.20 ug/kg	100
92) 1,2-Dichlorobenzene	17.02	146	80281	22.15 ug/kg	100
93) N-Butylbenzene	16.67	91	180989	23.91 ug/kg	100
94) DBCP	18.10	75	7093	20.74 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D
Acq On : 7 Aug 2014 11:27
Sample : BSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 15:01 2014

Vial: 5
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	88650	24.38 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	51268	25.40 ug/kg	100
97) Hexachlorobutadiene	19.04	225	29742	24.77 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.27	180	44948	24.34 ug/kg	99

(#) = qualifier out of range (m) = manual integration
1H7005.D 080614.M Fri Aug 08 11:58:30 2014

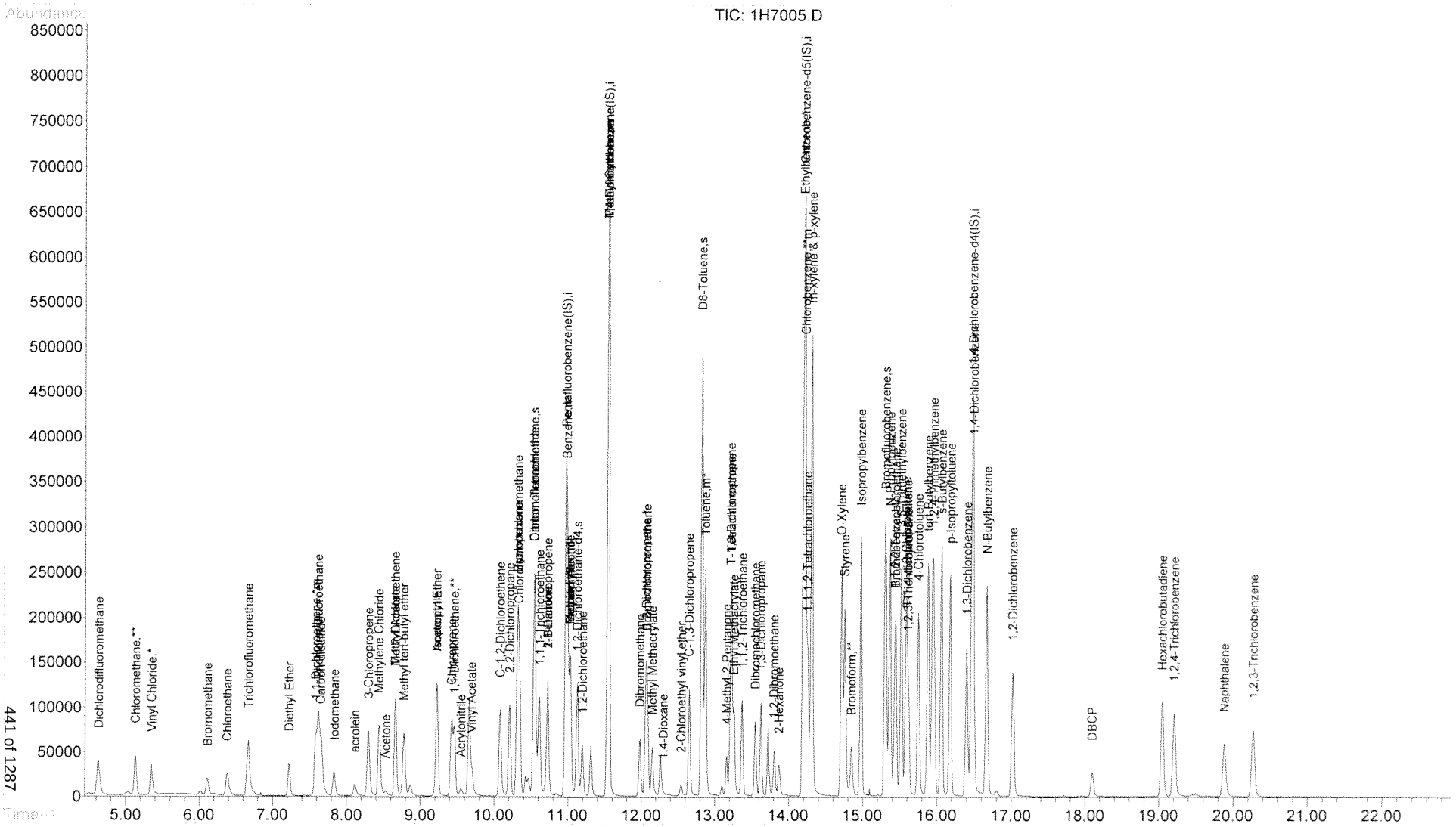
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7005.D
Acq On : 7 Aug 2014 11:27
Sample : BSD
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 15:01 2014

Vial: 5
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7007.D
Acq On : 7 Aug 2014 12:26
Sample : BLK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:48 2014

Vial: 7
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	221283	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.55	114	353153	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	295557	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	128602	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	108390	44.66 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 89.32%		
44) 1,2-Dichloroethane-d4	11.13	65	88144	47.68 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 95.36%		
56) D8-Toluene	12.83	98	358325	47.79 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 95.58%		
77) Bromofluorobenzene	15.30	95	132891	48.57 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 97.14%		

Target Compounds				Qvalue
2) Dichlorodifluoromethane	0.00	85	N.D.	
3) Chloromethane	0.00	50	N.D.	
4) Vinyl Chloride	0.00	62	N.D.	
5) Bromomethane	0.00	94	N.D.	
6) Chloroethane	0.00	64	N.D.	
7) Trichlorofluoromethane	0.00	101	N.D.	
8) Trichlorotrifluoroethane	0.00	101	N.D.	
9) acrolein	0.00	56	N.D.	
10) Acetone	0.00	43	N.D. d	
11) 1,1-Dichloroethene	0.00	96	N.D.	
12) 3-Chloropropene	0.00	76	N.D.	
13) Acetonitrile	0.00	41	N.D.	
14) Iodomethane	0.00	142	N.D.	
15) Carbon disulfide	0.00	76	N.D. d	
16) Methylene Chloride	0.00	84	N.D. d	
17) Methyl tert-butyl ether	0.00	73	N.D.	
18) Acrylonitrile	0.00	53	N.D.	
19) T-1,2-Dichloroethene	0.00	96	N.D.	
20) Isopropyl Ether	0.00	45	N.D.	
21) C-1,2-Dichloroethene	0.00	96	N.D.	
22) 1,1-Dichloroethane	0.00	63	N.D.	
23) Vinyl Acetate	0.00	43	N.D.	
24) Chloroprene	0.00	53	N.D.	
25) 2-Butanone	0.00	72	N.D. d	
26) Propionitrile	0.00	54	N.D.	
27) 2,2-Dichloropropane	0.00	77	N.D.	
28) Methacrylonitrile	0.00	67	N.D. d	
29) Chloroform	0.00	83	N.D.	
31) Dibromofluoromethane	10.55	113	108390	44.66 ug/kg 100
32) Bromochloromethane	0.00	128	N.D.	
33) 1,1,1-Trichloroethane	0.00	97	N.D.	
34) 1,1-Dichloropropene	0.00	75	N.D.	
35) Diethyl Ether	0.00	59	N.D.	
36) Methyl Acetate	0.00	74	N.D.	
37) Cyclohexane	0.00	56	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7007.D
Acq On : 7 Aug 2014 12:26
Sample : BLK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:48 2014

Vial: 7
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	0.00	55		N.D. d	
40) Carbon Tetrachloride	0.00	117		N.D.	
41) 1,2-Dichloroethane	0.00	62		N.D.	
42) Benzene	0.00	78		N.D.	
43) Isobutyl Alcohol	0.00	43		N.D. d	
45) 1,2-Dichloroethane-d4	11.13	65	88144	47.68 ug/kg#	93
46) Trichloroethene	0.00	130		N.D.	
47) 1,2-Dichloropropane	0.00	63		N.D.	
48) Methyl Methacrylate	0.00	100		N.D.	
49) 1,4-Dioxane	0.00	88		N.D.	
50) Bromodichloromethane	0.00	83		N.D.	
51) Dibromomethane	0.00	93		N.D.	
52) 4-Methyl-2-Pentanone	0.00	100		N.D. d	
53) 2-Chloroethyl vinyl ether	0.00	63		N.D.	
54) 2-Hexanone	0.00	43		N.D. d	
55) C-1,3-Dichloropropene	0.00	75		N.D.	
57) D8-Toluene	12.83	98	358325	47.79 ug/kg	94
59) Toluene	0.00	92		N.D.	
60) Ethyl Methacrylate	0.00	69		N.D.	
61) T-1,3-Dichloropropene	0.00	75		N.D.	
62) 1,1,2-Trichloroethane	0.00	97		N.D.	
63) 1,3-Dichloropropane	0.00	76		N.D.	
64) Tetrachloroethene	0.00	164		N.D.	
65) Dibromochloromethane	0.00	129		N.D.	
66) 1,2-Dibromoethane	0.00	107		N.D.	
67) Chlorobenzene	0.00	112		N.D.	
68) 1,1,1,2-Tetrachloroethane	0.00	131		N.D.	
69) Ethylbenzene	0.00	106		N.D.	
70) m-xylene & p-xylene	0.00	106		N.D.	
71) O-Xylene	0.00	106		N.D.	
72) Bromoform	0.00	173		N.D.	
73) Styrene	0.00	104		N.D.	
74) Isopropylbenzene	0.00	105		N.D.	
75) 1,2,3-Trichloropropane	0.00	75		N.D.	
76) 1,1,2,2-Tetrachloroethane	0.00	83		N.D.	
78) Bromofluorobenzene	15.30	95	132891	48.57 ug/kg#	80
79) T-1,4-dichloro-2-butene	0.00	53		N.D.	
80) N-Propylbenzene	0.00	91		N.D.	
82) Bromobenzene	0.00	156		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105		N.D.	
84) 2-Chlorotoluene	0.00	91		N.D.	
85) 4-Chlorotoluene	0.00	91		N.D.	
86) 1,2,4-Trimethylbenzene	0.00	105		N.D.	
87) s-Butylbenzene	0.00	105		N.D.	
88) tert-Butylbenzene	0.00	119		N.D.	
89) p-Isopropyltoluene	0.00	119		N.D.	
90) 1,3-Dichlorobenzene	0.00	146		N.D.	
91) 1,4-Dichlorobenzene	0.00	146		N.D.	
92) 1,2-Dichlorobenzene	0.00	146		N.D.	
93) N-Butylbenzene	0.00	91		N.D.	
94) DBCP	0.00	75		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7007.D
Acq On : 7 Aug 2014 12:26
Sample : BLK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:48 2014

Vial: 7
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	0.00	128		N.D. d	
96) 1,2,4-Trichlorobenzene	0.00	180		N.D. d	
97) Hexachlorobutadiene	0.00	225		N.D.	
98) 1,2,3-Trichlorobenzene	0.00	180		N.D. d	

(#) = qualifier out of range (m) = manual integration
1H7007.D 080614.M Fri Aug 08 11:58:34 2014

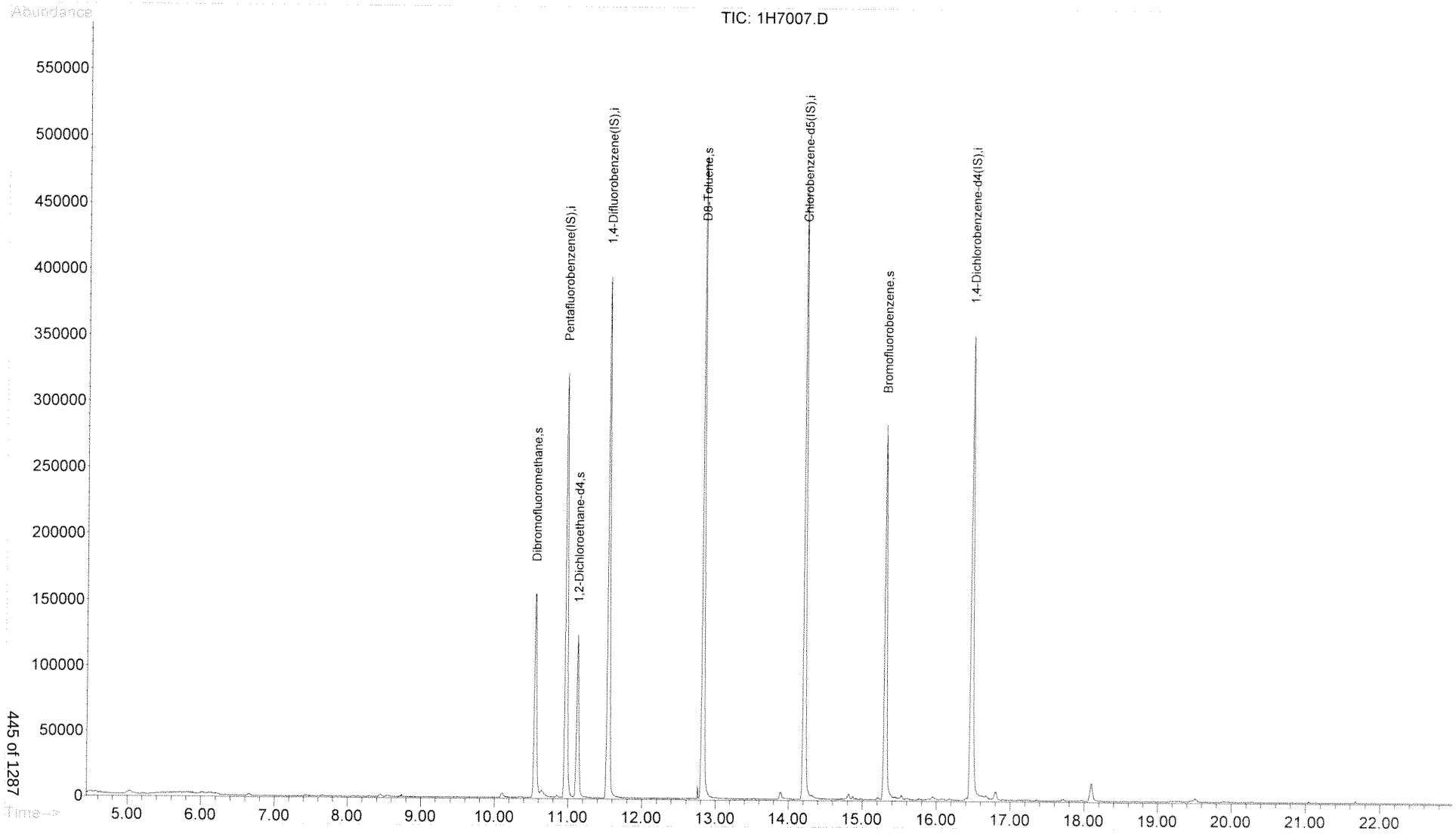
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7007.D
Acq On : 7 Aug 2014 12:26
Sample : BLK
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:48 2014

Vial: 7
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:51 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	198647	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	308700	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	255079	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	110958	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	89829	41.23 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 82.46%		
44) 1,2-Dichloroethane-d4	11.13	65	70286	43.49 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 86.98%		
56) D8-Toluene	12.82	98	305901	46.68 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 93.36%		
77) Bromofluorobenzene	15.30	95	111491	47.22 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 94.44%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.62	85	2549	0.86 ug/kg#	92
3) Chloromethane	5.13	50	3178	1.09 ug/kg	97
4) Vinyl Chloride	5.35	62	2018	0.89 ug/kg#	1
5) Bromomethane	6.11	94	2540	1.95 ug/kg#	45
6) Chloroethane	6.40	64	1438	1.11 ug/kg	98
7) Trichlorofluoromethane	6.67	101	3514	1.01 ug/kg	99
8) Trichlorotrifluoroethane	7.62	101	1993	0.87 ug/kg	94
9) acrolein	8.12	56	365	5.02 ug/kg#	54
10) Acetone	8.54	43	1214	2.97 ug/kg	69
11) 1,1-Dichloroethene	7.59	96	1958	0.89 ug/kg	95
12) 3-Chloropropene	8.30	76	784	0.72 ug/kg	80
13) Acetonitrile	9.24	41	2281	14.35 ug/kg#	33
14) Iodomethane	7.84	142	1833	0.79 ug/kg	93
15) Carbon disulfide	7.67	76	6001	0.90 ug/kg	97
16) Methylene Chloride	8.45	84	3061	1.30 ug/kg	97
17) Methyl tert-butyl ether	8.79	73	3878	0.83 ug/kg	90
18) Acrylonitrile	9.56	53	2597	6.59 ug/kg	90
19) T-1,2-Dichloroethene	8.66	96	2298	0.94 ug/kg	97
20) Isopropyl Ether	9.24	45	6446	0.93 ug/kg#	100
21) C-1,2-Dichloroethene	10.09	96	2299	0.90 ug/kg	94
22) 1,1-Dichloroethane	9.47	63	3415	0.94 ug/kg	97
23) Vinyl Acetate	9.73	43	2682m	0.67 ug/kg	78
24) Chloroprene	9.44	53	1204	0.43 ug/kg	85
25) 2-Butanone	10.60	72	287	2.11 ug/kg#	1
26) Propionitrile	11.03	54	838	5.29 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	3243	1.01 ug/kg	97
28) Methacrylonitrile	11.04	67	3362	6.63 ug/kg	86
29) Chloroform	10.36	83	4064	0.99 ug/kg	97
31) Dibromofluoromethane	10.55	113	89829	41.23 ug/kg	100
32) Bromochloromethane	10.32	128	832	0.86 ug/kg	90
33) 1,1,1-Trichloroethane	10.62	97	3152	0.95 ug/kg	97
34) 1,1-Dichloropropene	10.74	75	2844	0.93 ug/kg	91
35) Diethyl Ether	7.24	59	1252	0.85 ug/kg	91
36) Methyl Acetate	8.67	74	97	0.31 ug/kg#	1
37) Cyclohexane	10.33	56	3306	0.96 ug/kg	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:51 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	3718	1.52 ug/kg#	66
40) Carbon Tetrachloride	10.55	117	2496	0.99 ug/kg	97
41) 1,2-Dichloroethane	11.20	62	1875	0.91 ug/kg	93
42) Benzene	11.00	78	8760	1.10 ug/kg	71
43) Isobutyl Alcohol	11.03	43	1752	25.03 ug/kg#	39
45) 1,2-Dichloroethane-d4	11.13	65	70286	43.49 ug/kg#	93
46) Trichloroethene	11.55	130	2144	1.06 ug/kg#	1
47) 1,2-Dichloropropane	12.07	63	2030	1.10 ug/kg	92
48) Methyl Methacrylate	0.00	100		N.D.	
49) 1,4-Dioxane	12.32	88	90	4.87 ug/kg#	20
50) Bromodichloromethane	12.08	83	2492	0.93 ug/kg	99
51) Dibromomethane	11.98	93	1169	0.97 ug/kg	91
52) 4-Methyl-2-Pentanone	13.18	100	351	1.61 ug/kg#	1
53) 2-Chloroethyl vinyl ether	0.00	63		N.D.	
54) 2-Hexanone	13.89	43	1355	1.21 ug/kg#	53
55) C-1,3-Dichloropropene	12.67	75	2582	0.84 ug/kg	88
57) D8-Toluene	12.82	98	305901	46.68 ug/kg	93
59) Toluene	12.87	92	5497	1.12 ug/kg	98
60) Ethyl Methacrylate	13.28	69	1198	0.62 ug/kg#	79
61) T-1,3-Dichloropropene	13.23	75	1859	0.83 ug/kg	83
62) 1,1,2-Trichloroethane	13.38	97	1350	0.94 ug/kg	93
63) 1,3-Dichloropropane	13.64	76	2500	0.96 ug/kg	88
64) Tetrachloroethene	13.23	164	1568	0.99 ug/kg	94
65) Dibromochloromethane	13.56	129	1448	0.84 ug/kg#	89
66) 1,2-Dibromoethane	13.83	107	1314	0.86 ug/kg#	100
67) Chlorobenzene	14.23	112	5682	1.08 ug/kg#	62
68) 1,1,1,2-Tetrachloroethane	14.26	131	1627	1.00 ug/kg#	1
69) Ethylbenzene	14.19	106	2950	1.09 ug/kg	93
70) m-xylene & p-xylene	14.31	106	7209	2.13 ug/kg	98
71) O-Xylene	14.72	106	3546	1.06 ug/kg	97
72) Bromoform	14.85	173	781	0.69 ug/kg#	86
73) Styrene	14.77	104	4025	0.83 ug/kg	89
74) Isopropylbenzene	14.98	105	9591	1.07 ug/kg	99
75) 1,2,3-Trichloropropane	15.62	75	1946	1.00 ug/kg	86
76) 1,1,2,2-Tetrachloroethane	15.43	83	1874	0.97 ug/kg#	92
78) Bromofluorobenzene	15.30	95	111491	47.22 ug/kg#	80
79) T-1,4-dichloro-2-butene	15.63	53	173	0.46 ug/kg#	1
80) N-Propylbenzene	15.38	91	11785	1.09 ug/kg	99
82) Bromobenzene	15.45	156	2074	1.13 ug/kg	90
83) 1,3,5-Trimethylbenzene	15.52	105	7399	1.09 ug/kg	98
84) 2-Chlorotoluene	15.59	91	7055	1.13 ug/kg	98
85) 4-Chlorotoluene	15.76	91	6987	1.16 ug/kg	93
86) 1,2,4-Trimethylbenzene	15.94	105	7559	1.21 ug/kg	100
87) s-Butylbenzene	16.06	105	10557	1.13 ug/kg	97
88) tert-Butylbenzene	15.88	119	6337	1.09 ug/kg	92
89) p-Isopropyltoluene	16.18	119	7110	1.15 ug/kg	98
90) 1,3-Dichlorobenzene	16.41	146	4009	1.18 ug/kg	97
91) 1,4-Dichlorobenzene	16.49	146	4169m	1.25 ug/kg	97
92) 1,2-Dichlorobenzene	17.03	146	3414	1.09 ug/kg	99
93) N-Butylbenzene	16.68	91	7652	1.17 ug/kg	99
94) DBCP	18.11	75	163	0.55 ug/kg#	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:51 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.89	128	5663	1.81 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.23	180	2831	1.63 ug/kg	98
97) Hexachlorobutadiene	19.05	225	1167	1.13 ug/kg	96
98) 1,2,3-Trichlorobenzene	20.28	180	2720	1.71 ug/kg	97

(#) = qualifier out of range (m) = manual integration

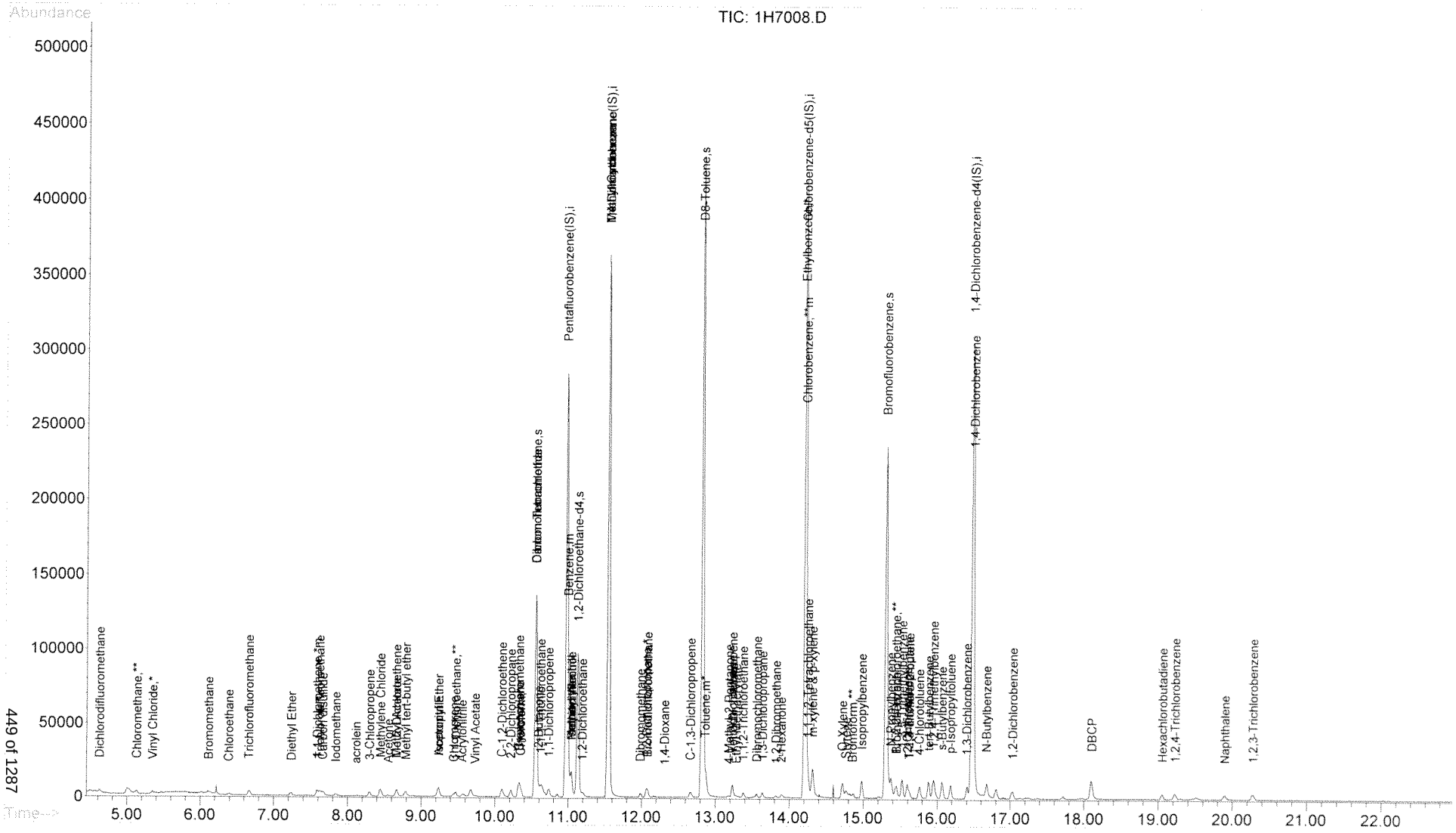
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7008.D
Acq On : 7 Aug 2014 12:56
Sample : CRL
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 8:51 2014

Vial: 8
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7021.D
Acq On : 7 Aug 2014 19:29
Sample : A404270-30
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 9:15 2014

Vial: 21
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	212517	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.55	114	343695	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	285844	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	130165	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	110299	47.32 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 94.64%		
44) 1,2-Dichloroethane-d4	11.13	65	92157	51.22 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 102.44%		
56) D8-Toluene	12.82	98	355518	48.73 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 97.46%		
77) Bromofluorobenzene	15.30	95	135741	51.30 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 102.60%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85		N.D.	
3) Chloromethane	0.00	50		N.D.	
4) Vinyl Chloride	0.00	62		N.D.	
5) Bromomethane	0.00	94		N.D. d	
6) Chloroethane	0.00	64		N.D.	
7) Trichlorofluoromethane	0.00	101		N.D.	
8) Trichlorotrifluoroethane	0.00	101		N.D.	
9) acrolein	0.00	56		N.D.	
10) Acetone	8.55	43	2482	5.67 ug/kg	90
11) 1,1-Dichloroethene	0.00	96		N.D.	
12) 3-Chloropropene	0.00	76		N.D. d	
13) Acetonitrile	0.00	41		N.D.	
14) Iodomethane	0.00	142		N.D.	
15) Carbon disulfide	7.66	76	5490	0.77 ug/kg	95
16) Methylene Chloride	8.44	84	3020	1.20 ug/kg	97
17) Methyl tert-butyl ether	0.00	73		N.D.	
18) Acrylonitrile	0.00	53		N.D.	
19) T-1,2-Dichloroethene	0.00	96		N.D.	
20) Isopropyl Ether	0.00	45		N.D.	
21) C-1,2-Dichloroethene	0.00	96		N.D.	
22) 1,1-Dichloroethane	0.00	63		N.D.	
23) Vinyl Acetate	0.00	43		N.D.	
24) Chloroprene	0.00	53		N.D.	
25) 2-Butanone	0.00	72		N.D. d	
26) Propionitrile	0.00	54		N.D. d	
27) 2,2-Dichloropropane	0.00	77		N.D.	
28) Methacrylonitrile	0.00	67		N.D. d	
29) Chloroform	0.00	83		N.D.	
31) Dibromofluoromethane	10.55	113	110299	47.32 ug/kg	100
32) Bromochloromethane	0.00	128		N.D.	
33) 1,1,1-Trichloroethane	0.00	97		N.D.	
34) 1,1-Dichloropropene	0.00	75		N.D.	
35) Diethyl Ether	0.00	59		N.D.	
36) Methyl Acetate	0.00	74		N.D.	
37) Cyclohexane	0.00	56		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7021.D
Acq On : 7 Aug 2014 19:29
Sample : A404270-30
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 9:15 2014

Vial: 21
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	0.00	55		N.D. d	
40) Carbon Tetrachloride	0.00	117		N.D.	
41) 1,2-Dichloroethane	0.00	62		N.D.	
42) Benzene	0.00	78		N.D.	
43) Isobutyl Alcohol	0.00	43		N.D. d	
45) 1,2-Dichloroethane-d4	11.13	65	92157	51.22 ug/kg#	93
46) Trichloroethene	0.00	130		N.D.	
47) 1,2-Dichloropropane	0.00	63		N.D.	
48) Methyl Methacrylate	0.00	100		N.D.	
49) 1,4-Dioxane	0.00	88		N.D.	
50) Bromodichloromethane	0.00	83		N.D.	
51) Dibromomethane	0.00	93		N.D.	
52) 4-Methyl-2-Pentanone	0.00	100		N.D. d	
53) 2-Chloroethyl vinyl ether	0.00	63		N.D.	
54) 2-Hexanone	0.00	43		N.D.	
55) C-1,3-Dichloropropene	0.00	75		N.D.	
57) D8-Toluene	12.82	98	355518	48.73 ug/kg	93
59) Toluene	0.00	92		N.D.	
60) Ethyl Methacrylate	0.00	69		N.D.	
61) T-1,3-Dichloropropene	0.00	75		N.D.	
62) 1,1,2-Trichloroethane	0.00	97		N.D.	
63) 1,3-Dichloropropane	0.00	76		N.D.	
64) Tetrachloroethene	0.00	164		N.D.	
65) Dibromochloromethane	0.00	129		N.D.	
66) 1,2-Dibromoethane	0.00	107		N.D.	
67) Chlorobenzene	0.00	112		N.D.	
68) 1,1,1,2-Tetrachloroethane	0.00	131		N.D.	
69) Ethylbenzene	0.00	106		N.D.	
70) m-xylene & p-xylene	0.00	106		N.D.	
71) O-Xylene	0.00	106		N.D.	
72) Bromoform	0.00	173		N.D.	
73) Styrene	0.00	104		N.D.	
74) Isopropylbenzene	0.00	105		N.D.	
75) 1,2,3-Trichloropropane	0.00	75		N.D.	
76) 1,1,2,2-Tetrachloroethane	0.00	83		N.D.	
78) Bromofluorobenzene	15.30	95	135741	51.30 ug/kg#	79
79) T-1,4-dichloro-2-butene	0.00	53		N.D.	
80) N-Propylbenzene	0.00	91		N.D.	
82) Bromobenzene	0.00	156		N.D.	
83) 1,3,5-Trimethylbenzene	0.00	105		N.D.	
84) 2-Chlorotoluene	0.00	91		N.D.	
85) 4-Chlorotoluene	0.00	91		N.D.	
86) 1,2,4-Trimethylbenzene	0.00	105		N.D.	
87) s-Butylbenzene	0.00	105		N.D.	
88) tert-Butylbenzene	0.00	119		N.D.	
89) p-Isopropyltoluene	0.00	119		N.D.	
90) 1,3-Dichlorobenzene	0.00	146		N.D.	
91) 1,4-Dichlorobenzene	0.00	146		N.D.	
92) 1,2-Dichlorobenzene	0.00	146		N.D.	
93) N-Butylbenzene	0.00	91		N.D.	
94) DBCP	0.00	75		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080714\1H7021.D
Acq On : 7 Aug 2014 19:29
Sample : A404270-30
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 8 9:15 2014

Vial: 21
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

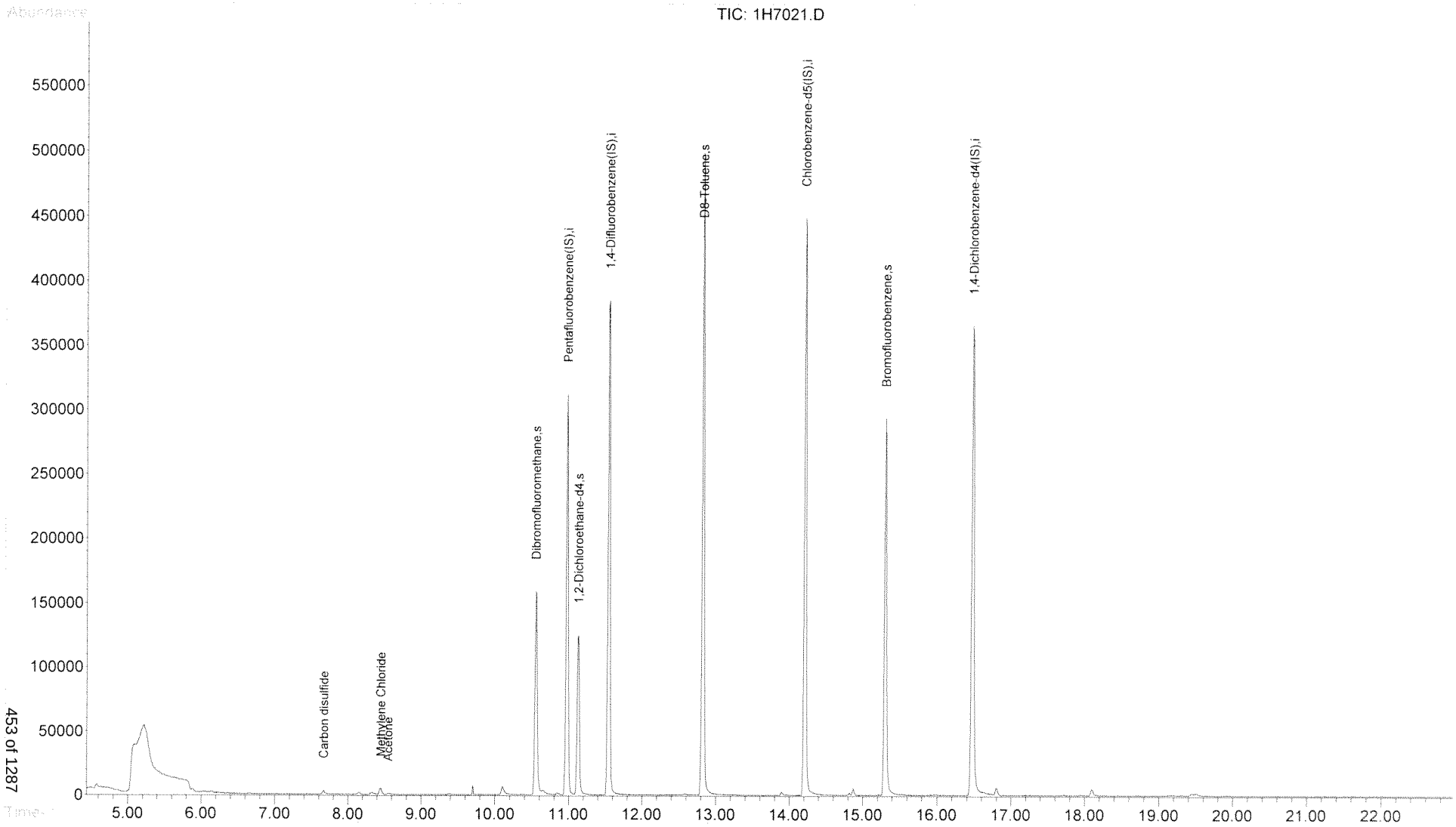
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	0.00	128		N.D.	
96) 1,2,4-Trichlorobenzene	0.00	180		N.D.	
97) Hexachlorobutadiene	0.00	225		N.D.	
98) 1,2,3-Trichlorobenzene	0.00	180		N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080714\1H7021.D Vial: 21
Acq On : 7 Aug 2014 19:29 Operator: JFL
Sample : A404270-30 Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 8 9:15 2014 Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29977

Instrument: OVGCMS5

Calibration ID: 1408017

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29977-TUN1	QC		1		A4F0379		
AA29977-CCV1	QC		2		A4H0161	A4H0099	
4H08021-BS1	QC		3			A4H0099	
4H08021-BSD1	QC		4			A4H0099	
4H08021-BLK1	QC		5			A4H0099	
AA29977-CRL1	QC		6		A4H0032	A4H0099	
A404270-21RE1	8260B TCL SOM01.2 DOD	C	7			A4H0099	CH2M Hill, Inc. (CH025)

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/8/2014 11:57:01AM

Analysis
8260B TCL SOM01.2 DOD [EPA 8260B]

4H08021

ENCO Orlando

Prepared using: EPA 5035_MS

Surrogate Solution
___ A4E0236 8260 surr working

Spiking Solution
A4H0125 8260 mix 2 working Gases/Acrolein
A4H0184 8260 mix full 2 working + TCL

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	Comments
4H08021-BLK1		Blank		QC			5	5			1	
4H08021-BS1		LCS		QC			5	5	A4H0125 A4H0184	2 2	1	
4H08021-BSD1		LCS Dup		QC			5	5	A4H0125 A4H0184	2 2	1	
A404270-21RE1	D	TR-5TH-CSF03-0814 C[MS]	08-Aug-14	8260B TCL SOM01.2 DOD			5	5			1	RR@1X FAILING IS Re-extract added 8/8/2014 by KKW

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

Instrument 5

Start Date _____

StopDate _____

Instrument ID _____

Standard ID#	Description	Manufacture Lot#

Samples Prepared By _____ Date

Samples Prepared By _____ Date

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time: 08/08/14 949
Sequence: AA29972, AA29978, AA29979, AA29982
Batch: 4H08021, 4H08022, 4H08024, 4H08024
Method: 8260/624

Surrogate ID: A4E0236
Internal ID: A4H0098
LCS ~~Halo~~ 2°: 8260: A4H0184
LCS ~~Arom~~ 2°: AC/AC: A4H0042
LCS Gas 2°: A4H0112

8260 Mix: A4G0583
8260 Add: A4H0139
8260 Ac/Ac: A4G0608
8260 Gases: A4H0137.1
Instrument #: MS-5

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
5HC001	BFB			1			✓	
5HC002	CCV			2			✓	
5HC003	BS			3			✓	
5HC004	BSD		KKW	4			✓	
5HC005	BLK		08/11/14	5			✓	
5HC006	CRL			6			✓	
5HC007	A404270-21REI	C	1	7			✓	
5HC008	A404510-03	C	1	8			✓ ↑Surr	
5HC009	A404393-01	E	1	9			NO RRW/X 2-butanone	
5HC010	A404393-02	E	1	10			NO RRW/X 2-butanone	
5HC011	A404393-03	E	1	11			RRW/XXX Carbon Tet. Chloroform	
5HC012	A404393-05	E	1	12			RRW/XXX Carbon Tet Chloroform	
5HC013	A4H08024-MS1	J	1	13			✓	
5HC014	A4H08024-MSD1	O	1	14	KKW		✓	
5HC015	BS			15	08/11/14		✓	
5HC016	BLK		KKW 08/11/14	16			C.O.	
5HC017	A404216-08	J	1	17	<2	N	C.O. RRW/X	
5HC018	A404216-09	E	1	18	<2	N	C.O. RRW/X	
5HC019	A404216-10	C	1	19	<2	N	C.O. RRW/X	
5HC020	A404216-11	E	1	20	<2	N	C.O. RRW/X	

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:	Surrogate ID:	8260 Mix:
Sequence:	Internal ID:	8260 Add:
Batch:	LCS Halo 2^0: KKW	8260 Ac/Ac: KKW 08/08/14
Method:	LCS Arom 2^0: 08/08/14	8260 Gases:
	LCS Gas 2^0:	Instrument #: MS.5

See Page 63

Filename	ENCO No.	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
SHC021	A404216-12	A	1	21	<2	N	RRWix co.	
SHC022	MS	J	1	22	<2	N	✓	
SHC023	KKW 08/08/14 MSD	J	1	23	<2	N	✓	
SHC024	~~A4584~~ A404584-01	A	100	24	~~<2~~		1X	
SHC025	A404584-02	A	100	25	~~<2~~	KKW	1X	
SHC026	A404584-03	A	100	26		08/08/14	1X	
SHC027	A404506-01	E	5	27	<2	N	1X	
SHC028	A404506-02	E	5	28	<2	N	1X	
SHC029	A404506-03	E	5	29	<2	N	1X	
SHC030	A404506-04	E	5	30	<2	N	1X	
SHC031	A404617-01	A	5	31	6	N	1X	
SHC032	A404617-02	A	5	32	6	N	1X	
SHC033	A404617-03	A	5	33	6	N	1X	
SHC034	A404617-05	A	5	34	6	N	1X	
SHC035	A404617-06	A	5	35	6	N	1X	
SHC036	A404617-07	A	5	36	6	N	1X	
SHC037	A404617-08	A	5	37	6	N	1X	
SHC038	A404617-09	A	5	38	6	N	1X	
SHC039	A404617-11	F	5	39	6	N	1X	
SHC040	A404617-12	F	5	40	6	N	1X	

Analyst: KKW

VOLATILES GC/MS LOGBOOK
Volatiles
EPA Method 624
SW-846 Method 8260

Tune Start Date/Time:
Sequence:
Batch:
Method:

Surrogate ID:
~~Internal ID:~~
LCS Halo 2⁰:
LCS Arom 2⁰: KKW 08/08/14
~~LCS Gas 2⁰:~~

8260 Mix:
8260 Add:
8260 Ac/Ac: KKW 08/08/14
8260 Gases:
Instrument #: MS-5

See Page 63

Filename	ENCO No. KKW 08/08/14	Vial #	Dilution Factor	Pos.	pH (<2)	RC (Y/N)	Comments	LIMS
SHC041	A404617-123	F	S	41	6	N	1X	
SHC042	A404617-124 KKW 08/08/14	F	S	42	6	N	1X	
SHC043	A404617-125 KKW 08/08/14	F	S	43	6	N	1X	
SHC044	A404617-16	H	S	44	6	N	1X	

KKW 08/11/14

Analyst: KKN

Tune File : C:\msdchem\1\DATA\080814\5HC001.D
Tune Time : 8 Aug 2014 9:49 am

Daily Calibration File : C:\msdchem\1\DATA\080414\5H4007.D

						639658	977088	1218050		
						568681				
File	Sample	Surrogate Recovery %				Internal Standard Responses				
5HC002.D										
	CCV	92	96	109	126*	847256	1350313	1775782	971922	
5HC003.D										
	BS	90	93	105	139*	913954	1450631	1651348	978860	
5HC004.D										
	BSD	94	96	106	142*	868269	1408659	1601347	940925	
5HC005.D										
	BLK	94	93	108	146*	815011	1327044	1422573	873646	
5HC006.D										
	CRL	89	92	105	137*	832012	1343736	1481361	896266	
5HC007.D										
	A404270-21	88	92	102	136*	809035	1302080	1367267	791023	
5HC008.D										
	A404510-03	94	100	116	176*	759629	1211550	1362881	892848	
5HC009.D										
	A404393-01	94	86	103	152*	1083648	1843295	1865419	1073539	
5HC010.D										
	A404393-02	89	81	97	139*	1139759	1928553	1897559	1120104	
5HC011.D										
	A404393-03	53*	100	102	142*	809413	1346738	1348396	739813	
5HC012.D										
	A404393-05	46*	103	109	128*	889075	1443823	1367823	563974	
5HC013.D										
	A4H08024-M	81*	100	99	118	857858	1393901	1314154	543598	
5HC014.D										
	A4H08024-M	56*	95	94	97	906435	1469896	1271876	433373	
5HC015.D										

```
        4H08030-BS   95   94  107  140*     941249    1535761    1755143
                            998642
-----------------------------------------------------------------------------
5HC016.D
        4H08030-BL  100   99  112  152*     875001    1425922    1530039
                            896723
-----------------------------------------------------------------------------
5HC017.D
        A404216-08   96  101  110  152*     853418    1381666    1484383
                            919484
-----------------------------------------------------------------------------
5HC018.D
        A404216-09   93   95  107  145*     813951    1327954    1419666
                            881566
-----------------------------------------------------------------------------
5HC019.D
        A404216-10   89   96  103  140*     828048    1330044    1430519
                            874547
-----------------------------------------------------------------------------
5HC020.D
        A404216-11   95   97  110  152*     778898    1249665    1337971
                            826262
-----------------------------------------------------------------------------
5HC021.D
        A404216-12   81*  87   95  126*     868036    1385072    1513587
                            945694
-----------------------------------------------------------------------------
5HC022.D
        4H08030-MS   97  102  108  141*     768090    1241658    1487258
                            896518
-----------------------------------------------------------------------------
5HC023.D
        4H08030-MS   96  103  111  142*     791426    1244693    1505876
                            887559
-----------------------------------------------------------------------------
(fails) - fails 12hr time check   * - fails criteria

    Created: Mon Aug 11 08:15:26 2014  JVGCMS4
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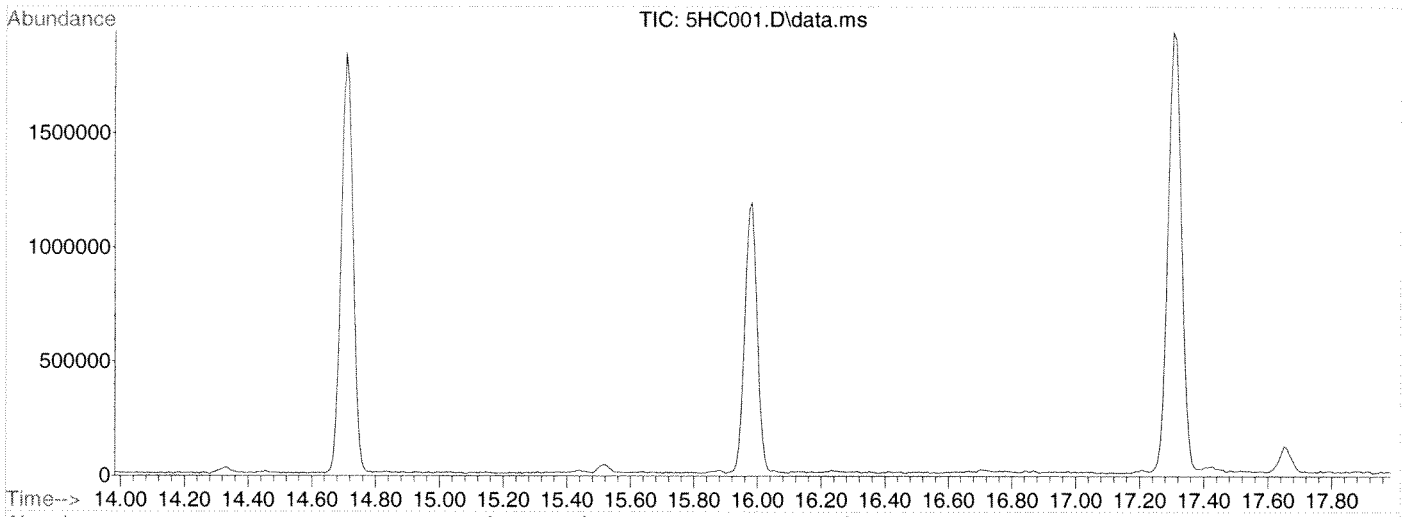
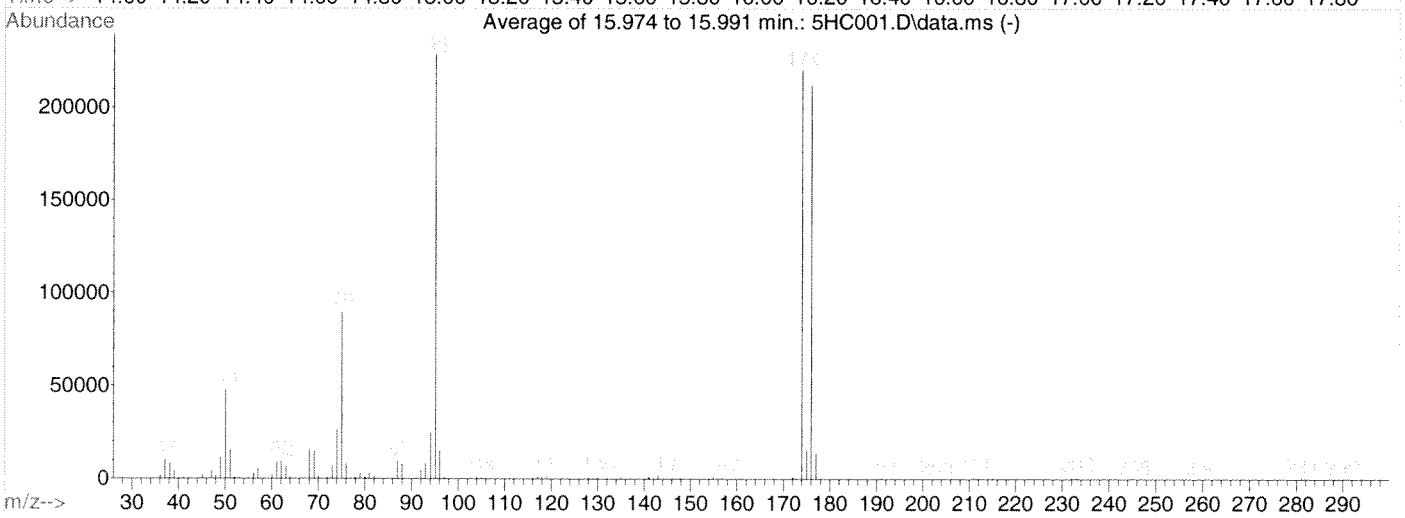
Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC001.D
Acq On : 8 Aug 2014 9:49 am
Operator : KKW
Sample : BFB
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\MS5080414.M
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
Last Update : Tue Aug 05 11:49:17 2014





AutoFind: Scans 1472, 1473, 1474; Background Corrected with Scan 1462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.8	47466	PASS
75	95	30	60	39.2	89512	PASS
95	95	100	100	100.0	228416	PASS
96	95	5	9	6.6	15036	PASS
173	174	0.00	2	0.1	295	PASS
174	95	50	100	96.3	220074	PASS
175	174	5	9	7.0	15453	PASS
176	174	95	101	96.2	211797	PASS
177	176	5	9	6.4	13627	PASS

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC002.D
Acq On : 8 Aug 2014 10:20 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 08:12:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	847256	50.00	ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1350313	50.00	ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1775782	50.00	ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	971922	50.00	ug/L	-0.02

System Monitoring Compounds						
31) Dibromofluoromethane	10.378	113	294545	45.85	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 91.70%			
42) d4-1,2-Dichloroethane	11.019	65	326850	47.81	ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 95.62%			
54) D8-Toluene	13.032	98	1728818	54.42	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 108.84%			
75) Bromofluorobenzene	15.982	95	726849	63.19	ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 126.38%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.158	85	339870	47.33	ug/L	97
3) Chloromethane	4.610	50	490605	38.86	ug/L	100
4) Vinyl Chloride	4.816	62	282245	33.44	ug/L	99
5) Bromomethane	5.539	94	149996	49.41	ug/L #	90
6) Chloroethane	5.810	64	135633	39.95	ug/L	97
7) Trichlorofluoromethane	6.097	101	536039	54.05	ug/L	99
8) Diethyl ether	6.673	59	212821	37.73	ug/L	90
9) 1,1-Dichloroethene	7.042	96	249778	41.88	ug/L	93
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	270576	46.05	ug/L	98
11) Acrolein	7.601	56	104739	306.54	ug/L	99
12) Iodomethane	7.305	142	399421	37.61	ug/L	96
13) Carbon Disulfide	7.125	76	621069	44.94	ug/L #	89
14) 3-chloropropene	7.823	41	557032	42.56	ug/L	95
15) Acetone	8.053	43	77193	42.78	ug/L	94
16) Methylene Chloride	7.987	84	257439	41.32	ug/L #	68
17) Methyl Acetate	8.226	43	187991	37.79	ug/L #	92
18) t-1,2-Dichloroethene	8.234	96	301328	42.42	ug/L	92
19) Methyl tert-butyl ether	8.365	73	555592	42.14	ug/L #	86
20) Acetonitrile	8.776	41	296528	332.96	ug/L	99
21) Diisopropyl ether	8.899	45	1188320	38.42	ug/L #	94
22) Chloroprene	9.105	88	253720	43.42	ug/L	91
23) 1,1-Dichloroethane	9.146	63	576259	43.66	ug/L	98
24) Acrylonitrile	9.212	53	830937	329.69	ug/L	99
25) Vinyl Acetate	9.425	43	692007	36.60	ug/L	98
26) c-1,2-Dichloroethene	9.844	96	352015	45.07	ug/L	91
27) 2,2-Dichloropropane	9.992	77	492204	57.95	ug/L	95
28) Bromochloromethane	10.099	128	157170	42.24	ug/L	97
29) Cyclohexane	10.115	56	880456	45.16	ug/L	93
30) Chloroform	10.148	83	576981	55.13	ug/L #	92
32) Dibromofluoromethane	10.378	113	294545	45.85	ug/L	95
33) 2-Butanone	10.518	72	17998	36.82	ug/L #	56
34) 1,1,1-Trichloroethane	10.444	97	586967	56.62	ug/L	93
35) 1,1-Dichloropropene	10.576	75	431983	49.26	ug/L	90
36) Propionitrile	10.888	54	444924	448.72	ug/L #	73
37) Methacrylonitrile	10.904	41	2070441	449.14	ug/L	96
38) Isobutyl Alcohol	10.937	43	593786	725.73	ug/L #	96
40) Carbon Tetrachloride	10.362	117	495917	51.62	ug/L	97
41) Benzene	10.871	78	1303847	43.92	ug/L	98
43) d4-1,2-Dichloroethane	11.019	65	326850	47.81	ug/L #	86
44) 1,2-Dichloroethane	11.101	62	452263	53.62	ug/L #	88

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC002.D
Acq On : 8 Aug 2014 10:20 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

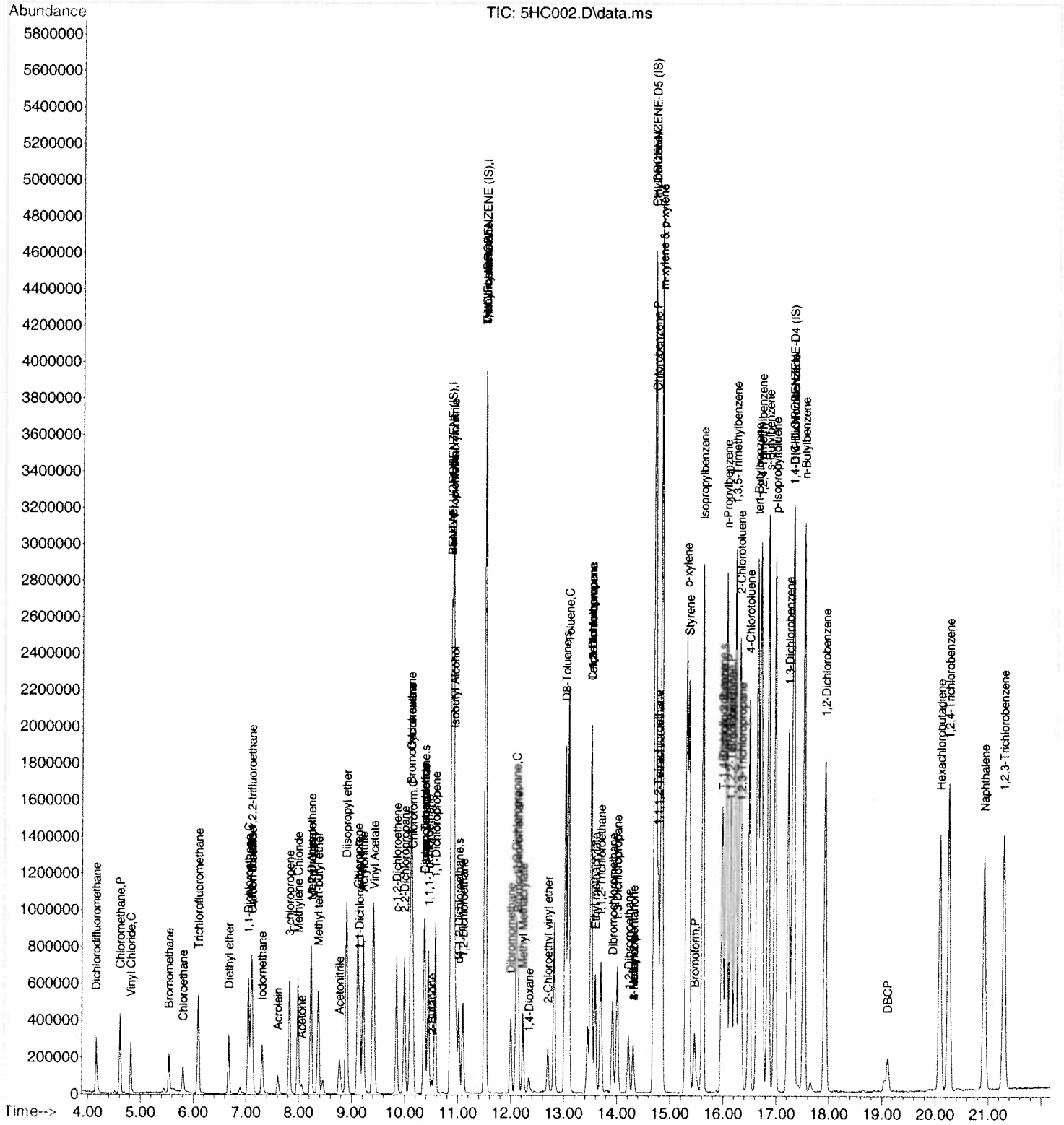
Quant Time: Aug 11 08:12:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.512	130	480216	48.19 ug/L	94
46) Methyl cyclohexane	11.521	83	799188	45.23 ug/L	89
47) Dibromomethane	11.997	93	182290	53.12 ug/L	93
48) 1,2-Dichloropropane	12.104	63	414957	45.30 ug/L #	91
49) Bromodichloromethane	12.137	83	489310	59.59 ug/L #	87
50) Methyl Methacrylate	12.227	69	151021	41.40 ug/L	87
51) 1,4-Dioxane	12.342	88	74412	1048.75 ug/L	88
52) 2-Chloroethyl vinyl ether	12.696	63	116006	35.94 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	502276	51.66 ug/L	88
55) D8-Toluene	13.032	98	1728818	54.42 ug/L #	90
56) 4-Methyl-2-pentanone	14.314	100	26015	51.12 ug/L	71
58) Toluene	13.090	92	1349688	49.94 ug/L	99
59) T-1,3-Dichloropropene	13.509	75	502276	52.28 ug/L	91
60) Tetrachloroethene	13.517	164	514634	53.12 ug/L	98
61) Ethyl methacrylate	13.591	69	369301	48.79 ug/L	98
62) 1,1,2-Trichloroethane	13.698	97	344376	51.77 ug/L	92
63) Dibromochloromethane	13.920	129	398301	49.63 ug/L #	95
64) 1,3-Dichloropropane	14.002	76	545762	48.98 ug/L #	85
65) 1,2-Dibromoethane	14.216	107	336615	49.36 ug/L	98
66) 2-Hexanone	14.306	43	242356	40.04 ug/L #	99
67) Ethylbenzene	14.700	106	944497	55.51 ug/L	99
68) Chlorobenzene	14.733	112	1629051	49.40 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.774	131	502839	50.44 ug/L	99
70) m-xylene & p-xylene	14.840	106	2426930	113.32 ug/L	99
71) o-xylene	15.309	106	1206794	56.67 ug/L	99
72) Styrene	15.350	104	1897766	52.22 ug/L #	90
73) Bromoform	15.465	173	250203	56.59 ug/L	99
74) Isopropylbenzene	15.613	105	3055119	51.01 ug/L	100
76) Bromofluorobenzene	15.982	95	726849	63.19 ug/L	96
77) n-Propylbenzene	16.056	91	3607470	53.02 ug/L	98
78) Bromobenzene	16.147	156	726875	53.34 ug/L #	86
79) 1,1,2,2-Tetrachloroethane	16.122	83	415697	52.00 ug/L	98
80) 1,2,3-Trichloropropane	16.344	61	151561	52.72 ug/L	87
81) T-1,4-Dichloro-2-Butene	15.999	53	201222	43.22 ug/L	90
83) 1,3,5-Trimethylbenzene	16.229	105	2716655	48.00 ug/L	99
84) 2-Chlorotoluene	16.311	91	2121476	50.48 ug/L	97
85) 4-Chlorotoluene	16.492	91	2141678	50.52 ug/L	97
86) tert-Butylbenzene	16.640	119	3155993	45.07 ug/L	99
87) 1,2,4-Trimethylbenzene	16.705	105	2799749	48.33 ug/L	99
88) p-Isopropyltoluene	16.977	119	3054474	45.55 ug/L	100
89) s-Butylbenzene	16.845	105	3894397	48.32 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	1738878	49.54 ug/L	97
91) 1,4-Dichlorobenzene	17.330	146	1689705	48.42 ug/L #	92
92) n-Butylbenzene	17.527	91	2994413	50.01 ug/L	97
93) 1,2-Dichlorobenzene	17.930	146	1634038	49.75 ug/L	95
94) DBCP	19.105	157	111367	45.27 ug/L	94
95) Hexachlorobutadiene	20.091	225	578061	57.68 ug/L	98
96) 1,2,4-Trichlorobenzene	20.255	180	1191199	52.85 ug/L	97
97) Naphthalene	20.929	128	2398618	49.16 ug/L	99
98) 1,2,3-Trichlorobenzene	21.299	180	1063822	52.27 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC002.D
Acq On : 8 Aug 2014 10:20 am
Operator : KKW
Sample : CCV
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 11 08:12:50 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC003.D
Acq On : 8 Aug 2014 10:59 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 08:12:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	913954	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1450631	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1651348	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	978860	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.378	113	311977	45.02 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 90.04%		
42) d4-1,2-Dichloroethane	11.019	65	342299	46.61 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 93.22%		
54) D8-Toluene	13.024	98	1788037	52.39 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 120		Recovery = 104.78%		
75) Bromofluorobenzene	15.974	95	734816	69.28 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 138.56%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	151645	19.57 ug/L	98
3) Chloromethane	4.610	50	225510	16.56 ug/L	96
4) Vinyl Chloride	4.816	62	139372	15.31 ug/L	97
5) Bromomethane	5.539	94	66597	20.34 ug/L #	91
6) Chloroethane	5.810	64	67326	18.38 ug/L	96
7) Trichlorofluoromethane	6.097	101	216160	20.21 ug/L	94
8) Diethyl ether	6.673	59	84041	13.81 ug/L #	92
9) 1,1-Dichloroethene	7.042	96	90395	14.05 ug/L	90
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	102403	16.16 ug/L	98
11) Acrolein	7.601	56	53708	145.72 ug/L	93
12) Iodomethane	7.305	142	157248	13.73 ug/L	98
13) Carbon Disulfide	7.116	76	271684	18.22 ug/L #	90
14) 3-chloropropene	7.823	41	219989	15.58 ug/L #	93
15) Acetone	8.053	43	36947	18.98 ug/L	98
16) Methylene Chloride	7.987	84	97027	14.63 ug/L #	65
17) Methyl Acetate	8.226	43	87504	16.31 ug/L	97
18) t-1,2-Dichloroethene	8.234	96	115465	15.07 ug/L	89
19) Methyl tert-butyl ether	8.373	73	231279	16.26 ug/L #	88
20) Acetonitrile	8.768	41	16730	17.41 ug/L #	92
21) Diisopropyl ether	8.899	45	467065	14.00 ug/L #	93
22) Chloroprene	9.105	88	91367	14.50 ug/L	86
23) 1,1-Dichloroethane	9.146	63	229392	16.11 ug/L #	98
24) Acrylonitrile	9.212	53	43566	16.02 ug/L #	99
25) Vinyl Acetate	9.425	43	208196	10.21 ug/L	98
26) c-1,2-Dichloroethene	9.844	96	130345	15.47 ug/L	90
27) 2,2-Dichloropropane	9.992	77	184712	20.16 ug/L	95
28) Bromochloromethane	10.099	128	63166	15.74 ug/L	98
29) Cyclohexane	10.115	56	302014	14.36 ug/L #	91
30) Chloroform	10.148	83	219907	19.48 ug/L #	92
32) Dibromofluoromethane	10.378	113	311977	45.02 ug/L	96
33) 2-Butanone	10.510	72	8252	15.65 ug/L	59
34) 1,1,1-Trichloroethane	10.444	97	219470	19.63 ug/L	94
35) 1,1-Dichloropropene	10.576	75	157340	16.63 ug/L	91
36) Propionitrile	10.888	54	22382	20.93 ug/L #	1
37) Methacrylonitrile	10.904	41	132873	26.72 ug/L #	88
38) Isobutyl Alcohol	10.929	43	142999	162.02 ug/L #	91
40) Carbon Tetrachloride	10.362	117	188167	18.23 ug/L	97
41) Benzene	10.871	78	515705	16.17 ug/L	98
43) d4-1,2-Dichloroethane	11.019	65	342299	46.61 ug/L #	86
44) 1,2-Dichloroethane	11.093	62	182314	20.12 ug/L #	85

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC003.D
Acq On : 8 Aug 2014 10:59 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 3 Sample Multiplier: 1

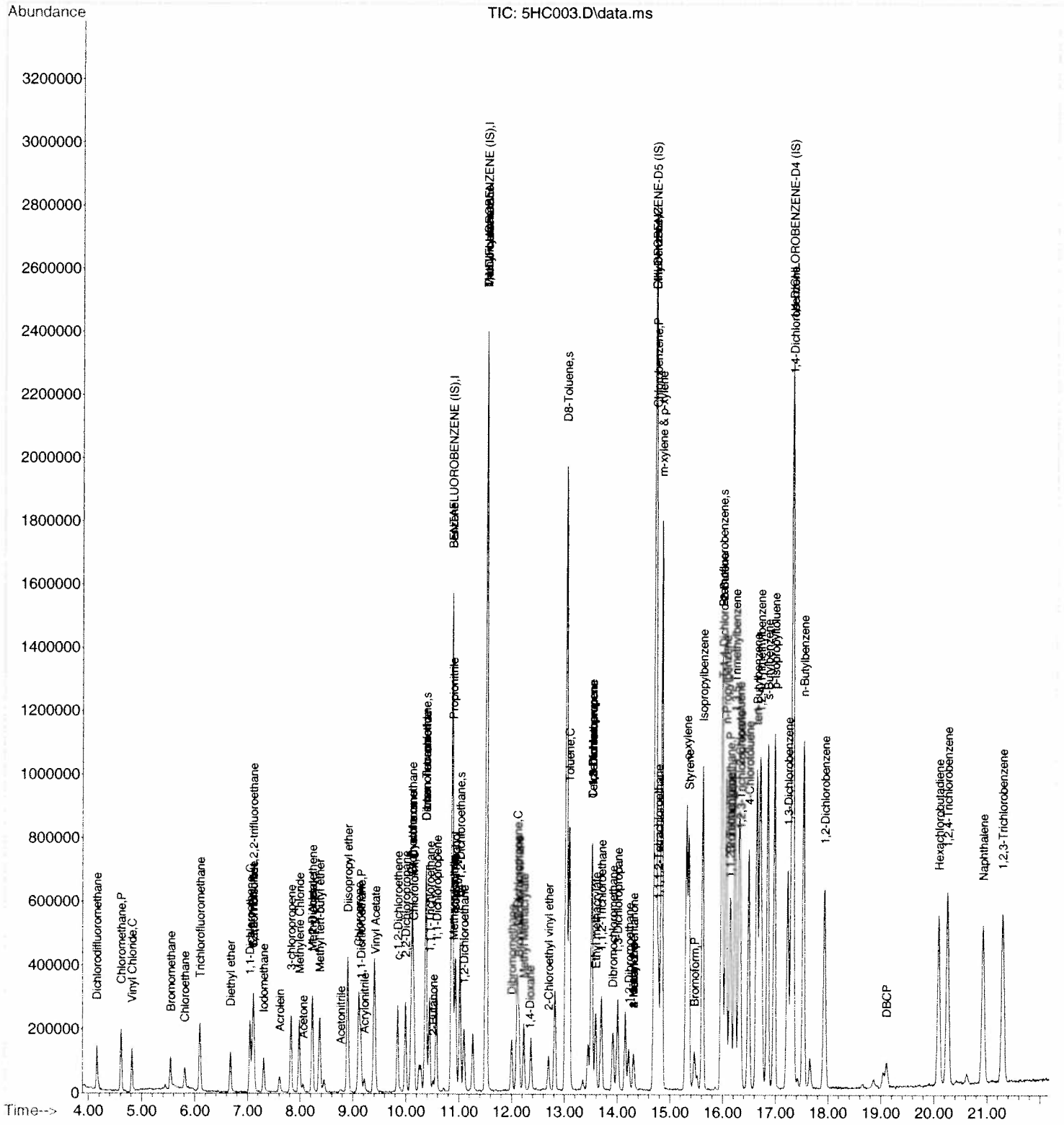
Quant Time: Aug 11 08:12:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	176316	16.47 ug/L	92
46) Methyl cyclohexane	11.521	83	292634	15.42 ug/L	88
47) Dibromomethane	11.989	93	70985	19.25 ug/L	92
48) 1,2-Dichloropropane	12.104	63	165204	16.79 ug/L #	91
49) Bromodichloromethane	12.137	83	175349	19.88 ug/L #	89
50) Methyl Methacrylate	12.227	69	72566	18.52 ug/L	88
51) 1,4-Dioxane	12.334	88	1442	18.92 ug/L #	1
52) 2-Chloroethyl vinyl ether	12.696	63	51489	14.85 ug/L	95
53) C-1,3-Dichloropropene	13.509	75	202817	19.42 ug/L	87
55) D8-Toluene	13.024	98	1788037	52.39 ug/L #	90
56) 4-Methyl-2-pentanone	14.298	100	10414	19.05 ug/L #	82
58) Toluene	13.082	92	512130	20.38 ug/L	99
59) T-1,3-Dichloropropene	13.509	75	202817	22.70 ug/L #	89
60) Tetrachloroethene	13.517	164	193361	21.46 ug/L	97
61) Ethyl methacrylate	13.583	69	146040	20.75 ug/L	98
62) 1,1,2-Trichloroethane	13.698	97	133002	21.50 ug/L	93
63) Dibromochloromethane	13.912	129	145256	19.46 ug/L #	95
64) 1,3-Dichloropropane	14.002	76	206308	19.91 ug/L	86
65) 1,2-Dibromoethane	14.216	107	132347	20.87 ug/L	99
66) 2-Hexanone	14.306	43	110446	19.62 ug/L	97
67) Ethylbenzene	14.701	106	338651	21.40 ug/L	96
68) Chlorobenzene	14.733	112	588735	19.20 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.774	131	187904	20.27 ug/L	99
70) m-xylene & p-xylene	14.840	106	892175	44.80 ug/L	99
71) o-xylene	15.309	106	419904	21.20 ug/L	97
72) Styrene	15.350	104	683386	20.22 ug/L #	90
73) Bromoform	15.465	173	96695	23.52 ug/L	98
74) Isopropylbenzene	15.613	105	1069806	19.21 ug/L	100
76) Bromofluorobenzene	15.974	95	734816	69.28 ug/L	94
77) n-Propylbenzene	16.056	91	1292404	20.43 ug/L	98
78) Bromobenzene	16.147	156	267358	21.10 ug/L #	83
79) 1,1,2,2-Tetrachloroethane	16.122	83	164707	22.16 ug/L	97
80) 1,2,3-Trichloropropane	16.336	61	57008	21.32 ug/L #	83
81) T-1,4-Dichloro-2-Butene	15.999	53	75334	17.40 ug/L #	59
83) 1,3,5-Trimethylbenzene	16.229	105	951892	16.70 ug/L	100
84) 2-Chlorotoluene	16.303	91	733939	17.34 ug/L	98
85) 4-Chlorotoluene	16.492	91	746249	17.48 ug/L	96
86) tert-Butylbenzene	16.648	119	1091914	15.48 ug/L	99
87) 1,2,4-Trimethylbenzene	16.705	105	984187	16.87 ug/L	99
88) p-Isopropyltoluene	16.977	119	1150125	17.03 ug/L	99
89) s-Butylbenzene	16.845	105	1343452	16.55 ug/L	99
90) 1,3-Dichlorobenzene	17.231	146	600318	16.98 ug/L	97
91) 1,4-Dichlorobenzene	17.330	146	605879	17.24 ug/L	98
92) n-Butylbenzene	17.527	91	1040509	17.25 ug/L	97
93) 1,2-Dichlorobenzene	17.930	146	566144	17.11 ug/L	96
94) DBCP	19.105	157	44300	17.88 ug/L	98
95) Hexachlorobutadiene	20.091	225	211245	20.93 ug/L	98
96) 1,2,4-Trichlorobenzene	20.255	180	434768	19.15 ug/L	97
97) Naphthalene	20.921	128	925779	18.84 ug/L	99
98) 1,2,3-Trichlorobenzene	21.290	180	404225	19.72 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC003.D
Acq On : 8 Aug 2014 10:59 am
Operator : KKW
Sample : BS
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 11 08:12:52 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC004.D
Acq On : 8 Aug 2014 11:27 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 08:12:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	868269	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1408659	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1601347	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	940925	50.00 ug/L	-0.02

System Monitoring Compounds					
31) Dibromofluoromethane	10.370	113	309790	47.06 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.12%		
42) d4-1,2-Dichloroethane	11.019	65	343988	48.24 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 96.48%		
54) D8-Toluene	13.024	98	1759990	53.11 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 120		Recovery = 106.22%		
75) Bromofluorobenzene	15.974	95	730204	71.16 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 142.32%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	135850	18.46 ug/L	97
3) Chloromethane	4.610	50	208050	16.08 ug/L	99
4) Vinyl Chloride	4.807	62	131673	15.23 ug/L	98
5) Bromomethane	5.539	94	63803	20.51 ug/L #	90
6) Chloroethane	5.802	64	68045	19.56 ug/L	94
7) Trichlorofluoromethane	6.089	101	215545	21.21 ug/L	95
8) Diethyl ether	6.673	59	86750	15.01 ug/L	91
9) 1,1-Dichloroethene	7.042	96	91117	14.91 ug/L	93
10) 1,1,2-Trichloro-1,2,2-...	7.100	151	106516	17.69 ug/L	99
11) Acrolein	7.601	56	46741	133.49 ug/L	99
12) Iodomethane	7.305	142	160226	14.72 ug/L	99
13) Carbon Disulfide	7.116	76	280610	19.81 ug/L #	91
14) 3-chloropropene	7.823	41	232241	17.31 ug/L #	96
15) Acetone	8.053	43	34199	18.49 ug/L	94
16) Methylene Chloride	7.979	84	97529	15.47 ug/L #	67
17) Methyl Acetate	8.217	43	88898	17.44 ug/L #	94
18) t-1,2-Dichloroethene	8.234	96	111046	15.25 ug/L	94
19) Methyl tert-butyl ether	8.365	73	238330	17.64 ug/L	89
20) Acetonitrile	8.776	41	14597	15.99 ug/L #	93
21) Diisopropyl ether	8.899	45	483544	15.26 ug/L #	94
22) Chloroprene	9.105	88	95315	15.92 ug/L	87
23) 1,1-Dichloroethane	9.146	63	229700	16.98 ug/L	98
24) Acrylonitrile	9.212	53	45415	17.58 ug/L #	98
25) Vinyl Acetate	9.425	43	211142	10.90 ug/L	99
26) c-1,2-Dichloroethene	9.844	96	128292	16.03 ug/L	95
27) 2,2-Dichloropropane	9.992	77	193028	22.18 ug/L	94
28) Bromochloromethane	10.091	128	64482	16.91 ug/L	96
29) Cyclohexane	10.115	56	300024	15.02 ug/L #	91
30) Chloroform	10.148	83	223519	20.84 ug/L #	92
32) Dibromofluoromethane	10.370	113	309790	47.06 ug/L	94
33) 2-Butanone	10.510	72	8199	16.37 ug/L #	46
34) 1,1,1-Trichloroethane	10.444	97	223945	21.08 ug/L	93
35) 1,1-Dichloropropene	10.576	75	157981	17.58 ug/L	91
36) Propionitrile	10.888	54	22975	22.61 ug/L #	1
37) Methacrylonitrile	10.904	41	131208	27.77 ug/L #	87
38) Isobutyl Alcohol	10.937	43	145170	173.13 ug/L #	84
40) Carbon Tetrachloride	10.362	117	189214	18.88 ug/L	97
41) Benzene	10.871	78	516059	16.66 ug/L	98
43) d4-1,2-Dichloroethane	11.019	65	343988	48.24 ug/L #	87
44) 1,2-Dichloroethane	11.093	62	176298	20.04 ug/L	89

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC004.D
Acq On : 8 Aug 2014 11:27 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 4 Sample Multiplier: 1

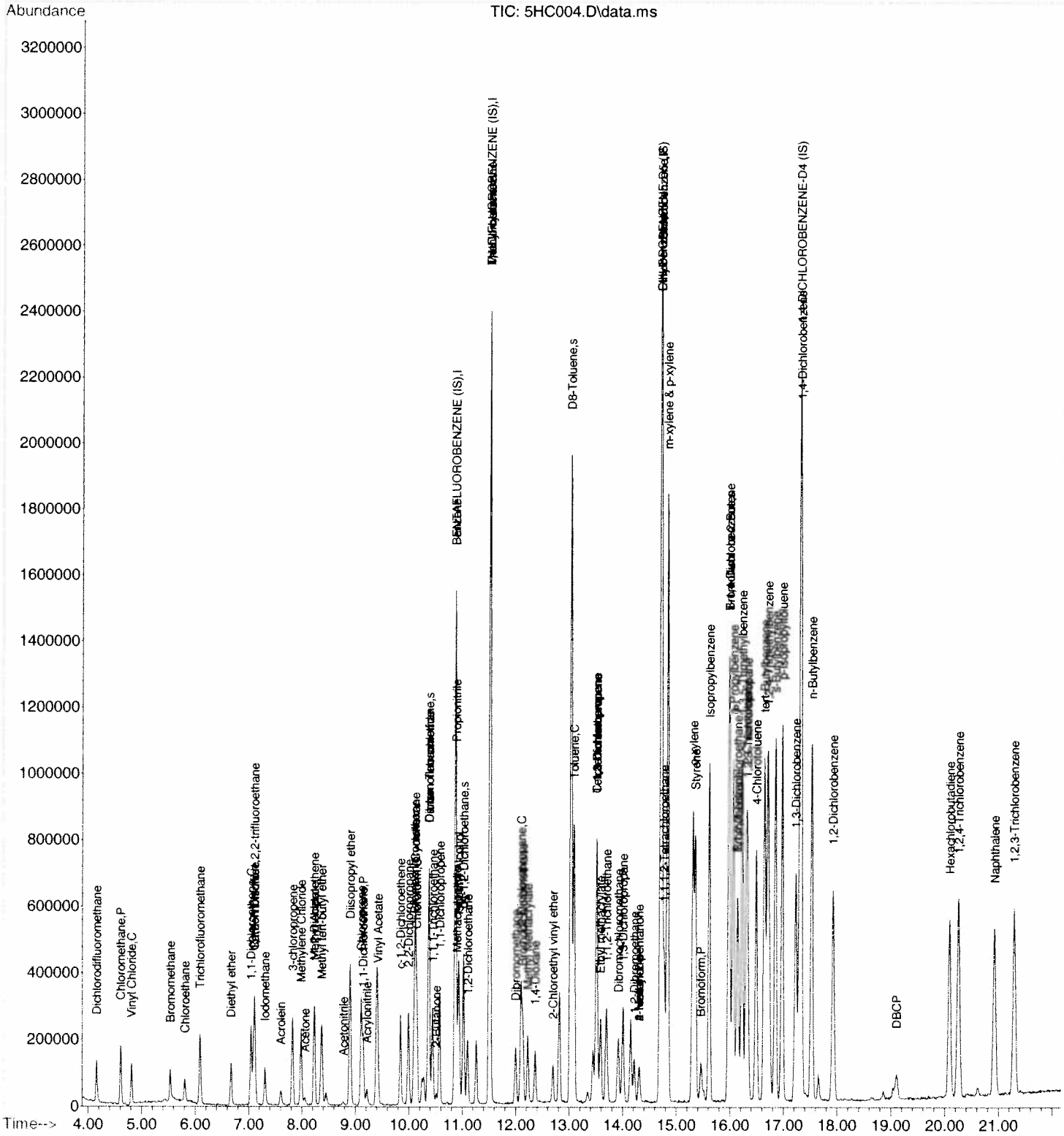
Quant Time: Aug 11 08:12:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	181367	17.45 ug/L	92
46) Methyl cyclohexane	11.521	83	293585	15.93 ug/L	90
47) Dibromomethane	11.997	93	72826	20.34 ug/L	93
48) 1,2-Dichloropropane	12.104	63	157122	16.44 ug/L #	91
49) Bromodichloromethane	12.137	83	180573	21.08 ug/L #	88
50) Methyl Methacrylate	12.227	69	75585	19.86 ug/L	78
51) 1,4-Dioxane	12.359	88	2152	29.07 ug/L #	79
52) 2-Chloroethyl vinyl ether	12.696	63	56260	16.71 ug/L	95
53) C-1,3-Dichloropropene	13.501	75	206240	20.33 ug/L	89
55) D8-Toluene	13.024	98	1759867	53.10 ug/L #	90
56) 4-Methyl-2-pentanone	14.306	100	10070	18.97 ug/L	84
58) Toluene	13.090	92	521691	21.41 ug/L	99
59) T-1,3-Dichloropropene	13.501	75	206240	23.81 ug/L	91
60) Tetrachloroethene	13.517	164	201714	23.09 ug/L	97
61) Ethyl methacrylate	13.591	69	147403	21.59 ug/L	99
62) 1,1,2-Trichloroethane	13.698	97	135579	22.60 ug/L	92
63) Dibromochloromethane	13.920	129	148272	20.49 ug/L #	96
64) 1,3-Dichloropropane	14.002	76	213871	21.28 ug/L	86
65) 1,2-Dibromoethane	14.216	107	137358	22.34 ug/L	98
66) 2-Hexanone	14.306	43	102555	18.79 ug/L	100
67) Ethylbenzene	14.700	106	344177	22.43 ug/L	98
68) Chlorobenzene	14.725	112	592639	19.93 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.774	131	189208	21.05 ug/L	97
70) m-xylene & p-xylene	14.832	106	883966	45.77 ug/L	97
71) o-xylene	15.309	106	429459	22.36 ug/L	99
72) Styrene	15.350	104	685628	20.92 ug/L #	90
73) Bromoform	15.465	173	92997	23.32 ug/L	99
74) Isopropylbenzene	15.613	105	1074850	19.90 ug/L	99
76) Bromofluorobenzene	15.974	95	730204	71.16 ug/L	96
77) n-Propylbenzene	16.056	91	1277273	20.82 ug/L	98
78) Bromobenzene	16.147	156	272840	22.20 ug/L #	86
79) 1,1,2,2-Tetrachloroethane	16.130	83	162064	22.48 ug/L	98
80) 1,2,3-Trichloropropane	16.327	61	58559	22.59 ug/L #	86
81) T-1,4-Dichloro-2-Butene	15.991	53	73543	17.52 ug/L #	59
83) 1,3,5-Trimethylbenzene	16.221	105	943209	17.21 ug/L	100
84) 2-Chlorotoluene	16.303	91	728303	17.90 ug/L	98
85) 4-Chlorotoluene	16.492	91	761332	18.55 ug/L	96
86) tert-Butylbenzene	16.640	119	1101553	16.25 ug/L	99
87) 1,2,4-Trimethylbenzene	16.697	105	998003	17.80 ug/L	91
88) p-Isopropyltoluene	16.977	119	1166148	17.96 ug/L	99
89) s-Butylbenzene	16.845	105	1344874	17.24 ug/L	99
90) 1,3-Dichlorobenzene	17.223	146	610342	17.96 ug/L	97
91) 1,4-Dichlorobenzene	17.330	146	614749	18.20 ug/L	98
92) n-Butylbenzene	17.527	91	1053941	18.18 ug/L	98
93) 1,2-Dichlorobenzene	17.922	146	566451	17.81 ug/L	95
94) DBCP	19.105	157	45462	19.09 ug/L	96
95) Hexachlorobutadiene	20.091	225	211251	21.77 ug/L	97
96) 1,2,4-Trichlorobenzene	20.255	180	433415	19.86 ug/L	97
97) Naphthalene	20.929	128	923971	19.56 ug/L	100
98) 1,2,3-Trichlorobenzene	21.290	180	406932	20.65 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC004.D
Acq On : 8 Aug 2014 11:27 am
Operator : KKW
Sample : BSD
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 11 08:12:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC005.D
Acq On : 8 Aug 2014 11:56 am
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 11 08:19:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	815011	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1327044	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1422573	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	873646	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.370	113	289449	46.84 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.68%		
42) d4-1,2-Dichloroethane	11.019	65	311366	46.35 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 92.70%		
54) D8-Toluene	13.024	98	1688163	54.07 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 120		Recovery = 108.14%		
75) Bromofluorobenzene	15.974	95	662540	72.82 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 145.64%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D.	
14) 3-chloropropene	0.000	41	0	N.D.	
15) Acetone	8.070	43	4131	2.38 ug/L	95
16) Methylene Chloride	0.000	84	0	N.D.	
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	10.058	77	1282	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	10.165	83	1126	N.D.	
32) Dibromofluoromethane	10.370	113	289449	46.84 ug/L	93
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D. d	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.880	78	4267	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	311366	46.35 ug/L #	84
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC005.D
Acq On : 8 Aug 2014 11:56 am
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

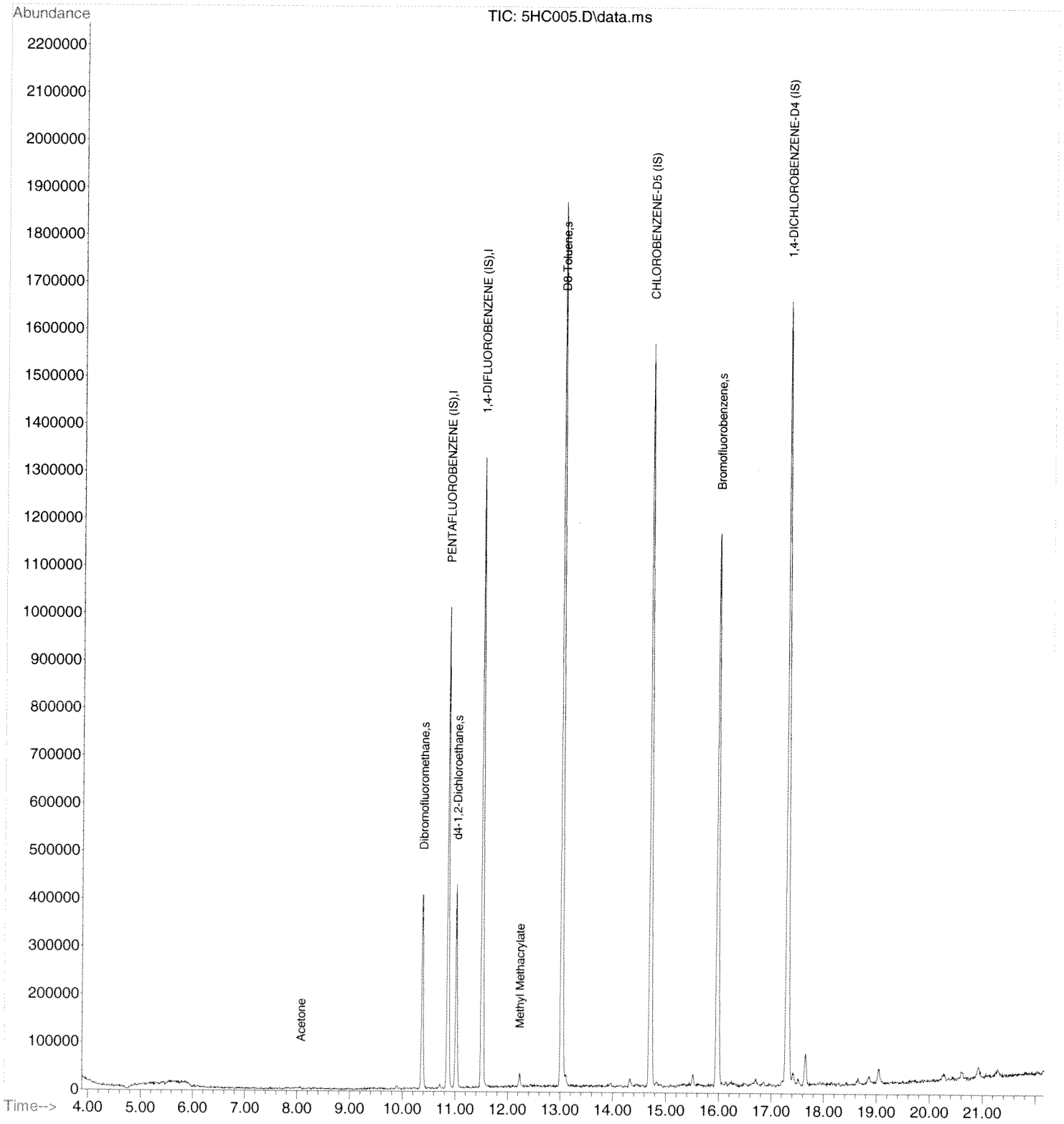
Quant Time: Aug 11 08:19:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	12.235	69	8813	2.46 ug/L	98
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.024	98	1688010	54.07 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.082	92	2363	N.D.	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.709	106	1776	N.D.	
68) Chlorobenzene	14.733	112	1511	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.317	106	2532	N.D.	
72) Styrene	15.350	104	3042	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.613	105	5101	N.D.	
76) Bromofluorobenzene	15.974	95	662540	72.82 ug/L	94
77) n-Propylbenzene	16.056	91	7035	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.204	105	5826	N.D.	
84) 2-Chlorotoluene	16.311	91	2941	N.D.	
85) 4-Chlorotoluene	16.484	91	4739	N.D.	
86) tert-Butylbenzene	16.648	119	3722	N.D.	
87) 1,2,4-Trimethylbenzene	16.689	105	8869	N.D.	
88) p-Isopropyltoluene	16.960	119	6785	N.D.	
89) s-Butylbenzene	16.862	105	7708	N.D.	
90) 1,3-Dichlorobenzene	17.223	146	4291	N.D.	
91) 1,4-Dichlorobenzene	17.322	146	5500	N.D.	
92) n-Butylbenzene	17.527	91	6471	N.D.	
93) 1,2-Dichlorobenzene	17.905	146	4804	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	20.083	225	1286	N.D.	
96) 1,2,4-Trichlorobenzene	0.000	180	0	N.D. d	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	0.000	180	0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC005.D
Acq On : 8 Aug 2014 11:56 am
Operator : KKW
Sample : BLK
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 11 08:19:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC006.D
Acq On : 8 Aug 2014 12:24 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 08:20:05 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	832012	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1343736	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1481361	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.305	152	896266	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.378	113	280556	44.47 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 88.94%		
42) d4-1,2-Dichloroethane	11.019	65	313893	46.14 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 92.28%		
54) D8-Toluene	13.032	98	1663993	52.64 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 105.28%		
75) Bromofluorobenzene	15.974	95	651964	68.45 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 136.90%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.158	85	5912	0.84 ug/L #	88
3) Chloromethane	4.610	50	11171	0.90 ug/L	96
4) Vinyl Chloride	4.807	62	6265	0.76 ug/L	99
5) Bromomethane	5.530	94	4004	1.34 ug/L #	71
6) Chloroethane	5.810	64	2336	0.70 ug/L #	40
7) Trichlorofluoromethane	6.089	101	10239	1.05 ug/L	91
8) Diethyl ether	6.664	59	5061	0.91 ug/L	87
9) 1,1-Dichloroethene	7.042	96	4531	0.77 ug/L	95
10) 1,1,2-Trichloro-1,2,2-...	7.083	151	4799	0.83 ug/L #	80
11) Acrolein	7.609	56	2125	6.33 ug/L	84
12) Iodomethane	7.313	142	6381	0.61 ug/L #	74
13) Carbon Disulfide	7.116	76	9242	0.68 ug/L #	1
14) 3-chloropropene	7.831	41	10481	0.82 ug/L	97
15) Acetone	8.053	43	7997	4.51 ug/L	99
16) Methylene Chloride	7.979	84	6216	1.04 ug/L #	69
17) Methyl Acetate	8.226	43	5891	1.21 ug/L #	77
18) t-1,2-Dichloroethene	8.242	96	4899	0.70 ug/L #	91
19) Methyl tert-butyl ether	8.365	73	11005	0.85 ug/L #	84
20) Acetonitrile	8.768	41	5913	6.76 ug/L #	73
21) Diisopropyl ether	8.899	45	20121	0.66 ug/L #	92
22) Chloroprene	9.097	88	3992	0.70 ug/L #	53
23) 1,1-Dichloroethane	9.146	63	10064	0.78 ug/L #	80
24) Acrylonitrile	9.220	53	14572	5.89 ug/L #	93
25) Vinyl Acetate	9.425	43	9716	0.52 ug/L #	82
26) c-1,2-Dichloroethene	9.844	96	5765	0.75 ug/L	91
27) 2,2-Dichloropropane	9.992	77	11301	1.35 ug/L #	87
28) Bromochloromethane	10.107	128	2603	0.71 ug/L	83
29) Cyclohexane	10.124	56	11654	0.61 ug/L #	72
30) Chloroform	10.156	83	10913	1.06 ug/L #	92
32) Dibromofluoromethane	10.378	113	280556	44.47 ug/L	93
33) 2-Butanone	0.000	72	0	N.D. d	
34) 1,1,1-Trichloroethane	10.436	97	9921	0.97 ug/L	91
35) 1,1-Dichloropropene	10.576	75	7579	0.88 ug/L	92
36) Propionitrile	10.888	54	8739	8.98 ug/L #	60
37) Methacrylonitrile	10.912	41	35228	7.78 ug/L	96
38) Isobutyl Alcohol	10.937	43	11378	14.16 ug/L #	77
40) Carbon Tetrachloride	10.354	117	8767	0.92 ug/L #	69
41) Benzene	10.880	78	28318	0.96 ug/L #	79
43) d4-1,2-Dichloroethane	11.019	65	313893	46.14 ug/L #	86
44) 1,2-Dichloroethane	11.093	62	8562	1.02 ug/L #	94

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC006.D
Acq On : 8 Aug 2014 12:24 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 6 Sample Multiplier: 1

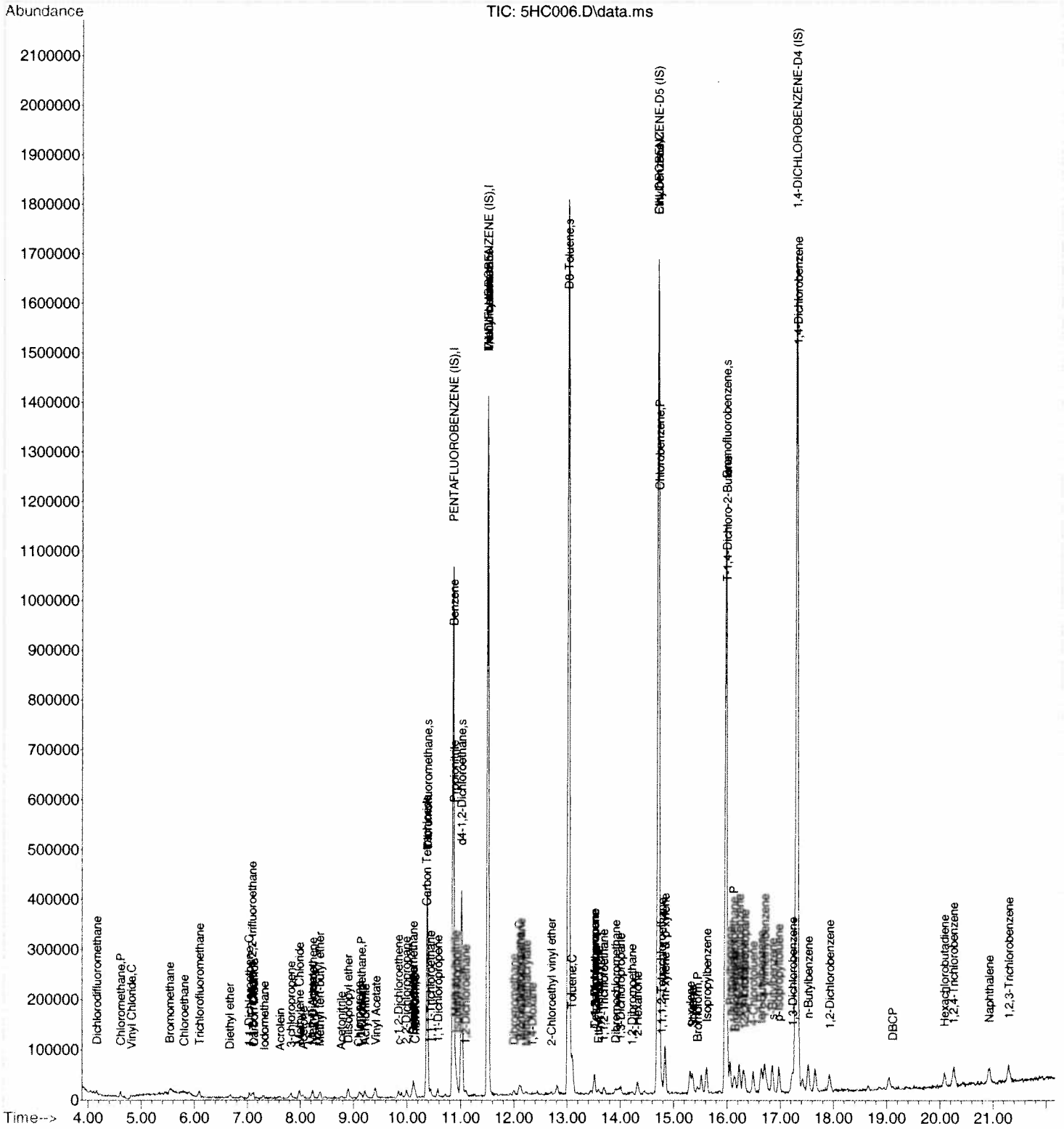
Quant Time: Aug 11 08:20:05 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.504	130	7636	0.77 ug/L #	1
46) Methyl cyclohexane	11.520	83	25281	1.44 ug/L #	57
47) Dibromomethane	11.997	93	3218	0.94 ug/L	93
48) 1,2-Dichloropropane	12.104	63	7930	0.87 ug/L #	90
49) Bromodichloromethane	12.137	83	8897	1.09 ug/L #	86
50) Methyl Methacrylate	12.227	69	2224	0.61 ug/L #	39
51) 1,4-Dioxane	12.334	88	1178	16.68 ug/L #	1
52) 2-Chloroethyl vinyl ether	12.704	63	2117	0.66 ug/L #	47
53) C-1,3-Dichloropropene	13.509	75	9964	1.03 ug/L	91
55) D8-Toluene	13.032	98	1663993	52.64 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.090	92	27773	1.23 ug/L	98
59) T-1,3-Dichloropropene	13.509	75	9964	1.24 ug/L	91
60) Tetrachloroethene	13.517	164	9232	1.14 ug/L	97
61) Ethyl methacrylate	13.599	69	5222	0.83 ug/L	95
62) 1,1,2-Trichloroethane	13.698	97	6425	1.16 ug/L	91
63) Dibromochloromethane	13.920	129	7149	1.07 ug/L #	86
64) 1,3-Dichloropropane	14.002	76	9287	1.00 ug/L	85
65) 1,2-Dibromoethane	14.216	107	6438	1.13 ug/L #	99
66) 2-Hexanone	14.322	43	10537	2.09 ug/L #	68
67) Ethylbenzene	14.700	106	19386	1.37 ug/L #	83
68) Chlorobenzene	14.733	112	30768	1.12 ug/L	97
69) 1,1,1,2-Tetrachloroethane	14.783	131	9237	1.11 ug/L #	68
70) m-xylene & p-xylene	14.832	106	44787	2.51 ug/L	97
71) o-xylene	15.317	106	20130	1.13 ug/L	97
72) Styrene	15.350	104	31889	1.05 ug/L #	77
73) Bromoform	15.456	173	3811	1.03 ug/L #	1
74) Isopropylbenzene	15.621	105	50202	1.00 ug/L #	84
76) Bromofluorobenzene	15.974	95	651964	68.45 ug/L	93
77) n-Propylbenzene	16.056	91	68734	1.21 ug/L	98
78) Bromobenzene	16.155	156	12503	1.10 ug/L	94
79) 1,1,2,2-Tetrachloroethane	16.122	83	8923	1.34 ug/L #	73
80) 1,2,3-Trichloropropane	16.336	61	3344	1.39 ug/L #	84
81) T-1,4-Dichloro-2-Butene	15.999	53	3746	0.96 ug/L #	1
83) 1,3,5-Trimethylbenzene	16.229	105	45085	0.86 ug/L #	98
84) 2-Chlorotoluene	16.311	91	36324	0.94 ug/L	97
85) 4-Chlorotoluene	16.492	91	38994	1.00 ug/L	98
86) tert-Butylbenzene	16.631	119	50953	0.79 ug/L	96
87) 1,2,4-Trimethylbenzene	16.697	105	49242	0.92 ug/L #	93
88) p-Isopropyltoluene	16.977	119	49121	0.79 ug/L	95
89) s-Butylbenzene	16.853	105	62928	0.85 ug/L	96
90) 1,3-Dichlorobenzene	17.223	146	30998	0.96 ug/L	98
91) 1,4-Dichlorobenzene	17.330	146	34475	1.07 ug/L #	1
92) n-Butylbenzene	17.527	91	47698	0.86 ug/L	94
93) 1,2-Dichlorobenzene	17.930	146	28434	0.94 ug/L	93
94) DBCP	19.105	157	2341	1.03 ug/L	92
95) Hexachlorobutadiene	20.083	225	9611	1.04 ug/L #	75
96) 1,2,4-Trichlorobenzene	20.247	180	21327	1.03 ug/L #	92
97) Naphthalene	20.921	128	50035	1.11 ug/L #	94
98) 1,2,3-Trichlorobenzene	21.290	180	22501	1.20 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC006.D
Acq On : 8 Aug 2014 12:24 pm
Operator : KKW
Sample : CRL
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 11 08:20:05 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC007.D
Acq On : 8 Aug 2014 12:53 pm
Operator : KKW
Sample : A404270-21RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 08:21:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.863	168	809035	50.00 ug/L	-0.02
39) 1,4-DIFLUOROBENZENE (IS)	11.512	114	1302080	50.00 ug/L	-0.02
57) CHLOROBENZENE-D5 (IS)	14.709	117	1367267	50.00 ug/L	-0.02
82) 1,4-DICHLOROBENZENE-D4...	17.313	152	791023	50.00 ug/L	-0.02

System Monitoring Compounds

31) Dibromofluoromethane	10.370	113	271091	44.19 ug/L	-0.02
Spiked Amount 50.000	Range 85 - 115		Recovery = 88.38%		
42) d4-1,2-Dichloroethane	11.019	65	304779	46.24 ug/L	-0.02
Spiked Amount 50.000	Range 70 - 120		Recovery = 92.48%		
54) D8-Toluene	13.032	98	1563582	51.04 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 102.08%		
75) Bromofluorobenzene	15.982	95	596723	67.82 ug/L	-0.02
Spiked Amount 50.000	Range 75 - 120		Recovery = 135.64%#		

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	0.000	85	0	N.D.	
3) Chloromethane	0.000	50	0	N.D.	
4) Vinyl Chloride	0.000	62	0	N.D.	
5) Bromomethane	0.000	94	0	N.D.	
6) Chloroethane	0.000	64	0	N.D.	
7) Trichlorofluoromethane	0.000	101	0	N.D.	
8) Diethyl ether	0.000	59	0	N.D.	
9) 1,1-Dichloroethene	0.000	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-...	0.000	151	0	N.D.	
11) Acrolein	0.000	56	0	N.D.	
12) Iodomethane	0.000	142	0	N.D.	
13) Carbon Disulfide	0.000	76	0	N.D. d	
14) 3-chloropropene	0.000	41	0	N.D. d	
15) Acetone	8.053	43	4335	2.52 ug/L #	45
16) Methylene Chloride	7.987	84	3867	0.66 ug/L #	59
17) Methyl Acetate	0.000	43	0	N.D. d	
18) t-1,2-Dichloroethene	0.000	96	0	N.D.	
19) Methyl tert-butyl ether	0.000	73	0	N.D.	
20) Acetonitrile	0.000	41	0	N.D.	
21) Diisopropyl ether	0.000	45	0	N.D.	
22) Chloroprene	0.000	88	0	N.D.	
23) 1,1-Dichloroethane	0.000	63	0	N.D.	
24) Acrylonitrile	0.000	53	0	N.D.	
25) Vinyl Acetate	0.000	43	0	N.D.	
26) c-1,2-Dichloroethene	0.000	96	0	N.D.	
27) 2,2-Dichloropropane	9.877	77	1032	N.D.	
28) Bromochloromethane	0.000	128	0	N.D.	
29) Cyclohexane	0.000	56	0	N.D.	
30) Chloroform	0.000	83	0	N.D.	
32) Dibromofluoromethane	10.370	113	271091	44.19 ug/L	94
33) 2-Butanone	0.000	72	0	N.D.	
34) 1,1,1-Trichloroethane	0.000	97	0	N.D.	
35) 1,1-Dichloropropene	0.000	75	0	N.D.	
36) Propionitrile	0.000	54	0	N.D.	
37) Methacrylonitrile	0.000	41	0	N.D.	
38) Isobutyl Alcohol	0.000	43	0	N.D.	
40) Carbon Tetrachloride	0.000	117	0	N.D.	
41) Benzene	10.871	78	3289	N.D.	
43) d4-1,2-Dichloroethane	11.019	65	304779	46.24 ug/L #	86
44) 1,2-Dichloroethane	0.000	62	0	N.D.	

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC007.D
Acq On : 8 Aug 2014 12:53 pm
Operator : KKW
Sample : A404270-21RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

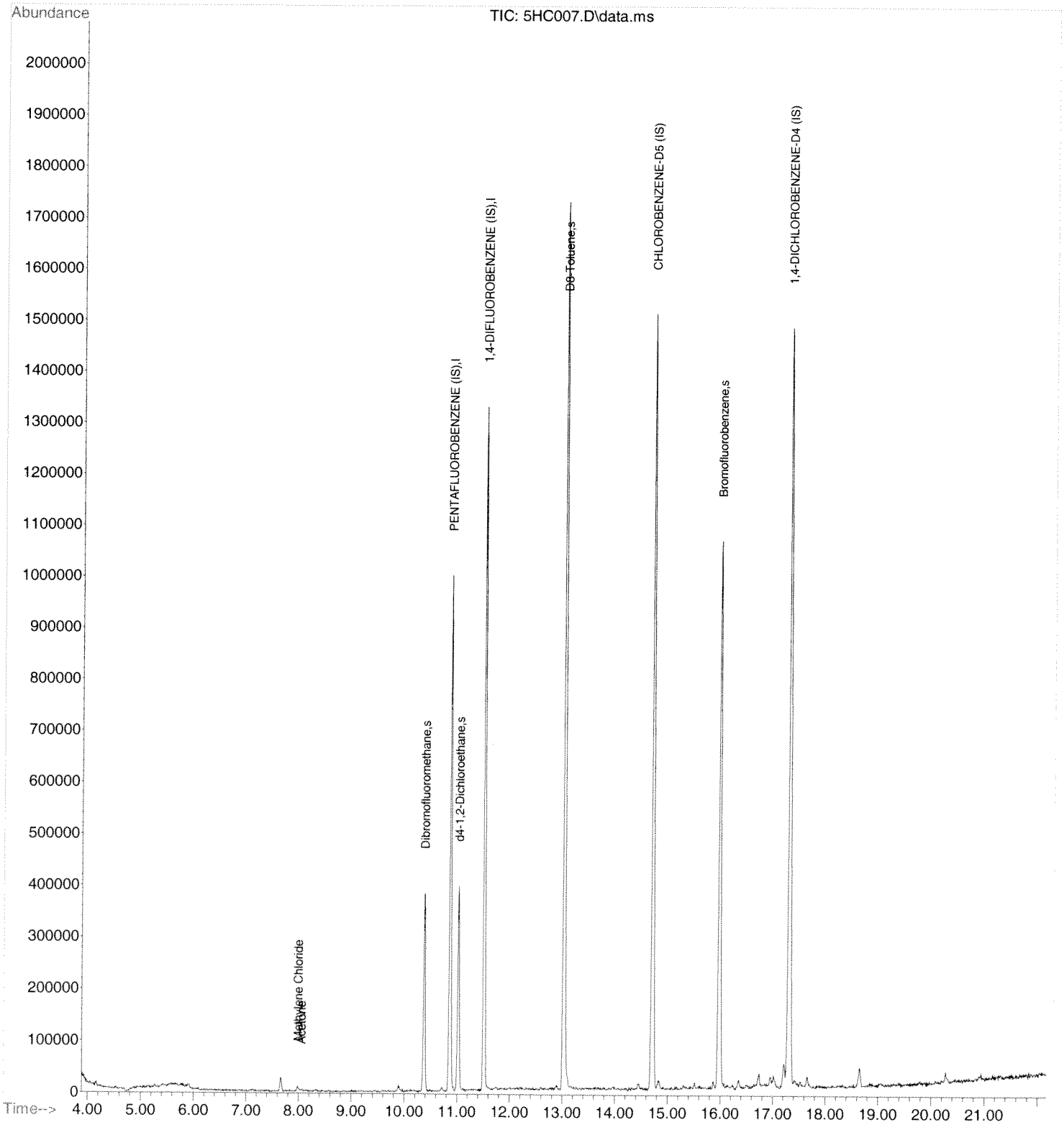
Quant Time: Aug 11 08:21:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	0.000	130	0	N.D.	
46) Methyl cyclohexane	0.000	83	0	N.D. d	
47) Dibromomethane	0.000	93	0	N.D.	
48) 1,2-Dichloropropane	0.000	63	0	N.D.	
49) Bromodichloromethane	0.000	83	0	N.D.	
50) Methyl Methacrylate	0.000	69	0	N.D.	
51) 1,4-Dioxane	0.000	88	0	N.D.	
52) 2-Chloroethyl vinyl ether	0.000	63	0	N.D.	
53) C-1,3-Dichloropropene	0.000	75	0	N.D.	
55) D8-Toluene	13.032	98	1563423	51.04 ug/L #	91
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	0.000	92	0	N.D. d	
59) T-1,3-Dichloropropene	0.000	75	0	N.D.	
60) Tetrachloroethene	0.000	164	0	N.D.	
61) Ethyl methacrylate	0.000	69	0	N.D.	
62) 1,1,2-Trichloroethane	0.000	97	0	N.D.	
63) Dibromochloromethane	0.000	129	0	N.D.	
64) 1,3-Dichloropropane	0.000	76	0	N.D.	
65) 1,2-Dibromoethane	0.000	107	0	N.D.	
66) 2-Hexanone	0.000	43	0	N.D. d	
67) Ethylbenzene	14.692	106	2370	N.D.	
68) Chlorobenzene	0.000	112	0	N.D.	
69) 1,1,1,2-Tetrachloroethane	0.000	131	0	N.D.	
70) m-xylene & p-xylene	0.000	106	0	N.D. d	
71) o-xylene	15.309	106	2016	N.D.	
72) Styrene	15.350	104	1227	N.D.	
73) Bromoform	0.000	173	0	N.D.	
74) Isopropylbenzene	15.613	105	3529	N.D.	
76) Bromofluorobenzene	15.982	95	596723	67.82 ug/L	94
77) n-Propylbenzene	16.056	91	4902	N.D.	
78) Bromobenzene	0.000	156	0	N.D.	
79) 1,1,2,2-Tetrachloroethane	0.000	83	0	N.D.	
80) 1,2,3-Trichloropropane	0.000	61	0	N.D.	
81) T-1,4-Dichloro-2-Butene	0.000	53	0	N.D.	
83) 1,3,5-Trimethylbenzene	16.221	105	3902	N.D.	
84) 2-Chlorotoluene	0.000	91	0	N.D.	
85) 4-Chlorotoluene	16.492	91	1637	N.D.	
86) tert-Butylbenzene	16.648	119	1375	N.D.	
87) 1,2,4-Trimethylbenzene	16.697	105	6093	N.D.	
88) p-Isopropyltoluene	16.968	119	5584	N.D.	
89) s-Butylbenzene	16.845	105	5275	N.D.	
90) 1,3-Dichlorobenzene	17.248	146	1009	N.D.	
91) 1,4-Dichlorobenzene	17.338	146	2903	N.D.	
92) n-Butylbenzene	17.535	91	4801	N.D.	
93) 1,2-Dichlorobenzene	17.930	146	1479	N.D.	
94) DBCP	0.000	157	0	N.D.	
95) Hexachlorobutadiene	0.000	225	0	N.D.	
96) 1,2,4-Trichlorobenzene	20.272	180	1809	N.D.	
97) Naphthalene	0.000	128	0	N.D. d	
98) 1,2,3-Trichlorobenzene	21.290	180	3114	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\080814\
Data File : 5HC007.D
Acq On : 8 Aug 2014 12:53 pm
Operator : KKW
Sample : A404270-21RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 11 08:21:23 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 11:49:17 2014
QLast Update : Tue Aug 05 11:49:17 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29899

Instrument: OVGCMS5

Calibration ID: UNASSIGNED

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29899-TUN1	QC		1		A4F0379		
AA29899-CAL1	QC		2		A4H0064	A4G0687	
AA29899-CAL2	QC		3		A4H0063	A4G0687	
AA29899-CAL3	QC		4		A4H0062	A4G0687	
AA29899-CAL4	QC		5		A4H0061	A4G0687	
AA29899-CAL5	QC		6		A4H0060	A4G0687	
AA29899-CAL6	QC		7		A4H0059	A4G0687	
AA29899-CAL7	QC		8		A4H0058	A4G0687	
AA29899-CAL8	QC		9		A4H0057	A4G0687	
AA29899-ICV1	QC		10		A4G0600	A4G0687	

Samples Loaded By Date

Data Processed By Date

Response Factor Report JVGCMS4

Method : C:\msdchem\1\METHODS\MS5080414.M (RTE Integrator)
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 09:04:36 2014
Last Update : Tue Aug 05 09:04:36 2014
Response via : Initial Calibration

Calibration Files
1 =5H4003.D 2 =5H4004.D 5 =5H4005.D
20 =5H4006.D 100 =5H4009.D 50 =5H4007.D

		Compound	1	2	5	20	100	50	Avg	%RSD	
1)	I	PENTAFLUOROBENZENE (I	----------ISTD----------								
2)		Dichlorodifluoromet	0.377	0.396	0.349	0.463	0.453	0.452	0.424	10.27	
3)	P	Chloromethane	0.680	0.708	0.637	0.797	0.785	0.795	0.745	8.24	
4)	C	Vinyl Chloride	0.355	0.333	0.364	0.421	0.478	0.453	0.423	0.998R	LRO
5)		Bromomethane	0.175	0.163	0.133	0.183	0.198	0.191	0.179	12.51	
6)		Chloroethane	0.166	0.175	0.160	0.192	0.215	0.208	0.190	0.997R	LRO
7)		Trichlorofluorometh	0.565	0.519	0.503	0.634	0.608	0.628	0.585	8.66	
8)		Diethyl ether	0.300	0.310	0.266	0.337	0.375	0.345	0.333	11.54	
9)	C	1,1-Dichloroethene	0.358	0.289	0.290	0.355	0.386	0.370	0.352	11.75	
10)		1,1,2-Trichloro-1,2	0.317	0.295	0.314	0.358	0.370	0.381	0.347	9.46	
11)		Acrolein	0.012	0.013	0.013	0.016	0.019	0.018	0.016#	0.996R	LRO
12)		Iodomethane	0.368	0.332	0.379	0.531	0.627	0.587	0.508	1.000R	LRO
13)		Carbon Disulfide	0.748	0.727	0.646	0.811	0.913	0.873	0.816	12.43	
14)		3-chloropropene	0.718	0.730	0.609	0.767	0.849	0.818	0.772	10.97	
15)		Acetone	0.194	0.158	0.091	0.110	0.109	0.108	0.122	1.000R	LRO
16)		Methylene Chloride	0.537	0.419	0.317	0.381	0.385	0.369	0.396	1.000R	QR
17)		Methyl Acetate	0.229	0.313	0.249	0.290	0.323	0.302	0.294	12.26	
18)		t-1,2-Dichloroethen	0.434	0.351	0.332	0.446	0.447	0.447	0.419	11.58	
19)		Methyl tert-butyl e	0.619	0.517	0.582	0.722	0.773	0.744	0.686	1.000R	LRO
20)		Acetonitrile	0.035	0.040	0.037	0.046	0.051	0.047	0.045#	0.998R	LRO
21)		Diisopropyl ether	1.704	1.507	1.536	1.875	2.024	1.992	1.825	11.70	
22)		Chloroprene	0.313	0.284	0.264	0.357	0.388	0.381	0.345	14.65	
23)	P	1,1-Dichloroethane	0.682	0.663	0.665	0.830	0.868	0.841	0.779	11.69	
24)		Acrylonitrile	0.108	0.101	0.108	0.135	0.149	0.144	0.130	1.000R	LRO
25)		Vinyl Acetate	0.785	0.746	0.724	1.011	1.116	1.079	0.960	1.000R	LRO
26)		c-1,2-Dichloroethen	0.406	0.393	0.396	0.484	0.511	0.496	0.461	11.41	
27)		2,2-Dichloropropane	0.465	0.413	0.468	0.512	0.536	0.548	0.501	9.50	
28)		Bromochloromethane	0.177	0.196	0.175	0.232	0.245	0.245	0.220	14.36	
29)		Cyclohexane	0.982	0.978	0.962	1.219	1.281	1.273	1.151	12.83	
30)	C	Chloroform	0.581	0.508	0.512	0.641	0.670	0.686	0.618	12.04	
31)	s	Dibromofluoromethan			0.360	0.380	0.385	0.388	0.379	2.66	NO 1+2
32)		Dibromofluoromethan			0.360	0.380	0.385	0.388	0.379	2.66	NO 1+2
33)		2-Butanone	0.035	0.007	0.023	0.025	0.029	0.027	0.025#	0.999R	LRO ~~NO 1+2~~
34)		1,1,1-Trichloroetha	0.420	0.454	0.483	0.589	0.609	0.621	0.550	1.000R	LRO ~~NO 1+2~~
35)		1,1-Dichloropropene	0.475	0.446	0.426	0.545	0.561	0.567	0.518	11.33	
36)		Propionitrile	0.055	0.047	0.047	0.060	0.066	0.064	0.059#	14.00	
37)		Methacrylonitrile	0.240	0.231	0.224	0.287	0.301	0.299	0.272	12.49	
38)		Isobutyl Alcohol	0.034	0.033	0.032	0.040	0.046	0.043	0.040#	0.997R	LRO
39)	I	1,4-DIFLUOROBENZENE (	----------ISTD----------								
40)		Carbon Tetrachlorid	0.316	0.286	0.313	0.378	0.391	0.397	0.356	12.16	
41)		Benzene	1.089	0.987	0.982	1.147	1.177	1.156	1.099	6.88	
42)	s	d4-1,2-Dichloroetha			0.276	0.260	0.248	0.253	0.253	5.32	NO 1+2
43)		d4-1,2-Dichloroetha			0.276	0.260	0.248	0.253	0.253	5.32	NO 1+2
44)		1,2-Dichloroethane	0.267	0.265	0.274	0.333	0.347	0.344	0.312	11.71	
45)		Trichloroethene	0.333	0.309	0.315	0.399	0.401	0.415	0.369	11.56	
46)		Methyl cyclohexane	0.826	0.652	0.612	0.636	0.631	0.651	0.654	10.93	
47)		Dibromomethane	0.107	0.102	0.120	0.133	0.139	0.139	0.127	12.19	
48)	C	1,2-Dichloropropane	0.296	0.273	0.288	0.351	0.382	0.380	0.339	13.49	
49)		Bromodichloromethan	0.263	0.264	0.252	0.321	0.334	0.335	0.304	12.10	
50)		Methyl Methacrylate	0.100	0.106	0.091	0.111	0.136	0.131	0.117	0.999R	LRO
51)		1,4-Dioxane	0.002	0.003	0.002	0.003	0.003	0.003	0.003#	14.43	
52)		2-Chloroethyl vinyl	0.075	0.086	0.079	0.113	0.121	0.113	0.102	0.999R	LRO
53)		C-1,3-Dichloroprope	0.251	0.235	0.256	0.317	0.366	0.356	0.312	1.000R	LRO
54)	s	D8-Toluene			1.156	1.221	1.176	1.214	1.176	3.01	NO 1+2
55)		D8-Toluene			1.156	1.221	1.176	1.214	1.176	3.01	NO 1+2
56)		4-Methyl-2-pentanon			0.017	0.015	0.020	0.018	0.019#	13.60	NO 1+2
57)		CHLOROBENZENE-D5 (IS)	----------ISTD----------								
58)	C	Toluene	0.788	0.788	0.753	0.857	0.635	0.767	0.761	9.32	
59)		T-1,3-Dichloroprope	0.265	0.242	0.254	0.293	0.246	0.285	0.271	10.04	
60)		Tetrachloroethene	0.314	0.269	0.274	0.310	0.221	0.272	0.273	11.64	
61)		Ethyl methacrylate	0.204	0.218	0.181	0.222	0.195	0.216	0.213	12.24	

62)		1,1,2-Trichloroetha	0.162	0.198	0.191	0.212	0.161	0.193	0.187	10.99	
63)		Dibromochloromethan	0.193	0.210	0.210	0.264	0.204	0.240	0.226	12.73	
64)		1,3-Dichloropropane	0.299	0.318	0.328	0.340	0.268	0.319	0.314	8.94	
65)		1,2-Dibromoethane	0.203	0.190	0.185	0.210	0.164	0.196	0.192	9.40	
66)		2-Hexanone			0.172	0.177	0.147	0.166	0.170	13.59	NO 1+2
67)	C	Ethylbenzene	0.567	0.531	0.525	0.609	0.456	0.545	0.531	0.991R	LRO NO 8
68)	P	Chlorobenzene	0.968	0.934	0.921	1.040	0.768	0.953	0.929	9.78	
69)		1,1,1,2-Tetrachloro	0.267	0.245	0.281	0.323	0.245	0.289	0.281	11.85	
70)		m-xylene & p-xylene	0.689	0.680	0.664	0.755	0.570	0.692	0.666	0.990R	LRO NO 8
71)		o-xylene	0.571	0.655	0.665	0.716	0.568	0.681	0.638	0.992R	LRO NO 8
72)		Styrene	0.940	0.898	0.931	1.166	0.919	1.089	1.023	12.81	
73)	P	Bromoform	0.053	0.112	0.128	0.139	0.118	0.138	0.117	0.994R	LRO NO 8
74)		Isopropylbenzene	1.616	1.668	1.624	1.884	1.455	1.727	1.686	9.76	
75)	s	Bromofluorobenzene			0.450	0.419	0.304	0.357	0.370	0.993R	LRO NO 1,2,8
76)		Bromofluorobenzene			0.450	0.419	0.304	0.357	0.370	0.993R	LRO NO 1,2,8
77)		n-Propylbenzene	1.885	1.834	1.827	2.163	1.656	1.967	1.916	10.11	
78)		Bromobenzene	0.369	0.398	0.363	0.420	0.330	0.396	0.384	10.41	
79)	P	1,1,2,2-Tetrachloro	0.242	0.212	0.211	0.228	0.194	0.225	0.225#	12.54	
80)		1,2,3-Trichloroprop	0.037	0.093	0.085	0.100	0.077	0.089	0.080#	0.994R	LRO NO 8
81)		T-1,4-Dichloro-2-Bu	0.143	0.129	0.129	0.131	0.111	0.128	0.131	11.33	
82)		1,4-DICHLOROBENZENE-D	----------	----------	ISTD	----------	----------	----------	----------		
83)		1,3,5-Trimethylbenz	2.706	2.332	2.470	3.162	3.168	3.256	2.912	12.31	
84)		2-Chlorotoluene	1.968	1.852	1.827	2.358	2.331	2.391	2.162	11.03	
85)		4-Chlorotoluene	1.982	1.851	1.871	2.358	2.352	2.424	2.181	10.92	
86)		tert-Butylbenzene	3.352	2.953	3.087	3.888	3.926	3.974	3.602	11.39	
87)		1,2,4-Trimethylbenz	2.623	2.480	2.468	3.267	3.267	3.374	2.980	12.99	
88)		p-Isopropyltoluene	3.347	2.800	2.912	3.735	3.716	3.841	3.450	11.56	
89)		s-Butylbenzene	3.755	3.285	3.624	4.537	4.512	4.675	4.147	12.55	
90)		1,3-Dichlorobenzene	1.731	1.473	1.559	1.937	1.944	1.984	1.806	10.92	
91)		1,4-Dichlorobenzene	1.852	1.522	1.558	1.920	1.890	1.933	1.795	9.04	
92)		n-Butylbenzene	2.871	2.482	2.648	3.388	3.330	3.475	3.081	12.14	
93)		1,2-Dichlorobenzene	1.536	1.467	1.478	1.817	1.819	1.862	1.690	9.91	
94)		DBCP	0.017	0.015	0.104	0.125	0.130	0.137	0.098#	0.999R	LRO
95)		Hexachlorobutadiene	0.467	0.431	0.435	0.587	0.556	0.593	0.516	13.04	
96)		1,2,4-Trichlorobenz	1.172	0.945	1.015	1.291	1.209	1.308	1.159	11.19	
97)		Naphthalene	2.680	2.128	2.093	2.628	2.670	2.796	2.510	10.74	
98)		1,2,3-Trichlorobenz	1.122	0.897	0.871	1.150	1.098	1.157	1.047	11.01	

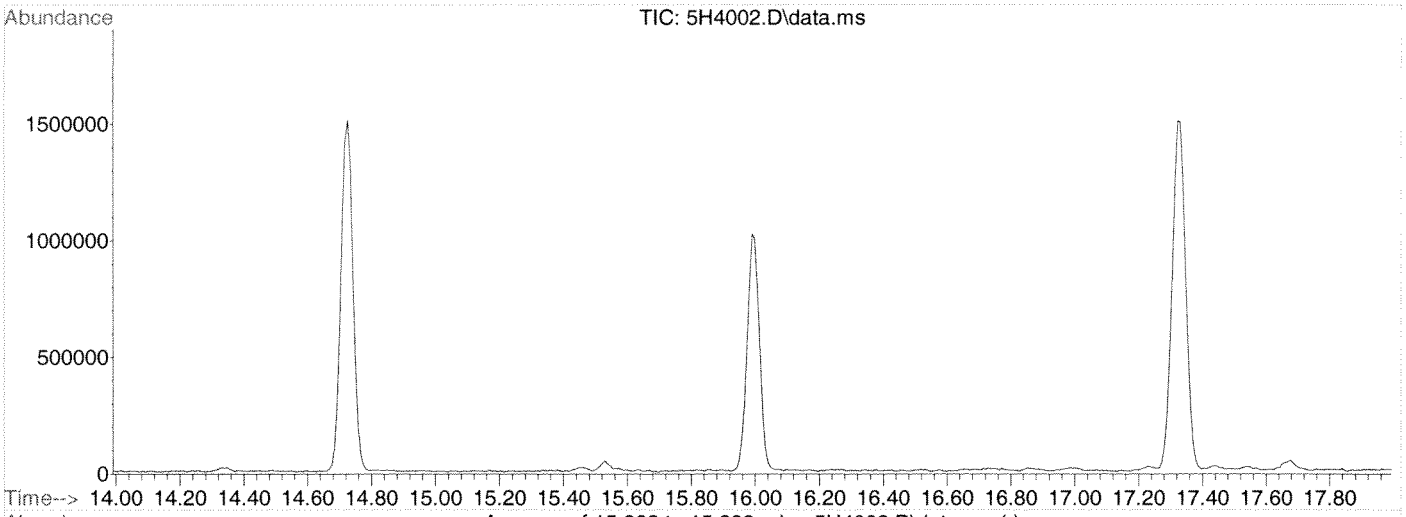
(#) = Out of Range ### Number of calibration levels exceeded format ###
(R) = Linear Regression or Quadratic Correlation

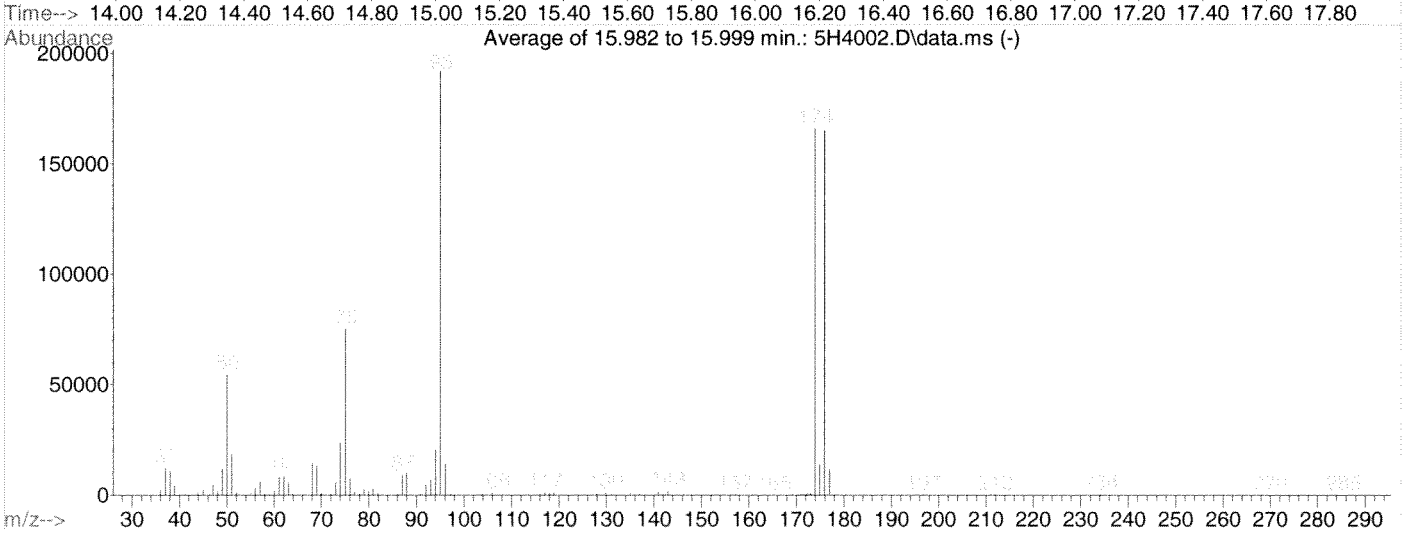
MS5080414.M Tue Aug 05 09:07:13 2014

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4002.D
Acq On : 4 Aug 2014 11:32 am
Operator : KKW
Sample : BFB
Misc :
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\MS5080414.M
Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 08:14:24 2014
Last Update : Tue Aug 05 08:14:24 2014





AutoFind: Scans 1473, 1474, 1475; Background Corrected with Scan 1463

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.4	54482	PASS
75	95	30	60	39.1	75090	PASS
95	95	100	100	100.0	191914	PASS
96	95	5	9	7.3	14072	PASS
173	174	0.00	2	0.3	524	PASS
174	95	50	100	86.3	165717	PASS
175	174	5	9	8.4	13853	PASS
176	174	95	101	99.5	164885	PASS
177	176	5	9	6.9	11426	PASS

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4003.D
Acq On : 4 Aug 2014 12:04 pm
Operator : KKW
Sample : cal 1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:05:01 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.880	168	738609	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	1141194	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1080869	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	589403	50.00 ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	11757	2.52 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery	= 5.04%#	
42) d4-1,2-Dichloroethane	11.036	65	14146	3.13 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery	= 6.26%#	
54) D8-Toluene	13.049	98	59248	2.94 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery	= 5.88%#	
75) Bromofluorobenzene	15.999	95	31602	4.55 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery	= 9.10%#	

Target Compounds

					Qvalue
2) Dichlorodifluoromethane	4.175	85	5564	0.86 ug/L #	81
3) Chloromethane	4.627	50	10045	1.43 ug/L #	87
4) Vinyl Chloride	4.824	62	5244	0.96 ug/L #	80
5) Bromomethane	5.555	94	2579	1.13 ug/L #	88
6) Chloroethane	5.843	64	2459	0.98 ug/L #	85
7) Trichlorofluoromethane	6.114	101	8350	1.06 ug/L #	95
8) Diethyl ether	6.689	59	4439	1.08 ug/L	94
9) 1,1-Dichloroethene	7.059	96	5282	1.10 ug/L #	72
10) 1,1,2-Trichloro-1,2,2-...	7.124	151	4684	1.14 ug/L	94
11) Acrolein	7.609	56	1755	8.59 ug/L #	28
12) Iodomethane	7.322	142	5433	0.88 ug/L #	82
13) Carbon Disulfide	7.141	76	11050	0.83 ug/L #	69
14) 3-chloropropene	7.839	41	10612	1.43 ug/L	89
15) Acetone	8.086	43	2866	2.51 ug/L #	70
16) Methylene Chloride	7.995	84	7935	1.40 ug/L	92
17) Methyl Acetate	8.234	43	3386	1.01 ug/L #	82
18) t-1,2-Dichloroethene	8.242	96	6406	1.12 ug/L	82
19) Methyl tert-butyl ether	8.390	73	9137	0.81 ug/L #	88
20) Acetonitrile	8.784	41	5237	9.72 ug/L #	78
21) Diisopropyl ether	8.916	45	25174	1.49 ug/L	96
22) Chloroprene	9.113	88	4626	0.99 ug/L #	69
23) 1,1-Dichloroethane	9.162	63	10078	1.04 ug/L #	90
24) Acrylonitrile	9.236	53	15890	10.38 ug/L #	93
25) Vinyl Acetate	9.442	43	11603	1.15 ug/L #	93
26) c-1,2-Dichloroethene	9.869	96	5995	0.91 ug/L #	86
27) 2,2-Dichloropropane	10.009	77	6864	0.95 ug/L #	87
28) Bromochloromethane	10.107	128	2613	0.90 ug/L	79
29) Cyclohexane	10.140	56	14507	1.28 ug/L	97
30) Chloroform	10.165	83	8579	0.89 ug/L #	90
32) Dibromofluoromethane	10.387	113	11757	2.52 ug/L #	78
33) 2-Butanone	10.559	72	510	1.00 ug/L #	18
34) 1,1,1-Trichloroethane	10.452	97	6197	0.81 ug/L #	85
35) 1,1-Dichloropropene	10.576	75	7020	0.95 ug/L	97
36) Propionitrile	10.896	54	8142	10.51 ug/L #	58
37) Methacrylonitrile	10.921	41	35505	11.34 ug/L #	87
38) Isobutyl Alcohol	10.945	43	9982	20.97 ug/L #	89
40) Carbon Tetrachloride	10.362	117	7221	1.21 ug/L	97
41) Benzene	10.888	78	24865	1.03 ug/L #	89
43) d4-1,2-Dichloroethane	11.036	65	14146	3.13 ug/L #	70
44) 1,2-Dichloroethane	11.118	62	6100	1.08 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4003.D
Acq On : 4 Aug 2014 12:04 pm
Operator : KKW
Sample : cal 1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:05:01 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

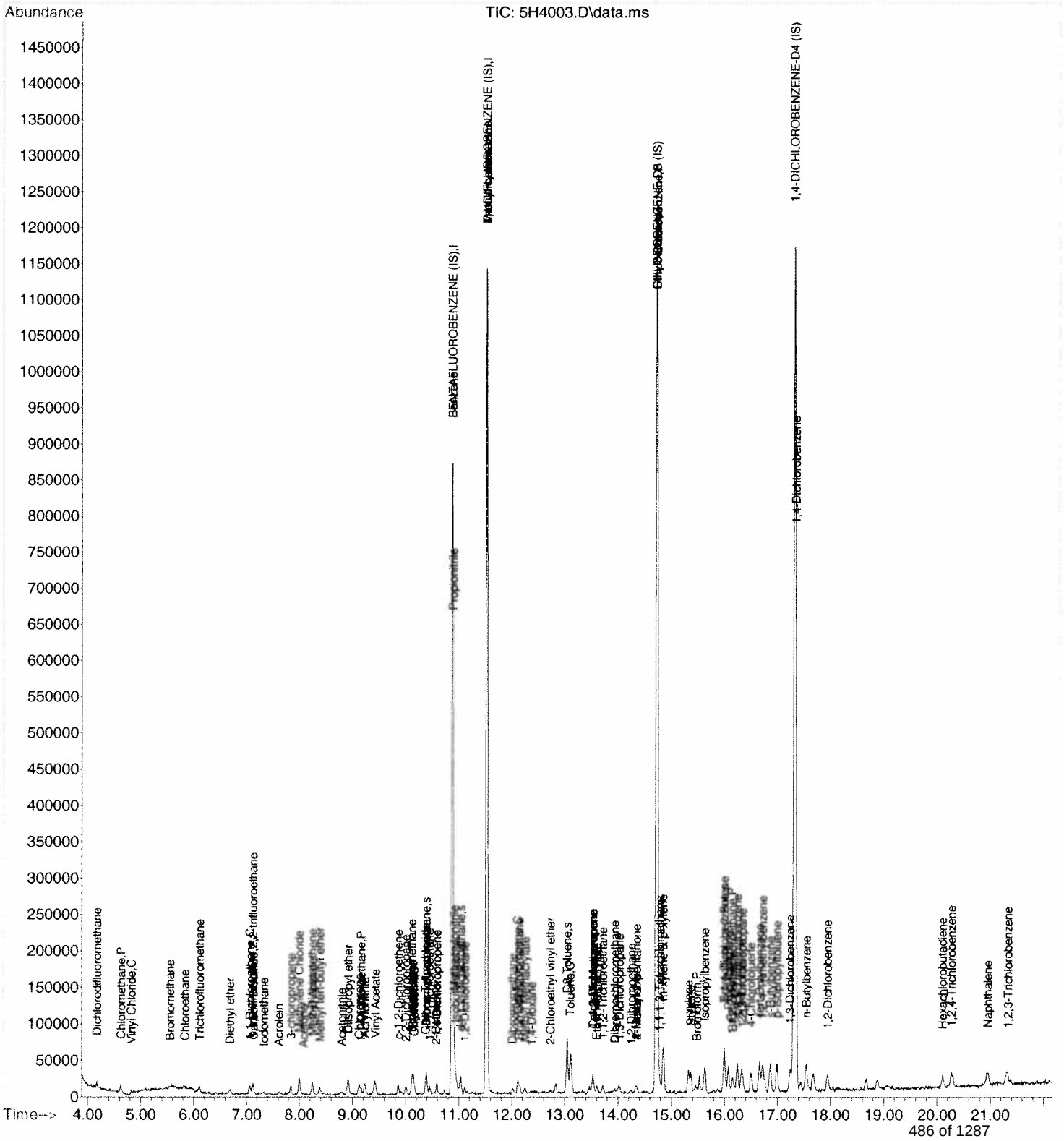
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	7589	1.26 ug/L #	1
46) Methyl cyclohexane	11.529	83	18860	1.70 ug/L #	70
47) Dibromomethane	12.005	93	2433	0.95 ug/L	97
48) 1,2-Dichloropropane	12.120	63	6759	1.15 ug/L	91
49) Bromodichloromethane	12.145	83	6012	0.94 ug/L #	90
50) Methyl Methacrylate	12.244	69	2278	0.82 ug/L	89
51) 1,4-Dioxane	12.375	88	873	12.38 ug/L	91
52) 2-Chloroethyl vinyl ether	12.728	63	1706	0.84 ug/L #	68
53) C-1,3-Dichloropropene	13.525	75	5727	0.84 ug/L #	82
55) D8-Toluene	13.049	98	59248	2.94 ug/L #	87
56) 4-Methyl-2-pentanone	14.339	100	215	0.53 ug/L #	1
58) Toluene	13.090	92	17045	1.31 ug/L	92
59) T-1,3-Dichloropropene	13.525	75	5727	0.86 ug/L	92
60) Tetrachloroethene	13.525	164	6780	1.73 ug/L	97
61) Ethyl methacrylate	13.599	69	4402	0.82 ug/L #	86
62) 1,1,2-Trichloroethane	13.706	97	3496	0.98 ug/L #	82
63) Dibromochloromethane	13.945	129	4167	0.96 ug/L #	92
64) 1,3-Dichloropropane	14.027	76	6455	0.82 ug/L #	65
65) 1,2-Dibromoethane	14.240	107	4390	1.07 ug/L #	95
66) 2-Hexanone	14.339	43	5793	2.33 ug/L #	77
67) Ethylbenzene	14.717	106	12267	1.44 ug/L #	93
68) Chlorobenzene	14.742	112	20923	1.40 ug/L	94
69) 1,1,1,2-Tetrachloroethane	14.791	131	5781	1.13 ug/L	95
70) m-xylene & p-xylene	14.857	106	29779	2.78 ug/L	98
71) o-xylene	15.317	106	12349	1.15 ug/L	81
72) Styrene	15.366	104	20319	1.03 ug/L #	76
73) Bromoform	15.489	173	1156	0.50 ug/L #	62
74) Isopropylbenzene	15.629	105	34939	1.11 ug/L #	97
76) Bromofluorobenzene	15.999	95	31602	4.55 ug/L	94
77) n-Propylbenzene	16.081	91	40739	1.07 ug/L	93
78) Bromobenzene	16.163	156	7973	1.35 ug/L	98
79) 1,1,2,2-Tetrachloroethane	16.138	83	5231	0.91 ug/L #	86
80) 1,2,3-Trichloropropane	16.344	61	792	0.43 ug/L #	51
81) T-1,4-Dichloro-2-Butene	16.007	53	3089	1.92 ug/L #	82
83) 1,3,5-Trimethylbenzene	16.245	105	31898	1.21 ug/L #	98
84) 2-Chlorotoluene	16.327	91	23198	1.05 ug/L #	90
85) 4-Chlorotoluene	16.500	91	23368	1.05 ug/L	99
86) tert-Butylbenzene	16.664	119	39508	1.31 ug/L	96
87) 1,2,4-Trimethylbenzene	16.714	105	30922	1.10 ug/L #	89
88) p-Isopropyltoluene	16.993	119	39451	1.37 ug/L	97
89) s-Butylbenzene	16.870	105	44264	1.17 ug/L	96
90) 1,3-Dichlorobenzene	17.248	146	20411	1.24 ug/L	98
91) 1,4-Dichlorobenzene	17.355	146	21837	1.35 ug/L #	1
92) n-Butylbenzene	17.552	91	33846	1.12 ug/L	94
93) 1,2-Dichlorobenzene	17.954	146	18102	1.15 ug/L	97
94) DBCP	19.138	157	205	N.D.	
95) Hexachlorobutadiene	20.115	225	5503	1.11 ug/L #	72
96) 1,2,4-Trichlorobenzene	20.272	180	13812	1.28 ug/L	95
97) Naphthalene	20.954	128	31587	1.33 ug/L #	92
98) 1,2,3-Trichlorobenzene	21.340	180	13229	1.36 ug/L #	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4003.D
Acq On : 4 Aug 2014 12:04 pm
Operator : KKW
Sample : cal 1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 04 13:05:01 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4004.D
Acq On : 4 Aug 2014 12:32 pm
Operator : KKW
Sample : cal 2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 04 13:06:58 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.872	168	736302	50.00 ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1111209	50.00 ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1078262	50.00 ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	617524	50.00 ug/L	0.00

System Monitoring Compounds					
31) Dibromofluoromethane	10.387	113	16150	3.47 ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 6.94%#		
42) d4-1,2-Dichloroethane	11.036	65	16282	3.69 ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 7.38%#		
54) D8-Toluene	13.049	98	70269	3.58 ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 7.16%#		
75) Bromofluorobenzene	15.991	95	32067	4.63 ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 9.26%#		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.158	85	11661	1.81 ug/L #	87
3) Chloromethane	4.618	50	20845	2.97 ug/L	99
4) Vinyl Chloride	4.824	62	9809	1.79 ug/L #	85
5) Bromomethane	5.547	94	4788	2.11 ug/L #	97
6) Chloroethane	5.818	64	5143	2.05 ug/L #	92
7) Trichlorofluoromethane	6.097	101	15271	1.94 ug/L	98
8) Diethyl ether	6.673	59	9129	2.23 ug/L	87
9) 1,1-Dichloroethene	7.051	96	8497	1.77 ug/L	93
10) 1,1,2-Trichloro-1,2,2-...	7.116	151	8676	2.13 ug/L	91
11) Acrolein	7.626	56	3882	19.05 ug/L	98
12) Iodomethane	7.322	142	9773	1.58 ug/L	90
13) Carbon Disulfide	7.133	76	21415	1.62 ug/L #	80
14) 3-chloropropene	7.831	41	21503	2.91 ug/L	99
15) Acetone	8.070	43	4642	4.07 ug/L #	60
16) Methylene Chloride	8.004	84	12350	2.19 ug/L	85
17) Methyl Acetate	8.242	43	9229	2.75 ug/L	98
18) t-1,2-Dichloroethene	8.250	96	10332	1.81 ug/L #	93
19) Methyl tert-butyl ether	8.382	73	15212	1.35 ug/L #	90
20) Acetonitrile	8.776	41	11892	22.14 ug/L #	89
21) Diisopropyl ether	8.908	45	44384	2.63 ug/L #	96
22) Chloroprene	9.121	88	8374	1.81 ug/L	79
23) 1,1-Dichloroethane	9.162	63	19537	2.02 ug/L #	97
24) Acrylonitrile	9.228	53	29831	19.55 ug/L	90
25) Vinyl Acetate	9.442	43	21974	2.19 ug/L	97
26) c-1,2-Dichloroethene	9.861	96	11587	1.77 ug/L	96
27) 2,2-Dichloropropane	10.001	77	12176	1.68 ug/L	95
28) Bromochloromethane	10.107	128	5772	2.00 ug/L	91
29) Cyclohexane	10.132	56	28795	2.54 ug/L	95
30) Chloroform	10.157	83	14952	1.56 ug/L #	83
32) Dibromofluoromethane	10.387	113	16150	3.47 ug/L #	94
33) 2-Butanone	10.535	72	210	0.41 ug/L #	1
34) 1,1,1-Trichloroethane	10.452	97	13358	1.74 ug/L	97
35) 1,1-Dichloropropene	10.584	75	13131	1.79 ug/L	99
36) Propionitrile	10.896	54	13708	17.75 ug/L #	49
37) Methacrylonitrile	10.913	41	68043	21.80 ug/L	98
38) Isobutyl Alcohol	10.954	43	19403	40.89 ug/L #	93
40) Carbon Tetrachloride	10.379	117	12717	2.18 ug/L	92
41) Benzene	10.880	78	43866	1.86 ug/L	97
43) d4-1,2-Dichloroethane	11.036	65	16282	3.69 ug/L #	66
44) 1,2-Dichloroethane	11.110	62	11760	2.14 ug/L	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4004.D
Acq On : 4 Aug 2014 12:32 pm
Operator : KKW
Sample : cal 2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 04 13:06:58 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

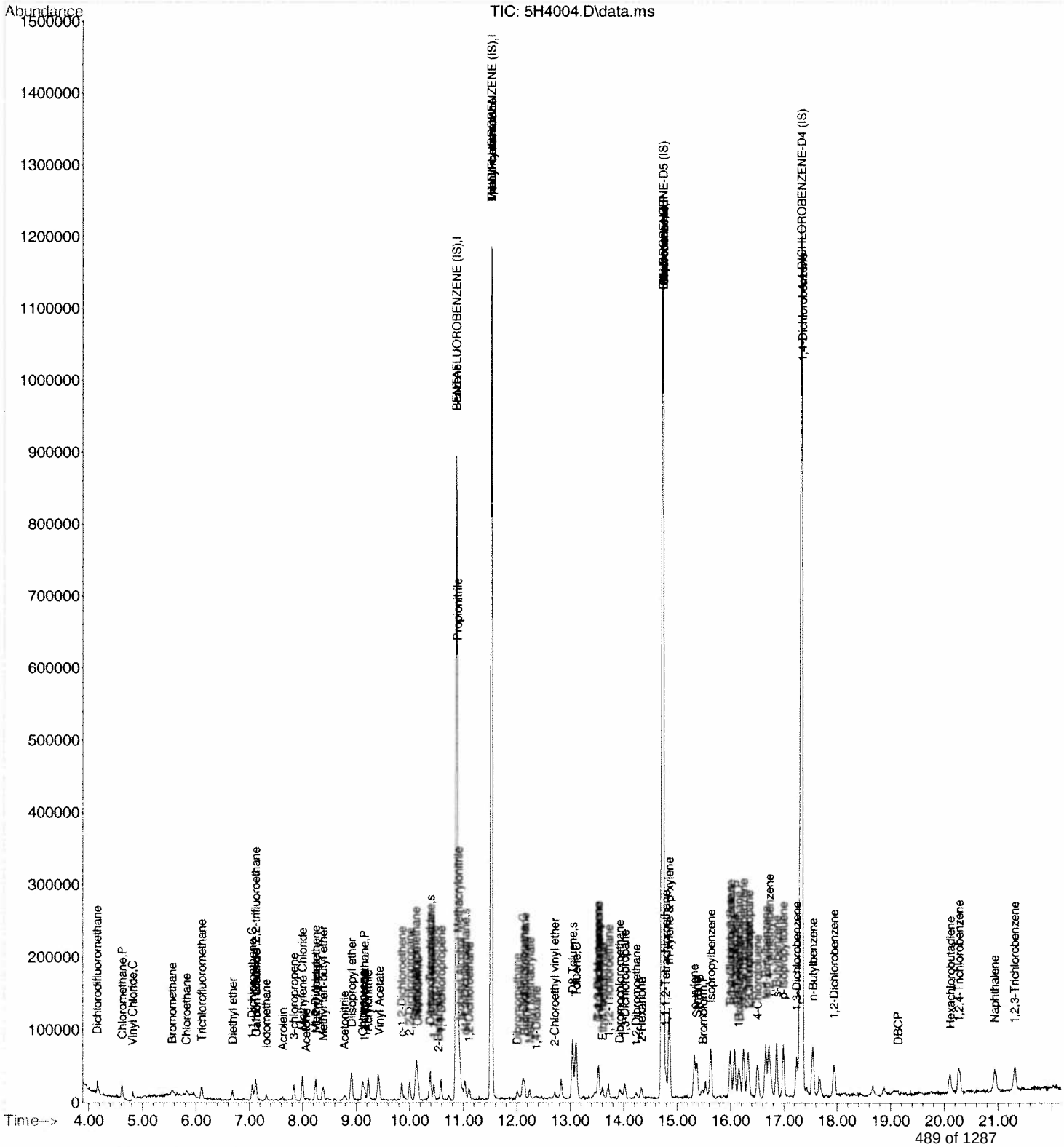
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	13754	2.34 ug/L #	1
46) Methyl cyclohexane	11.529	83	28987	2.68 ug/L #	76
47) Dibromomethane	12.005	93	4538	1.82 ug/L #	87
48) 1,2-Dichloropropane	12.120	63	12129	2.12 ug/L #	89
49) Bromodichloromethane	12.145	83	11756	1.88 ug/L #	94
50) Methyl Methacrylate	12.244	69	4714	1.73 ug/L	94
51) 1,4-Dioxane	12.359	88	2396	34.89 ug/L	86
52) 2-Chloroethyl vinyl ether	12.704	63	3803	1.92 ug/L #	64
53) C-1,3-Dichloropropene	13.509	75	10444	1.57 ug/L	90
55) D8-Toluene	13.049	98	70269	3.58 ug/L #	85
56) 4-Methyl-2-pentanone	0.000	100	0	N.D.	
58) Toluene	13.098	92	33976	2.62 ug/L #	99
59) T-1,3-Dichloropropene	13.509	75	10444	1.57 ug/L	94
60) Tetrachloroethene	13.534	164	11615	2.98 ug/L	95
61) Ethyl methacrylate	13.600	69	9414	1.76 ug/L #	83
62) 1,1,2-Trichloroethane	13.706	97	8523	2.39 ug/L	94
63) Dibromochloromethane	13.928	129	9036	2.09 ug/L #	90
64) 1,3-Dichloropropane	14.019	76	13714	1.75 ug/L	86
65) 1,2-Dibromoethane	14.224	107	8179	2.00 ug/L #	88
66) 2-Hexanone	14.331	43	9129	3.68 ug/L #	87
67) Ethylbenzene	14.717	106	22890	2.70 ug/L #	94
68) Chlorobenzene	14.742	112	40290	2.70 ug/L	91
69) 1,1,1,2-Tetrachloroethane	14.791	131	10579	2.07 ug/L #	81
70) m-xylene & p-xylene	14.857	106	58677	5.48 ug/L	99
71) o-xylene	15.317	106	28237	2.63 ug/L	98
72) Styrene	15.374	104	38733	1.97 ug/L #	93
73) Bromoform	15.481	173	4846	2.08 ug/L #	1
74) Isopropylbenzene	15.629	105	71952	2.30 ug/L	94
76) Bromofluorobenzene	15.991	95	32067	4.63 ug/L	96
77) n-Propylbenzene	16.073	91	79088	2.08 ug/L	98
78) Bromobenzene	16.163	156	17170	2.92 ug/L	97
79) 1,1,2,2-Tetrachloroethane	16.139	83	9143	1.59 ug/L #	88
80) 1,2,3-Trichloropropane	16.344	61	3996	2.15 ug/L #	81
81) T-1,4-Dichloro-2-Butene	16.007	53	5552	3.44 ug/L #	86
83) 1,3,5-Trimethylbenzene	16.245	105	57610	2.08 ug/L #	94
84) 2-Chlorotoluene	16.328	91	45755	1.98 ug/L	98
85) 4-Chlorotoluene	16.500	91	45720	1.95 ug/L	98
86) tert-Butylbenzene	16.656	119	72941	2.30 ug/L	95
87) 1,2,4-Trimethylbenzene	16.722	105	61270	2.09 ug/L	92
88) p-Isopropyltoluene	16.993	119	69155	2.29 ug/L	100
89) s-Butylbenzene	16.862	105	81131	2.04 ug/L	98
90) 1,3-Dichlorobenzene	17.240	146	36386	2.11 ug/L	97
91) 1,4-Dichlorobenzene	17.346	146	37597	2.22 ug/L #	1
92) n-Butylbenzene	17.544	91	61306	1.94 ug/L	95
93) 1,2-Dichlorobenzene	17.938	146	36228	2.20 ug/L	95
94) DBCP	19.138	157	379	0.31 ug/L #	1
95) Hexachlorobutadiene	20.107	225	10637	2.05 ug/L	98
96) 1,2,4-Trichlorobenzene	20.272	180	23352	2.07 ug/L	96
97) Naphthalene	20.937	128	52564	2.12 ug/L	96
98) 1,2,3-Trichlorobenzene	21.299	180	22156	2.17 ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4004.D
Acq On : 4 Aug 2014 12:32 pm
Operator : KKW
Sample : cal 2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 04 13:06:58 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4005.D
Acq On : 4 Aug 2014 1:00 pm
Operator : KKW
Sample : cal 3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 04 15:02:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	766891	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1146312	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1158010	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.322	152	646194	50.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	10.387	113	27575	5.69	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 11.38%#			
42) d4-1,2-Dichloroethane	11.036	65	31610	6.95	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 13.90%#			
54) D8-Toluene	13.041	98	132550	6.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 13.08%#			
75) Bromofluorobenzene	15.991	95	52057	6.99	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 13.98%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.166	85	26755	3.99	ug/L	94
3) Chloromethane	4.618	50	48868	6.68	ug/L	100
4) Vinyl Chloride	4.824	62	27933	4.90	ug/L	95
5) Bromomethane	5.547	94	10169	4.30	ug/L #	64
6) Chloroethane	5.818	64	12246	4.69	ug/L	94
7) Trichlorofluoromethane	6.106	101	38566	4.71	ug/L	96
8) Diethyl ether	6.689	59	20390	4.79	ug/L	94
9) 1,1-Dichloroethene	7.059	96	22267	4.45	ug/L	83
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	24108	5.67	ug/L	98
11) Acrolein	7.626	56	10179	47.96	ug/L	85
12) Iodomethane	7.322	142	29069	4.52	ug/L	92
13) Carbon Disulfide	7.133	76	49542	3.60	ug/L	98
14) 3-chloropropene	7.839	41	46721	6.07	ug/L	93
15) Acetone	8.061	43	6972	5.87	ug/L #	63
16) Methylene Chloride	7.995	84	24291	4.14	ug/L	86
17) Methyl Acetate	8.234	43	19066	5.46	ug/L	94
18) t-1,2-Dichloroethene	8.242	96	25489	4.29	ug/L	99
19) Methyl tert-butyl ether	8.382	73	44617	3.81	ug/L	93
20) Acetonitrile	8.784	41	28082	50.21	ug/L	93
21) Diisopropyl ether	8.916	45	117794	6.71	ug/L	97
22) Chloroprene	9.121	88	20255	4.20	ug/L	85
23) 1,1-Dichloroethane	9.154	63	50984	5.05	ug/L #	95
24) Acrylonitrile	9.220	53	83201	52.36	ug/L	100
25) Vinyl Acetate	9.433	43	55535	5.31	ug/L	97
26) c-1,2-Dichloroethene	9.852	96	30372	4.46	ug/L	91
27) 2,2-Dichloropropane	10.000	77	35866	4.76	ug/L	96
28) Bromochloromethane	10.107	128	13421	4.46	ug/L	94
29) Cyclohexane	10.132	56	73753	6.25	ug/L	94
30) Chloroform	10.165	83	39232	3.92	ug/L	91
32) Dibromofluoromethane	10.387	113	27575	5.69	ug/L	90
33) 2-Butanone	10.526	72	1748	3.31	ug/L #	52
34) 1,1,1-Trichloroethane	10.452	97	37071	4.64	ug/L	98
35) 1,1-Dichloropropene	10.584	75	32652	4.27	ug/L	96
36) Propionitrile	10.896	54	35713	44.39	ug/L #	57
37) Methacrylonitrile	10.921	41	171495	52.75	ug/L	93
38) Isobutyl Alcohol	10.945	43	49201m	99.56	ug/L	
40) Carbon Tetrachloride	10.370	117	35863	5.96	ug/L	92
41) Benzene	10.888	78	112613	4.63	ug/L	96
43) d4-1,2-Dichloroethane	11.036	65	31610	6.95	ug/L #	70
44) 1,2-Dichloroethane	11.110	62	31420	5.55	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4005.D
Acq On : 4 Aug 2014 1:00 pm
Operator : KKW
Sample : cal 3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 04 15:02:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

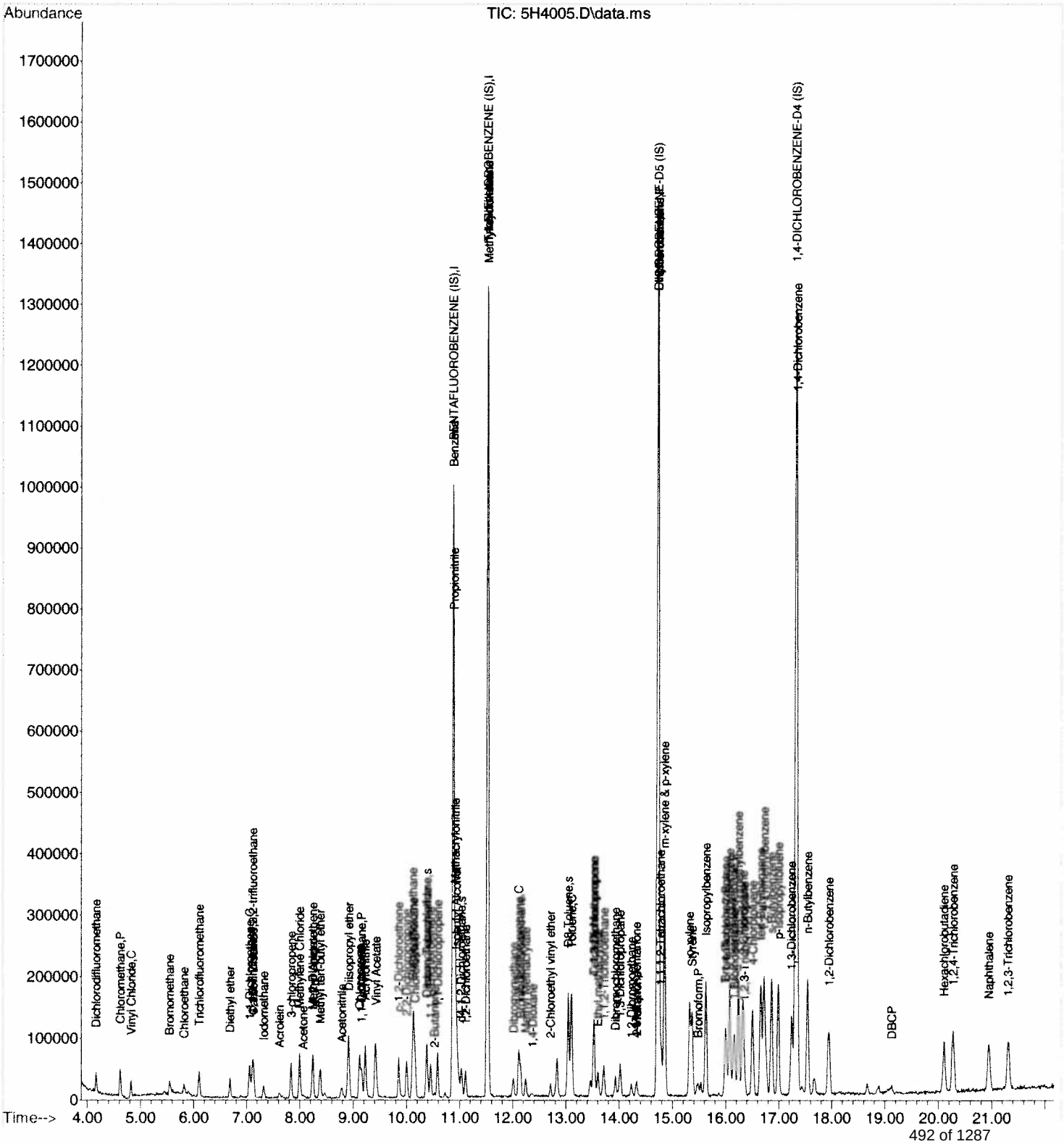
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	36151	5.96 ug/L #	55
46) Methyl cyclohexane	11.537	83	70099	6.27 ug/L	83
47) Dibromomethane	12.005	93	13735	5.34 ug/L	95
48) 1,2-Dichloropropane	12.112	63	32991	5.60 ug/L	92
49) Bromodichloromethane	12.153	83	28938	4.48 ug/L	99
50) Methyl Methacrylate	12.244	69	10399	3.71 ug/L	94
51) 1,4-Dioxane	12.367	88	5038	71.11 ug/L	94
52) 2-Chloroethyl vinyl ether	12.712	63	9046	4.42 ug/L	96
53) C-1,3-Dichloropropene	13.517	75	29382	4.29 ug/L	92
55) D8-Toluene	13.041	98	132550	6.54 ug/L #	86
56) 4-Methyl-2-pentanone	14.314	100	2003	4.93 ug/L #	53
58) Toluene	13.098	92	87254	6.26 ug/L	95
59) T-1,3-Dichloropropene	13.517	75	29382	4.11 ug/L	98
60) Tetrachloroethene	13.534	164	31768	7.58 ug/L	99
61) Ethyl methacrylate	13.599	69	20977	3.66 ug/L	98
62) 1,1,2-Trichloroethane	13.714	97	22115	5.77 ug/L	93
63) Dibromochloromethane	13.928	129	24359	5.24 ug/L	98
64) 1,3-Dichloropropane	14.018	76	37966	4.52 ug/L	96
65) 1,2-Dibromoethane	14.232	107	21423	4.87 ug/L #	93
66) 2-Hexanone	14.331	43	19921	7.42 ug/L	89
67) Ethylbenzene	14.717	106	60815	6.68 ug/L	98
68) Chlorobenzene	14.742	112	106681	6.66 ug/L	96
69) 1,1,1,2-Tetrachloroethane	14.783	131	32562	5.95 ug/L	99
70) m-xylene & p-xylene	14.848	106	153892	13.39 ug/L	97
71) o-xylene	15.317	106	76956	6.67 ug/L	93
72) Styrene	15.366	104	107849	5.11 ug/L	95
73) Bromoform	15.481	173	14791	5.92 ug/L #	59
74) Isopropylbenzene	15.629	105	188058	5.59 ug/L	98
76) Bromofluorobenzene	15.991	95	52057	6.99 ug/L	94
77) n-Propylbenzene	16.073	91	211542	5.19 ug/L	96
78) Bromobenzene	16.163	156	42040	6.65 ug/L	88
79) 1,1,2,2-Tetrachloroethane	16.138	83	24454	3.96 ug/L #	83
80) 1,2,3-Trichloropropane	16.360	61	9879	4.96 ug/L	93
81) T-1,4-Dichloro-2-Butene	16.007	53	14967	8.51 ug/L #	87
83) 1,3,5-Trimethylbenzene	16.245	105	159635	5.52 ug/L #	93
84) 2-Chlorotoluene	16.319	91	118055	4.89 ug/L	93
85) 4-Chlorotoluene	16.500	91	120914	4.93 ug/L	95
86) tert-Butylbenzene	16.656	119	199464	6.02 ug/L	94
87) 1,2,4-Trimethylbenzene	16.722	105	159471	5.20 ug/L #	88
88) p-Isopropyltoluene	16.993	119	188167	5.95 ug/L	99
89) s-Butylbenzene	16.862	105	234159	5.63 ug/L	97
90) 1,3-Dichlorobenzene	17.240	146	100737	5.57 ug/L	95
91) 1,4-Dichlorobenzene	17.346	146	100665	5.67 ug/L #	65
92) n-Butylbenzene	17.544	91	171096	5.18 ug/L	96
93) 1,2-Dichlorobenzene	17.946	146	95481	5.55 ug/L	95
94) DBCP	19.129	157	6720	5.31 ug/L	99
95) Hexachlorobutadiene	20.107	225	28104	5.17 ug/L	90
96) 1,2,4-Trichlorobenzene	20.280	180	65586	5.56 ug/L	99
97) Naphthalene	20.945	128	135265	5.20 ug/L	97
98) 1,2,3-Trichlorobenzene	21.315	180	56264	5.27 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4005.D
Acq On : 4 Aug 2014 1:00 pm
Operator : KKW
Sample : cal 3
Misc :
ALS Vial : 4 Sample Multiplier: 1

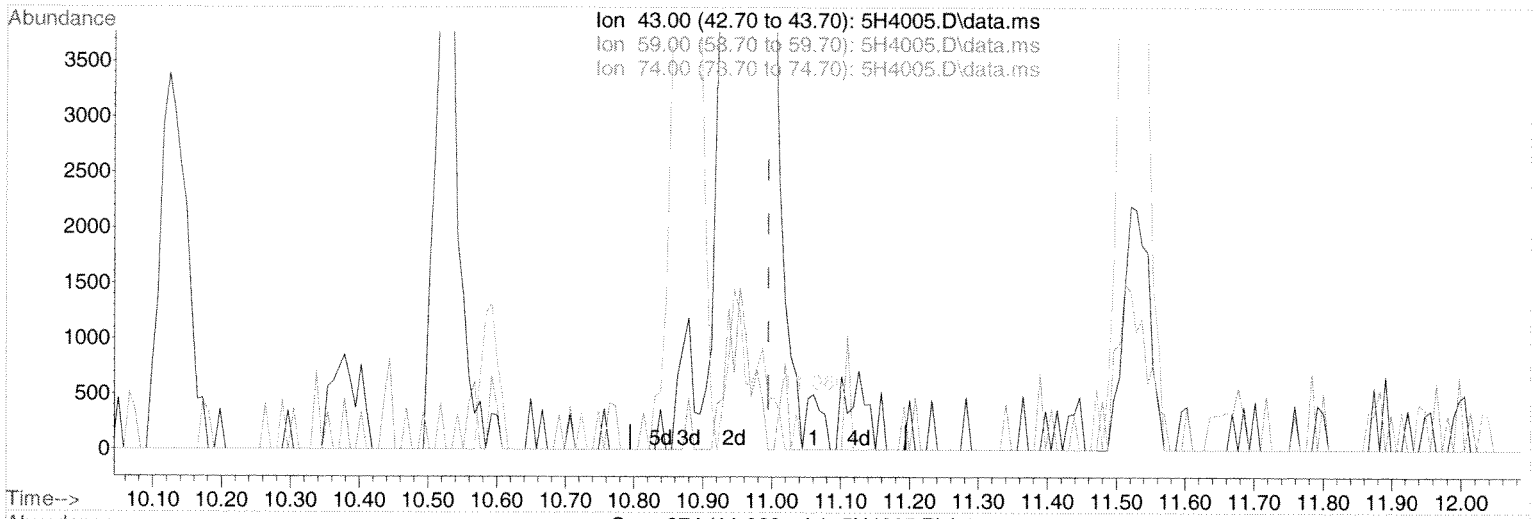
Quant Time: Aug 04 15:02:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

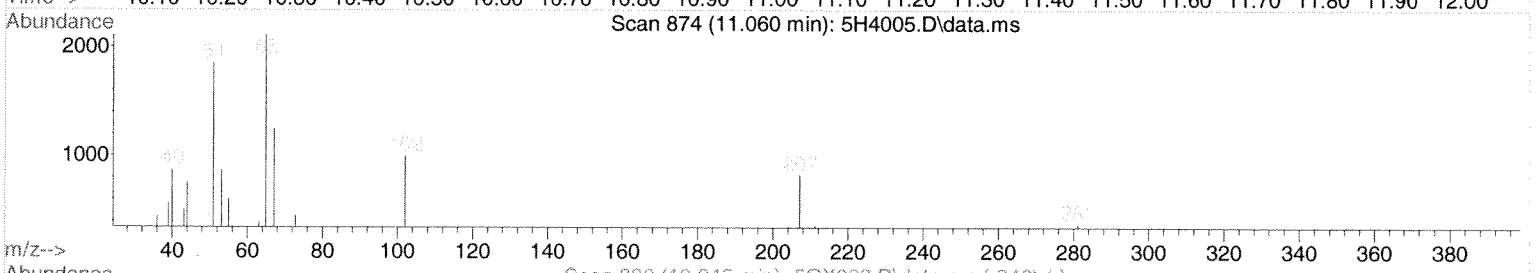


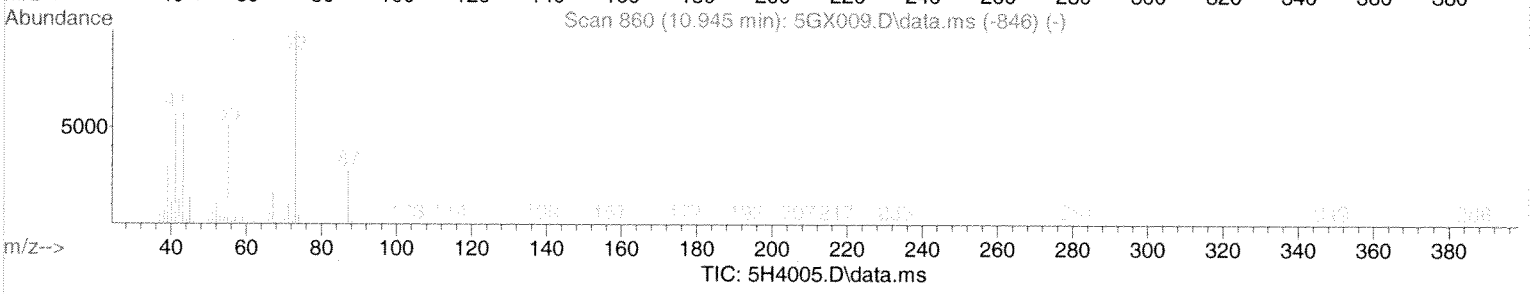
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4005.D
Acq On : 4 Aug 2014 1:00 pm
Operator : KKW
Sample : cal 3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 04 14:51:22 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration







TIC: 5H4005.D\data.ms

(38) Isobutyl Alcohol

11.060min (+0.066) 1.64ug/L

response 811

Ion	Exp%	Act%
43.00	100	100
59.00	3.70	69.79#
74.00	6.60	19.85#
0.00	0.00	0.00

Select One:

[X] Original Integration [ ] Manual Integration

Select reason for manual integration:

[X] Poor integration (peak tailing, baseline selection)

[ ] Incorrect peak selection/Peak not found

[ ] Hump integration

[ ] Baseline drop for split peaks

[ ] ISTD reintegration

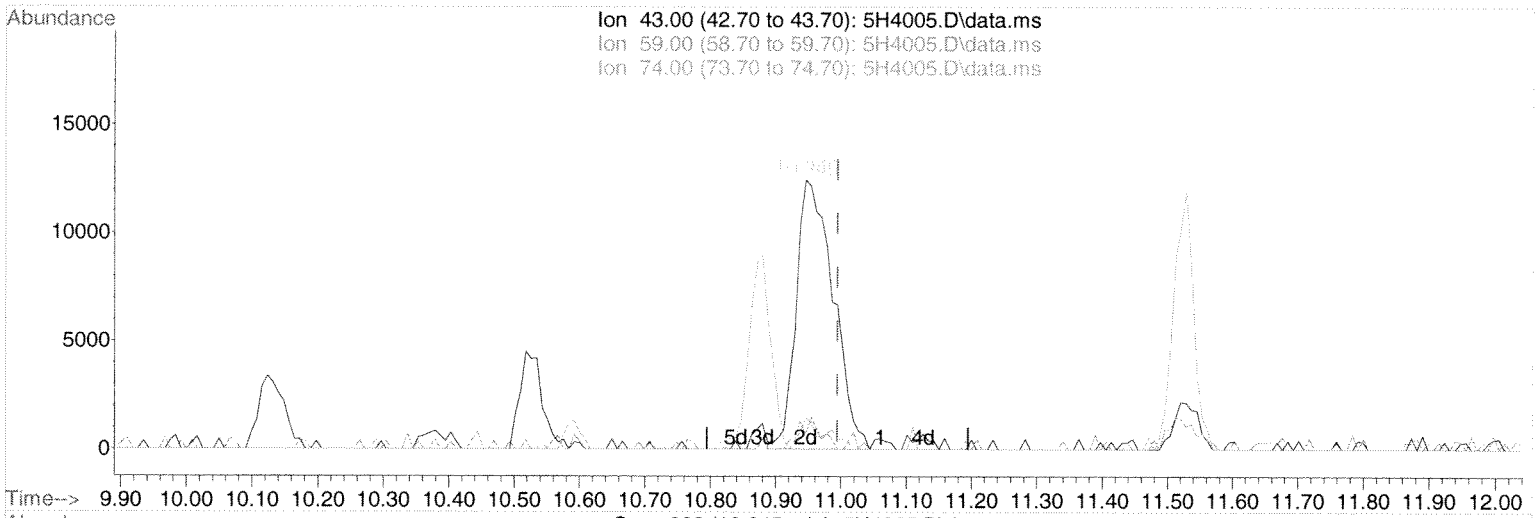
[ ] Other:

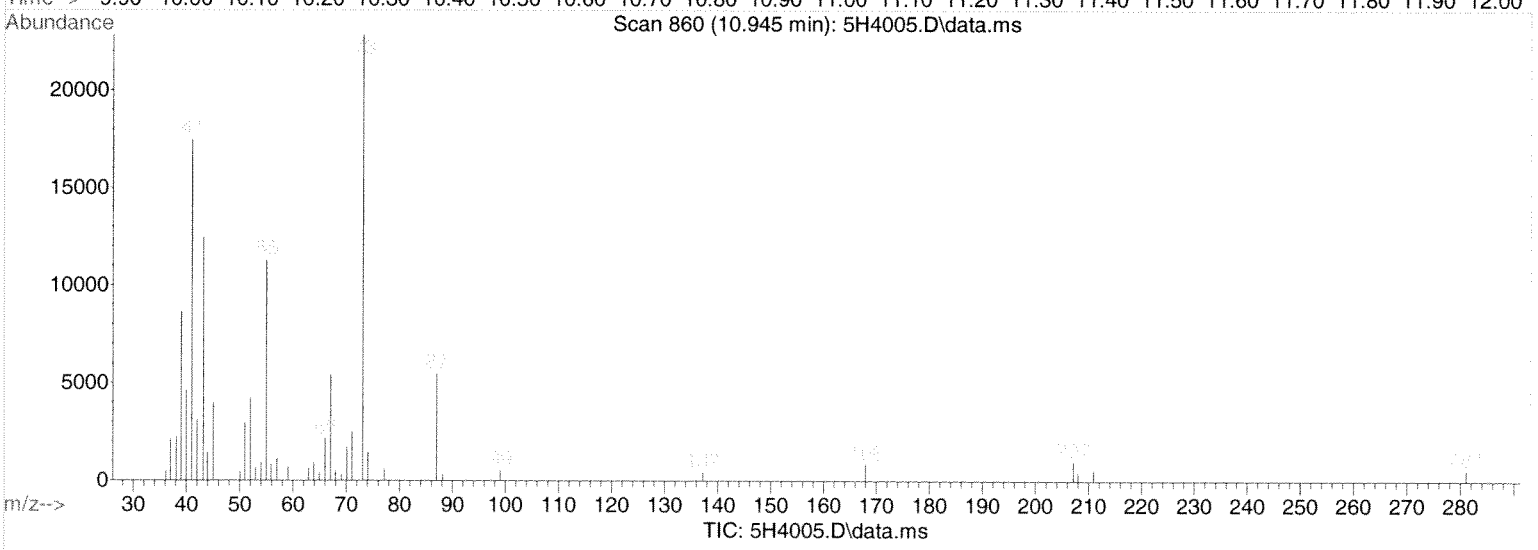
Review by/Date KKW 08/05/14

Review by/Date: [illegible] 8/5/14

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4005.D
Acq On : 4 Aug 2014 1:00 pm
Operator : KKW
Sample : cal 3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 04 15:02:21 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration





(38) Isobutyl Alcohol

10.945min (-0.049) 99.56ug/L m

response 49201

Ion	Exp%	Act%
43.00	100	100
59.00	3.70	1.15#
74.00	6.60	0.33#
0.00	0.00	0.00

Select One:
[ ] Original Integration [X] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date KKW 08/05/14
Review by/Date: 8/5/14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4006.D
Acq On : 4 Aug 2014 1:28 pm
Operator : KKW
Sample : cal 4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 04 14:52:25 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.879	168	619313	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	948384	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1027169	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	532102	50.00	ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.386	113	94116	24.05	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 48.10%#			
42) d4-1,2-Dichloroethane	11.036	65	98740	26.25	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 52.50%#			
54) D8-Toluene	13.041	98	463067	27.63	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 55.26%#			
75) Bromofluorobenzene	15.990	95	171961	26.04	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 52.08%#			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.166	85	114650	21.19	ug/L	94
3) Chloromethane	4.618	50	197360	33.43	ug/L	100
4) Vinyl Chloride	4.824	62	104170	22.63	ug/L	98
5) Bromomethane	5.555	94	45432	23.80	ug/L #	95
6) Chloroethane	5.818	64	47580	22.55	ug/L	95
7) Trichlorofluoromethane	6.105	101	157126	23.77	ug/L #	95
8) Diethyl ether	6.681	59	83482	24.28	ug/L	92
9) 1,1-Dichloroethene	7.059	96	87854	21.74	ug/L	90
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	88649	25.83	ug/L	92
11) Acrolein	7.617	56	38793	226.34	ug/L	97
12) Iodomethane	7.322	142	131468	25.31	ug/L	98
13) Carbon Disulfide	7.133	76	200865	18.07	ug/L	95
14) 3-chloropropene	7.839	41	189971	30.57	ug/L	94
15) Acetone	8.069	43	27230	28.41	ug/L	99
16) Methylene Chloride	8.004	84	94475	19.92	ug/L	81
17) Methyl Acetate	8.234	43	71858	25.47	ug/L #	95
18) t-1,2-Dichloroethene	8.242	96	110596	23.04	ug/L	90
19) Methyl tert-butyl ether	8.382	73	178875	18.93	ug/L	93
20) Acetonitrile	8.776	41	113291	250.82	ug/L	99
21) Diisopropyl ether	8.916	45	464425	32.77	ug/L	94
22) Chloroprene	9.121	88	88519	22.71	ug/L	80
23) 1,1-Dichloroethane	9.162	63	205573	25.21	ug/L	98
24) Acrylonitrile	9.228	53	333709	260.04	ug/L	98
25) Vinyl Acetate	9.442	43	250362	29.67	ug/L	100
26) c-1,2-Dichloroethene	9.861	96	119924	21.78	ug/L	91
27) 2,2-Dichloropropane	10.000	77	126866	20.85	ug/L	98
28) Bromochloromethane	10.107	128	57574	23.71	ug/L	99
29) Cyclohexane	10.132	56	301867	31.68	ug/L	94
30) Chloroform	10.165	83	158741	19.65	ug/L	94
32) Dibromofluoromethane	10.386	113	94116	24.05	ug/L	92
33) 2-Butanone	10.534	72	6210	14.57	ug/L	60
34) 1,1,1-Trichloroethane	10.452	97	145939	22.64	ug/L	99
35) 1,1-Dichloropropene	10.584	75	134958	21.86	ug/L	93
36) Propionitrile	10.896	54	149598	230.27	ug/L #	68
37) Methacrylonitrile	10.921	41	711678	271.09	ug/L	96
38) Isobutyl Alcohol	10.953	43	200341	502.01	ug/L #	97
40) Carbon Tetrachloride	10.370	117	143263	28.77	ug/L	96
41) Benzene	10.888	78	435025	21.63	ug/L	97
43) d4-1,2-Dichloroethane	11.036	65	98740	26.25	ug/L #	65
44) 1,2-Dichloroethane	11.110	62	126261	26.97	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4006.D
Acq On : 4 Aug 2014 1:28 pm
Operator : KKW
Sample : cal 4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 04 14:52:25 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

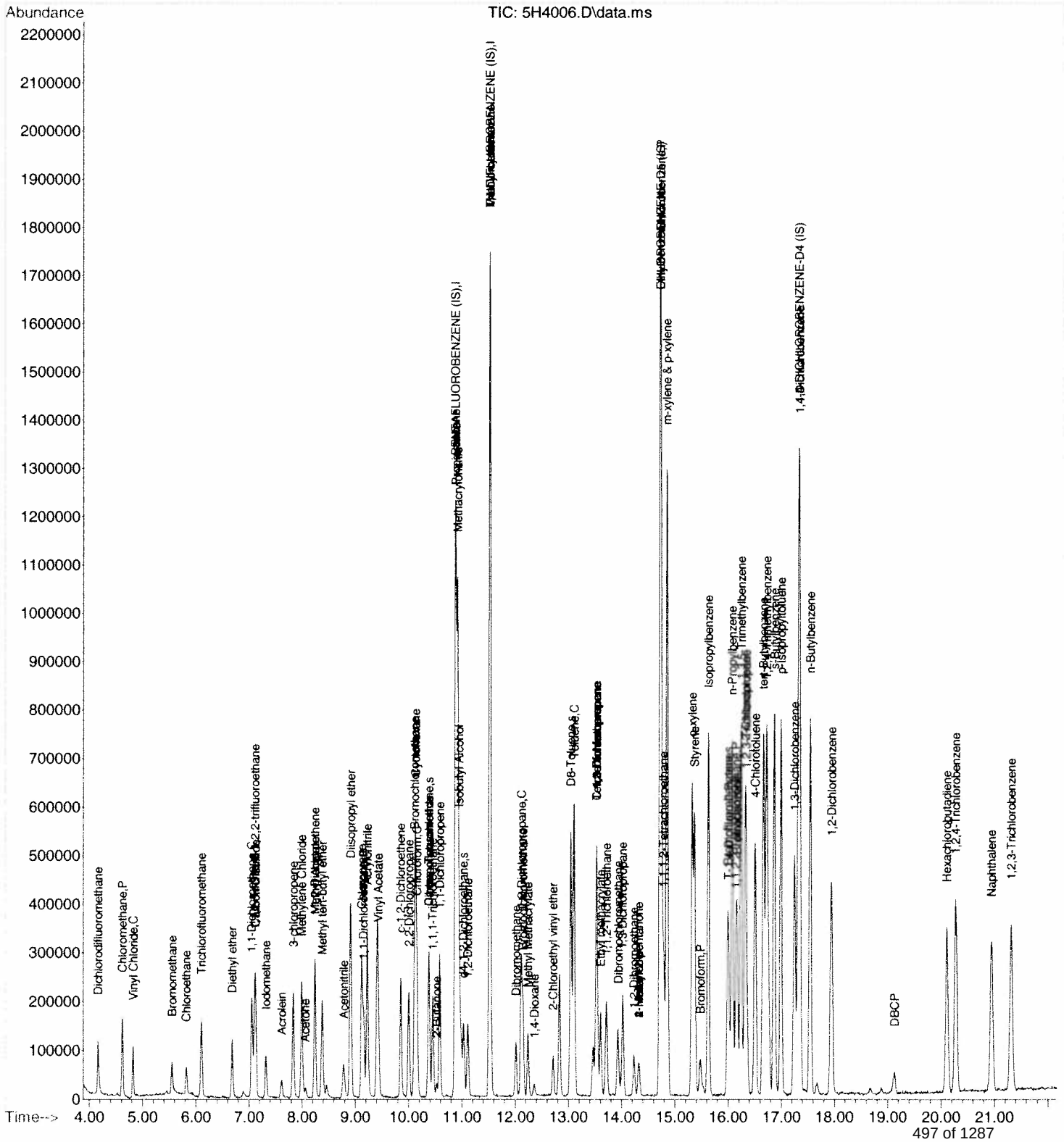
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.520	130	151343	30.14 ug/L	96
46) Methyl cyclohexane	11.537	83	241435	26.12 ug/L	93
47) Dibromomethane	12.013	93	50375	23.69 ug/L	94
48) 1,2-Dichloropropane	12.120	63	133328	27.36 ug/L	98
49) Bromodichloromethane	12.153	83	121953	22.84 ug/L	99
50) Methyl Methacrylate	12.252	69	42081	18.14 ug/L	95
51) 1,4-Dioxane	12.350	88	20503	349.81 ug/L	90
52) 2-Chloroethyl vinyl ether	12.712	63	42993	25.38 ug/L	97
53) C-1,3-Dichloropropene	13.517	75	120395	21.24 ug/L	97
55) D8-Toluene	13.041	98	463067	27.63 ug/L #	86
56) 4-Methyl-2-pentanone	14.322	100	5747	17.09 ug/L #	82
58) Toluene	13.106	92	352062	28.48 ug/L	97
59) T-1,3-Dichloropropene	13.517	75	120395	18.97 ug/L	97
60) Tetrachloroethene	13.534	164	127172	34.20 ug/L	96
61) Ethyl methacrylate	13.608	69	91401	17.96 ug/L	100
62) 1,1,2-Trichloroethane	13.714	97	87092	25.60 ug/L	92
63) Dibromochloromethane	13.936	129	108289	26.27 ug/L	97
64) 1,3-Dichloropropane	14.018	76	139563	18.75 ug/L	97
65) 1,2-Dibromoethane	14.232	107	86445	22.16 ug/L	98
66) 2-Hexanone	14.322	43	72922	29.48 ug/L	97
67) Ethylbenzene	14.717	106	250293	31.01 ug/L	95
68) Chlorobenzene	14.741	112	427326	30.10 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.791	131	132867	27.35 ug/L	97
70) m-xylene & p-xylene	14.856	106	620811	60.89 ug/L	99
71) o-xylene	15.325	106	294185	28.73 ug/L	98
72) Styrene	15.374	104	479015	25.60 ug/L	94
73) Bromoform	15.481	173	57073	25.74 ug/L #	89
74) Isopropylbenzene	15.629	105	774225	25.94 ug/L	97
76) Bromofluorobenzene	15.990	95	171961	26.04 ug/L	94
77) n-Propylbenzene	16.073	91	888572	24.59 ug/L	97
78) Bromobenzene	16.163	156	172494	30.77 ug/L	89
79) 1,1,2,2-Tetrachloroethane	16.138	83	93705	17.10 ug/L #	93
80) 1,2,3-Trichloropropane	16.344	61	40920	23.14 ug/L	98
81) T-1,4-Dichloro-2-Butene	16.015	53	53701	32.22 ug/L #	78
83) 1,3,5-Trimethylbenzene	16.245	105	673056	28.26 ug/L	97
84) 2-Chlorotoluene	16.327	91	501965	25.27 ug/L	96
85) 4-Chlorotoluene	16.500	91	501974	24.87 ug/L	94
86) tert-Butylbenzene	16.664	119	827537	30.35 ug/L	95
87) 1,2,4-Trimethylbenzene	16.722	105	695276	27.52 ug/L	92
88) p-Isopropyltoluene	16.993	119	794964	30.54 ug/L	97
89) s-Butylbenzene	16.870	105	965633	28.17 ug/L	97
90) 1,3-Dichlorobenzene	17.248	146	412316	27.70 ug/L	95
91) 1,4-Dichlorobenzene	17.346	146	408730	27.96 ug/L	100
92) n-Butylbenzene	17.543	91	721086	26.50 ug/L	96
93) 1,2-Dichlorobenzene	17.946	146	386758	27.31 ug/L	93
94) DBCP	19.129	157	26525	25.44 ug/L	97
95) Hexachlorobutadiene	20.107	225	124956	27.90 ug/L	96
96) 1,2,4-Trichlorobenzene	20.271	180	274832	28.31 ug/L	97
97) Naphthalene	20.953	128	559335	26.13 ug/L	99
98) 1,2,3-Trichlorobenzene	21.323	180	244692	27.82 ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4006.D
Acq On : 4 Aug 2014 1:28 pm
Operator : KKW
Sample : cal 4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 04 14:52:25 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4007.D
Acq On : 4 Aug 2014 1:57 pm
Operator : KKW
Sample : cal 5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 14:52:14 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.880	168	639658	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	977088	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1218049	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	568681	50.00	ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	248247	61.41	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 122.82%#			
42) d4-1,2-Dichloroethane	11.036	65	247323	63.82	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 127.64%#			
54) D8-Toluene	13.041	98	1186506	68.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 137.44%#			
75) Bromofluorobenzene	15.999	95	434709	55.52	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 111.04%			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.166	85	289010	51.73	ug/L	97
3) Chloromethane	4.618	50	508805	83.43	ug/L	97
4) Vinyl Chloride	4.824	62	289711	60.92	ug/L	97
5) Bromomethane	5.547	94	121922	61.83	ug/L #	93
6) Chloroethane	5.818	64	133002	61.04	ug/L	96
7) Trichlorofluoromethane	6.097	101	401800	58.85	ug/L	96
8) Diethyl ether	6.681	59	220665	62.13	ug/L	93
9) 1,1-Dichloroethene	7.051	96	236974	56.78	ug/L	86
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	243463	68.69	ug/L	98
11) Acrolein	7.618	56	112985	638.25	ug/L	96
12) Iodomethane	7.322	142	375349	69.97	ug/L	98
13) Carbon Disulfide	7.133	76	558354	48.63	ug/L	91
14) 3-chloropropene	7.831	41	523544	81.57	ug/L	96
15) Acetone	8.069	43	68991	69.68	ug/L	96
16) Methylene Chloride	7.996	84	235933	48.16	ug/L	84
17) Methyl Acetate	8.234	43	193496	66.41	ug/L	96
18) t-1,2-Dichloroethene	8.242	96	286177	57.73	ug/L	91
19) Methyl tert-butyl ether	8.382	73	475935	48.76	ug/L	94
20) Acetonitrile	8.784	41	299618	642.24	ug/L	98
21) Diisopropyl ether	8.908	45	1274346	87.05	ug/L	97
22) Chloroprene	9.121	88	243841	60.56	ug/L	76
23) 1,1-Dichloroethane	9.154	63	538185	63.90	ug/L	98
24) Acrylonitrile	9.228	53	921275	695.07	ug/L	98
25) Vinyl Acetate	9.433	43	690467	79.21	ug/L	98
26) c-1,2-Dichloroethene	9.853	96	317492	55.84	ug/L	94
27) 2,2-Dichloropropane	10.000	77	350366	55.75	ug/L	99
28) Bromochloromethane	10.107	128	156424	62.38	ug/L	97
29) Cyclohexane	10.132	56	814046	82.72	ug/L	97
30) Chloroform	10.165	83	439123	52.62	ug/L	96
32) Dibromofluoromethane	10.387	113	248247	61.41	ug/L	93
33) 2-Butanone	10.518	72	17432	39.61	ug/L #	56
34) 1,1,1-Trichloroethane	10.452	97	397185	59.64	ug/L	100
35) 1,1-Dichloropropene	10.584	75	362377	56.84	ug/L	93
36) Propionitrile	10.896	54	407430	607.18	ug/L #	71
37) Methacrylonitrile	10.921	41	1911450	704.94	ug/L	96
38) Isobutyl Alcohol	10.945	43	547953	1329.38	ug/L #	96
40) Carbon Tetrachloride	10.370	117	388124	75.66	ug/L	97
41) Benzene	10.888	78	1129748	54.51	ug/L	98
43) d4-1,2-Dichloroethane	11.036	65	247323	63.82	ug/L #	66
44) 1,2-Dichloroethane	11.110	62	335983	69.67	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4007.D
Acq On : 4 Aug 2014 1:57 pm
Operator : KKW
Sample : cal 5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 14:52:14 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

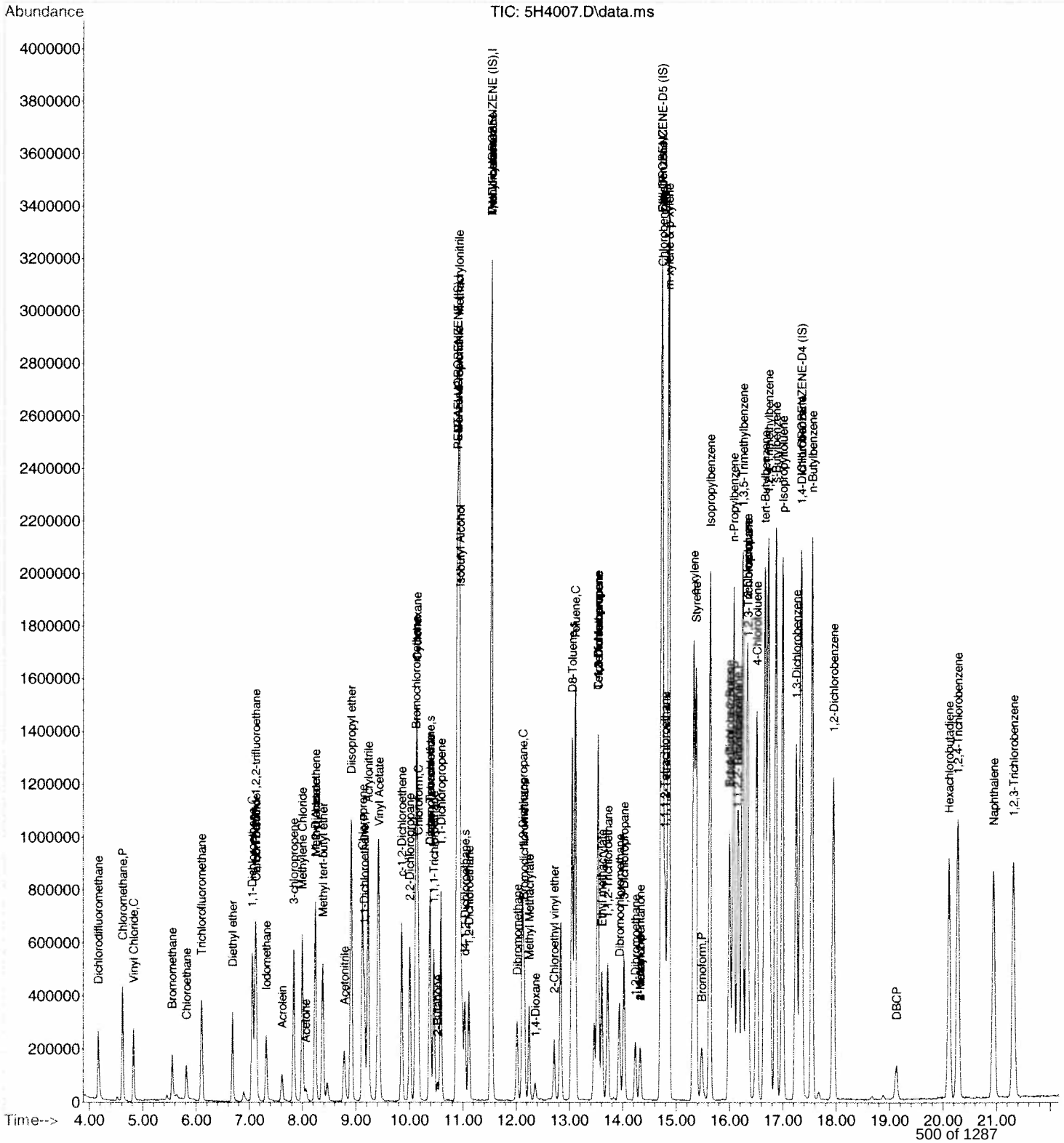
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	405286	78.34 ug/L	86
46) Methyl cyclohexane	11.537	83	635831	66.77 ug/L	93
47) Dibromomethane	12.014	93	135692	61.94 ug/L	94
48) 1,2-Dichloropropane	12.112	63	370974	73.89 ug/L	98
49) Bromodichloromethane	12.145	83	327186	59.49 ug/L	98
50) Methyl Methacrylate	12.244	69	127521	53.36 ug/L	93
51) 1,4-Dioxane	12.359	88	54551	903.39 ug/L	96
52) 2-Chloroethyl vinyl ether	12.712	63	110161	63.12 ug/L	98
53) C-1,3-Dichloropropene	13.517	75	347516	59.52 ug/L	99
55) D8-Toluene	13.041	98	1186506	68.72 ug/L #	86
56) 4-Methyl-2-pentanone	14.323	100	17678	51.04 ug/L	98
58) Toluene	13.106	92	934573	63.75 ug/L	97
59) T-1,3-Dichloropropene	13.517	75	347516	46.19 ug/L	99
60) Tetrachloroethene	13.534	164	331072	75.08 ug/L	97
61) Ethyl methacrylate	13.599	69	262942	43.57 ug/L	97
62) 1,1,2-Trichloroethane	13.714	97	234854	58.21 ug/L	95
63) Dibromochloromethane	13.936	129	292676	59.88 ug/L	98
64) 1,3-Dichloropropane	14.019	76	388216	43.97 ug/L	98
65) 1,2-Dibromoethane	14.232	107	238628	51.59 ug/L	100
66) 2-Hexanone	14.323	43	201858	64.92 ug/L	99
67) Ethylbenzene	14.717	106	664122	69.39 ug/L	97
68) Chlorobenzene	14.742	112	1160213	68.91 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.791	131	352121	61.13 ug/L	99
70) m-xylene & p-xylene	14.848	106	1686751	139.52 ug/L	97
71) o-xylene	15.325	106	829838	68.34 ug/L	98
72) Styrene	15.366	104	1326731	59.80 ug/L	95
73) Bromoform	15.473	173	167980	63.88 ug/L	97
74) Isopropylbenzene	15.629	105	2104088	59.44 ug/L	98
76) Bromofluorobenzene	15.999	95	434709	55.52 ug/L	94
77) n-Propylbenzene	16.073	91	2396462	55.93 ug/L	96
78) Bromobenzene	16.163	156	482342	72.56 ug/L	85
79) 1,1,2,2-Tetrachloroethane	16.138	83	273902	42.14 ug/L	96
80) 1,2,3-Trichloropropane	16.344	61	108617	51.80 ug/L	94
81) T-1,4-Dichloro-2-Butene	16.007	53	155427	71.20 ug/L #	83
83) 1,3,5-Trimethylbenzene	16.245	105	1851811	72.76 ug/L	96
84) 2-Chlorotoluene	16.319	91	1359507	64.03 ug/L	95
85) 4-Chlorotoluene	16.508	91	1378253	63.90 ug/L	95
86) tert-Butylbenzene	16.656	119	2259720	77.53 ug/L	96
87) 1,2,4-Trimethylbenzene	16.722	105	1918963	71.07 ug/L	97
88) p-Isopropyltoluene	16.993	119	2184400	78.52 ug/L	98
89) s-Butylbenzene	16.862	105	2658323	72.56 ug/L	98
90) 1,3-Dichlorobenzene	17.248	146	1128304	70.94 ug/L	97
91) 1,4-Dichlorobenzene	17.346	146	1099163	70.37 ug/L #	92
92) n-Butylbenzene	17.544	91	1976043	67.94 ug/L	95
93) 1,2-Dichlorobenzene	17.946	146	1059002	69.97 ug/L	95
94) DBCP	19.129	157	77950	69.94 ug/L	96
95) Hexachlorobutadiene	20.107	225	337311	70.48 ug/L	95
96) 1,2,4-Trichlorobenzene	20.280	180	744038	71.72 ug/L	97
97) Naphthalene	20.945	128	1590028	69.50 ug/L	99
98) 1,2,3-Trichlorobenzene	21.315	180	657717	69.97 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4007.D
Acq On : 4 Aug 2014 1:57 pm
Operator : KKW
Sample : cal 5
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 04 14:52:14 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4008.D
Acq On : 4 Aug 2014 2:25 pm
Operator : KKW
Sample : cal 6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 14:51:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.871	168	689574	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.521	114	1059294	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1450635	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	632440	50.00	ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	421114	96.64	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 193.28%#			
42) d4-1,2-Dichloroethane	11.028	65	412044	98.08	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 196.16%#			
54) D8-Toluene	13.041	98	1969535	105.23	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 210.46%#			
75) Bromofluorobenzene	15.999	95	743121	79.70	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 159.40%#			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.167	85	502524	83.43	ug/L	97
3) Chloromethane	4.618	50	855635	130.15	ug/L	98
4) Vinyl Chloride	4.824	62	512422	99.96	ug/L	97
5) Bromomethane	5.547	94	216785	101.98	ug/L #	96
6) Chloroethane	5.810	64	232909	99.15	ug/L	95
7) Trichlorofluoromethane	6.097	101	668967	90.89	ug/L	97
8) Diethyl ether	6.681	59	389847	101.83	ug/L	90
9) 1,1-Dichloroethene	7.051	96	405330	90.09	ug/L	87
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	410700	107.49	ug/L	99
11) Acrolein	7.618	56	199405	1044.90	ug/L	99
12) Iodomethane	7.322	142	668581	115.61	ug/L	97
13) Carbon Disulfide	7.133	76	956793	77.30	ug/L #	89
14) 3-chloropropene	7.831	41	909700	131.48	ug/L	98
15) Acetone	8.070	43	115118	107.86	ug/L	99
16) Methylene Chloride	7.996	84	401586	76.05	ug/L	83
17) Methyl Acetate	8.234	43	347970	110.79	ug/L	96
18) t-1,2-Dichloroethene	8.242	96	486495	91.03	ug/L	91
19) Methyl tert-butyl ether	8.382	73	821610	78.08	ug/L	91
20) Acetonitrile	8.784	41	539153	1072.03	ug/L	99
21) Diisopropyl ether	8.916	45	2168175	137.39	ug/L	96
22) Chloroprene	9.121	88	417431	96.16	ug/L	78
23) 1,1-Dichloroethane	9.162	63	917872	101.08	ug/L	98
24) Acrylonitrile	9.228	53	1564898	1095.19	ug/L	97
25) Vinyl Acetate	9.434	43	1211770	128.96	ug/L	98
26) c-1,2-Dichloroethene	9.853	96	542604	88.52	ug/L	94
27) 2,2-Dichloropropane	10.001	77	586155	86.51	ug/L	98
28) Bromochloromethane	10.107	128	265589	98.24	ug/L	99
29) Cyclohexane	10.132	56	1387774	130.81	ug/L	97
30) Chloroform	10.157	83	736057	81.81	ug/L	95
32) Dibromofluoromethane	10.387	113	421114	96.64	ug/L	93
33) 2-Butanone	10.518	72	30296	63.86	ug/L #	57
34) 1,1,1-Trichloroethane	10.452	97	674383	93.94	ug/L	98
35) 1,1-Dichloropropene	10.584	75	618881	90.04	ug/L	92
36) Propionitrile	10.896	54	700315	968.12	ug/L #	74
37) Methacrylonitrile	10.921	41	3252319	1112.62	ug/L	96
38) Isobutyl Alcohol	10.945	43	961443	2163.70	ug/L #	97
40) Carbon Tetrachloride	10.370	117	649035	116.71	ug/L	96
41) Benzene	10.888	78	1936668	86.20	ug/L	99
43) d4-1,2-Dichloroethane	11.028	65	412044	98.08	ug/L #	66
44) 1,2-Dichloroethane	11.110	62	567859	108.61	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4008.D
Acq On : 4 Aug 2014 2:25 pm
Operator : KKW
Sample : cal 6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 14:51:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

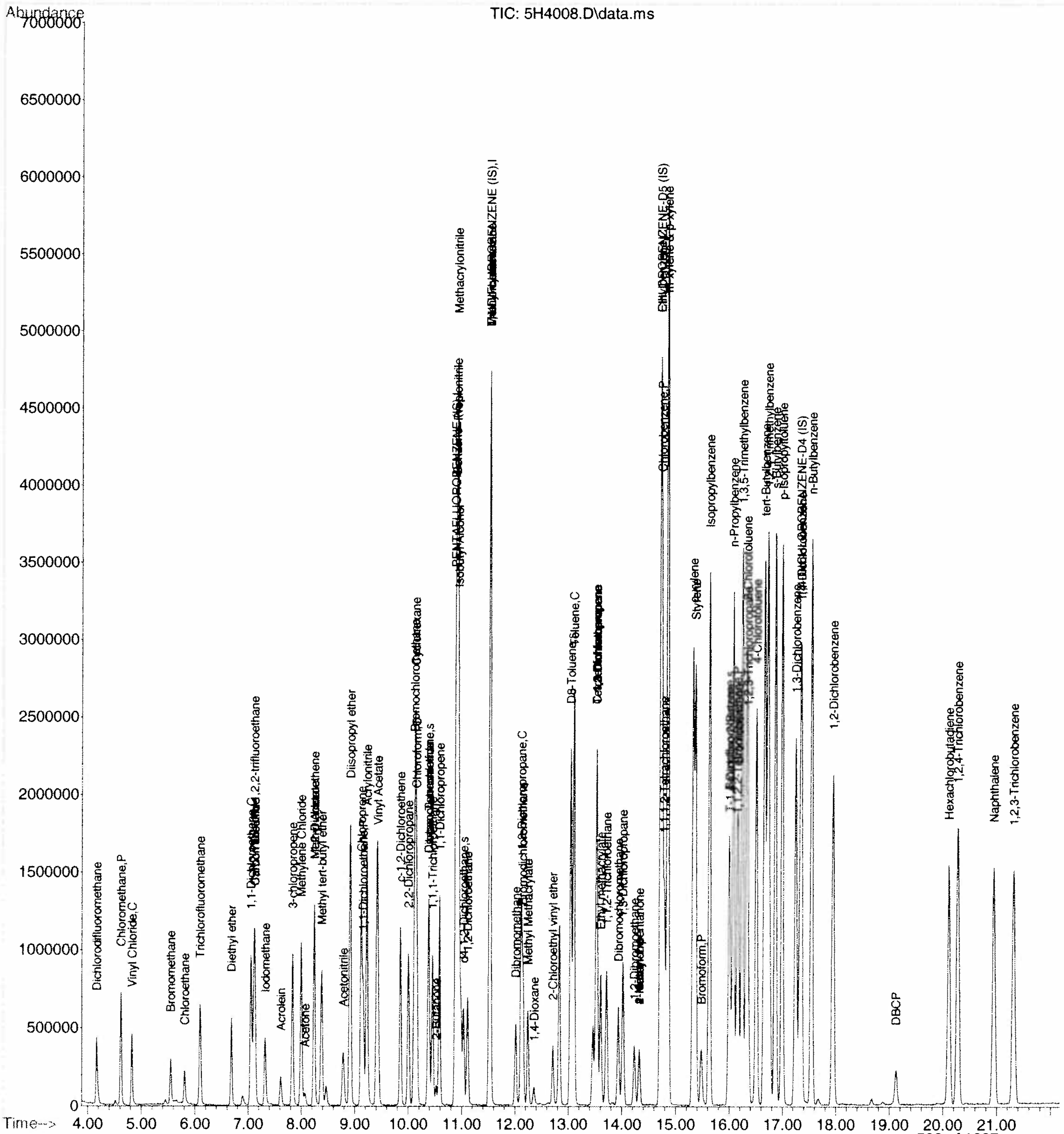
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	671259	119.69 ug/L	86
46) Methyl cyclohexane	11.537	83	1050687	101.77 ug/L	95
47) Dibromomethane	12.014	93	235713	99.24 ug/L	94
48) 1,2-Dichloropropane	12.112	63	626350	115.08 ug/L	99
49) Bromodichloromethane	12.145	83	559811	93.89 ug/L	98
50) Methyl Methacrylate	12.244	69	216765	83.66 ug/L	95
51) 1,4-Dioxane	12.351	88	93298	1425.15 ug/L	99
52) 2-Chloroethyl vinyl ether	12.712	63	187984	99.35 ug/L	96
53) C-1,3-Dichloropropene	13.517	75	598012	94.47 ug/L	97
55) D8-Toluene	13.041	98	1969535	105.23 ug/L #	86
56) 4-Methyl-2-pentanone	14.323	100	33416	88.99 ug/L	85
58) Toluene	13.098	92	1589275	91.03 ug/L	96
59) T-1,3-Dichloropropene	13.517	75	598012	66.74 ug/L	99
60) Tetrachloroethene	13.534	164	551739	105.07 ug/L	97
61) Ethyl methacrylate	13.608	69	465931	64.83 ug/L	96
62) 1,1,2-Trichloroethane	13.715	97	395073	82.22 ug/L	95
63) Dibromochloromethane	13.936	129	503027	86.41 ug/L	96
64) 1,3-Dichloropropane	14.019	76	664349	63.18 ug/L	97
65) 1,2-Dibromoethane	14.232	107	400795	72.75 ug/L	98
66) 2-Hexanone	14.323	43	346062	89.88 ug/L	99
67) Ethylbenzene	14.717	106	1117146	98.00 ug/L	98
68) Chlorobenzene	14.750	112	1925443	96.03 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.791	131	605006	88.20 ug/L	98
70) m-xylene & p-xylene	14.848	106	2829433	196.52 ug/L	98
71) o-xylene	15.325	106	1413339	97.73 ug/L	98
72) Styrene	15.366	104	2297203	86.94 ug/L	94
73) Bromoform	15.481	173	297743	95.07 ug/L	97
74) Isopropylbenzene	15.629	105	3626925	86.04 ug/L	97
76) Bromofluorobenzene	15.999	95	743121	79.70 ug/L	95
77) n-Propylbenzene	16.073	91	4111514	80.57 ug/L	97
78) Bromobenzene	16.163	156	799194	100.95 ug/L	91
79) 1,1,2,2-Tetrachloroethane	16.139	83	473441	61.17 ug/L #	94
80) 1,2,3-Trichloropropane	16.352	61	190994	76.48 ug/L	94
81) T-1,4-Dichloro-2-Butene	16.015	53	275237	99.14 ug/L	96
83) 1,3,5-Trimethylbenzene	16.245	105	3204663	113.22 ug/L	97
84) 2-Chlorotoluene	16.319	91	2349983	99.52 ug/L	96
85) 4-Chlorotoluene	16.508	91	2367736	98.72 ug/L	95
86) tert-Butylbenzene	16.664	119	3937822	121.49 ug/L	95
87) 1,2,4-Trimethylbenzene	16.722	105	3287960	109.50 ug/L	97
88) p-Isopropyltoluene	16.993	119	3778528	122.12 ug/L	98
89) s-Butylbenzene	16.862	105	4588362	112.62 ug/L	98
90) 1,3-Dichlorobenzene	17.248	146	1985629	112.25 ug/L	96
91) 1,4-Dichlorobenzene	17.355	146	1895830	109.13 ug/L #	91
92) n-Butylbenzene	17.544	91	3399627	105.11 ug/L	95
93) 1,2-Dichlorobenzene	17.946	146	1823775	108.34 ug/L	96
94) DBCP	19.130	157	129644	104.60 ug/L	95
95) Hexachlorobutadiene	20.107	225	570077	107.11 ug/L	95
96) 1,2,4-Trichlorobenzene	20.280	180	1249214	108.27 ug/L	99
97) Naphthalene	20.945	128	2709869	106.51 ug/L	99
98) 1,2,3-Trichlorobenzene	21.315	180	1119298	107.08 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4008.D
Acq On : 4 Aug 2014 2:25 pm
Operator : KKW
Sample : cal 6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 04 14:51:54 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



503 of 1287

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4009.D
Acq On : 4 Aug 2014 2:53 pm
Operator : KKW
Sample : cal 7
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 15:30:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.880	168	726641	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	1096994	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1629803	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	664743	50.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	10.387	113	559674	121.88	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 243.76%#			
42) d4-1,2-Dichloroethane	11.036	65	544655	125.19	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 250.38%#			
54) D8-Toluene	13.041	98	2579955	133.10	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 266.20%#			
75) Bromofluorobenzene	15.999	95	990816	94.58	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 189.16%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.167	85	659002	103.83	ug/L	97
3) Chloromethane	4.618	50	1140514	164.64	ug/L	97
4) Vinyl Chloride	4.824	62	695184	128.69	ug/L	95
5) Bromomethane	5.547	94	287477	128.34	ug/L #	94
6) Chloroethane	5.802	64	312304	126.17	ug/L	95
7) Trichlorofluoromethane	6.097	101	882891	113.83	ug/L	96
8) Diethyl ether	6.681	59	545424	135.20	ug/L	90
9) 1,1-Dichloroethene	7.051	96	560652	118.26	ug/L	84
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	537423	133.48	ug/L	96
11) Acrolein	7.618	56	279423	1389.52	ug/L	100
12) Iodomethane	7.322	142	910793	149.45	ug/L	97
13) Carbon Disulfide	7.133	76	1327543	101.79	ug/L #	87
14) 3-chloropropene	7.831	41	1234377	169.30	ug/L #	97
15) Acetone	8.070	43	158490	140.92	ug/L	97
16) Methylene Chloride	7.996	84	560172	100.67	ug/L	79
17) Methyl Acetate	8.234	43	469400	141.83	ug/L #	95
18) t-1,2-Dichloroethene	8.242	96	649612	115.35	ug/L	93
19) Methyl tert-butyl ether	8.382	73	1124105	101.38	ug/L	92
20) Acetonitrile	8.784	41	734898	1386.70	ug/L	98
21) Diisopropyl ether	8.908	45	2940853	176.84	ug/L	95
22) Chloroprene	9.121	88	563876	123.27	ug/L	75
23) 1,1-Dichloroethane	9.162	63	1261177	131.81	ug/L	98
24) Acrylonitrile	9.228	53	2172134	1442.62	ug/L	100
25) Vinyl Acetate	9.434	43	1621892	163.80	ug/L	98
26) c-1,2-Dichloroethene	9.853	96	742003	114.88	ug/L	92
27) 2,2-Dichloropropane	10.001	77	779590	109.20	ug/L	98
28) Bromochloromethane	10.107	128	356264	125.06	ug/L	99
29) Cyclohexane	10.132	56	1861449	166.51	ug/L	96
30) Chloroform	10.165	83	973462	102.68	ug/L	95
32) Dibromofluoromethane	10.387	113	559674	121.88	ug/L	93
33) 2-Butanone	10.526	72	41727	83.46	ug/L #	55
34) 1,1,1-Trichloroethane	10.452	97	885519	117.06	ug/L	98
35) 1,1-Dichloropropene	10.584	75	814871	112.51	ug/L	93
36) Propionitrile	10.896	54	956474	1254.78	ug/L #	77
37) Methacrylonitrile	10.921	41	4377869	1421.27	ug/L	96
38) Isobutyl Alcohol	10.945	43	1333530	2847.98	ug/L #	97
40) Carbon Tetrachloride	10.378	117	858162	149.01	ug/L	97
41) Benzene	10.888	78	2583297	111.03	ug/L	99
43) d4-1,2-Dichloroethane	11.036	65	544655	125.19	ug/L #	66
44) 1,2-Dichloroethane	11.110	62	760633	140.48	ug/L	98

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4009.D
Acq On : 4 Aug 2014 2:53 pm
Operator : KKW
Sample : cal 7
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 15:30:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

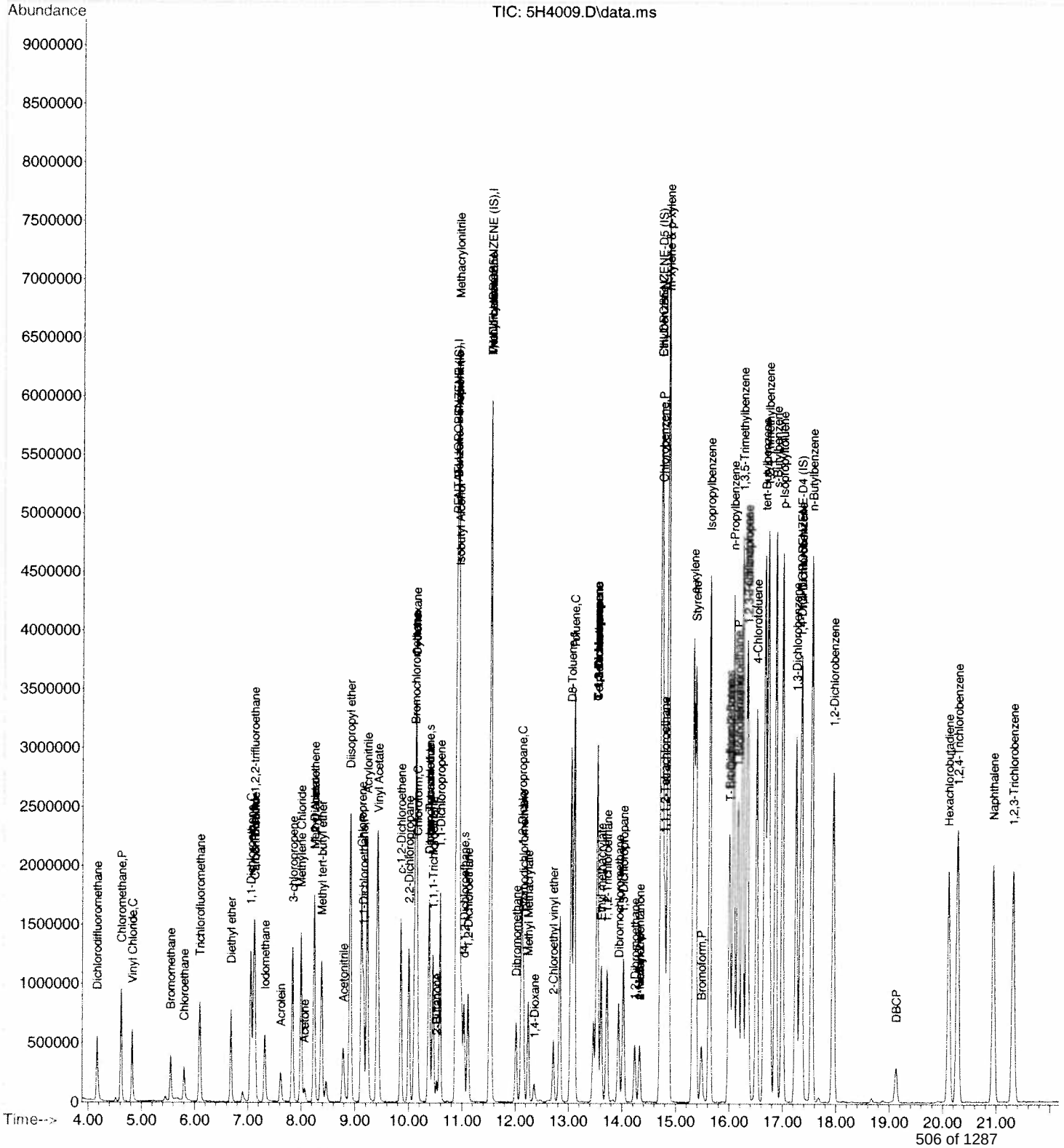
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	880123	151.53 ug/L	86
46) Methyl cyclohexane	11.537	83	1384814	129.52 ug/L	95
47) Dibromomethane	12.014	93	305310	124.12 ug/L	95
48) 1,2-Dichloropropane	12.112	63	839095	148.87 ug/L	99
49) Bromodichloromethane	12.153	83	733561	118.80 ug/L	98
50) Methyl Methacrylate	12.244	69	297897	111.02 ug/L	90
51) 1,4-Dioxane	12.351	88	132766	1958.33 ug/L	99
52) 2-Chloroethyl vinyl ether	12.712	63	264717	135.10 ug/L	97
53) C-1,3-Dichloropropene	13.517	75	802357	122.40 ug/L	98
55) D8-Toluene	13.041	98	2579955	133.10 ug/L #	86
56) 4-Methyl-2-pentanone	14.323	100	43756	112.52 ug/L	91
58) Toluene	13.107	92	2070306	105.55 ug/L	96
59) T-1,3-Dichloropropene	13.517	75	802357	79.70 ug/L	98
60) Tetrachloroethene	13.534	164	721294	122.26 ug/L	96
61) Ethyl methacrylate	13.608	69	634938	78.63 ug/L	98
62) 1,1,2-Trichloroethane	13.715	97	526323	97.49 ug/L	94
63) Dibromochloromethane	13.936	129	665359	101.73 ug/L	98
64) 1,3-Dichloropropane	14.019	76	874153	74.00 ug/L	98
65) 1,2-Dibromoethane	14.232	107	533112	86.13 ug/L	98
66) 2-Hexanone	14.323	43	480753	108.11 ug/L	98
67) Ethylbenzene	14.717	106	1485360	115.98 ug/L	97
68) Chlorobenzene	14.750	112	2502525	111.09 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.791	131	799573	103.74 ug/L	98
70) m-xylene & p-xylene	14.857	106	3717124	229.79 ug/L	98
71) o-xylene	15.325	106	1852796	114.04 ug/L	99
72) Styrene	15.366	104	2995722	100.91 ug/L	95
73) Bromoform	15.481	173	385092	109.44 ug/L	99
74) Isopropylbenzene	15.629	105	4744008	100.17 ug/L	97
76) Bromofluorobenzene	15.999	95	990816	94.58 ug/L	96
77) n-Propylbenzene	16.073	91	5396372	94.12 ug/L	97
78) Bromobenzene	16.163	156	1074523	120.81 ug/L	89
79) 1,1,2,2-Tetrachloroethane	16.147	83	633034	72.79 ug/L #	95
80) 1,2,3-Trichloropropane	16.344	61	251923	89.79 ug/L	93
81) T-1,4-Dichloro-2-Butene	16.015	53	361968	112.60 ug/L	95
83) 1,3,5-Trimethylbenzene	16.245	105	4211274	141.55 ug/L	97
84) 2-Chlorotoluene	16.328	91	3099287	124.88 ug/L	97
85) 4-Chlorotoluene	16.508	91	3126785	124.03 ug/L	95
86) tert-Butylbenzene	16.664	119	5219673	153.21 ug/L	95
87) 1,2,4-Trimethylbenzene	16.722	105	4342824	137.60 ug/L	97
88) p-Isopropyltoluene	16.993	119	4939813	151.90 ug/L	98
89) s-Butylbenzene	16.870	105	5998073	140.07 ug/L	97
90) 1,3-Dichlorobenzene	17.248	146	2584730	139.02 ug/L	97
91) 1,4-Dichlorobenzene	17.355	146	2513141	137.64 ug/L #	90
92) n-Butylbenzene	17.544	91	4427765	130.24 ug/L	96
93) 1,2-Dichlorobenzene	17.946	146	2417883	136.66 ug/L	96
94) DBCP	19.129	157	172940	132.75 ug/L	95
95) Hexachlorobutadiene	20.107	225	738856	132.07 ug/L	95
96) 1,2,4-Trichlorobenzene	20.280	180	1607084	132.52 ug/L	98
97) Naphthalene	20.945	128	3549712	132.74 ug/L	99
98) 1,2,3-Trichlorobenzene	21.323	180	1459372	132.83 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4009.D
Acq On : 4 Aug 2014 2:53 pm
Operator : KKW
Sample : cal 7
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 04 15:30:57 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4010.D
Acq On : 4 Aug 2014 3:22 pm
Operator : KKW
Sample : cal 8
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 04 15:44:29 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.880	168	782573	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	1218875	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1368434	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	799158	50.00	ug/L	0.00

System Monitoring Compounds

31) Dibromofluoromethane	10.387	113	1190235	240.68	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 481.36%#			
42) d4-1,2-Dichloroethane	11.036	65	1161641	240.30	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 480.60%#			
54) D8-Toluene	13.041	98	5503610	255.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 511.08%#			
75) Bromofluorobenzene	15.990	95	2299535	261.43	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 522.86%#			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.166	85	1394560	204.02	ug/L	98
3) Chloromethane	4.618	50	2450123	328.40	ug/L	98
4) Vinyl Chloride	4.824	62	1602774	275.50	ug/L	95
5) Bromomethane	5.547	94	611008	253.27	ug/L #	92
6) Chloroethane	5.785	64	609391	228.59	ug/L	93
7) Trichlorofluoromethane	6.081	101	1937587	231.96	ug/L	96
8) Diethyl ether	6.681	59	1178161	271.16	ug/L	89
9) 1,1-Dichloroethene	7.050	96	1254962	245.79	ug/L	82
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	1150098	265.23	ug/L	95
11) Acrolein	7.617	56	655457	3026.50	ug/L	99
12) Iodomethane	7.313	142	1983654	302.24	ug/L	96
13) Carbon Disulfide	7.124	76	2940067	209.31	ug/L #	86
14) 3-chloropropene	7.831	41	2699496	343.78	ug/L #	95
15) Acetone	8.069	43	332047	274.13	ug/L	94
16) Methylene Chloride	7.995	84	1239526	206.83	ug/L	73
17) Methyl Acetate	8.234	43	1021514	286.58	ug/L #	96
18) t-1,2-Dichloroethene	8.242	96	1424623	234.89	ug/L	91
19) Methyl tert-butyl ether	8.382	73	2464677	206.39	ug/L	91
20) Acetonitrile	8.784	41	1692884	2966.05	ug/L	98
21) Diisopropyl ether	8.916	45	6257306	349.38	ug/L #	94
22) Chloroprene	9.121	88	1227145	249.10	ug/L	72
23) 1,1-Dichloroethane	9.154	63	2662449	258.37	ug/L	98
24) Acrylonitrile	9.228	53	4699428	2898.05	ug/L	99
25) Vinyl Acetate	9.433	43	3512034	329.34	ug/L	98
26) c-1,2-Dichloroethene	9.852	96	1594925	229.28	ug/L	92
27) 2,2-Dichloropropane	10.000	77	1680108	218.51	ug/L	98
28) Bromochloromethane	10.107	128	770556	251.16	ug/L	98
29) Cyclohexane	10.132	56	3922448	325.80	ug/L	96
30) Chloroform	10.165	83	2119463	207.59	ug/L	94
32) Dibromofluoromethane	10.387	113	1190235	240.68	ug/L	92
33) 2-Butanone	10.526	72	91547	170.03	ug/L	64
34) 1,1,1-Trichloroethane	10.452	97	1916345	235.22	ug/L	99
35) 1,1-Dichloropropene	10.584	75	1754297	224.90	ug/L	91
36) Propionitrile	10.904	54	2082030	2536.17	ug/L #	80
37) Methacrylonitrile	10.921	41	9365875	2823.31	ug/L	96
38) Isobutyl Alcohol	10.995	43	3134751	6216.30	ug/L	97
40) Carbon Tetrachloride	10.370	117	1859702	290.63	ug/L	98
41) Benzene	10.888	78	5418946	209.61	ug/L	97
43) d4-1,2-Dichloroethane	11.036	65	1161641	240.30	ug/L #	66
44) 1,2-Dichloroethane	11.110	62	1629020	270.78	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4010.D
Acq On : 4 Aug 2014 3:22 pm
Operator : KKW
Sample : cal 8
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 04 15:44:29 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration

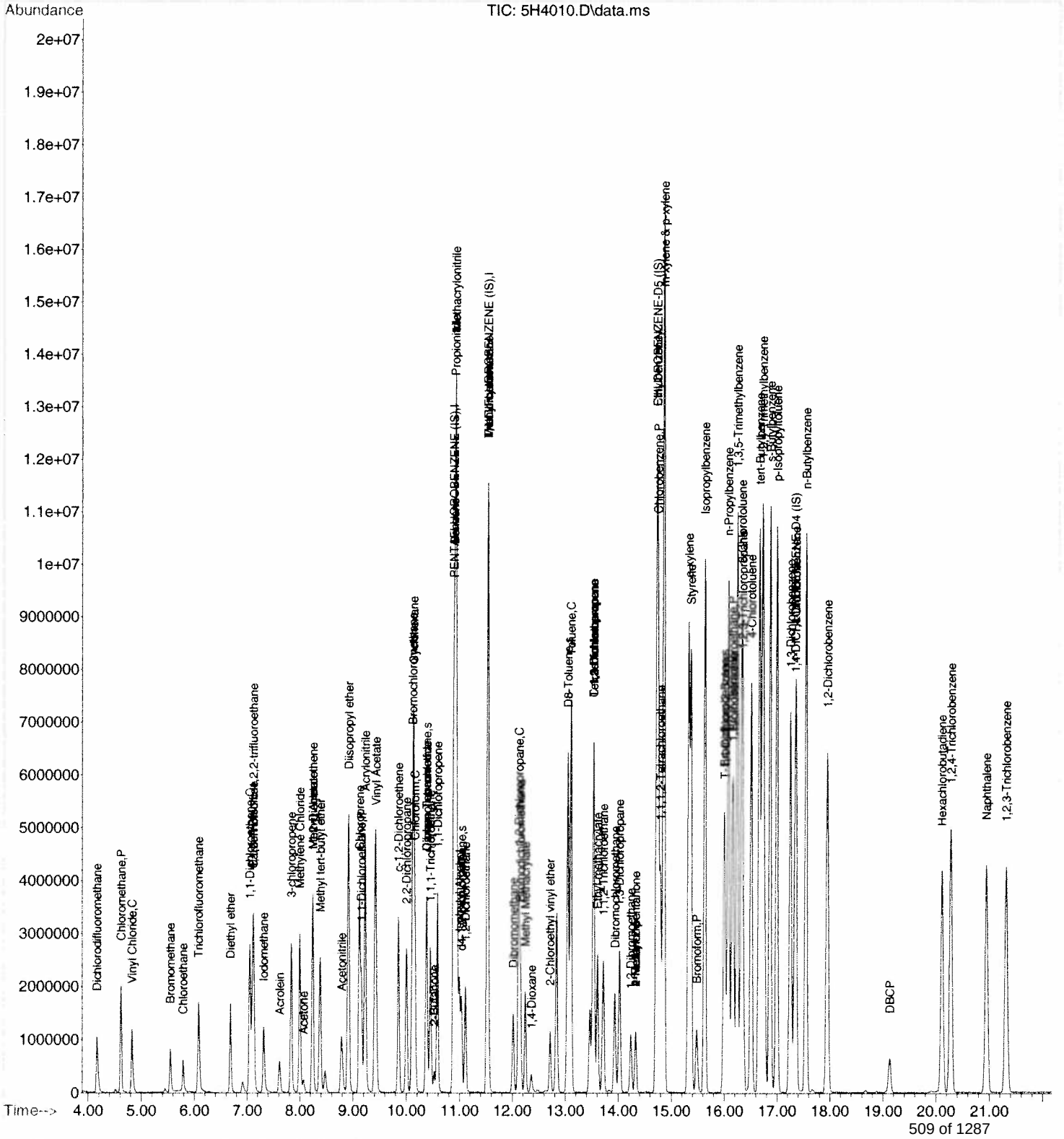
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.520	130	1869882	289.75 ug/L	86
46) Methyl cyclohexane	11.537	83	2955174	248.75 ug/L	94
47) Dibromomethane	12.013	93	673562	246.45 ug/L	95
48) 1,2-Dichloropropane	12.112	63	1820979	290.77 ug/L	99
49) Bromodichloromethane	12.153	83	1614262	235.28 ug/L	97
50) Methyl Methacrylate	12.244	69	666067	223.41 ug/L	91
51) 1,4-Dioxane	12.359	88	286798	3807.34 ug/L	98
52) 2-Chloroethyl vinyl ether	12.712	63	590475	271.22 ug/L	97
53) C-1,3-Dichloropropene	13.517	75	1757664	241.32 ug/L	98
55) D8-Toluene	13.041	98	5503189	255.52 ug/L #	87
56) 4-Methyl-2-pentanone	14.322	100	110611	256.00 ug/L	83
58) Toluene	13.106	92	4455391	270.54 ug/L	97
59) T-1,3-Dichloropropene	13.517	75	1757664	207.93 ug/L	98
60) Tetrachloroethene	13.534	164	1559004	314.71 ug/L	96
61) Ethyl methacrylate	13.608	69	1468284	216.56 ug/L	97
62) 1,1,2-Trichloroethane	13.714	97	1158791	255.64 ug/L	96
63) Dibromochloromethane	13.936	129	1481208	269.73 ug/L	98
64) 1,3-Dichloropropane	14.027	76	1931700	194.76 ug/L	97
65) 1,2-Dibromoethane	14.232	107	1181332	227.31 ug/L	99
66) 2-Hexanone	14.322	43	1153737	253.83 ug/L	98
67) Ethylbenzene	14.717	106	3238012	301.12 ug/L	98
68) Chlorobenzene	14.750	112	5555178	293.69 ug/L	99
69) 1,1,1,2-Tetrachloroethane	14.791	131	1824296	281.91 ug/L	98
70) m-xylene & p-xylene	14.857	106	8145835	599.75 ug/L	98
71) o-xylene	15.325	106	4161763	305.08 ug/L	99
72) Styrene	15.374	104	6855025	275.01 ug/L	96
73) Bromoform	15.481	173	952159	322.28 ug/L	95
74) Isopropylbenzene	15.629	105	10686992	268.74 ug/L	97
76) Bromofluorobenzene	15.990	95	2299535	261.43 ug/L	95
77) n-Propylbenzene	16.073	91	12169736	252.80 ug/L	96
78) Bromobenzene	16.163	156	2462963	329.79 ug/L	91
79) 1,1,2,2-Tetrachloroethane	16.147	83	1556572	213.18 ug/L	95
80) 1,2,3-Trichloropropane	16.352	61	597941	253.82 ug/L	92
81) T-1,4-Dichloro-2-Butene	16.015	53	874785	249.07 ug/L	96
83) 1,3,5-Trimethylbenzene	16.245	105	9694798	271.05 ug/L	97
84) 2-Chlorotoluene	16.327	91	7185026	240.81 ug/L	96
85) 4-Chlorotoluene	16.508	91	7255201	239.38 ug/L	95
86) tert-Butylbenzene	16.664	119	11976443	292.41 ug/L	96
87) 1,2,4-Trimethylbenzene	16.722	105	9944921	262.10 ug/L	97
88) p-Isopropyltoluene	16.993	119	11236875	287.41 ug/L	99
89) s-Butylbenzene	16.870	105	13590439	263.98 ug/L	97
90) 1,3-Dichlorobenzene	17.248	146	5932175	265.40 ug/L	98
91) 1,4-Dichlorobenzene	17.354	146	5789970	263.76 ug/L #	89
92) n-Butylbenzene	17.543	91	9880909	241.76 ug/L	95
93) 1,2-Dichlorobenzene	17.946	146	5555351	261.18 ug/L	96
94) DBCP	19.129	157	399029	254.79 ug/L	99
95) Hexachlorobutadiene	20.115	225	1575501	234.26 ug/L	95
96) 1,2,4-Trichlorobenzene	20.280	180	3518255	241.32 ug/L	99
97) Naphthalene	20.945	128	7693874	239.32 ug/L	99
98) 1,2,3-Trichlorobenzene	21.315	180	3119042	236.13 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4010.D
Acq On : 4 Aug 2014 3:22 pm
Operator : KKW
Sample : cal 8
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 04 15:44:29 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Fri Aug 01 09:42:53 2014
QLast Update : Fri Aug 01 09:42:53 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4012.D
Acq On : 4 Aug 2014 4:18 pm
Operator : KKW
Sample : ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 09:05:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 09:03:56 2014
QLast Update : Tue Aug 05 09:04:36 2014
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) PENTAFLUOROBENZENE (IS)	10.880	168	735155	50.00	ug/L	0.00
39) 1,4-DIFLUOROBENZENE (IS)	11.529	114	1138810	50.00	ug/L	0.00
57) CHLOROBENZENE-D5 (IS)	14.725	117	1325755	50.00	ug/L	0.00
82) 1,4-DICHLOROBENZENE-D4...	17.330	152	623907	50.00	ug/L	0.00

System Monitoring Compounds						
31) Dibromofluoromethane	10.387	113	279730	50.19	ug/L	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 100.38%			
42) d4-1,2-Dichloroethane	11.036	65	261223	45.31	ug/L	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 90.62%			
54) D8-Toluene	13.041	98	1354606	50.56	ug/L	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 101.12%			
75) Bromofluorobenzene	15.999	95	489954	56.41	ug/L	0.00
Spiked Amount 50.000	Range 75 - 120		Recovery = 112.82%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.166	85	234261	37.59	ug/L	98
3) Chloromethane	4.618	50	490190	44.75	ug/L	98
4) Vinyl Chloride	4.824	62	305487	41.72	ug/L	96
5) Bromomethane	5.547	94	126944	48.19	ug/L #	94
6) Chloroethane	5.818	64	170779	57.97	ug/L	93
7) Trichlorofluoromethane	6.106	101	391349	45.48	ug/L	96
8) Diethyl ether	6.681	59	226388	46.25	ug/L	88
9) 1,1-Dichloroethene	7.051	96	238036	46.00	ug/L	81
10) 1,1,2-Trichloro-1,2,2-...	7.108	151	244802	48.02	ug/L	96
11) Acrolein	7.618	56	137260	462.98	ug/L	99
12) Iodomethane	7.322	142	416124	45.16	ug/L	96
13) Carbon Disulfide	7.133	76	713982	59.54	ug/L #	88
14) 3-chloropropene	7.839	41	612952	53.97	ug/L #	96
15) Acetone	8.070	43	70016	44.72	ug/L	96
16) Methylene Chloride	8.004	84	228515	42.25	ug/L	77
17) Methyl Acetate	8.234	43	212061	49.13	ug/L #	96
18) t-1,2-Dichloroethene	8.242	96	272130	44.15	ug/L	94
19) Methyl tert-butyl ether	8.382	73	481451	42.09	ug/L	95
20) Acetonitrile	8.776	41	34089	44.11	ug/L	98
21) Diisopropyl ether	8.916	45	1250867	46.61	ug/L	95
22) Chloroprene	9.121	88	259778	51.24	ug/L	74
23) 1,1-Dichloroethane	9.162	63	559716	48.87	ug/L	97
24) Acrylonitrile	9.228	53	110623	50.58	ug/L	99
25) Vinyl Acetate	9.434	43	521464	31.79	ug/L	100
26) c-1,2-Dichloroethene	9.853	96	302854	44.69	ug/L	94
27) 2,2-Dichloropropane	10.009	77	345793	46.92	ug/L	98
28) Bromochloromethane	10.107	128	152406	47.20	ug/L	99
29) Cyclohexane	10.132	56	762004	45.04	ug/L	97
30) Chloroform	10.165	83	420046	46.25	ug/L	95
32) Dibromofluoromethane	10.387	113	279730	50.19	ug/L	92
33) 2-Butanone	10.526	72	17743	41.83	ug/L #	53
34) 1,1,1-Trichloroethane	10.452	97	388702	43.21	ug/L	98
35) 1,1-Dichloropropene	10.584	75	346211	45.50	ug/L	92
36) Propionitrile	10.904	54	50582	58.79	ug/L #	1
37) Methacrylonitrile	10.921	41	297678	74.42	ug/L #	88
38) Isobutyl Alcohol	10.945	43	308135	434.03	ug/L #	85
40) Carbon Tetrachloride	10.370	117	375511	46.35	ug/L #	96
41) Benzene	10.888	78	1139301	45.51	ug/L	98
43) d4-1,2-Dichloroethane	11.036	65	261223	45.31	ug/L #	63
44) 1,2-Dichloroethane	11.110	62	327490	46.04	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4012.D
Acq On : 4 Aug 2014 4:18 pm
Operator : KKW
Sample : ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 09:05:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 09:03:56 2014
QLast Update : Tue Aug 05 09:04:36 2014
Response via : Initial Calibration

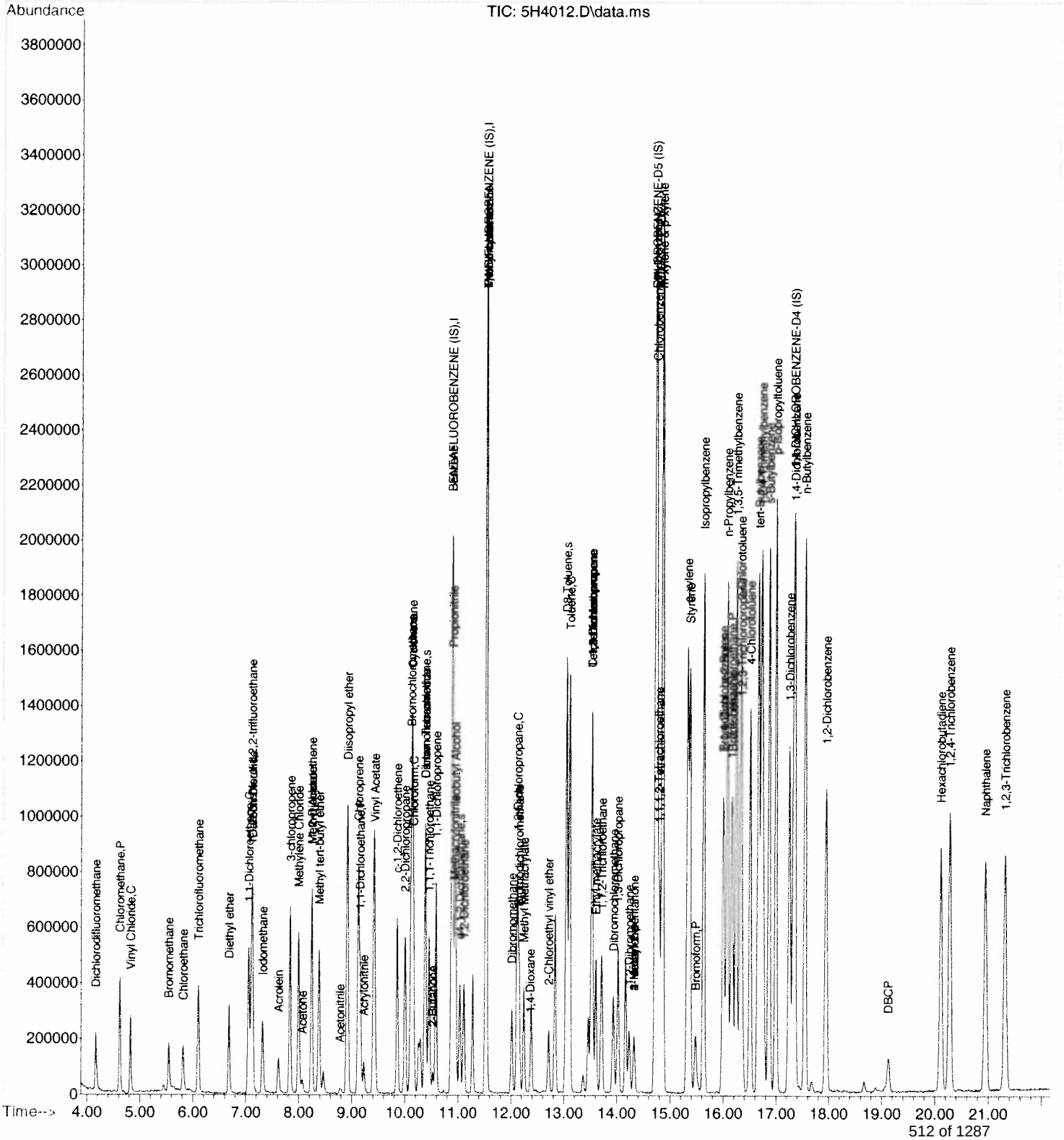
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
45) Trichloroethene	11.521	130	393912	46.87 ug/L	87
46) Methyl cyclohexane	11.537	83	586470	39.35 ug/L	93
47) Dibromomethane	12.014	93	133263	46.05 ug/L	95
48) 1,2-Dichloropropane	12.112	63	365766	47.35 ug/L	100
49) Bromodichloromethane	12.153	83	308701	44.58 ug/L	97
50) Methyl Methacrylate	12.244	69	133224	43.30 ug/L	90
51) 1,4-Dioxane	12.351	88	3108	51.94 ug/L #	28
52) 2-Chloroethyl vinyl ether	12.712	63	113551	41.72 ug/L	98
53) C-1,3-Dichloropropene	13.526	75	360905	44.01 ug/L	98
55) D8-Toluene	13.041	98	1354611	50.56 ug/L #	88
56) 4-Methyl-2-pentanone	14.323	100	18299	42.64 ug/L	85
58) Toluene	13.106	92	896088	44.41 ug/L	96
59) T-1,3-Dichloropropene	13.526	75	360905	50.32 ug/L	98
60) Tetrachloroethene	13.534	164	327176	45.23 ug/L	98
61) Ethyl methacrylate	13.608	69	274417	48.56 ug/L	97
62) 1,1,2-Trichloroethane	13.715	97	226879	45.68 ug/L	95
63) Dibromochloromethane	13.928	129	275451	45.97 ug/L	98
64) 1,3-Dichloropropane	14.027	76	371107	44.61 ug/L	99
65) 1,2-Dibromoethane	14.232	107	233845	45.93 ug/L	96
66) 2-Hexanone	14.323	43	196658	43.52 ug/L	97
67) Ethylbenzene	14.717	106	637710	50.21 ug/L	97
68) Chlorobenzene	14.750	112	1037814	42.15 ug/L	98
69) 1,1,1,2-Tetrachloroethane	14.791	131	339316	45.59 ug/L	98
70) m-xylene & p-xylene	14.848	106	1561938	97.69 ug/L	99
71) o-xylene	15.325	106	747134	46.99 ug/L	99
72) Styrene	15.374	104	1233713	45.47 ug/L	96
73) Bromoform	15.481	173	160514	48.63 ug/L #	91
74) Isopropylbenzene	15.629	105	1971707	44.10 ug/L	98
76) Bromofluorobenzene	15.999	95	489954	57.97 ug/L	95
77) n-Propylbenzene	16.073	91	2262096	44.53 ug/L	96
78) Bromobenzene	16.163	156	437364	42.99 ug/L	92
79) 1,1,2,2-Tetrachloroethane	16.147	83	269688	45.19 ug/L	97
80) 1,2,3-Trichloropropane	16.352	61	105044	48.94 ug/L	94
81) T-1,4-Dichloro-2-Butene	16.007	53	146715	42.21 ug/L	93
83) 1,3,5-Trimethylbenzene	16.245	105	1706066	46.95 ug/L	97
84) 2-Chlorotoluene	16.328	91	1241407	46.01 ug/L	96
85) 4-Chlorotoluene	16.508	91	1282409	47.12 ug/L	96
86) tert-Butylbenzene	16.664	119	2084186	46.37 ug/L	96
87) 1,2,4-Trimethylbenzene	16.722	105	1764819	47.46 ug/L #	93
88) p-Isopropyltoluene	16.993	119	2229381	51.79 ug/L	98
89) s-Butylbenzene	16.870	105	2450332	47.36 ug/L	98
90) 1,3-Dichlorobenzene	17.248	146	1037291	46.03 ug/L	96
91) 1,4-Dichlorobenzene	17.355	146	1035485	46.23 ug/L #	94
92) n-Butylbenzene	17.544	91	1889443	49.15 ug/L	96
93) 1,2-Dichlorobenzene	17.946	146	962106	45.63 ug/L	95
94) DBCP	19.129	157	67545	42.77 ug/L	92
95) Hexachlorobutadiene	20.116	225	331596	51.54 ug/L	96
96) 1,2,4-Trichlorobenzene	20.280	180	694353	47.99 ug/L	99
97) Naphthalene	20.945	128	1505299	48.06 ug/L	99
98) 1,2,3-Trichlorobenzene	21.315	180	630148	48.24 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080414\
Data File : 5H4012.D
Acq On : 4 Aug 2014 4:18 pm
Operator : KKW
Sample : ICV
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 05 09:05:35 2014
Quant Method : C:\msdchem\1\METHODS\MS5080414.M
Quant Title : Analysis of Volatile Organic Compounds by VGCMS-05Tue Aug 05 09:03:56 2014
QLast Update : Tue Aug 05 09:04:36 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29950

Instrument: OVGCMS1

Calibration ID: UNASSIGNED

Printed: 8/7/2014 11:09:24AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
AA29950-TUN1	QC		1		A4F0379			
AA29950-CAL1	1 QC		2		A4H0146	A4G0687		
AA29950-CAL2	2 QC		3		A4H0147	A4G0687		
AA29950-CAL3	5 QC		4		A4H0148	A4G0687		
AA29950-CAL4	20 QC		5		A4H0149	A4G0687		
AA29950-CAL5	50 QC		6		A4H0150	A4G0687		
AA29950-CAL6	80 QC		7		A4H0151	A4G0687		
AA29950-CAL7	100 QC		8		A4H0152	A4G0687		
AA29950-CAL8	200 QC		9		A4H0153	A4G0687		
AA29950-ICV1	QC		10		A4H0154	A4G0687		
AA29950-ICV2	QC		11		A4H0162	A4G0687		

Samples Loaded By Date

Data Processed By Date

Response Factor Report OVGCMS1

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration

Calibration Files
1 =1H6014.D 5 =1H6016.D 20 =1H6017.D
50 =1H6018.D 100 =1H6020.D 200 =1H6021.D

		Compound	1	5	20	50	100	200	Avg	%RSD	
1)	i	Pentafluorobenzene(IS	----------ISTD----------								
2)		Dichlorodifluoromet	0.709	0.535	0.542	0.752	0.608		0.605	15.81	QR
3)	**	Chloromethane	0.889	0.701	0.648	0.844	0.695	0.688	0.731	11.82	
4)	*	Vinyl Chloride	0.595	0.446	0.449	0.586	0.492		0.493	14.18	QR
5)		Bromomethane	0.470	0.322	0.264	0.351	0.271	0.255	0.316	22.13	QR
6)		Chloroethane	0.384	0.312	0.308	0.320			0.325	10.29	
7)		Trichlorofluorometh	0.965	0.789	0.788	1.087	0.899	0.850	0.872	13.33	
8)		Trichlorotrifluoroe	0.538	0.578	0.542	0.713	0.590	0.555	0.575	10.66	
9)		acrolein	0.016	0.018	0.017	0.022	0.020	0.018	0.018#	11.31	
10)		Acetone	0.612	0.252	0.128	0.127	0.112	0.097	0.233	80.89	LR
11)	*m	1,1-Dichloroethene	0.531	0.547	0.514	0.673	0.569	0.543	0.551	10.25	
12)		3-Chloropropene	0.246	0.285	0.272	0.327	0.267	0.248	0.272	9.35	
13)		Acetonitrile	0.026	0.032	0.035	0.046	0.043	0.038	0.036#	20.87	LR
14)		Iodomethane	0.569	0.562	0.580	0.705	0.588	0.542	0.585	9.29	
15)		Carbon disulfide	1.687	1.640	1.593	1.995	1.667	1.589	1.674	8.28	
16)		Methylene Chloride	3.150	0.715	0.605	0.723	0.608	0.577	0.995	88.56	LR
17)		Methyl tert-butyl e	1.237	1.145	1.124	1.373	1.193	1.095	1.170	8.71	
18)		Acrylonitrile	0.100	0.106	0.094	0.112	0.102	0.091	0.099#	8.41	
19)		T-1,2-Dichloroethen	0.617	0.610	0.590	0.734	0.613	0.588	0.614	8.56	
20)		Isopropyl Ether	1.798	1.758	1.713	2.047	1.719	1.605	1.747	7.79	
21)		C-1,2-Dichloroethen	0.679	0.630	0.613	0.747	0.632	0.616	0.641	7.81	
22)	**	1,1-Dichloroethane	0.930	0.944	0.892	1.090	0.885	0.832	0.911	9.00	
23)		Vinyl Acetate	0.754	0.889	1.028	1.247	1.066	0.981	0.980	15.93	LR
24)		Chloroprene	0.471	0.649	0.661	0.863	0.727	0.687	0.662	19.15	LR
25)		2-Butanone	0.036	0.066	0.031	0.032	0.035	0.033	0.039#	30.58	QR
26)		Propionitrile	0.041	0.044	0.039	0.047	0.038	0.031	0.040#	11.98	
27)		2,2-Dichloropropane	0.860	0.802	0.766	0.963	0.797	0.762	0.809	8.96	
28)		Methacrylonitrile	0.136	0.137	0.128	0.149	0.120	0.094	0.128	12.51	
29)	*	Chloroform	1.073	1.053	1.006	1.221	1.008	0.948	1.036	8.16	
30)	s	Dibromofluoromethan			0.590	0.621	0.512	0.516	0.548	9.79	
31)		Dibromofluoromethan			0.590	0.621	0.512	0.516	0.548	9.79	
32)		Bromochloromethane	0.241	0.239	0.238	0.290	0.251	0.237	0.244	9.23	
33)		1,1,1-Trichloroetha	0.844	0.825	0.797	1.011	0.844	0.818	0.839	9.44	
34)		1,1-Dichloropropene	0.767	0.792	0.726	0.918	0.772	0.718	0.771	8.55	
35)		Diethyl Ether	0.399	0.359	0.357	0.434	0.372	0.346	0.371	8.62	
36)		Methyl Acetate	0.034	0.058	0.065	0.078	0.069	0.059	0.061#	21.34	QR
37)		Cyclohexane	0.896	0.923	0.835	1.053	0.842	0.742	0.866	10.90	
38)	i	1,4-Difluorobenzene(I	----------ISTD----------								
39)		Methyl Cyclohexane	0.611	0.496	0.423	0.441	0.421	0.381	0.462	15.49	LR
40)		Carbon Tetrachlorid	0.377	0.413	0.398	0.424	0.437	0.438	0.408	8.11	
41)		1,2-Dichloroethane	0.351	0.346	0.326	0.333	0.340	0.329	0.334	4.26	
42)	m	Benzene	1.472	1.362	1.264	1.246	1.244	1.194	1.289	6.79	
43)		Isobutyl Alcohol	0.016	0.014	0.013	0.012	0.012	0.011	0.013#	12.05	LR
44)	s	1,2-Dichloroethane-		0.185	0.306	0.263	0.257	0.263	0.256	15.22	LR
45)		1,2-Dichloroethane-		0.185	0.306	0.263	0.257	0.263	0.256	15.22	
46)	m	Trichloroethene	0.333	0.330	0.317	0.330	0.339	0.336	0.328	3.92	
47)	*	1,2-Dichloropropane	0.319	0.311	0.301	0.302	0.300	0.287	0.300	3.86	
48)		Methyl Methacrylate	0.046	0.060	0.065	0.069	0.076	0.073	0.065#	17.49	LR
49)		1,4-Dioxane	0.003	0.003	0.003	0.003	0.003	0.003	0.003#	9.42	LR
50)		Bromodichloromethan	0.385	0.426	0.437	0.455	0.471	0.464	0.434	9.12	
51)		Dibromomethane	0.187	0.191	0.192	0.195	0.207	0.203	0.195	5.78	
52)		4-Methyl-2-Pentanon	0.006	0.035	0.035	0.035	0.038	0.035	0.031#	33.56	LR
53)		2-Chloroethyl vinyl		0.011	0.025	0.034	0.074	0.067	0.038#	69.21	
54)		2-Hexanone	0.235	0.224	0.172	0.177	0.195	0.176	0.205	16.02	
55)		C-1,3-Dichloroprope	0.474	0.489	0.495	0.515	0.534	0.526	0.498	7.66	
56)	s	D8-Toluene		0.638	1.142	1.044	1.029	1.094	0.996	18.18	LR
57)		D8-Toluene		0.638	1.142	1.044	1.029	1.094	0.996	18.18	
58)	i	Chlorobenzene-d5(IS)	----------ISTD----------								
59)	m*	Toluene	1.035	0.974	0.940	0.941	0.960	0.939	0.964	3.35	

60)		Ethyl Methacrylate	0.377	0.355	0.382	0.376	0.399	0.363	0.377	4.60
61)		T-1,3-Dichloroprope	0.393	0.425	0.463	0.461	0.486	0.455	0.441	11.15
62)		1,1,2-Trichloroetha	0.290	0.278	0.281	0.276	0.295	0.282	0.283	4.04
63)		1,3-Dichloropropane	0.538	0.500	0.513	0.506	0.528	0.503	0.511	4.82
64)		Tetrachloroethene	0.311	0.305	0.301	0.307	0.317	0.307	0.307	4.02 LR
65)		Dibromochloromethan	0.297	0.304	0.343	0.351	0.385	0.383	0.340	13.12
66)		1,2-Dibromoethane	0.291	0.280	0.302	0.301	0.327	0.315	0.300	8.03
67)	**m	Chlorobenzene	1.134	1.024	1.010	1.017	1.050	1.020	1.034	4.81
68)		1,1,1,2-Tetrachloro	0.325	0.301	0.316	0.318	0.341	0.340	0.320	6.30
69)	*	Ethylbenzene	0.522	0.531	0.523	0.529	0.546	0.531	0.529	3.43
70)		m-xylene & p-xylene	0.707	0.677	0.651	0.664	0.670	0.626	0.664	4.58
71)		O-Xylene	0.658	0.658	0.647	0.656	0.674	0.660	0.653	3.85
72)	**	Bromoform	0.155	0.172	0.193	0.202	0.230	0.221	0.194	16.49 LR
73)		Styrene	0.825	0.863	0.952	1.002	1.076	1.064	0.952	12.60
74)		Isopropylbenzene	1.853	1.773	1.701	1.752	1.782	1.732	1.751	4.23
75)		1,2,3-Trichloroprop	0.391	0.389	0.365	0.370	0.407	0.366	0.381	5.75
76)	**	1,1,2,2-Tetrachloro	0.425	0.388	0.372	0.361	0.391	0.349	0.379	6.86
77)	s	Bromofluorobenzene		0.274	0.501	0.458	0.458	0.469	0.436	18.55 LR
78)		Bromofluorobenzene		0.274	0.501	0.458	0.458	0.469	0.436	18.55
79)		T-1,4-dichloro-2-bu	0.047	0.070	0.073	0.071	0.078	0.071	0.069#	15.49 LR
80)		N-Propylbenzene	2.161	2.095	2.095	2.125	2.189	2.106	2.114	4.27
81)	i	1,4-Dichlorobenzene-d	----------ISTD----------							
82)		Bromobenzene	0.804	0.864	0.836	0.819	0.844	0.822	0.827	3.02
83)		1,3,5-Trimethylbenz	3.155	3.098	3.024	3.045	3.054	3.022	3.049	2.88
84)		2-Chlorotoluene	3.156	2.892	2.761	2.746	2.713	2.611	2.815	5.78
85)		4-Chlorotoluene	3.022	2.688	2.675	2.694	2.702	2.628	2.724	4.66
86)		1,2,4-Trimethylbenz	2.864	2.786	2.873	2.785	2.847	2.836	2.819	3.89
87)		s-Butylbenzene	4.329	4.336	4.111	4.244	4.218	4.101	4.206	3.14
88)		tert-Butylbenzene	2.748	2.753	2.565	2.598	2.628	2.551	2.625	3.41
89)		p-Isopropyltoluene	2.656	2.735	2.790	2.861	2.910	2.866	2.789	5.34
90)		1,3-Dichlorobenzene	1.676	1.514	1.508	1.509	1.553	1.521	1.537	4.49
91)		1,4-Dichlorobenzene	1.677	1.490	1.477	1.457	1.502	1.453	1.506	4.79
92)		1,2-Dichlorobenzene	1.457	1.399	1.408	1.399	1.440	1.426	1.409	3.37
93)		N-Butylbenzene	2.465	2.429	2.794	2.873	2.950	2.931	2.727	10.04 LR
94)		DBCP	0.139	0.134	0.122	0.126	0.136	0.131	0.131	6.32 LR
95)		Naphthalene	2.096	1.624	1.489	1.418	1.487	1.377	1.581	14.34 LR
96)		1,2,4-Trichlorobenz	0.832	0.677	0.776	0.776	0.827	0.820	0.784	7.04
97)		Hexachlorobutadiene	0.443	0.479	0.444	0.488	0.483	0.480	0.467	5.91
98)		1,2,3-Trichlorobenz	0.795	0.660	0.696	0.700	0.740	0.735	0.718	6.06

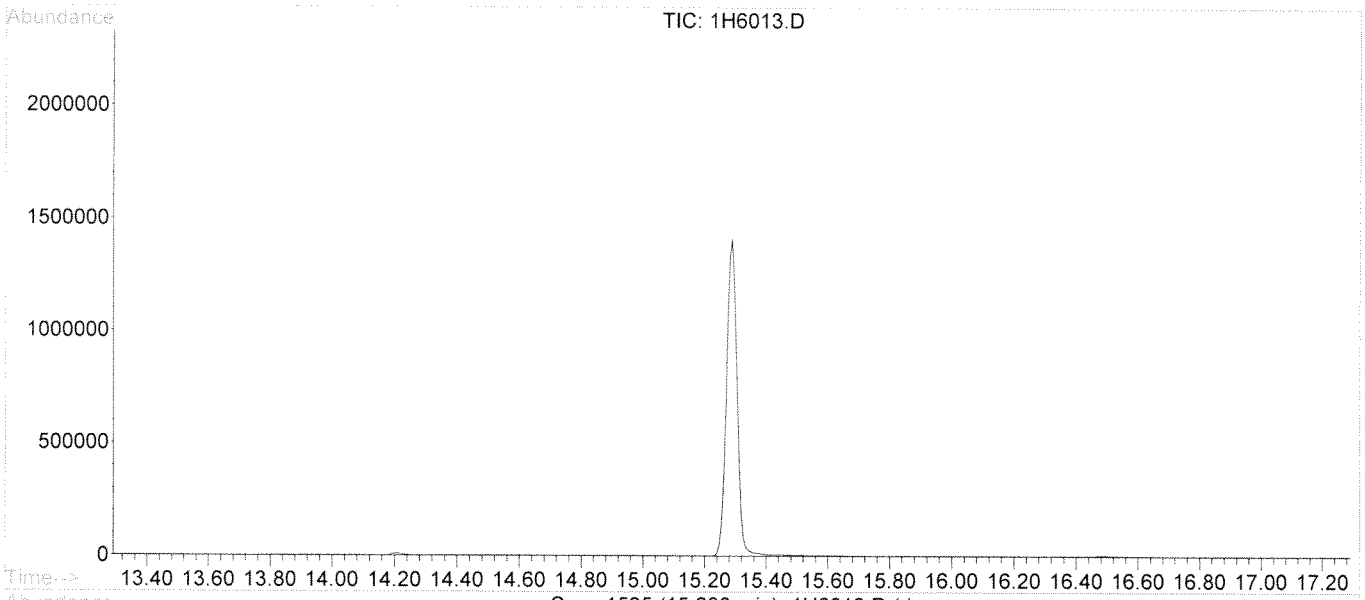
(#) = Out of Range ### Number of calibration levels exceeded format ###

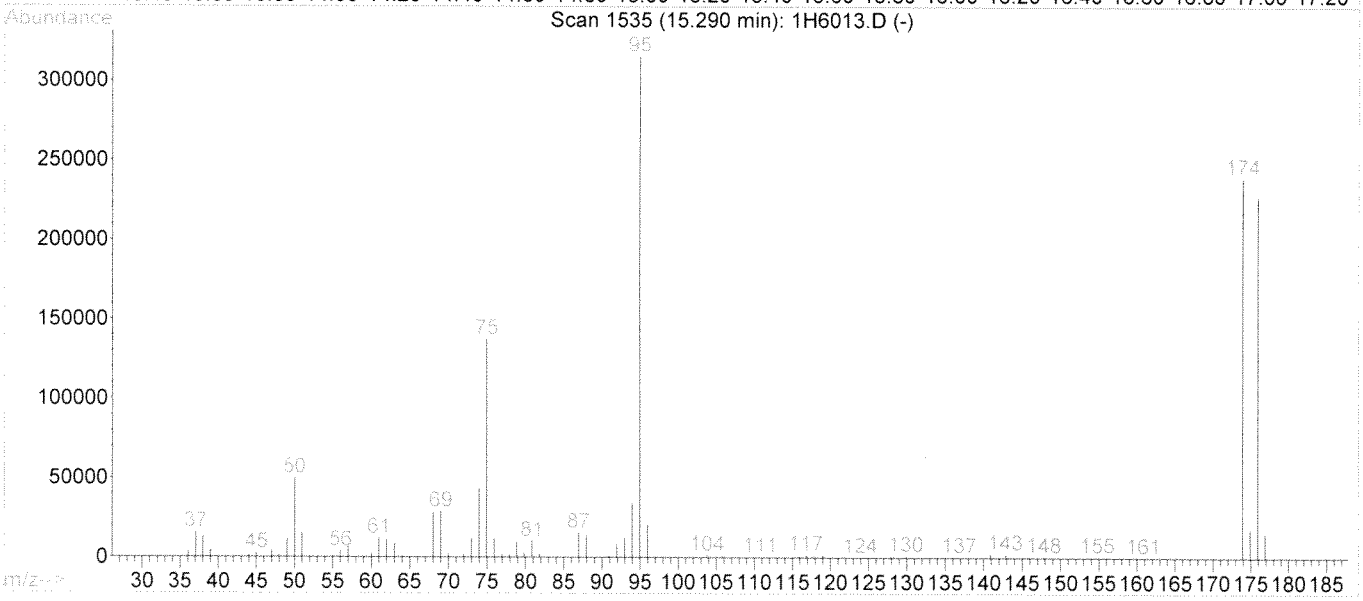
080614.M Thu Aug 07 11:44:02 2014

BFB

Data File : C:\HPCHEM\1\DATA\080614\1H6013.D
Acq On : 6 Aug 2014 18:22
Sample : BFB
Misc :
MS Integration Params: RTEINT.P
Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029

Vial: 11
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00





Spectrum Information: Scan 1535

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	49720	PASS
75	95	30	60	43.5	137280	PASS
95	95	100	100	100.0	315712	PASS
96	95	5	9	6.5	20648	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	75.8	239168	PASS
175	174	5	9	7.6	18112	PASS
176	174	95	101	95.1	227392	PASS
177	176	5	9	6.7	15226	PASS

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D Vial: 12
Acq On : 6 Aug 2014 19:09 Operator: JFL
Sample : 1 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:33 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	208301	50.00	ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	341956	50.00	ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	277250	50.00	ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	121263	50.00	ug/kg	0.00
System Monitoring Compounds						
30) Dibromofluoromethane	10.55	113	3122	1.10	ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 2.20%#			
44) 1,2-Dichloroethane-d4	11.13	65	2832	0.96	ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 1.92%#			
56) D8-Toluene	12.83	98	2702	0.31	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 0.62%#			
77) Bromofluorobenzene	15.31	95	2257	0.70	ug/kg	0.01
Spiked Amount 50.000	Range 41 - 142		Recovery = 1.40%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.62	85	2954	0.81	ug/kg	92
3) Chloromethane	5.13	50	3705	0.77	ug/kg	95
4) Vinyl Chloride	5.34	62	2477	0.53	ug/kg	77
5) Bromomethane	6.11	94	1959	0.78	ug/kg	72
6) Chloroethane	6.40	64	1599	0.65	ug/kg	94
7) Trichlorofluoromethane	6.67	101	4020	0.81	ug/kg	97
8) Trichlorotrifluoroethane	7.62	101	2242	0.80	ug/kg	97
9) acrolein	8.12	56	655	4.28	ug/kg	81
10) Acetone	8.53	43	2549	3.07	ug/kg	92
11) 1,1-Dichloroethene	7.59	96	2213	0.87	ug/kg	76
12) 3-Chloropropene	8.29	76	1024	0.62	ug/kg	100
13) Acetonitrile	9.19	41	1068m	3.48	ug/kg	88
14) Iodomethane	7.83	142	2370	0.77	ug/kg	93
15) Carbon disulfide	7.66	76	7030	0.71	ug/kg	93
16) Methylene Chloride	8.44	84	13124	4.22	ug/kg#	81
17) Methyl tert-butyl ether	8.78	73	5153	0.76	ug/kg	86
18) Acrylonitrile	9.55	53	4181	5.67	ug/kg	94
19) T-1,2-Dichloroethene	8.66	96	2569	0.88	ug/kg	84
20) Isopropyl Ether	9.23	45	7491	0.64	ug/kg#	89
21) C-1,2-Dichloroethene	10.09	96	2830	0.88	ug/kg	83
22) 1,1-Dichloroethane	9.46	63	3875	0.71	ug/kg	97
23) Vinyl Acetate	9.72	43	3140	0.38	ug/kg	87
24) Chloroprene	9.43	53	1963	0.37	ug/kg	82
25) 2-Butanone	10.72	72	148	0.81	ug/kg#	89
26) Propionitrile	11.03	54	1728	5.65	ug/kg	100
27) 2,2-Dichloropropane	10.21	77	3583	0.77	ug/kg	98
28) Methacrylonitrile	11.04	67	5677	6.41	ug/kg	86
29) Chloroform	10.34	83	4471	0.77	ug/kg	94
31) Dibromofluoromethane	10.55	113	3122	0.95	ug/kg	100
32) Bromochloromethane	10.32	128	1002	0.89	ug/kg	69
33) 1,1,1-Trichloroethane	10.61	97	3518	0.77	ug/kg	98
34) 1,1-Dichloropropene	10.73	75	3195	0.78	ug/kg	95
35) Diethyl Ether	7.23	59	1663	0.73	ug/kg	93
36) Methyl Acetate	8.66	74	140	0.34	ug/kg#	1
37) Cyclohexane	10.32	56	3732	0.71	ug/kg	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D
Acq On : 6 Aug 2014 19:09
Sample : 1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:33 2014

Vial: 12
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	4180	1.15 ug/kg#	57
40) Carbon Tetrachloride	10.53	117	2578	0.82 ug/kg	99
41) 1,2-Dichloroethane	11.19	62	2400	0.70 ug/kg	95
42) Benzene	10.99	78	10065	0.95 ug/kg#	54
43) Isobutyl Alcohol	11.04	43	2196	8.48 ug/kg#	17
45) 1,2-Dichloroethane-d4	11.13	65	2832	0.96 ug/kg	93
46) Trichloroethene	11.55	130	2275	0.98 ug/kg#	1
47) 1,2-Dichloropropane	12.06	63	2179	0.84 ug/kg	94
48) Methyl Methacrylate	12.16	100	318	0.61 ug/kg	58
49) 1,4-Dioxane	12.31	88	459	21.38 ug/kg#	44
50) Bromodichloromethane	12.08	83	2635	0.67 ug/kg	96
51) Dibromomethane	11.98	93	1281	0.80 ug/kg	95
52) 4-Methyl-2-Pentanone	0.00	100		N.D.	
53) 2-Chloroethyl vinyl ether	0.00	63		N.D.	
54) 2-Hexanone	13.89	43	1609	0.88 ug/kg#	75
55) C-1,3-Dichloropropene	12.66	75	3241	0.78 ug/kg	89
57) D8-Toluene	12.83	98	2702	0.31 ug/kg	92
59) Toluene	12.88	92	5741	0.94 ug/kg	99
60) Ethyl Methacrylate	13.27	69	2089	0.72 ug/kg#	93
61) T-1,3-Dichloropropene	13.23	75	2177	0.61 ug/kg	88
62) 1,1,2-Trichloroethane	13.38	97	1610	0.89 ug/kg	98
63) 1,3-Dichloropropane	13.63	76	2982	0.89 ug/kg	90
64) Tetrachloroethene	13.23	164	1727	1.00 ug/kg	95
65) Dibromochloromethane	13.55	129	1649	0.75 ug/kg#	89
66) 1,2-Dibromoethane	13.82	107	1613	0.88 ug/kg#	99
67) Chlorobenzene	14.23	112	6288	1.06 ug/kg#	73
68) 1,1,1,2-Tetrachloroethane	14.26	131	1800	0.92 ug/kg#	1
69) Ethylbenzene	14.19	106	2897	0.92 ug/kg	99
70) m-xylene & p-xylene	14.31	106	7841	1.97 ug/kg	91
71) O-Xylene	14.72	106	3646	0.97 ug/kg	97
72) Bromoform	14.85	173	858	0.67 ug/kg#	96
73) Styrene	14.76	104	4573	0.78 ug/kg	89
74) Isopropylbenzene	14.98	105	10277	0.99 ug/kg	96
75) 1,2,3-Trichloropropane	15.63	75	2166	0.74 ug/kg#	61
76) 1,1,2,2-Tetrachloroethane	15.43	83	2354	0.90 ug/kg#	97
78) Bromofluorobenzene	15.31	95	2257	0.70 ug/kg#	70
79) T-1,4-dichloro-2-butene	15.63	53	260	0.32 ug/kg#	1
80) N-Propylbenzene	15.37	91	11983	0.89 ug/kg	95
82) Bromobenzene	15.46	156	1949	0.93 ug/kg	87
83) 1,3,5-Trimethylbenzene	15.53	105	7652	0.98 ug/kg	98
84) 2-Chlorotoluene	15.59	91	7654	0.96 ug/kg	99
85) 4-Chlorotoluene	15.76	91	7330	0.97 ug/kg	97
86) 1,2,4-Trimethylbenzene	15.94	105	6946	0.96 ug/kg	98
87) s-Butylbenzene	16.06	105	10500	0.96 ug/kg	99
88) tert-Butylbenzene	15.88	119	6664	1.05 ug/kg	94
89) p-Isopropyltoluene	16.19	119	6441	0.98 ug/kg	95
90) 1,3-Dichlorobenzene	16.40	146	4064	1.06 ug/kg	97
91) 1,4-Dichlorobenzene	16.50	146	4067m	1.07 ug/kg	98
92) 1,2-Dichlorobenzene	17.02	146	3533	1.01 ug/kg	98
93) N-Butylbenzene	16.67	91	5979	0.80 ug/kg	98
94) DBCP	18.10	75	337	0.85 ug/kg#	39

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D
Acq On : 6 Aug 2014 19:09
Sample : 1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:33 2014

Vial: 12
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

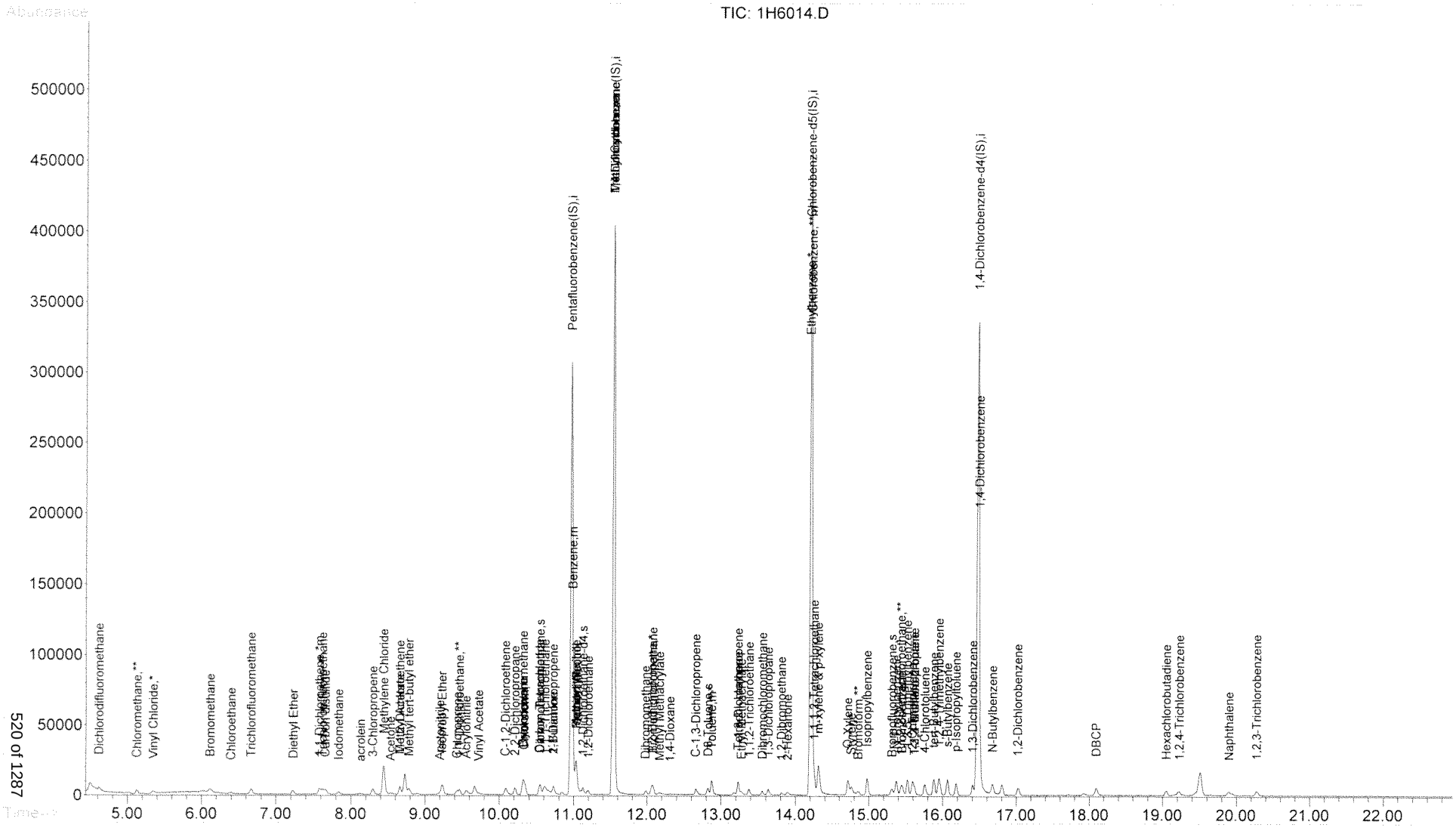
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95)	Naphthalene	19.89	128	5083	1.99 ug/kg	100
96)	1,2,4-Trichlorobenzene	19.23	180	2018	1.24 ug/kg	96
97)	Hexachlorobutadiene	19.05	225	1075	1.06 ug/kg	97
98)	1,2,3-Trichlorobenzene	20.27	180	1928	1.33 ug/kg	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D Vial: 12
Acq On : 6 Aug 2014 19:09 Operator: JFL
Sample : 1 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:33 2014 Quant Results File: 072314.RES

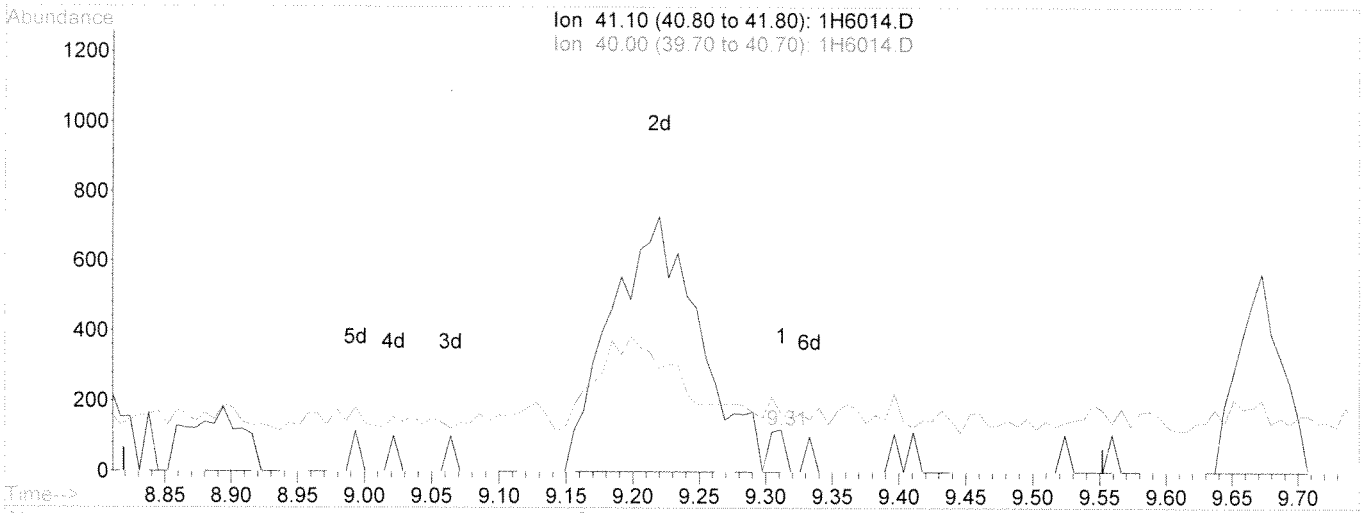
Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration

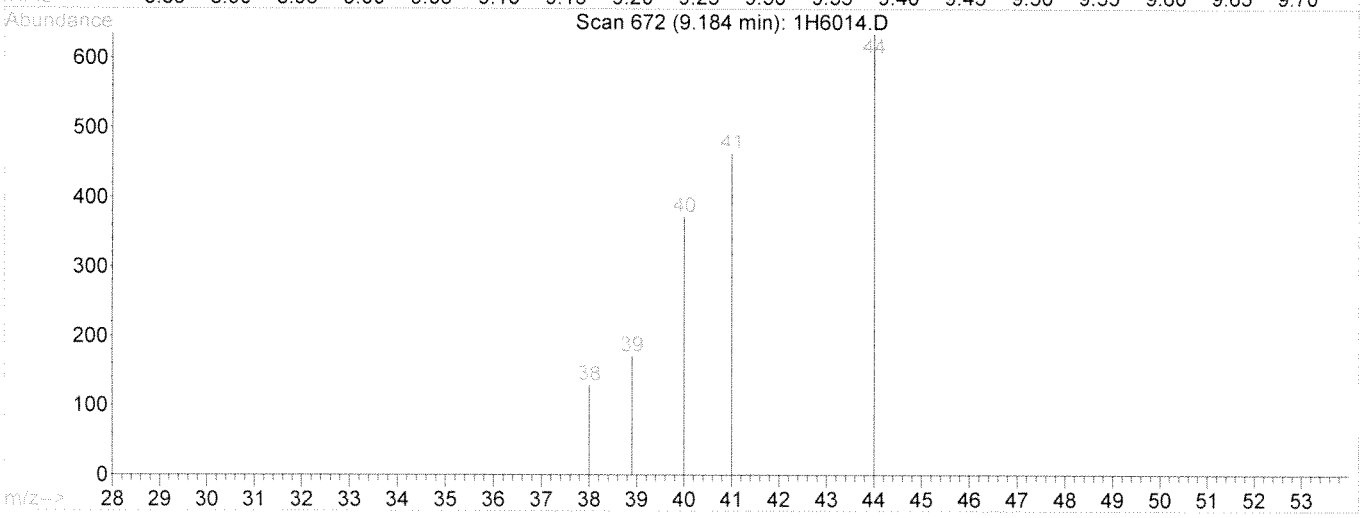


Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D Vial: 12
Acq On : 6 Aug 2014 19:09 Operator: JFL
Sample : 1 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:21 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 08:32:23 2014
Response via : Multiple Level Calibration





TIC: 1H6014.D

(13) Acetonitrile

9.31min 0.32ug/kg

response 99

Ion	Exp%	Act%
41.10	100	100
40.00	66.20	67.68
39.00	21.40	42.42
0.00	0.00	0.00

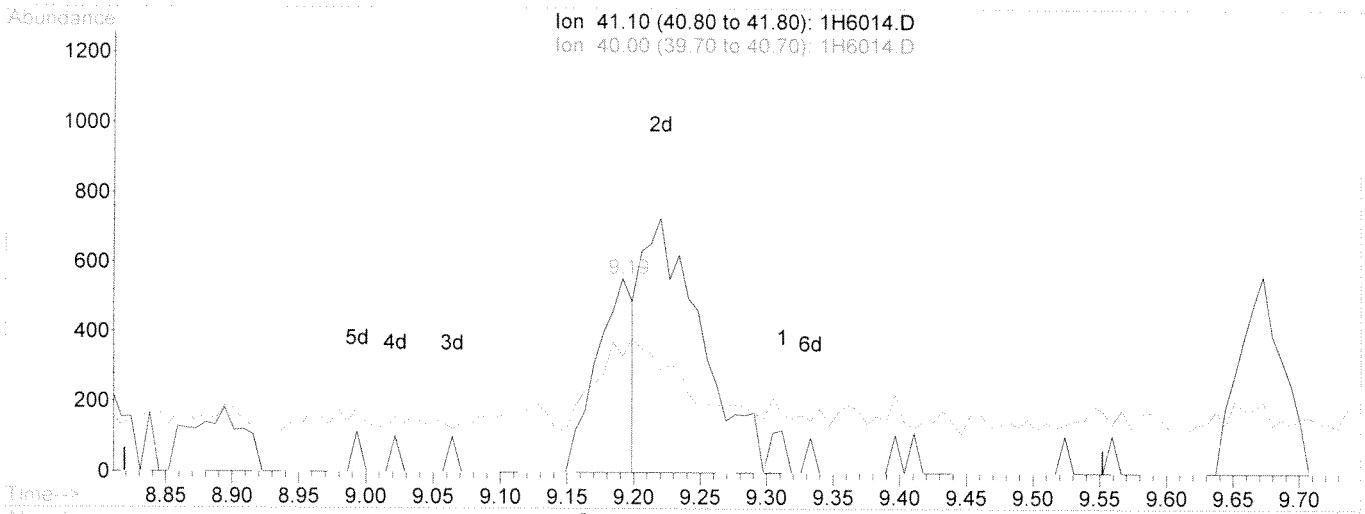
Select One:
[X] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/7/14
Review by/Date: [illegible] 8/7/14

Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6014.D
Acq On : 6 Aug 2014 19:09
Sample : 1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:33 2014

Vial: 12
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 08:32:23 2014
Response via : Multiple Level Calibration



TIC: 1H6014.D

(13) Acetonitrile

9.19min 3.48ug/kg m

response 1068

Ion	Exp%	Act%
41.10	100	100
40.00	66.20	6.27#
39.00	21.40	3.93
0.00	0.00	0.00

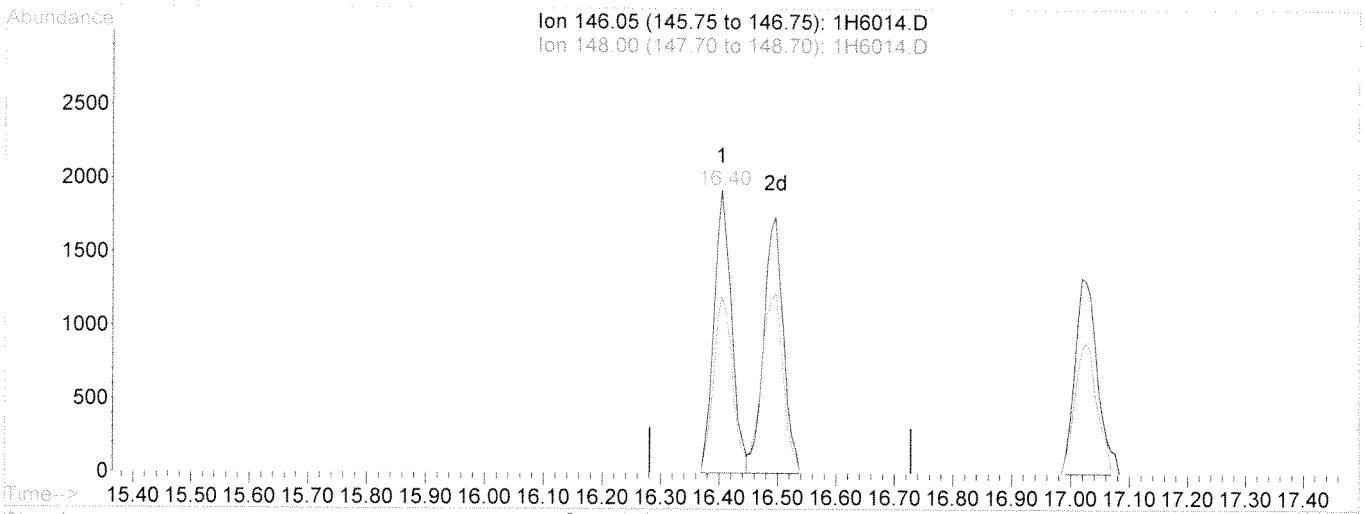
Select One:
[ ] Original Integration [X] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date MC 8/7/14
Review by/Date: A 8/7/14

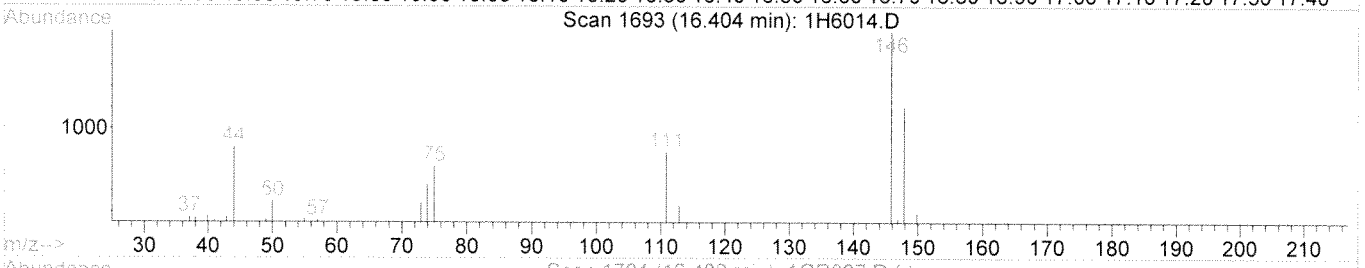
Quantitation Report (Qedit)

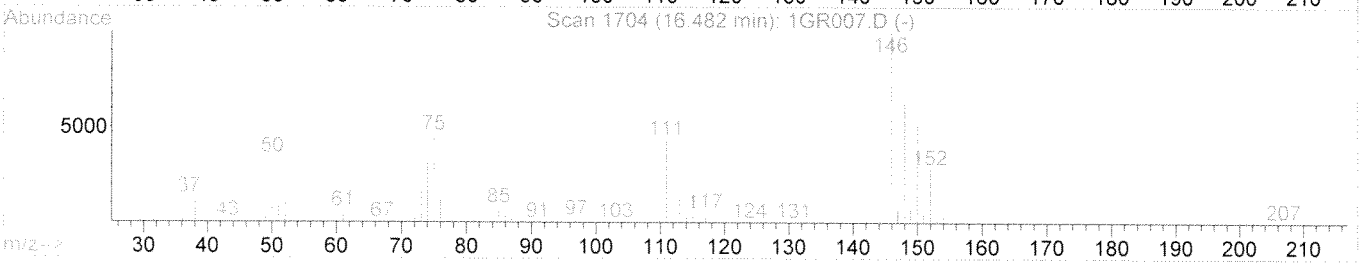
Data File : C:\HPCHEM\1\DATA\080614\1H6014.D
Acq On : 6 Aug 2014 19:09
Sample : 1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014

Vial: 12
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration







TIC: 1H6014.D

(91) 1,4-Dichlorobenzene

16.40min 1.07ug/kg

response 4064

Ion	Exp%	Act%
146.05	100	100
148.00	64.40	66.71
111.00	43.20	43.01
0.00	0.00	0.00

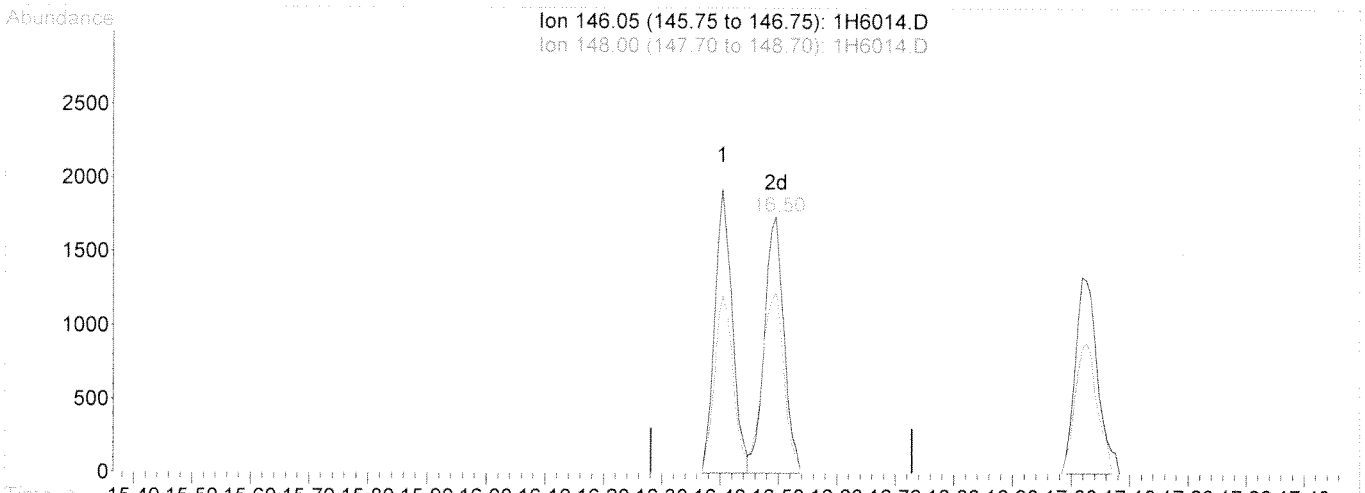
Select One:
[x] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[x] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date MC 8/7/14
Review by/Date: 8/7/14

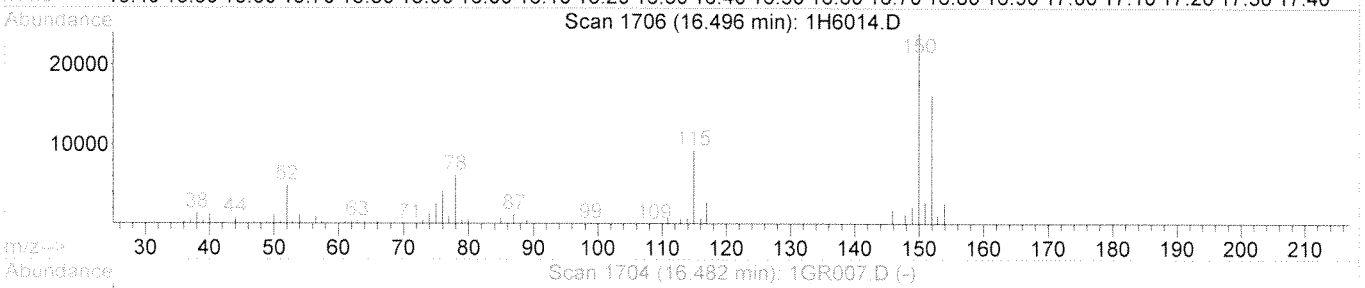
Quantitation Report (Qedit)

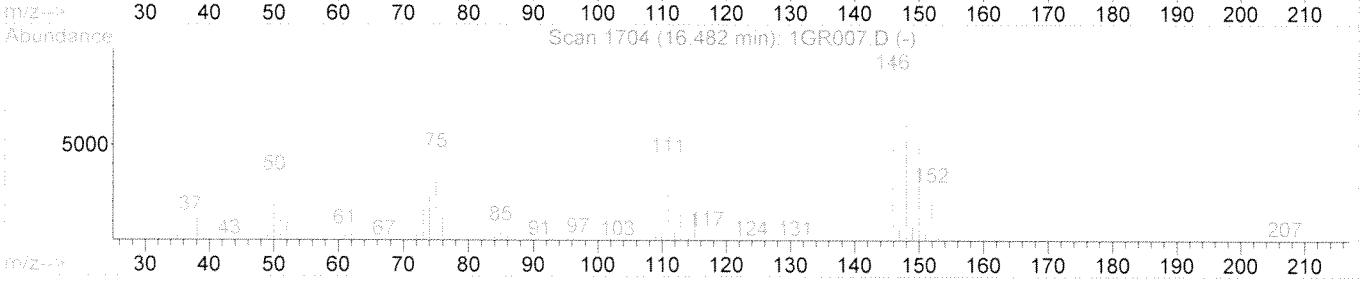
Data File : C:\HPCHEM\1\DATA\080614\1H6014.D
Acq On : 6 Aug 2014 19:09
Sample : 1 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:21 2014

Vial: 12
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration







TIC: 1H6014.D

(91) 1,4-Dichlorobenzene

16.50min 1.07ug/kg m

response 4067

Ion	Exp%	Act%
146.05	100	100
148.00	64.40	66.66
111.00	43.20	42.98
0.00	0.00	0.00

Select One:
[ ] Original Integration [X] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/7/14
Review by/Date: AB 8/7/14

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6015.D
Acq On : 6 Aug 2014 19:38
Sample : 2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:24 2014

Vial: 13
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	210316	50.00	ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	339555	50.00	ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	282073	50.00	ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	120586	50.00	ug/kg	0.00

System Monitoring Compounds

30) Dibromofluoromethane	0.00	113	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 53 - 146		Recovery = 0.00%#			
44) 1,2-Dichloroethane-d4	0.00	65	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 45 - 174		Recovery = 0.00%#			
56) D8-Toluene	0.00	98	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 41 - 146		Recovery = 0.00%#			
77) Bromofluorobenzene	0.00	95	0d	0.00	ug/kg	
Spiked Amount 50.000	Range 41 - 142		Recovery = 0.00%#			

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	4.63	85	4114	1.12	ug/kg	95
3) Chloromethane	5.13	50	5728	1.18	ug/kg	98
4) Vinyl Chloride	5.35	62	3510	0.75	ug/kg	69
5) Bromomethane	6.12	94	2431	0.96	ug/kg	81
6) Chloroethane	6.40	64	2538	1.02	ug/kg	85
7) Trichlorofluoromethane	6.67	101	6027	1.20	ug/kg	99
8) Trichlorotrifluoroethane	7.62	101	4291	1.51	ug/kg	99
9) acrolein	8.12	56	1369	8.86	ug/kg	84
10) Acetone	8.54	43	3564	4.26	ug/kg	99
11) 1,1-Dichloroethene	7.58	96	4026	1.56	ug/kg	78
12) 3-Chloropropene	8.30	76	2218	1.33	ug/kg	84
13) Acetonitrile	9.20	41	2340	7.56	ug/kg#	65
14) Iodomethane	7.84	142	4445	1.44	ug/kg	93
15) Carbon disulfide	7.66	76	13015	1.30	ug/kg	97
16) Methylene Chloride	8.44	84	8255	2.63	ug/kg#	79
17) Methyl tert-butyl ether	8.79	73	8716	1.28	ug/kg	91
18) Acrylonitrile	9.56	53	7273	9.78	ug/kg	98
19) T-1,2-Dichloroethene	8.66	96	4652	1.58	ug/kg	84
20) Isopropyl Ether	9.23	45	13783	1.16	ug/kg#	92
21) C-1,2-Dichloroethene	10.09	96	4945	1.52	ug/kg	86
22) 1,1-Dichloroethane	9.46	63	7053	1.27	ug/kg	94
23) Vinyl Acetate	9.72	43	6926	0.83	ug/kg	100
24) Chloroprene	9.43	53	4228	0.79	ug/kg	77
25) 2-Butanone	10.72	72	363	1.97	ug/kg#	32
26) Propionitrile	11.03	54	3241	10.50	ug/kg	100
27) 2,2-Dichloropropane	10.21	77	6183	1.32	ug/kg	96
28) Methacrylonitrile	11.03	67	10940	12.24	ug/kg	74
29) Chloroform	10.35	83	8178	1.40	ug/kg	95
31) Dibromofluoromethane	0.00	113		N.D.	d	
32) Bromochloromethane	10.32	128	1756	1.54	ug/kg	72
33) 1,1,1-Trichloroethane	10.61	97	6148	1.34	ug/kg	98
34) 1,1-Dichloropropene	10.73	75	6002	1.46	ug/kg	99
35) Diethyl Ether	7.23	59	2807	1.21	ug/kg	93
36) Methyl Acetate	8.67	74	501	1.19	ug/kg#	84
37) Cyclohexane	10.33	56	6623	1.24	ug/kg	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6015.D
Acq On : 6 Aug 2014 19:38
Sample : 2 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:24 2014

Vial: 13
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Methyl Cyclohexane	11.55	55	6742	1.87 ug/kg#	73
40)	Carbon Tetrachloride	10.54	117	4689	1.50 ug/kg	99
41)	1,2-Dichloroethane	11.20	62	4158	1.22 ug/kg	98
42)	Benzene	10.99	78	17091	1.63 ug/kg#	50
43)	Isobutyl Alcohol	11.03	43	3732	14.51 ug/kg#	11
45)	1,2-Dichloroethane-d4	0.00	65		N.D. d	
46)	Trichloroethene	11.54	130	4091	1.78 ug/kg#	19
47)	1,2-Dichloropropane	12.06	63	3841	1.49 ug/kg	94
48)	Methyl Methacrylate	12.16	100	690	1.32 ug/kg	83
49)	1,4-Dioxane	12.31	88	692	32.46 ug/kg#	73
50)	Bromodichloromethane	12.09	83	4975	1.27 ug/kg	97
51)	Dibromomethane	11.98	93	2361	1.48 ug/kg	93
52)	4-Methyl-2-Pentanone	13.17	100	374	1.36 ug/kg	89
53)	2-Chloroethyl vinyl ether	0.00	63		N.D.	
54)	2-Hexanone	13.88	43	3585	1.97 ug/kg#	72
55)	C-1,3-Dichloropropene	12.66	75	5717	1.38 ug/kg	86
57)	D8-Toluene	0.00	98		N.D. d	
59)	Toluene	12.87	92	10701	1.72 ug/kg	97
60)	Ethyl Methacrylate	13.27	69	4069	1.37 ug/kg#	83
61)	T-1,3-Dichloropropene	13.22	75	3938	1.09 ug/kg	83
62)	1,1,2-Trichloroethane	13.38	97	2942	1.60 ug/kg	98
63)	1,3-Dichloropropane	13.63	76	5214	1.53 ug/kg	94
64)	Tetrachloroethene	13.23	164	3188	1.81 ug/kg	98
65)	Dibromochloromethane	13.55	129	3043	1.37 ug/kg#	89
66)	1,2-Dibromoethane	13.81	107	2894	1.54 ug/kg#	99
67)	Chlorobenzene	14.22	112	10841	1.80 ug/kg	88
68)	1,1,1,2-Tetrachloroethane	14.26	131	3188	1.60 ug/kg#	1
69)	Ethylbenzene	14.20	106	5569	1.74 ug/kg	93
70)	m-xylene & p-xylene	14.32	106	14012	3.46 ug/kg	90
71)	O-Xylene	14.72	106	6711	1.76 ug/kg	90
72)	Bromoform	14.85	173	1684	1.29 ug/kg#	91
73)	Styrene	14.76	104	8686	1.46 ug/kg	92
74)	Isopropylbenzene	14.97	105	18147	1.72 ug/kg	94
75)	1,2,3-Trichloropropane	15.62	75	3942	1.33 ug/kg	83
76)	1,1,2,2-Tetrachloroethane	15.43	83	3934	1.47 ug/kg	97
78)	Bromofluorobenzene	0.00	95		N.D. d	
79)	T-1,4-dichloro-2-butene	15.62	53	676	0.81 ug/kg#	24
80)	N-Propylbenzene	15.37	91	21684	1.58 ug/kg	94
82)	Bromobenzene	15.45	156	3790	1.82 ug/kg	96
83)	1,3,5-Trimethylbenzene	15.53	105	13838	1.78 ug/kg	93
84)	2-Chlorotoluene	15.59	91	13815	1.74 ug/kg	96
85)	4-Chlorotoluene	15.76	91	12686	1.69 ug/kg	95
86)	1,2,4-Trimethylbenzene	15.94	105	12493	1.75 ug/kg	92
87)	s-Butylbenzene	16.06	105	19189	1.77 ug/kg	98
88)	tert-Butylbenzene	15.88	119	12090	1.92 ug/kg	93
89)	p-Isopropyltoluene	16.18	119	12138	1.87 ug/kg	93
90)	1,3-Dichlorobenzene	16.40	146	6933	1.82 ug/kg	100
91)	1,4-Dichlorobenzene	16.49	146	7119	1.88 ug/kg	83
92)	1,2-Dichlorobenzene	17.02	146	6287	1.81 ug/kg	100
93)	N-Butylbenzene	16.67	91	11261	1.52 ug/kg	99
94)	DBCP	18.11	75	576	1.46 ug/kg	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6015.D Vial: 13
Acq On : 6 Aug 2014 19:38 Operator: JFL
Sample : 2 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:24 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

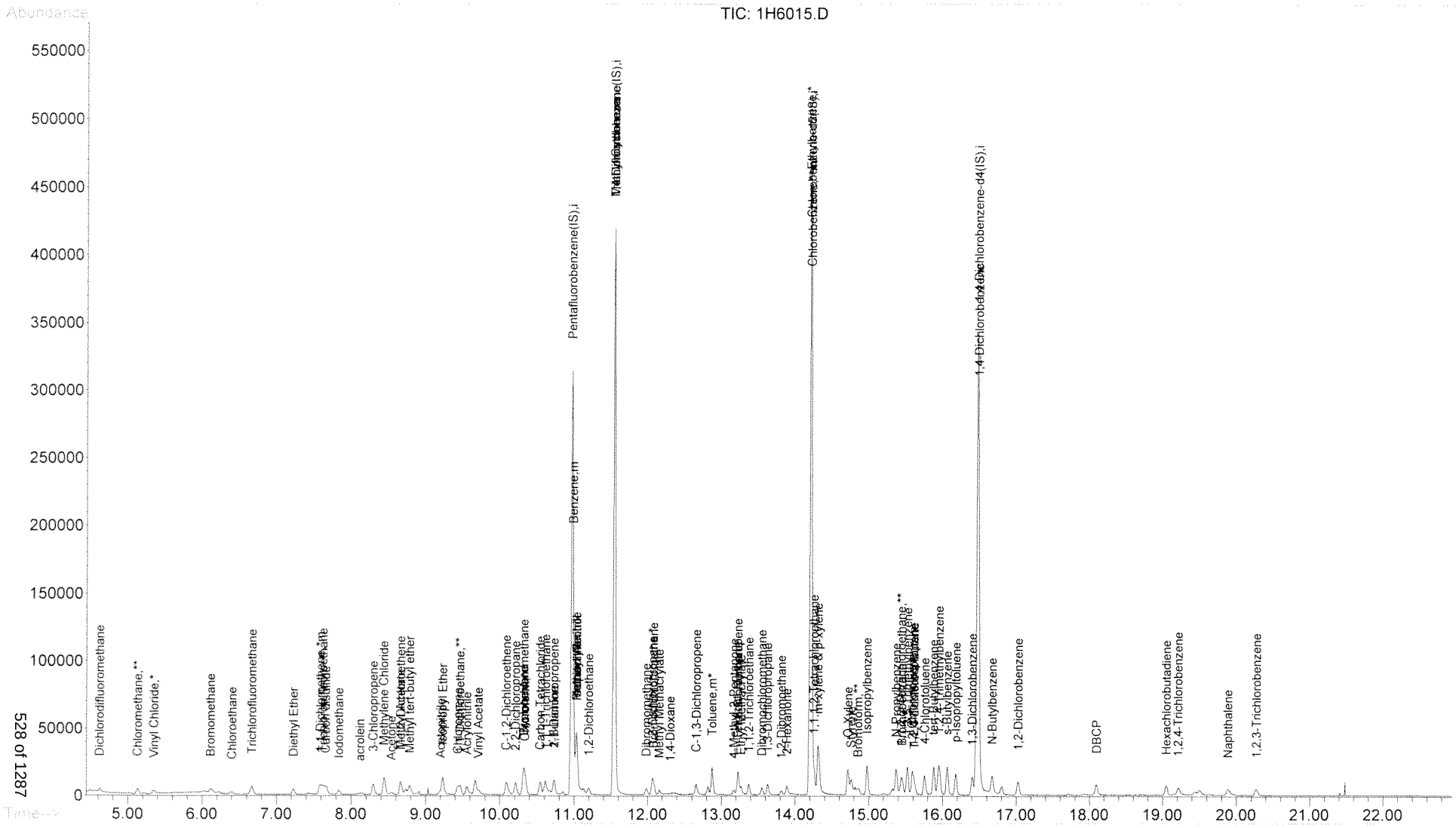
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	7913	3.12 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.22	180	3553	2.19 ug/kg	95
97) Hexachlorobutadiene	19.04	225	2023	2.00 ug/kg	98
98) 1,2,3-Trichlorobenzene	20.27	180	3258	2.26 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6015.D Vial: 13
Acq On : 6 Aug 2014 19:38 Operator: JFL
Sample : 2 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:24 2014 Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6016.D Vial: 14
Acq On : 6 Aug 2014 20:07 Operator: JFL
Sample : 5 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	203895	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	327981	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	280278	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	119369	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	14262	5.13 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 10.26%#		
44) 1,2-Dichloroethane-d4	11.13	65	12158	4.29 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 8.58%#		
56) D8-Toluene	12.82	98	41821	4.98 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 9.96%#		
77) Bromofluorobenzene	15.30	95	15386	4.72 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 9.44%#		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.62	85	10906	3.05 ug/kg	98
3) Chloromethane	5.13	50	14302	3.04 ug/kg	99
4) Vinyl Chloride	5.34	62	9087	2.00 ug/kg	91
5) Bromomethane	6.12	94	6565	2.67 ug/kg	88
6) Chloroethane	6.40	64	6363	2.64 ug/kg	91
7) Trichlorofluoromethane	6.67	101	16085	3.31 ug/kg	98
8) Trichlorotrifluoroethane	7.62	101	11781	4.27 ug/kg	92
9) acrolein	8.12	56	3638	24.29 ug/kg	91
10) Acetone	8.54	43	5136	6.33 ug/kg	92
11) 1,1-Dichloroethene	7.58	96	11147	4.47 ug/kg	81
12) 3-Chloropropene	8.30	76	5814	3.59 ug/kg	74
13) Acetonitrile	9.18	41	6479	21.59 ug/kg#	75
14) Iodomethane	7.83	142	11468	3.83 ug/kg	95
15) Carbon disulfide	7.66	76	33429	3.46 ug/kg	98
16) Methylene Chloride	8.44	84	14588	4.80 ug/kg#	81
17) Methyl tert-butyl ether	8.78	73	23352	3.54 ug/kg	90
18) Acrylonitrile	9.55	53	21632	29.99 ug/kg	94
19) T-1,2-Dichloroethene	8.66	96	12434	4.36 ug/kg	87
20) Isopropyl Ether	9.23	45	35851	3.12 ug/kg#	90
21) C-1,2-Dichloroethene	10.09	96	12838	4.08 ug/kg	86
22) 1,1-Dichloroethane	9.47	63	19250	3.58 ug/kg	97
23) Vinyl Acetate	9.71	43	18122	2.24 ug/kg	94
24) Chloroprene	9.43	53	13231	2.55 ug/kg	81
25) 2-Butanone	10.72	72	1351	7.56 ug/kg#	1
26) Propionitrile	11.03	54	9049	30.23 ug/kg	100
27) 2,2-Dichloropropane	10.22	77	16360	3.59 ug/kg	99
28) Methacrylonitrile	11.03	67	27959	32.26 ug/kg	76
29) Chloroform	10.35	83	21463	3.80 ug/kg	93
31) Dibromofluoromethane	10.55	113	14262	4.42 ug/kg	100
32) Bromochloromethane	10.31	128	4865	4.39 ug/kg#	66
33) 1,1,1-Trichloroethane	10.61	97	16830	3.77 ug/kg	97
34) 1,1-Dichloropropene	10.73	75	16151	4.04 ug/kg	94
35) Diethyl Ether	7.22	59	7322	3.26 ug/kg	91
36) Methyl Acetate	8.67	74	1178	2.88 ug/kg	92
37) Cyclohexane	10.32	56	18822	3.64 ug/kg	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6016.D
Acq On : 6 Aug 2014 20:07
Sample : 5 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014

Vial: 14
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Methyl Cyclohexane	11.55	55	16273	4.67 ug/kg#	79
40)	Carbon Tetrachloride	10.54	117	13537	4.47 ug/kg	98
41)	1,2-Dichloroethane	11.20	62	11341	3.44 ug/kg	98
42)	Benzene	10.99	78	44683	4.42 ug/kg	78
43)	Isobutyl Alcohol	11.03	43	9161	36.88 ug/kg#	1
45)	1,2-Dichloroethane-d4	11.13	65	12158	4.29 ug/kg#	91
46)	Trichloroethene	11.54	130	10810	4.87 ug/kg#	74
47)	1,2-Dichloropropane	12.06	63	10197	4.11 ug/kg	91
48)	Methyl Methacrylate	12.16	100	1960	3.90 ug/kg	100
49)	1,4-Dioxane	12.30	88	1890	91.77 ug/kg#	81
50)	Bromodichloromethane	12.08	83	13971	3.69 ug/kg	99
51)	Dibromomethane	11.98	93	6266	4.07 ug/kg	93
52)	4-Methyl-2-Pentanone	13.16	100	1136	4.28 ug/kg	53
53)	2-Chloroethyl vinyl ether	12.56	63	365	0.45 ug/kg#	58
54)	2-Hexanone	13.88	43	7339	4.18 ug/kg#	87
55)	C-1,3-Dichloropropene	12.66	75	16028	4.00 ug/kg	85
57)	D8-Toluene	12.82	98	41821	4.98 ug/kg	94
59)	Toluene	12.87	92	27297	4.42 ug/kg	99
60)	Ethyl Methacrylate	13.26	69	9948	3.37 ug/kg#	85
61)	T-1,3-Dichloropropene	13.22	75	11918	3.31 ug/kg	81
62)	1,1,2-Trichloroethane	13.37	97	7804	4.26 ug/kg	99
63)	1,3-Dichloropropane	13.63	76	14027	4.13 ug/kg	97
64)	Tetrachloroethene	13.23	164	8555	4.88 ug/kg	99
65)	Dibromochloromethane	13.55	129	8530	3.85 ug/kg	98
66)	1,2-Dibromoethane	13.81	107	7837	4.21 ug/kg	97
67)	Chlorobenzene	14.23	112	28709	4.80 ug/kg	98
68)	1,1,1,2-Tetrachloroethane	14.25	131	8438	4.26 ug/kg#	1
69)	Ethylbenzene	14.20	106	14886	4.68 ug/kg	88
70)	m-xylene & p-xylene	14.31	106	37936	9.43 ug/kg	84
71)	O-Xylene	14.71	106	18438	4.87 ug/kg	85
72)	Bromoform	14.85	173	4822	3.71 ug/kg	98
73)	Styrene	14.76	104	24190	4.09 ug/kg	93
74)	Isopropylbenzene	14.97	105	49704	4.74 ug/kg	97
75)	1,2,3-Trichloropropane	15.62	75	10904	3.71 ug/kg	90
76)	1,1,2,2-Tetrachloroethane	15.43	83	10880	4.10 ug/kg	98
78)	Bromofluorobenzene	15.30	95	15386	4.72 ug/kg#	71
79)	T-1,4-dichloro-2-butene	15.62	53	1974	2.38 ug/kg#	38
80)	N-Propylbenzene	15.37	91	58720	4.32 ug/kg	93
82)	Bromobenzene	15.45	156	10309	5.00 ug/kg	89
83)	1,3,5-Trimethylbenzene	15.52	105	36982	4.82 ug/kg	93
84)	2-Chlorotoluene	15.59	91	34523	4.40 ug/kg	94
85)	4-Chlorotoluene	15.75	91	32082	4.33 ug/kg	91
86)	1,2,4-Trimethylbenzene	15.94	105	33255	4.69 ug/kg	93
87)	s-Butylbenzene	16.06	105	51753	4.82 ug/kg	97
88)	tert-Butylbenzene	15.88	119	32867	5.28 ug/kg	88
89)	p-Isopropyltoluene	16.18	119	32649	5.07 ug/kg	96
90)	1,3-Dichlorobenzene	16.40	146	18067	4.80 ug/kg	99
91)	1,4-Dichlorobenzene	16.49	146	17789	4.75 ug/kg	92
92)	1,2-Dichlorobenzene	17.02	146	16701	4.86 ug/kg	99
93)	N-Butylbenzene	16.67	91	28992	3.97 ug/kg	98
94)	DBCP	18.10	75	1595	4.09 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6016.D Vial: 14
Acq On : 6 Aug 2014 20:07 Operator: JFL
Sample : 5 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

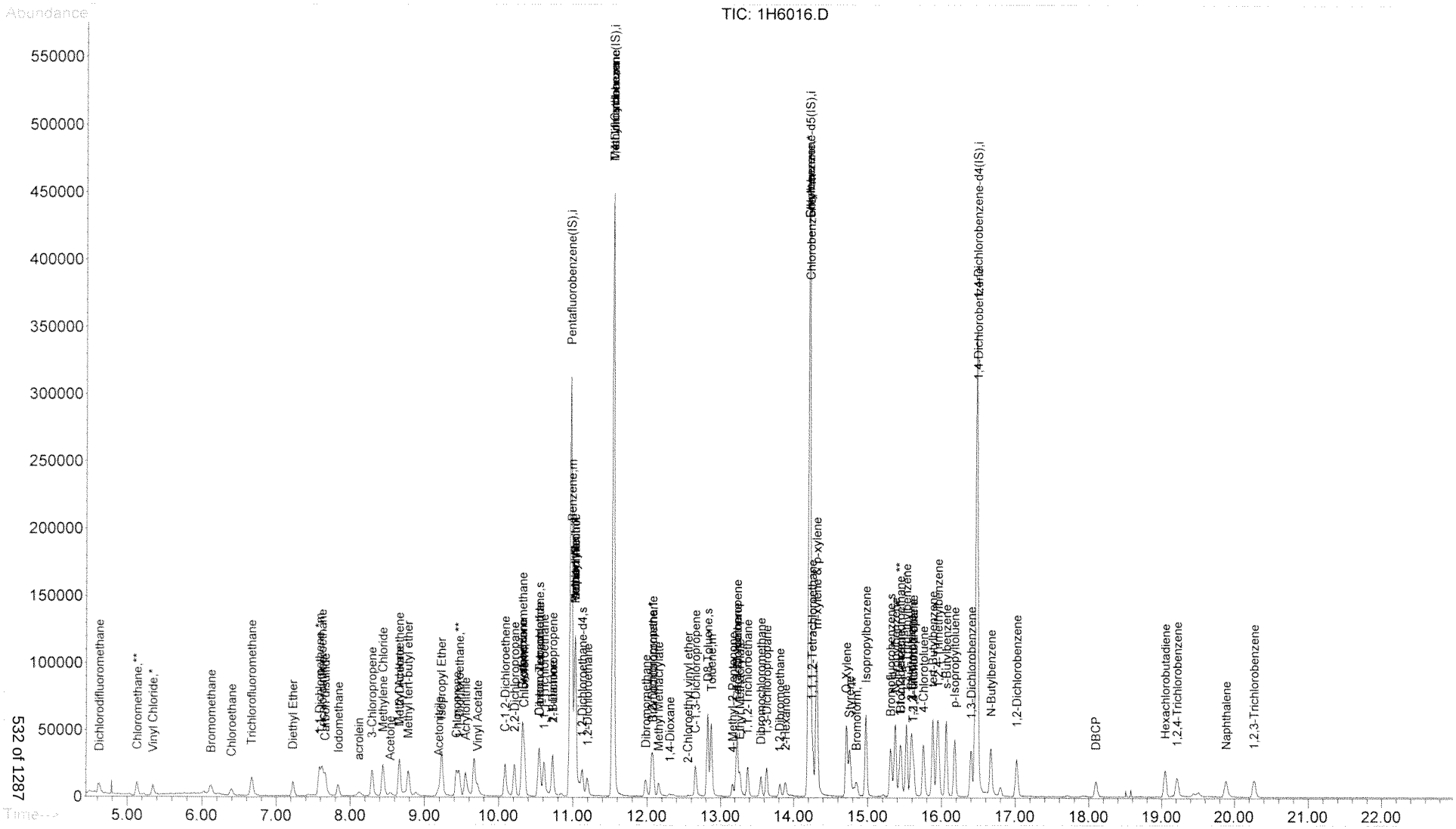
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	19381	7.71 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.22	180	8085	5.04 ug/kg	97
97) Hexachlorobutadiene	19.05	225	5713	5.71 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	7873	5.51 ug/kg	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6016.D Vial: 14
Acq On : 6 Aug 2014 20:07 Operator: JFL
Sample : 5 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014 Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D Vial: 15
Acq On : 6 Aug 2014 20:36 Operator: JFL
Sample : 20 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	220978	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	355591	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	292556	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	128096	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	65196	21.32 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 42.64%#		
44) 1,2-Dichloroethane-d4	11.13	65	54348	17.69 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 35.38%#		
56) D8-Toluene	12.82	98	203042	22.32 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 44.64%		
77) Bromofluorobenzene	15.30	95	73238	21.52 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 43.04%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.63	85	47874	12.37 ug/kg	97
3) Chloromethane	5.14	50	57256	11.23 ug/kg	99
4) Vinyl Chloride	5.35	62	39674	8.07 ug/kg	97
5) Bromomethane	6.13	94	23316	8.76 ug/kg	98
6) Chloroethane	6.39	64	27242	10.66 ug/kg	93
7) Trichlorofluoromethane	6.68	101	69616	13.21 ug/kg	98
8) Trichlorotrifluoroethane	7.62	101	47925	16.02 ug/kg	94
9) acrolein	8.11	56	15316	94.36 ug/kg	96
10) Acetone	8.54	43	11338	12.89 ug/kg	91
11) 1,1-Dichloroethene	7.59	96	45396	16.78 ug/kg	80
12) 3-Chloropropene	8.30	76	24065	13.70 ug/kg	73
13) Acetonitrile	9.18	41	31036	95.43 ug/kg	92
14) Iodomethane	7.84	142	51264	15.78 ug/kg	93
15) Carbon disulfide	7.67	76	140802	13.43 ug/kg	99
16) Methylene Chloride	8.45	84	53492	16.23 ug/kg#	81
17) Methyl tert-butyl ether	8.78	73	99342	13.88 ug/kg	89
18) Acrylonitrile	9.54	53	83448	106.76 ug/kg	97
19) T-1,2-Dichloroethene	8.66	96	52134	16.87 ug/kg	85
20) Isopropyl Ether	9.23	45	151396	12.17 ug/kg#	90
21) C-1,2-Dichloroethene	10.09	96	54144	15.87 ug/kg	85
22) 1,1-Dichloroethane	9.46	63	78839	13.52 ug/kg	98
23) Vinyl Acetate	9.70	43	90877	10.35 ug/kg	95
24) Chloroprene	9.43	53	58431	10.40 ug/kg	75
25) 2-Butanone	10.71	72	2753m	14.18 ug/kg	1
26) Propionitrile	11.02	54	34341	105.85 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	67717	13.73 ug/kg	98
28) Methacrylonitrile	11.03	67	112857	120.17 ug/kg	76
29) Chloroform	10.35	83	88889	14.50 ug/kg	94
31) Dibromofluoromethane	10.55	113	65196	18.63 ug/kg	100
32) Bromochloromethane	10.32	128	21055	17.54 ug/kg#	64
33) 1,1,1-Trichloroethane	10.62	97	70413	14.56 ug/kg	99
34) 1,1-Dichloropropene	10.73	75	64186	14.83 ug/kg	95
35) Diethyl Ether	7.22	59	31554	12.97 ug/kg	92
36) Methyl Acetate	8.66	74	5729	12.93 ug/kg#	64
37) Cyclohexane	10.33	56	73799	13.16 ug/kg	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D
Acq On : 6 Aug 2014 20:36
Sample : 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014

Vial: 15
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	60138	15.92 ug/kg	83
40) Carbon Tetrachloride	10.55	117	56601	17.25 ug/kg	100
41) 1,2-Dichloroethane	11.20	62	46337	12.97 ug/kg	98
42) Benzene	10.99	78	179852	16.40 ug/kg	77
43) Isobutyl Alcohol	11.03	43	38401	142.58 ug/kg#	5
45) 1,2-Dichloroethane-d4	11.13	65	54348	17.69 ug/kg#	95
46) Trichloroethene	11.54	130	45116	18.73 ug/kg	95
47) 1,2-Dichloropropane	12.06	63	42836	15.91 ug/kg	89
48) Methyl Methacrylate	12.15	100	9274	17.00 ug/kg	87
49) 1,4-Dioxane	12.29	88	7282	326.13 ug/kg	100
50) Bromodichloromethane	12.08	83	62095	15.13 ug/kg	98
51) Dibromomethane	11.98	93	27264	16.32 ug/kg	91
52) 4-Methyl-2-Pentanone	13.16	100	5015	17.44 ug/kg#	40
53) 2-Chloroethyl vinyl ether	12.55	63	3592	4.13 ug/kg	98
54) 2-Hexanone	13.87	43	24407	12.84 ug/kg#	88
55) C-1,3-Dichloropropene	12.65	75	70452	16.20 ug/kg	81
57) D8-Toluene	12.82	98	203042	22.32 ug/kg	94
59) Toluene	12.87	92	110017	17.08 ug/kg	98
60) Ethyl Methacrylate	13.26	69	44694	14.51 ug/kg	81
61) T-1,3-Dichloropropene	13.21	75	54131	14.39 ug/kg	81
62) 1,1,2-Trichloroethane	13.37	97	32941	17.23 ug/kg	98
63) 1,3-Dichloropropane	13.63	76	60083	16.95 ug/kg	100
64) Tetrachloroethene	13.23	164	35263	19.27 ug/kg	99
65) Dibromochloromethane	13.55	129	40140	17.37 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	35312	18.17 ug/kg	99
67) Chlorobenzene	14.22	112	118249	18.94 ug/kg	92
68) 1,1,1,2-Tetrachloroethane	14.26	131	36924	17.87 ug/kg	97
69) Ethylbenzene	14.19	106	61198	18.44 ug/kg	86
70) m-xylene & p-xylene	14.31	106	152347	36.27 ug/kg	87
71) O-Xylene	14.71	106	75747	19.18 ug/kg	86
72) Bromoform	14.84	173	22583	16.63 ug/kg	99
73) Styrene	14.75	104	111449	18.03 ug/kg	92
74) Isopropylbenzene	14.97	105	199027	18.17 ug/kg	96
75) 1,2,3-Trichloropropane	15.62	75	42681	13.91 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	43502	15.69 ug/kg	97
78) Bromofluorobenzene	15.30	95	73238	21.52 ug/kg#	72
79) T-1,4-dichloro-2-butene	15.62	53	8601	9.94 ug/kg#	54
80) N-Propylbenzene	15.37	91	245218	17.26 ug/kg	92
82) Bromobenzene	15.45	156	42856	19.37 ug/kg	89
83) 1,3,5-Trimethylbenzene	15.52	105	154928	18.81 ug/kg	91
84) 2-Chlorotoluene	15.59	91	141455	16.81 ug/kg	94
85) 4-Chlorotoluene	15.75	91	137064	17.23 ug/kg	90
86) 1,2,4-Trimethylbenzene	15.94	105	147226	19.36 ug/kg	93
87) s-Butylbenzene	16.06	105	210635	18.29 ug/kg	97
88) tert-Butylbenzene	15.88	119	131448	19.66 ug/kg	88
89) p-Isopropyltoluene	16.18	119	142945	20.69 ug/kg	94
90) 1,3-Dichlorobenzene	16.40	146	77271	19.13 ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	75675	18.83 ug/kg	99
92) 1,2-Dichlorobenzene	17.02	146	72154	19.57 ug/kg	100
93) N-Butylbenzene	16.67	91	143161	18.25 ug/kg	97
94) DBCP	18.10	75	6256	14.95 ug/kg	79

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D
Acq On : 6 Aug 2014 20:36
Sample : 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014

Vial: 15
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

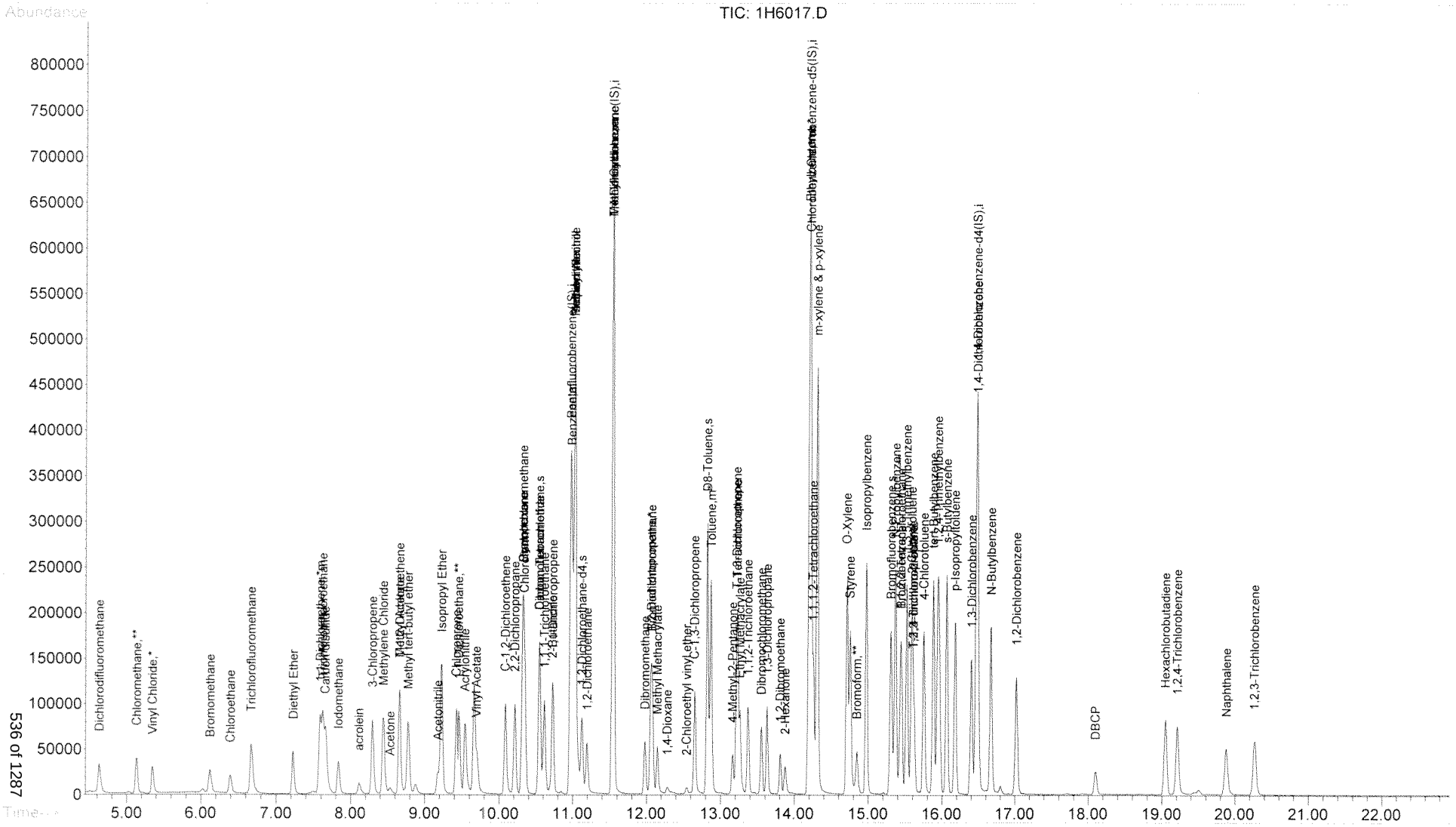
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	76285	28.28 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	39784	23.11 ug/kg	98
97) Hexachlorobutadiene	19.05	225	22734	21.19 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.27	180	35672	23.26 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D Vial: 15
Acq On : 6 Aug 2014 20:36 Operator: JFL
Sample : 20 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014 Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration

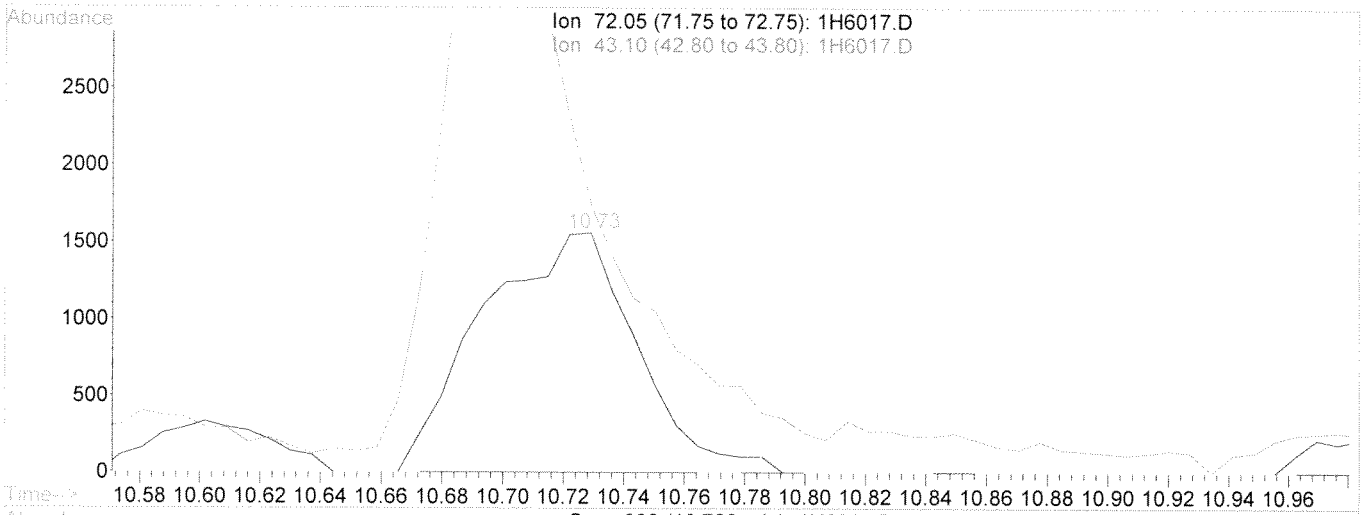


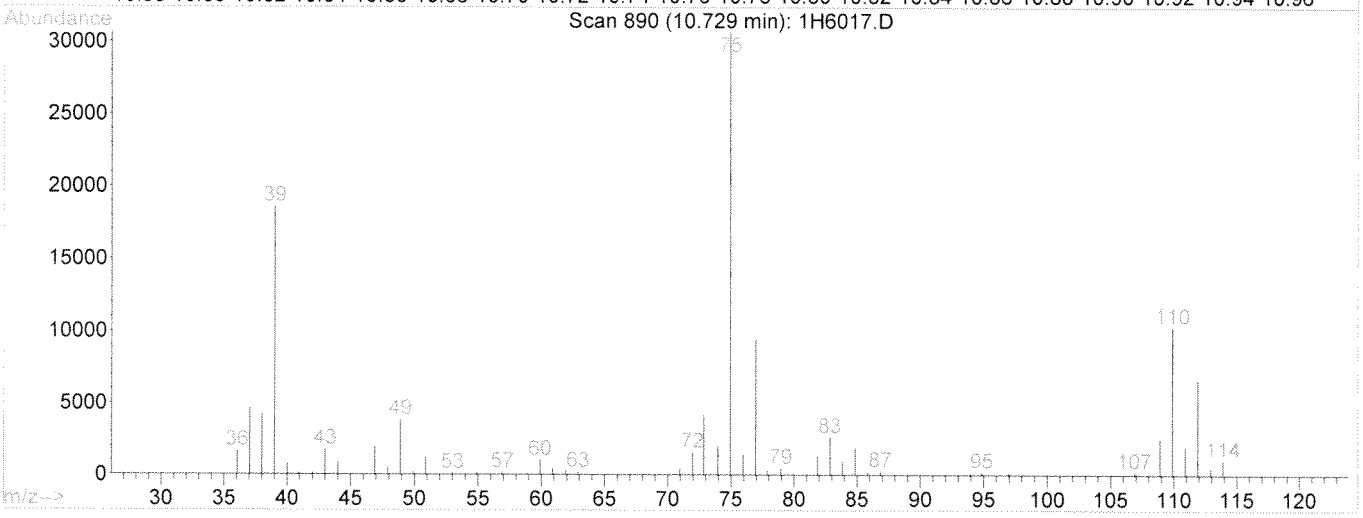
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D
Acq On : 6 Aug 2014 20:36
Sample : 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:03 2014

Vial: 15
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration





TIC: 1H6017.D

(25) 2-Butanone

10.73min 28.36ug/kg

response 5535

Ion	Exp%	Act%
72.05	100	100
43.10	843.00	250.35#
57.00	48.30	19.64#
0.00	0.00	0.00

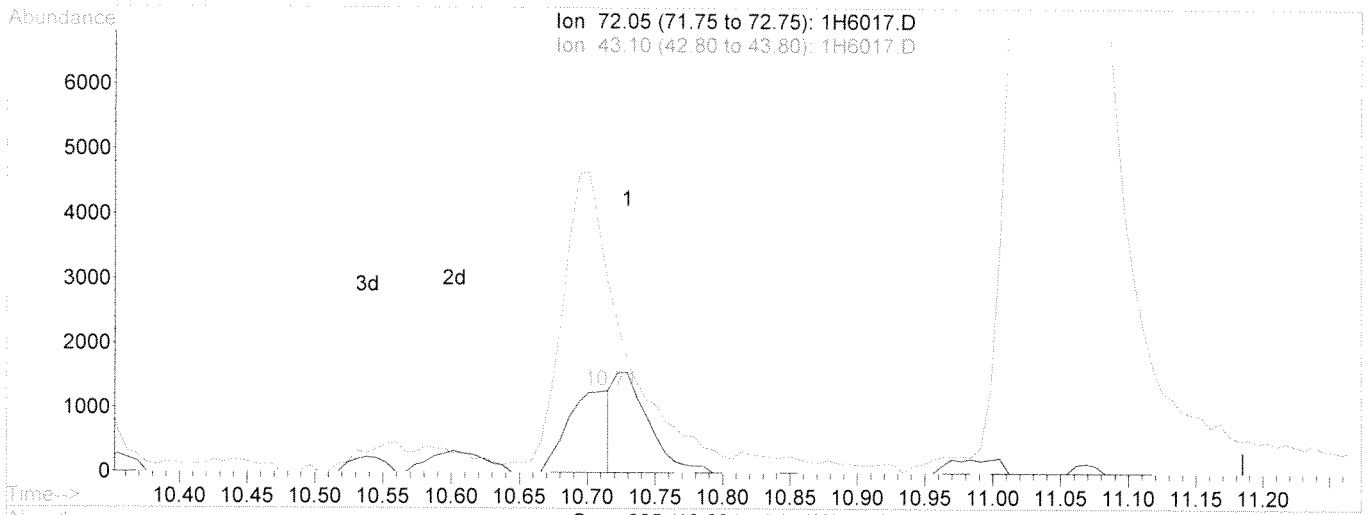
Select One:
[X] Original Integration [ ] Manual Integration
Select reason for manual integration:
[X] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/7/14
Review by/Date: 8/7/14

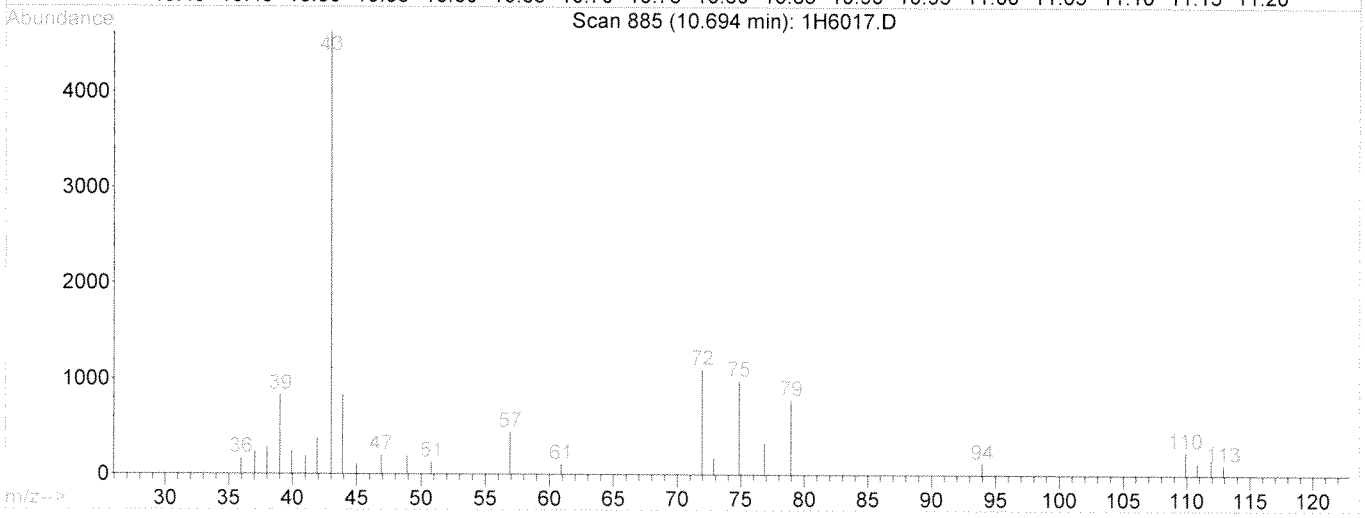
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6017.D
Acq On : 6 Aug 2014 20:36
Sample : 20 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014

Vial: 15
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration





TIC: 1H6017.D

(25) 2-Butanone

10.71min 14.18ug/kg m

response 2753

Ion	Exp%	Act%
72.05	100	100
43.10	843.00	503.34#
57.00	48.30	39.48
0.00	0.00	0.00

Select One:
NC 8/7/14 [X] ~~Original Integration~~ [ ] Manual Integration
Select reason for manual integration:
[X] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/7/14
Review by/Date: [illegible] 8/12/14

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D Vial: 16
Acq On : 6 Aug 2014 21:05 Operator: JFL
Sample : 50 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.98	168	174839	50.00 ug/kg	0.01
38) 1,4-Difluorobenzene(IS)	11.54	114	341486	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	288973	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	128462	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	108602	44.00 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 88.00%		
44) 1,2-Dichloroethane-d4	11.13	65	89657	30.40 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 60.80%		
56) D8-Toluene	12.82	98	356669	40.82 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 81.64%		
77) Bromofluorobenzene	15.30	95	132375	39.39 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 78.78%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.62	85	131545	42.97 ug/kg	96
3) Chloromethane	5.13	50	147636	36.60 ug/kg	99
4) Vinyl Chloride	5.35	62	102437	26.33 ug/kg	99
5) Bromomethane	6.12	94	61419	29.17 ug/kg	97
6) Chloroethane	6.39	64	55920	29.17 ug/kg	94
7) Trichlorofluoromethane	6.67	101	190095	45.60 ug/kg	98
8) Trichlorotrifluoroethane	7.62	101	124653	52.66 ug/kg	94
9) acrolein	8.11	56	38448	299.40 ug/kg	99
10) Acetone	8.53	43	22175	31.85 ug/kg	87
11) 1,1-Dichloroethene	7.58	96	117642	54.97 ug/kg	79
12) 3-Chloropropene	8.30	76	57129	41.11 ug/kg	71
13) Acetonitrile	9.18	41	80537	312.99 ug/kg	95
14) Iodomethane	7.83	142	123299	47.96 ug/kg	94
15) Carbon disulfide	7.66	76	348864	42.07 ug/kg	100
16) Methylene Chloride	8.44	84	126441	48.49 ug/kg#	81
17) Methyl tert-butyl ether	8.77	73	240079	42.39 ug/kg	88
18) Acrylonitrile	9.54	53	196029	316.98 ug/kg	99
19) T-1,2-Dichloroethene	8.66	96	128281	52.46 ug/kg	85
20) Isopropyl Ether	9.23	45	357913m	36.35 ug/kg	98
21) C-1,2-Dichloroethene	10.08	96	130651	48.39 ug/kg	85
22) 1,1-Dichloroethane	9.47	63	190596	41.31 ug/kg	98
23) Vinyl Acetate	9.71	43	218063	31.40 ug/kg	94
24) Chloroprene	9.42	53	150946	33.95 ug/kg	77
25) 2-Butanone	10.70	72	5572	35.99 ug/kg	49
26) Propionitrile	11.02	54	81373	317.00 ug/kg	100
27) 2,2-Dichloropropane	10.22	77	168449	43.16 ug/kg	100
28) Methacrylonitrile	11.03	67	260078	350.01 ug/kg	78
29) Chloroform	10.35	83	213391	44.01 ug/kg	93
31) Dibromofluoromethane	10.55	113	108602	39.23 ug/kg	100
32) Bromochloromethane	10.31	128	50703	53.40 ug/kg#	62
33) 1,1,1-Trichloroethane	10.61	97	176840	46.21 ug/kg	98
34) 1,1-Dichloropropene	10.72	75	160552	46.88 ug/kg	94
35) Diethyl Ether	7.22	59	75920	39.45 ug/kg	91
36) Methyl Acetate	8.66	74	13555	38.67 ug/kg	67
37) Cyclohexane	10.32	56	184052	41.48 ug/kg	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D
Acq On : 6 Aug 2014 21:05
Sample : 50 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014

Vial: 16
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	150529	41.51 ug/kg#	82
40) Carbon Tetrachloride	10.54	117	144633	45.89 ug/kg	100
41) 1,2-Dichloroethane	11.19	62	113548	33.10 ug/kg	98
42) Benzene	10.99	78	425333	40.39 ug/kg	78
43) Isobutyl Alcohol	11.03	43	83578	323.14 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	89657	30.40 ug/kg#	96
46) Trichloroethene	11.54	130	112785	48.76 ug/kg	90
47) 1,2-Dichloropropane	12.06	63	103042	39.86 ug/kg	88
48) Methyl Methacrylate	12.15	100	23547	44.95 ug/kg	82
49) 1,4-Dioxane	12.29	88	19302	900.15 ug/kg	91
50) Bromodichloromethane	12.08	83	155290	39.41 ug/kg	99
51) Dibromomethane	11.98	93	66669	41.55 ug/kg	89
52) 4-Methyl-2-Pentanone	13.16	100	12050	43.64 ug/kg#	42
53) 2-Chloroethyl vinyl ether	12.54	63	11474	13.73 ug/kg	94
54) 2-Hexanone	13.87	43	60568	33.17 ug/kg#	92
55) C-1,3-Dichloropropene	12.65	75	176025	42.15 ug/kg	80
57) D8-Toluene	12.82	98	356669	40.82 ug/kg	94
59) Toluene	12.87	92	271873	42.74 ug/kg	98
60) Ethyl Methacrylate	13.26	69	108700	35.74 ug/kg	81
61) T-1,3-Dichloropropene	13.21	75	133358	35.89 ug/kg	81
62) 1,1,2-Trichloroethane	13.37	97	79876	42.30 ug/kg	98
63) 1,3-Dichloropropane	13.63	76	146269	41.78 ug/kg	100
64) Tetrachloroethene	13.23	164	88806	49.12 ug/kg	99
65) Dibromochloromethane	13.55	129	101427	44.44 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	87055	45.35 ug/kg	99
67) Chlorobenzene	14.22	112	293794	47.65 ug/kg	89
68) 1,1,1,2-Tetrachloroethane	14.25	131	91976	45.06 ug/kg	97
69) Ethylbenzene	14.19	106	152918	46.64 ug/kg	85
70) m-xylene & p-xylene	14.31	106	384017	92.56 ug/kg	85
71) O-Xylene	14.71	106	189498	48.59 ug/kg	85
72) Bromoform	14.85	173	58492	43.62 ug/kg	100
73) Styrene	14.75	104	289643	47.45 ug/kg	97
74) Isopropylbenzene	14.97	105	506257	46.79 ug/kg	95
75) 1,2,3-Trichloropropane	15.62	75	106867	35.25 ug/kg	100
76) 1,1,2,2-Tetrachloroethane	15.43	83	104344	38.10 ug/kg	97
78) Bromofluorobenzene	15.30	95	132375	39.39 ug/kg#	69
79) T-1,4-dichloro-2-butene	15.61	53	20557	24.05 ug/kg#	49
80) N-Propylbenzene	15.36	91	614177	43.78 ug/kg	92
82) Bromobenzene	15.45	156	105235	47.42 ug/kg	89
83) 1,3,5-Trimethylbenzene	15.52	105	391109	47.36 ug/kg	92
84) 2-Chlorotoluene	15.59	91	352775	41.79 ug/kg	93
85) 4-Chlorotoluene	15.75	91	346137	43.38 ug/kg	90
86) 1,2,4-Trimethylbenzene	15.94	105	357740	46.91 ug/kg	92
87) s-Butylbenzene	16.06	105	545219	47.21 ug/kg	97
88) tert-Butylbenzene	15.88	119	333807	49.80 ug/kg	87
89) p-Isopropyltoluene	16.18	119	367468	53.05 ug/kg	94
90) 1,3-Dichlorobenzene	16.40	146	193800	47.85 ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	187181	46.45 ug/kg	100
92) 1,2-Dichlorobenzene	17.02	146	179696	48.61 ug/kg	100
93) N-Butylbenzene	16.66	91	369027	46.90 ug/kg	96
94) DBCP	18.10	75	16197	38.58 ug/kg	76

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D Vial: 16
Acq On : 6 Aug 2014 21:05 Operator: JFL
Sample : 50 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

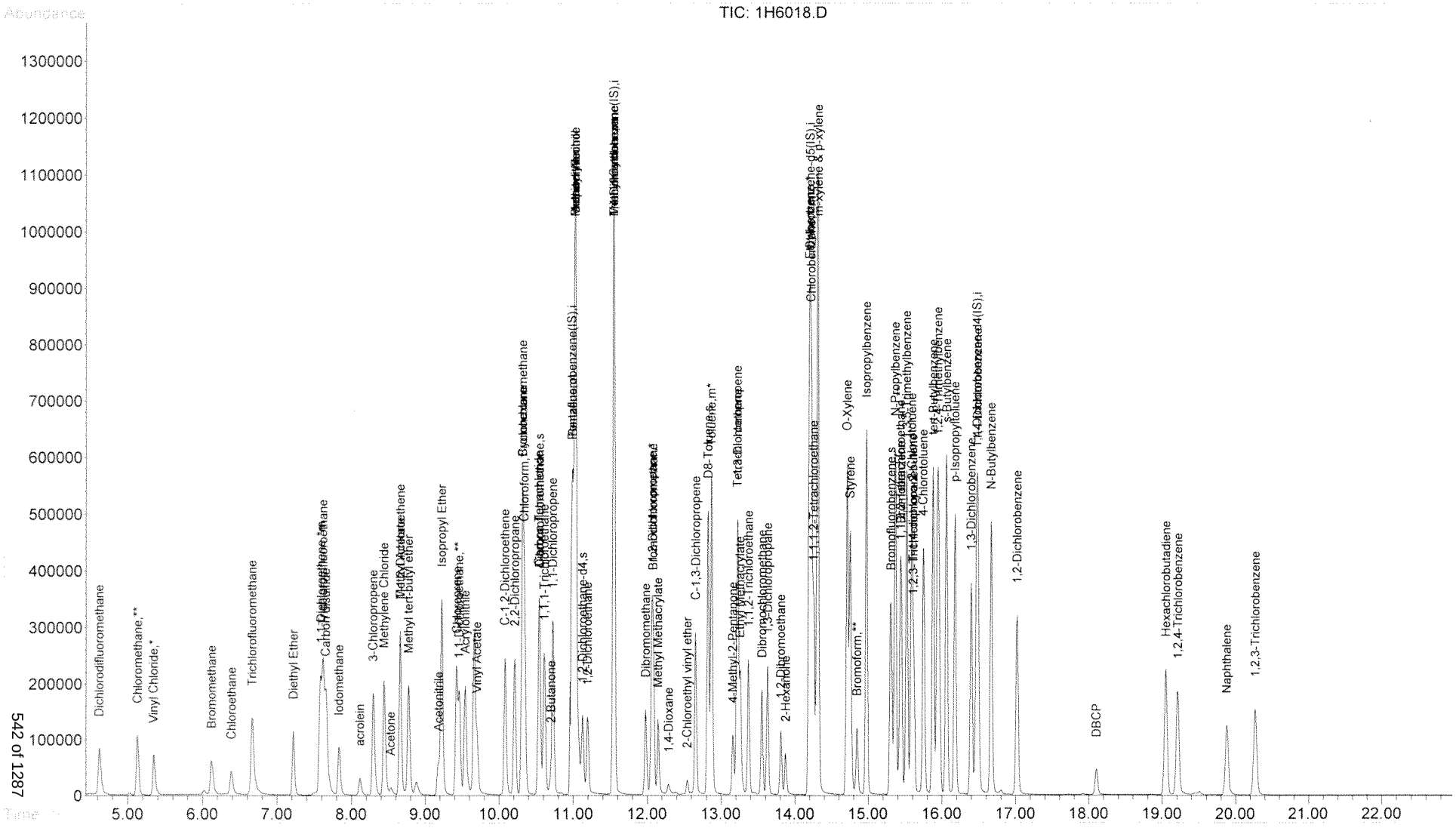
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95)	Naphthalene	19.87	128	182170	67.35 ug/kg	100
96)	1,2,4-Trichlorobenzene	19.21	180	99679	57.73 ug/kg	99
97)	Hexachlorobutadiene	19.05	225	62642	58.22 ug/kg	99
98)	1,2,3-Trichlorobenzene	20.26	180	89969	58.51 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D Vial: 16
Acq On : 6 Aug 2014 21:05 Operator: JFL
Sample : 50 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014 Quant Results File: 072314.RES

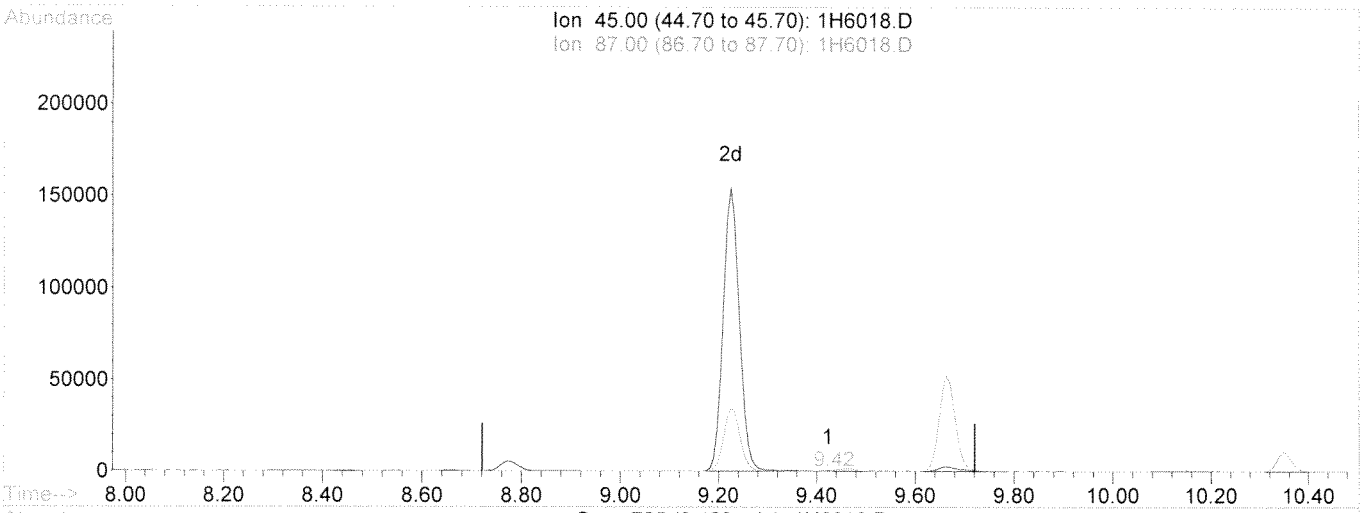
Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration

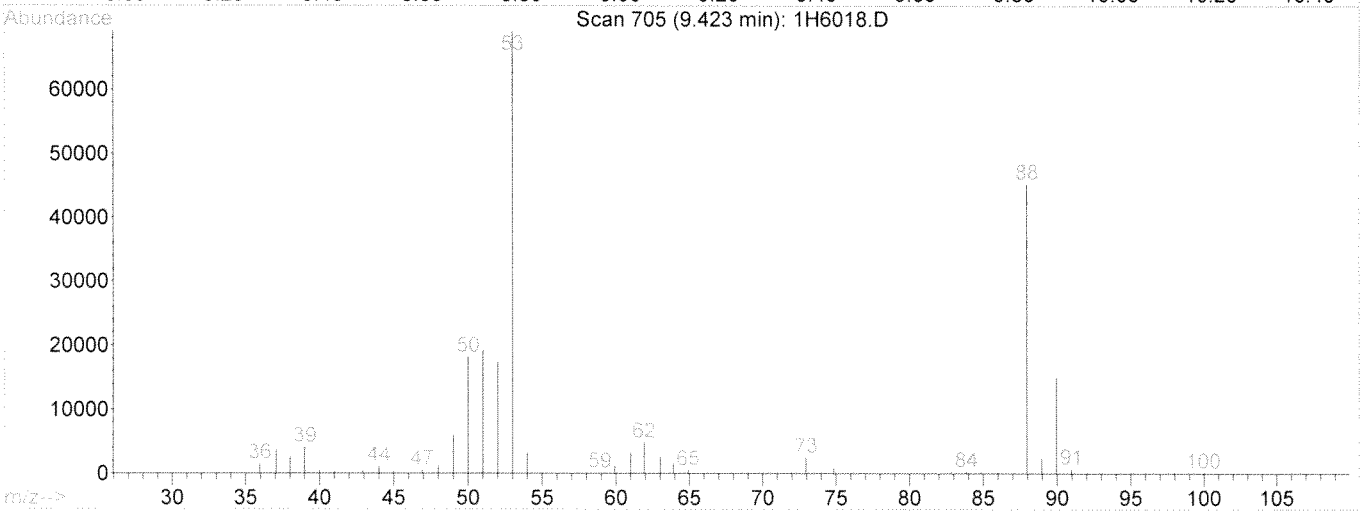


Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D Vial: 16
Acq On : 6 Aug 2014 21:05 Operator: JFL
Sample : 50 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration





TIC: 1H6018.D

(20) Isopropyl Ether

9.42min 0.10ug/kg

response 988

Ion	Exp%	Act%
45.00	100	100
87.00	17.60	16.60
0.00	0.00	0.00
0.00	0.00	0.00

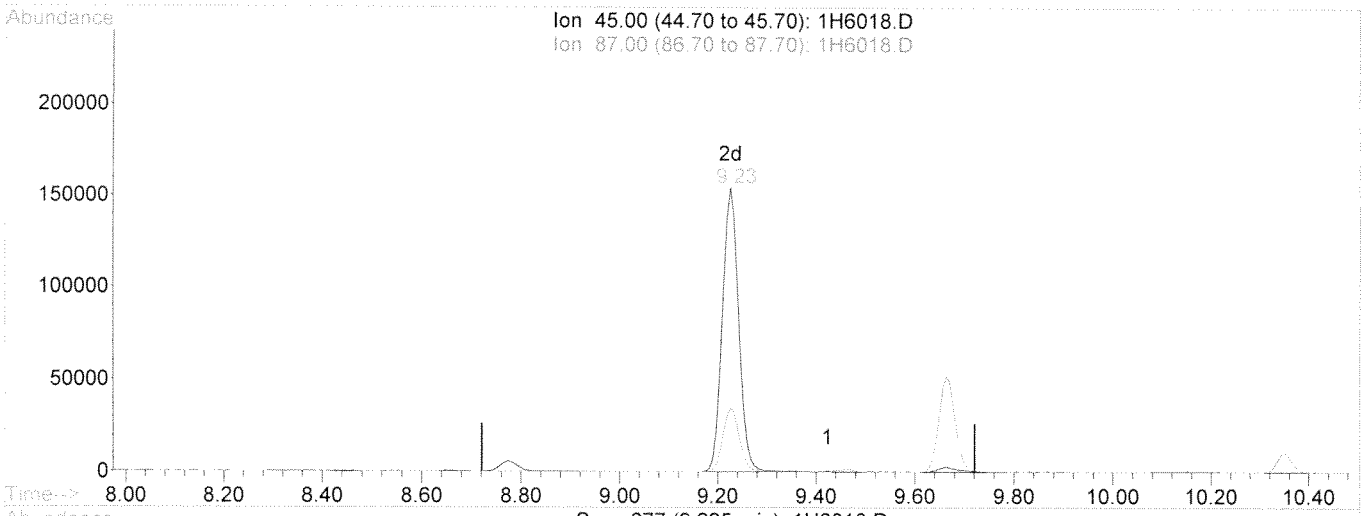
Select One:
[X] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date NC 8/7/14
Review by/Date: RS 8/7/14

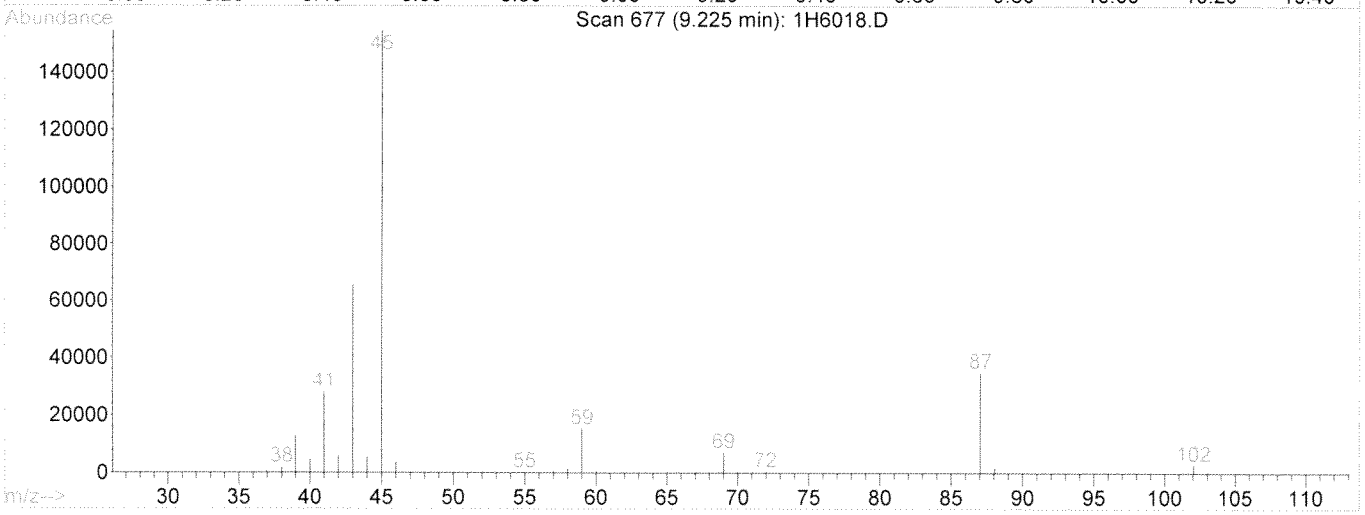
Quantitation Report (Qedit)

Data File : C:\HPCHEM\1\DATA\080614\1H6018.D
Acq On : 6 Aug 2014 21:05
Sample : 50 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:28 2014

Vial: 16
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: temp.res

Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Multiple Level Calibration





TIC: 1H6018.D

(20) Isopropyl Ether

9.23min 36.35ug/kg m

response 357913

Ion	Exp%	Act%
45.00	100	100
87.00	17.60	0.05#
0.00	0.00	0.00
0.00	0.00	0.00

Select One:
[] Original Integration [X] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[X] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date NC 8/7/14
Review by/Date: [illegible] 8/7/14

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6019.D Vial: 17
Acq On : 6 Aug 2014 21:34 Operator: JFL
Sample : 80 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	204752	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.55	114	326029	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	271881	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	124594	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	123289	42.71 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 85.42%		
44) 1,2-Dichloroethane-d4	11.13	65	101981	36.21 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 72.42%		
56) D8-Toluene	12.82	98	403739	48.40 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 96.80%		
77) Bromofluorobenzene	15.30	95	148781	47.05 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 94.10%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.63	85	197514	55.09 ug/kg	96
3) Chloromethane	5.13	50	229617	48.61 ug/kg	99
4) Vinyl Chloride	5.35	62	154191	33.85 ug/kg	99
5) Bromomethane	6.12	94	101499	41.16 ug/kg	99
6) Chloroethane	6.39	64	53469	23.42 ug/kg	97
7) Trichlorofluoromethane	6.67	101	288605	59.11 ug/kg	98
8) Trichlorotrifluoroethane	7.62	101	188216	67.90 ug/kg	93
9) acrolein	8.12	56	64732	430.43 ug/kg	99
10) Acetone	8.53	43	37813	46.38 ug/kg	88
11) 1,1-Dichloroethene	7.59	96	180456	72.00 ug/kg	79
12) 3-Chloropropene	8.29	76	88936	54.65 ug/kg	69
13) Acetonitrile	9.18	41	141535	469.68 ug/kg	99
14) Iodomethane	7.83	142	197741	65.69 ug/kg	94
15) Carbon disulfide	7.66	76	548064	56.43 ug/kg	100
16) Methylene Chloride	8.44	84	195847	64.14 ug/kg#	80
17) Methyl tert-butyl ether	8.77	73	379637	57.24 ug/kg	88
18) Acrylonitrile	9.54	53	331375	457.55 ug/kg	99
19) T-1,2-Dichloroethene	8.66	96	199751	69.75 ug/kg	83
20) Isopropyl Ether	9.23	45	554866	48.12 ug/kg#	88
21) C-1,2-Dichloroethene	10.08	96	204291	64.61 ug/kg	84
22) 1,1-Dichloroethane	9.47	63	288241	53.35 ug/kg	98
23) Vinyl Acetate	9.70	43	345483	42.48 ug/kg	94
24) Chloroprene	9.42	53	240207	46.13 ug/kg	78
25) 2-Butanone	10.69	72	10737	58.76 ug/kg#	34
26) Propionitrile	11.02	54	132263	439.97 ug/kg	100
27) 2,2-Dichloropropane	10.22	77	257284	56.29 ug/kg	99
28) Methacrylonitrile	11.03	67	413575	475.27 ug/kg	78
29) Chloroform	10.35	83	329967	58.11 ug/kg	94
31) Dibromofluoromethane	10.55	113	123289	38.03 ug/kg	100
32) Bromochloromethane	10.31	128	81017	72.86 ug/kg#	60
33) 1,1,1-Trichloroethane	10.61	97	274471	61.24 ug/kg	98
34) 1,1-Dichloropropene	10.72	75	249267	62.15 ug/kg	94
35) Diethyl Ether	7.22	59	120714	53.57 ug/kg	92
36) Methyl Acetate	8.66	74	22991	56.00 ug/kg#	63
37) Cyclohexane	10.32	56	278427	53.58 ug/kg	89

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6019.D Vial: 17
Acq On : 6 Aug 2014 21:34 Operator: JFL
Sample : 80 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	223667	64.60 ug/kg#	81
40) Carbon Tetrachloride	10.54	117	226030	75.12 ug/kg	100
41) 1,2-Dichloroethane	11.19	62	178805	54.59 ug/kg	98
42) Benzene	10.99	78	661719	65.82 ug/kg	79
43) Isobutyl Alcohol	11.03	43	132589	536.94 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	101981	36.21 ug/kg#	94
46) Trichloroethene	11.55	130	176802	80.07 ug/kg	88
47) 1,2-Dichloropropane	12.06	63	156425	63.37 ug/kg	89
48) Methyl Methacrylate	12.15	100	39400	78.77 ug/kg	81
49) 1,4-Dioxane	12.29	88	32550	1589.94 ug/kg	93
50) Bromodichloromethane	12.08	83	245036	65.14 ug/kg	98
51) Dibromomethane	11.98	93	107677	70.28 ug/kg	90
52) 4-Methyl-2-Pentanone	13.16	100	19291	73.18 ug/kg	49
53) 2-Chloroethyl vinyl ether	12.54	63	24593	30.82 ug/kg	94
54) 2-Hexanone	13.86	43	104206	59.77 ug/kg#	89
55) C-1,3-Dichloropropene	12.66	75	277944	69.72 ug/kg	81
57) D8-Toluene	12.82	98	403739	48.40 ug/kg	94
59) Toluene	12.87	92	423816	70.81 ug/kg	97
60) Ethyl Methacrylate	13.26	69	175329	61.27 ug/kg	81
61) T-1,3-Dichloropropene	13.21	75	214570	61.38 ug/kg	82
62) 1,1,2-Trichloroethane	13.37	97	128607	72.39 ug/kg	98
63) 1,3-Dichloropropane	13.62	76	233418	70.86 ug/kg	100
64) Tetrachloroethene	13.23	164	141375	83.11 ug/kg	99
65) Dibromochloromethane	13.55	129	166502	77.55 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	141954	78.60 ug/kg	98
67) Chlorobenzene	14.23	112	460105	79.32 ug/kg	88
68) 1,1,1,2-Tetrachloroethane	14.25	131	145697	75.87 ug/kg	98
69) Ethylbenzene	14.19	106	241367	78.25 ug/kg	84
70) m-xylene & p-xylene	14.30	106	604900	154.96 ug/kg	83
71) O-Xylene	14.71	106	293405	79.96 ug/kg	84
72) Bromoform	14.85	173	97939	77.62 ug/kg	100
73) Styrene	14.76	104	463730	80.74 ug/kg	97
74) Isopropylbenzene	14.97	105	786677	77.28 ug/kg	95
75) 1,2,3-Trichloropropane	15.62	75	178980	62.75 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	171828	66.68 ug/kg	97
78) Bromofluorobenzene	15.30	95	148781	47.05 ug/kg#	63
79) T-1,4-dichloro-2-butene	15.61	53	34701	43.15 ug/kg#	51
80) N-Propylbenzene	15.36	91	966053	73.19 ug/kg	91
82) Bromobenzene	15.44	156	168270	78.19 ug/kg	87
83) 1,3,5-Trimethylbenzene	15.52	105	623916	77.89 ug/kg	92
84) 2-Chlorotoluene	15.58	91	553557	67.61 ug/kg	92
85) 4-Chlorotoluene	15.75	91	548568	70.88 ug/kg	90
86) 1,2,4-Trimethylbenzene	15.94	105	592425	80.10 ug/kg	92
87) s-Butylbenzene	16.06	105	864048	77.13 ug/kg	96
88) tert-Butylbenzene	15.88	119	528607	81.30 ug/kg	87
89) p-Isopropyltoluene	16.18	119	593002	88.26 ug/kg	94
90) 1,3-Dichlorobenzene	16.40	146	313836	79.89 ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	301378	77.12 ug/kg	100
92) 1,2-Dichlorobenzene	17.02	146	287034	80.06 ug/kg	100
93) N-Butylbenzene	16.66	91	605463	79.34 ug/kg	96
94) DBCP	18.10	75	28546	70.11 ug/kg	73

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6019.D Vial: 17
Acq On : 6 Aug 2014 21:34 Operator: JFL
Sample : 80 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	302579	115.34 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	165511	98.83 ug/kg	99
97) Hexachlorobutadiene	19.05	225	99282	95.14 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	147715	99.04 ug/kg	99

(#) = qualifier out of range (m) = manual integration

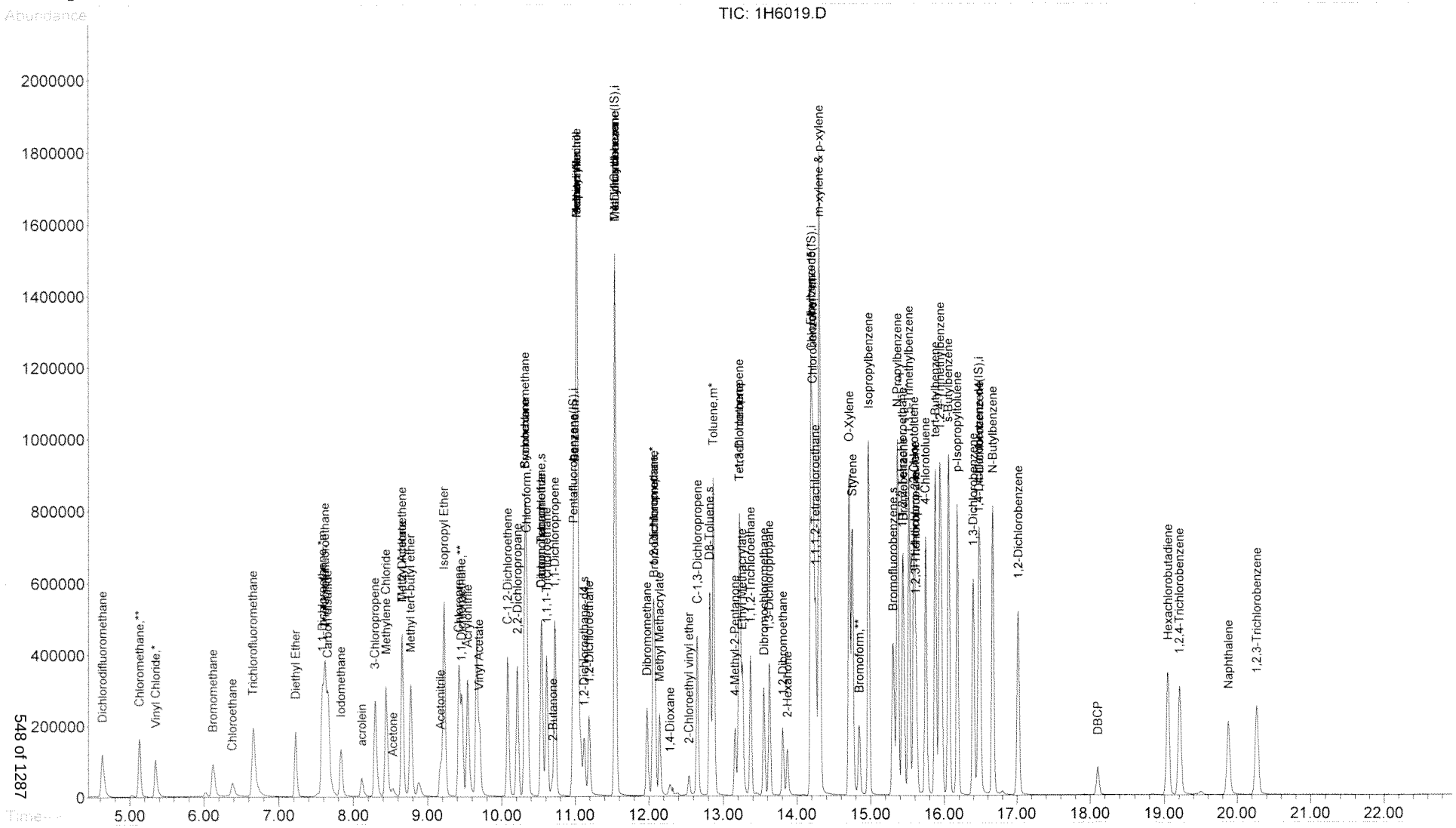
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6019.D
Acq On : 6 Aug 2014 21:34
Sample : 80 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014

Vial: 17
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6020.D Vial: 18
Acq On : 6 Aug 2014 22:04 Operator: JFL
Sample : 100 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	217731	50.00	ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.55	114	350589	50.00	ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.20	117	295503	50.00	ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	136176	50.00	ug/kg	0.00
System Monitoring Compounds						
30) Dibromofluoromethane	10.55	113	167304	53.97	ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 107.94%			
44) 1,2-Dichloroethane-d4	11.13	65	135269	44.67	ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 89.34%			
56) D8-Toluene	12.82	98	541387	60.35	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 120.70%			
77) Bromofluorobenzene	15.30	95	202919	59.04	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 118.08%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.62	85	264611	69.41	ug/kg	96
3) Chloromethane	5.13	50	302684	60.26	ug/kg	99
4) Vinyl Chloride	5.34	62	214053	44.19	ug/kg	100
5) Bromomethane	6.12	94	117879	44.95	ug/kg	99
6) Chloroethane	6.38	64	79066	33.56	ug/kg	97
7) Trichlorofluoromethane	6.65	101	391514	75.41	ug/kg	98
8) Trichlorotrifluoroethane	7.62	101	256837	87.13	ug/kg	94
9) acrolein	8.11	56	85849	536.81	ug/kg	99
10) Acetone	8.53	43	48913	56.42	ug/kg	88
11) 1,1-Dichloroethene	7.58	96	247843	92.99	ug/kg	77
12) 3-Chloropropene	8.29	76	116121	67.10	ug/kg	69
13) Acetonitrile	9.17	41	188718	588.93	ug/kg	98
14) Iodomethane	7.83	142	256182	80.03	ug/kg	94
15) Carbon disulfide	7.66	76	725993	70.30	ug/kg	100
16) Methylene Chloride	8.44	84	264716	81.53	ug/kg#	79
17) Methyl tert-butyl ether	8.77	73	519532	73.67	ug/kg	88
18) Acrylonitrile	9.54	53	445578	578.57	ug/kg	98
19) T-1,2-Dichloroethene	8.65	96	266805	87.61	ug/kg	83
20) Isopropyl Ether	9.23	45	748586	61.05	ug/kg#	88
21) C-1,2-Dichloroethene	10.08	96	275351	81.89	ug/kg	83
22) 1,1-Dichloroethane	9.46	63	385508	67.10	ug/kg	98
23) Vinyl Acetate	9.70	43	464253	53.68	ug/kg	93
24) Chloroprene	9.42	53	316549	57.17	ug/kg	76
25) 2-Butanone	10.68	72	15293	78.17	ug/kg#	26
26) Propionitrile	11.02	54	167474	523.89	ug/kg	100
27) 2,2-Dichloropropane	10.21	77	347039	71.40	ug/kg	100
28) Methacrylonitrile	11.03	67	521768	563.86	ug/kg	79
29) Chloroform	10.35	83	438910	72.69	ug/kg	93
31) Dibromofluoromethane	10.55	113	167304	48.53	ug/kg	100
32) Bromochloromethane	10.32	128	109326	92.45	ug/kg#	59
33) 1,1,1-Trichloroethane	10.61	97	367670	77.15	ug/kg	98
34) 1,1-Dichloropropene	10.73	75	336288	78.85	ug/kg	94
35) Diethyl Ether	7.23	59	162052	67.62	ug/kg	91
36) Methyl Acetate	8.65	74	30103	68.96	ug/kg#	64
37) Cyclohexane	10.32	56	366549	66.34	ug/kg	87

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6020.D Vial: 18
Acq On : 6 Aug 2014 22:04 Operator: JFL
Sample : 100 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	294997	79.23	ug/kg#	79
40) Carbon Tetrachloride	10.54	117	306279	94.66	ug/kg	100
41) 1,2-Dichloroethane	11.19	62	238661	67.76	ug/kg	98
42) Benzene	10.99	78	872191	80.67	ug/kg	77
43) Isobutyl Alcohol	11.03	43	164634	620.01	ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	135269	44.67	ug/kg#	96
46) Trichloroethene	11.54	130	237495	100.02	ug/kg	87
47) 1,2-Dichloropropane	12.06	63	210022	79.13	ug/kg	89
48) Methyl Methacrylate	12.15	100	53380	99.25	ug/kg	78
49) 1,4-Dioxane	12.27	88	42740	1941.44	ug/kg	92
50) Bromodichloromethane	12.08	83	330039	81.59	ug/kg	98
51) Dibromomethane	11.98	93	145359	88.23	ug/kg	89
52) 4-Methyl-2-Pentanone	13.16	100	26568	93.72	ug/kg#	44
53) 2-Chloroethyl vinyl ether	12.54	63	51789	60.35	ug/kg	94
54) 2-Hexanone	13.87	43	136960	73.05	ug/kg#	90
55) C-1,3-Dichloropropene	12.65	75	374375	87.33	ug/kg	81
57) D8-Toluene	12.82	98	541387	60.35	ug/kg	94
59) Toluene	12.87	92	567496	87.23	ug/kg	97
60) Ethyl Methacrylate	13.26	69	235517	75.72	ug/kg	81
61) T-1,3-Dichloropropene	13.21	75	287359	75.63	ug/kg	82
62) 1,1,2-Trichloroethane	13.37	97	174162	90.20	ug/kg	97
63) 1,3-Dichloropropane	13.62	76	311766	87.08	ug/kg	100
64) Tetrachloroethene	13.23	164	187109	101.20	ug/kg	99
65) Dibromochloromethane	13.55	129	227828	97.63	ug/kg	100
66) 1,2-Dibromoethane	13.81	107	193435	98.54	ug/kg	98
67) Chlorobenzene	14.23	112	620551	98.43	ug/kg	87
68) 1,1,1,2-Tetrachloroethane	14.25	131	201302	96.45	ug/kg	98
69) Ethylbenzene	14.19	106	322672	96.25	ug/kg	82
70) m-xylene & p-xylene	14.30	106	792241	186.73	ug/kg	83
71) O-Xylene	14.71	106	398491	99.92	ug/kg	84
72) Bromoform	14.85	173	136213	99.33	ug/kg	99
73) Styrene	14.76	104	635791	101.85	ug/kg	98
74) Isopropylbenzene	14.98	105	1053227	95.20	ug/kg	95
75) 1,2,3-Trichloropropane	15.62	75	240500	77.58	ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	231036	82.49	ug/kg	97
78) Bromofluorobenzene	15.30	95	202919	59.04	ug/kg#	63
79) T-1,4-dichloro-2-butene	15.61	53	45961	52.58	ug/kg#	49
80) N-Propylbenzene	15.36	91	1293639	90.17	ug/kg	91
82) Bromobenzene	15.44	156	229983	97.77	ug/kg	87
83) 1,3,5-Trimethylbenzene	15.52	105	831686	95.00	ug/kg	91
84) 2-Chlorotoluene	15.58	91	738841	82.57	ug/kg	91
85) 4-Chlorotoluene	15.75	91	735924	87.00	ug/kg	90
86) 1,2,4-Trimethylbenzene	15.94	105	775318	95.91	ug/kg	91
87) s-Butylbenzene	16.06	105	1148805	93.83	ug/kg	96
88) tert-Butylbenzene	15.88	119	715845	100.74	ug/kg	86
89) p-Isopropyltoluene	16.18	119	792554	107.93	ug/kg	93
90) 1,3-Dichlorobenzene	16.40	146	423083	98.54	ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	409005	95.75	ug/kg	99
92) 1,2-Dichlorobenzene	17.02	146	392075	100.06	ug/kg	99
93) N-Butylbenzene	16.67	91	803494	96.33	ug/kg	95
94) DBCP	18.10	75	37093	83.36	ug/kg	72

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6020.D Vial: 18
Acq On : 6 Aug 2014 22:04 Operator: JFL
Sample : 100 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

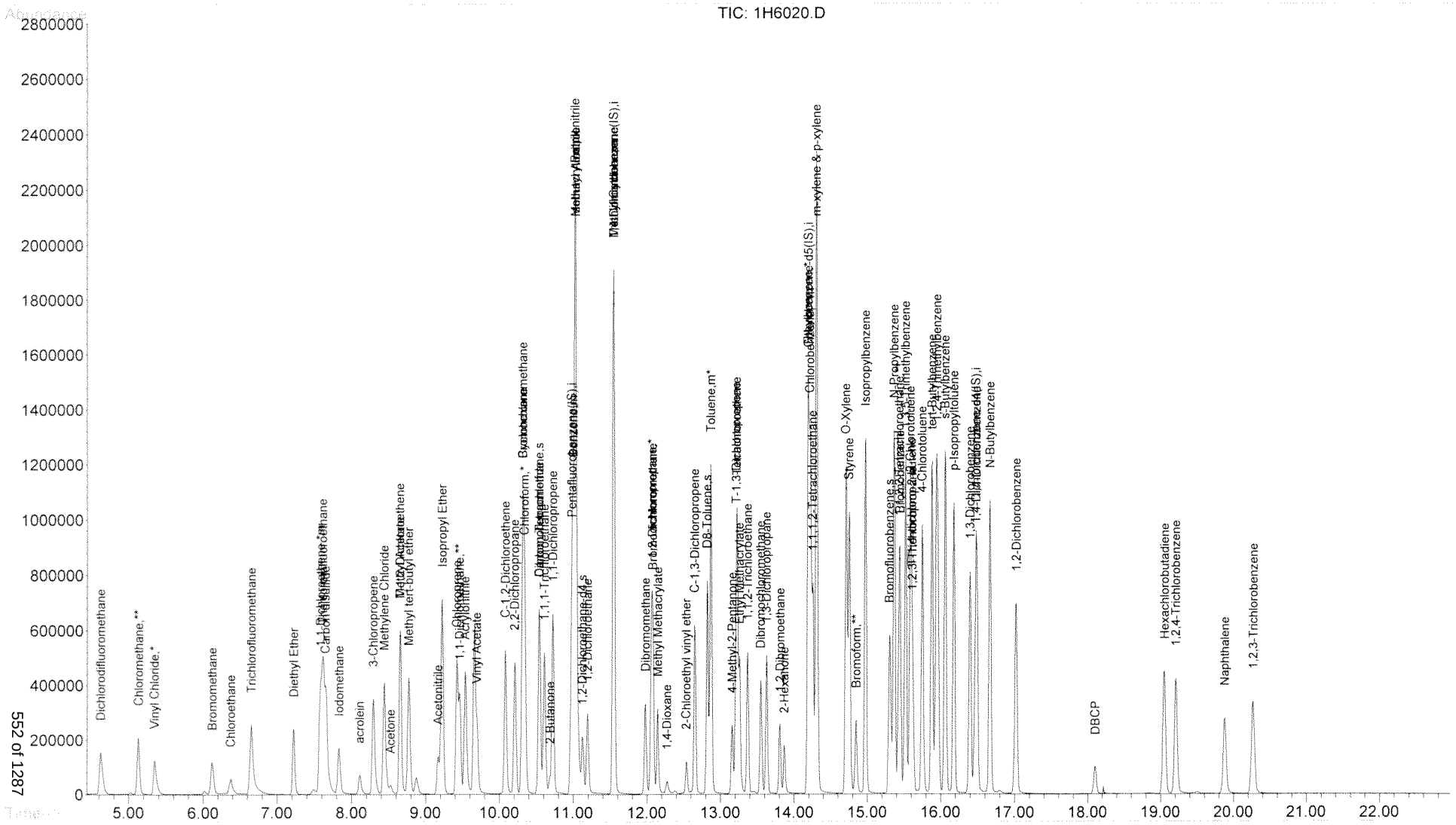
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.88	128	404907	141.22 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.20	180	225218	123.04 ug/kg	99
97) Hexachlorobutadiene	19.05	225	131645	115.43 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	201554	123.64 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6020.D Vial: 18
Acq On : 6 Aug 2014 22:04 Operator: JFL
Sample : 100 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6021.D
Acq On : 6 Aug 2014 22:33
Sample : 200 PPB
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014

Vial: 19
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00
Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	213579	50.00	ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	329998	50.00	ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	281099	50.00	ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	129459	50.00	ug/kg	0.00
System Monitoring Compounds						
30) Dibromofluoromethane	10.55	113	220625	71.48	ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 142.96%			
44) 1,2-Dichloroethane-d4	11.13	65	173272	60.79	ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 121.58%			
56) D8-Toluene	12.82	98	721719	85.48	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 170.96%#			
77) Bromofluorobenzene	15.30	95	263605	80.63	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 161.26%#			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.62	85	489598	130.92	ug/kg	96
3) Chloromethane	5.12	50	588004	119.34	ug/kg	99
4) Vinyl Chloride	5.34	62	405160	85.26	ug/kg	99
5) Bromomethane	6.12	94	217791	84.66	ug/kg	99
6) Chloroethane	6.36	64	77624	33.59	ug/kg	97
7) Trichlorofluoromethane	6.63	101	726401	142.63	ug/kg	98
8) Trichlorotrifluoroethane	7.61	101	474027	163.95	ug/kg	93
9) acrolein	8.11	56	151476	965.59	ug/kg	99
10) Acetone	8.52	43	82606	97.14	ug/kg	88
11) 1,1-Dichloroethene	7.57	96	464206	177.56	ug/kg	76
12) 3-Chloropropene	8.29	76	211611	124.66	ug/kg	70
13) Acetonitrile	9.17	41	327628	1042.30	ug/kg	98
14) Iodomethane	7.82	142	463058	147.46	ug/kg	93
15) Carbon disulfide	7.65	76	1357760	134.03	ug/kg	100
16) Methylene Chloride	8.44	84	492755	154.71	ug/kg#	78
17) Methyl tert-butyl ether	8.77	73	935535	135.23	ug/kg	88
18) Acrylonitrile	9.54	53	774809	1025.62	ug/kg	97
19) T-1,2-Dichloroethene	8.65	96	502757	168.31	ug/kg	82
20) Isopropyl Ether	9.22	45	1371200	114.01	ug/kg#	87
21) C-1,2-Dichloroethene	10.08	96	525902	159.44	ug/kg	82
22) 1,1-Dichloroethane	9.47	63	710613	126.09	ug/kg	98
23) Vinyl Acetate	9.70	43	838382	98.83	ug/kg	93
24) Chloroprene	9.42	53	586758	108.03	ug/kg	75
25) 2-Butanone	10.68	72	28084	143.15	ug/kg#	18
26) Propionitrile	11.02	54	260773	831.61	ug/kg	100
27) 2,2-Dichloropropane	10.21	77	650792	136.50	ug/kg	99
28) Methacrylonitrile	11.03	67	806751	888.78	ug/kg	82
29) Chloroform	10.35	83	810242	136.79	ug/kg	93
31) Dibromofluoromethane	10.55	113	220625	65.24	ug/kg	100
32) Bromochloromethane	10.31	128	202201	174.32	ug/kg#	56
33) 1,1,1-Trichloroethane	10.61	97	699170	149.56	ug/kg	99
34) 1,1-Dichloropropene	10.72	75	613228	146.58	ug/kg	93
35) Diethyl Ether	7.22	59	295295	125.62	ug/kg	91
36) Methyl Acetate	8.65	74	50430	117.77	ug/kg#	64
37) Cyclohexane	10.32	56	634172	117.00	ug/kg#	84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6021.D Vial: 19
Acq On : 6 Aug 2014 22:33 Operator: JFL
Sample : 200 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	503516	143.68 ug/kg#	76
40) Carbon Tetrachloride	10.54	117	578584	189.98 ug/kg	100
41) 1,2-Dichloroethane	11.19	62	433877	130.88 ug/kg	98
42) Benzene	10.99	78	1576641	154.93 ug/kg#	53
43) Isobutyl Alcohol	11.03	43	288806	1155.50 ug/kg#	5
45) 1,2-Dichloroethane-d4	11.13	65	173272	60.79 ug/kg#	95
46) Trichloroethene	11.54	130	443010	198.21 ug/kg#	85
47) 1,2-Dichloropropane	12.06	63	378495	151.50 ug/kg	90
48) Methyl Methacrylate	12.15	100	96968	191.54 ug/kg	76
49) 1,4-Dioxane	12.28	88	78514	3788.98 ug/kg	91
50) Bromodichloromethane	12.08	83	612395	160.84 ug/kg	98
51) Dibromomethane	11.98	93	268500	173.14 ug/kg	89
52) 4-Methyl-2-Pentanone	13.16	100	45574	170.80 ug/kg#	43
53) 2-Chloroethyl vinyl ether	12.53	63	88491	109.56 ug/kg	93
54) 2-Hexanone	13.86	43	232485	131.74 ug/kg#	89
55) C-1,3-Dichloropropene	12.65	75	693807	171.93 ug/kg	80
57) D8-Toluene	12.82	98	721719	85.48 ug/kg	93
59) Toluene	12.87	92	1055395	170.54 ug/kg	96
60) Ethyl Methacrylate	13.26	69	408705	138.13 ug/kg	81
61) T-1,3-Dichloropropene	13.21	75	511602	141.54 ug/kg	82
62) 1,1,2-Trichloroethane	13.37	97	317600	172.91 ug/kg	96
63) 1,3-Dichloropropane	13.63	76	565010	165.90 ug/kg	99
64) Tetrachloroethene	13.23	164	345183	196.27 ug/kg	99
65) Dibromochloromethane	13.55	129	430458	193.91 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	354013	189.58 ug/kg	98
67) Chlorobenzene	14.22	112	1146322	191.14 ug/kg	85
68) 1,1,1,2-Tetrachloroethane	14.25	131	381979	192.39 ug/kg	97
69) Ethylbenzene	14.19	106	597134	187.24 ug/kg	80
70) m-xylene & p-xylene	14.30	106	1408185	348.92 ug/kg	82
71) O-Xylene	14.71	106	741664	195.49 ug/kg	82
72) Bromoform	14.85	173	248491	190.49 ug/kg	100
73) Styrene	14.75	104	1196432	201.49 ug/kg	98
74) Isopropylbenzene	14.97	105	1946927	184.99 ug/kg	94
75) 1,2,3-Trichloropropane	15.62	75	411929	139.69 ug/kg	99
76) 1,1,2,2-Tetrachloroethane	15.43	83	392956	147.50 ug/kg	97
78) Bromofluorobenzene	15.30	95	263605	80.63 ug/kg#	57
79) T-1,4-dichloro-2-butene	15.61	53	80061	96.28 ug/kg#	52
80) N-Propylbenzene	15.36	91	2368348	173.54 ug/kg	89
82) Bromobenzene	15.44	156	425651	190.35 ug/kg	85
83) 1,3,5-Trimethylbenzene	15.52	105	1564980	188.03 ug/kg	91
84) 2-Chlorotoluene	15.58	91	1352306	158.96 ug/kg	89
85) 4-Chlorotoluene	15.74	91	1360675	169.20 ug/kg	89
86) 1,2,4-Trimethylbenzene	15.94	105	1468538	191.10 ug/kg	92
87) s-Butylbenzene	16.06	105	2123579	182.45 ug/kg	95
88) tert-Butylbenzene	15.88	119	1321246	195.58 ug/kg	86
89) p-Isopropyltoluene	16.18	119	1484080	212.59 ug/kg	93
90) 1,3-Dichlorobenzene	16.40	146	787864	193.01 ug/kg	99
91) 1,4-Dichlorobenzene	16.49	146	752665	185.35 ug/kg	100
92) 1,2-Dichlorobenzene	17.02	146	738208	198.16 ug/kg	100
93) N-Butylbenzene	16.66	91	1517918	191.42 ug/kg	95
94) DBCP	18.10	75	67830	160.34 ug/kg	71

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6021.D Vial: 19
Acq On : 6 Aug 2014 22:33 Operator: JFL
Sample : 200 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Quant Method : C:\HPCHEM\1\METHODS\072314.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Jul 24 14:24:47 2014
Response via : Initial Calibration
DataAcq Meth : BFB

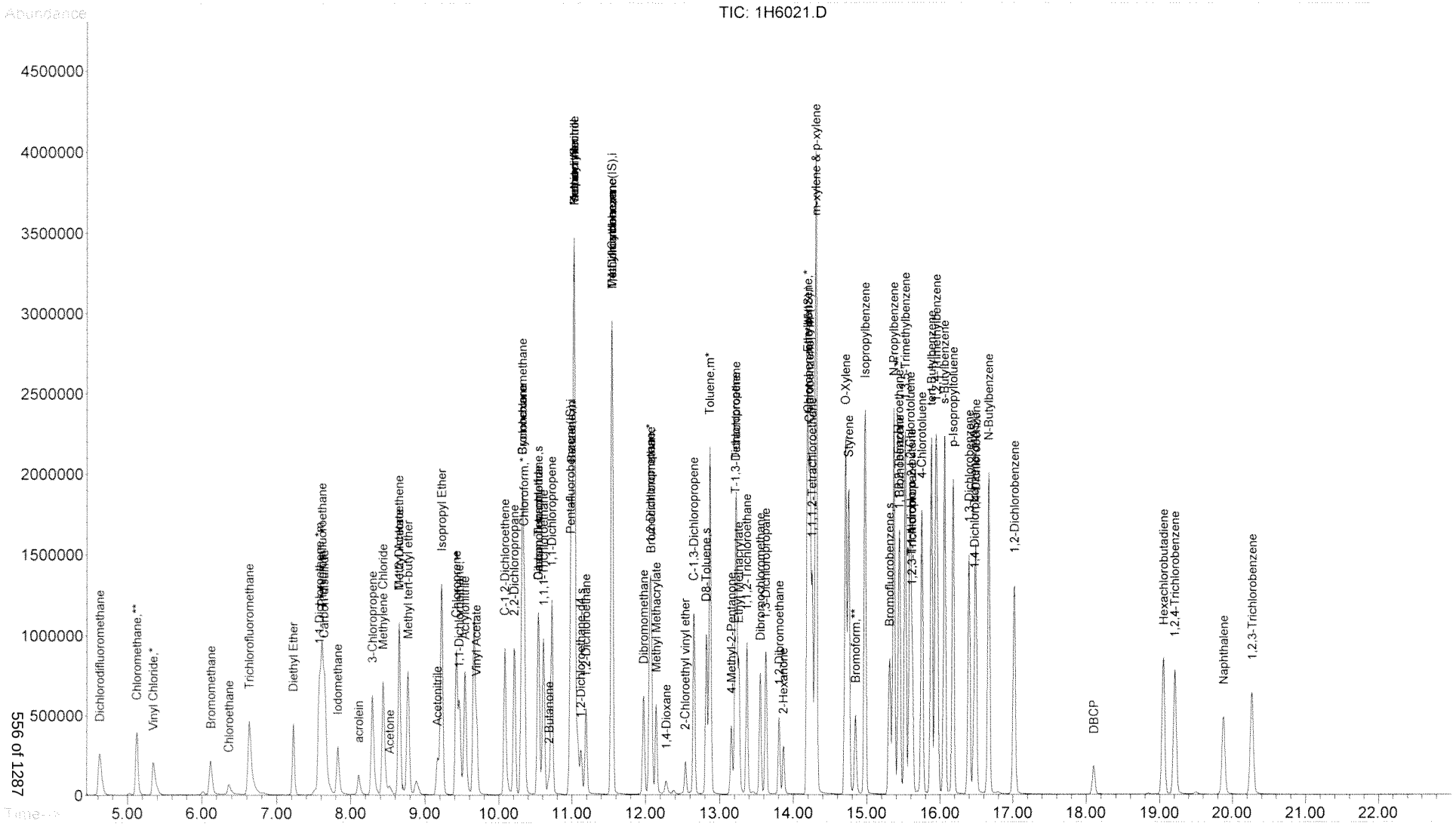
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.87	128	713222	261.66 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	424815	244.13 ug/kg	99
97) Hexachlorobutadiene	19.05	225	248542	229.23 ug/kg	99
98) 1,2,3-Trichlorobenzene	20.26	180	380867	245.77 ug/kg	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6021.D Vial: 19
Acq On : 6 Aug 2014 22:33 Operator: JFL
Sample : 200 PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 8:04 2014 Quant Results File: 072314.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6023.D Vial: 21
Acq On : 6 Aug 2014 23:31 Operator: JFL
Sample : 50 ICV Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:45 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	214957	50.00 ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	346657	50.00 ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	287667	50.00 ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	126767	50.00 ug/kg	0.00
System Monitoring Compounds					
30) Dibromofluoromethane	10.55	113	107254	45.50 ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 91.00%		
44) 1,2-Dichloroethane-d4	11.13	65	86543	47.69 ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 95.38%		
56) D8-Toluene	12.82	98	352771	47.94 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 95.88%		
77) Bromofluorobenzene	15.30	95	131994	49.57 ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 99.14%		

Target Compounds					Qvalue
2) Dichlorodifluoromethane	4.63	85	165314	58.04 ug/kg	99
3) Chloromethane	5.13	50	165098	52.53 ug/kg	100
4) Vinyl Chloride	5.35	62	125266	55.90 ug/kg	99
5) Bromomethane	6.12	94	58695	43.77 ug/kg	100
6) Chloroethane	6.37	64	89784	64.23 ug/kg	98
7) Trichlorofluoromethane	6.66	101	213635	56.99 ug/kg	100
8) Trichlorotrifluoroethane	7.62	101	129979	52.58 ug/kg	99
9) acrolein	8.11	56	41214	524.00 ug/kg	99
10) Acetone	8.52	43	20085	45.39 ug/kg	99
11) 1,1-Dichloroethene	7.58	96	105347	44.49 ug/kg	98
12) 3-Chloropropene	8.29	76	59393	50.71 ug/kg	98
13) Acetonitrile	9.22	41	61021	354.72 ug/kg#	26
14) Iodomethane	7.83	142	118680	47.20 ug/kg	98
15) Carbon disulfide	7.66	76	319658	44.42 ug/kg	99
16) Methylene Chloride	8.44	84	116900	46.03 ug/kg	99
17) Methyl tert-butyl ether	8.77	73	221615	44.05 ug/kg	99
18) Acrylonitrile	9.55	53	23531	55.18 ug/kg	89
19) T-1,2-Dichloroethene	8.66	96	126307	47.83 ug/kg	99
20) Isopropyl Ether	9.22	45	351587	46.82 ug/kg#	100
21) C-1,2-Dichloroethene	10.08	96	131450	47.70 ug/kg	98
22) 1,1-Dichloroethane	9.46	63	199534	50.92 ug/kg	100
23) Vinyl Acetate	9.70	43	158324	36.28 ug/kg	99
24) Chloroprene	9.42	53	161937	53.37 ug/kg	100
25) 2-Butanone	10.69	72	6046	41.42 ug/kg	81
26) Propionitrile	11.02	54	9565	55.77 ug/kg	100
27) 2,2-Dichloropropane	10.21	77	180231	51.83 ug/kg	100
28) Methacrylonitrile	11.03	67	29336	53.50 ug/kg#	50
29) Chloroform	10.35	83	227134	51.00 ug/kg	99
31) Dibromofluoromethane	10.55	113	107254	45.50 ug/kg	100
32) Bromochloromethane	10.31	128	52662	50.23 ug/kg	98
33) 1,1,1-Trichloroethane	10.61	97	192297	53.33 ug/kg	100
34) 1,1-Dichloropropene	10.72	75	171072	51.61 ug/kg	99
35) Diethyl Ether	7.22	59	63164	39.58 ug/kg	100
36) Methyl Acetate	8.65	74	13186	41.02 ug/kg	95
37) Cyclohexane	10.32	56	180216	48.41 ug/kg	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6023.D Vial: 21
Acq On : 6 Aug 2014 23:31 Operator: JFL
Sample : 50 ICV Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:45 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	159464	58.08 ug/kg	99
40) Carbon Tetrachloride	10.54	117	161828	57.19 ug/kg	99
41) 1,2-Dichloroethane	11.19	62	114224	49.31 ug/kg	99
42) Benzene	10.99	78	446945	50.03 ug/kg	74
43) Isobutyl Alcohol	11.03	43	92146	1172.13 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	86543	47.69 ug/kg#	94
46) Trichloroethene	11.54	130	127880	56.23 ug/kg	99
47) 1,2-Dichloropropane	12.06	63	109405	52.57 ug/kg	99
48) Methyl Methacrylate	12.14	100	25749	50.27 ug/kg	99
49) 1,4-Dioxane	12.29	88	940	45.30 ug/kg#	23
50) Bromodichloromethane	12.08	83	166190	55.21 ug/kg	100
51) Dibromomethane	11.97	93	71321	52.88 ug/kg	99
52) 4-Methyl-2-Pentanone	13.16	100	12845	52.34 ug/kg	89
53) 2-Chloroethyl vinyl ether	12.54	63	18986	42.57 ug/kg	96
54) 2-Hexanone	13.86	43	60717	48.13 ug/kg	96
55) C-1,3-Dichloropropene	12.65	75	181298	52.47 ug/kg	100
57) D8-Toluene	12.82	98	352771	47.94 ug/kg	93
59) Toluene	12.87	92	297154	53.58 ug/kg	99
60) Ethyl Methacrylate	13.26	69	117871	54.35 ug/kg	99
61) T-1,3-Dichloropropene	13.21	75	156736	61.82 ug/kg	98
62) 1,1,2-Trichloroethane	13.37	97	88349	54.35 ug/kg	99
63) 1,3-Dichloropropane	13.62	76	128832	43.84 ug/kg	100
64) Tetrachloroethene	13.23	164	106478	59.60 ug/kg	99
65) Dibromochloromethane	13.55	129	112422	57.55 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	97095	56.29 ug/kg	99
67) Chlorobenzene	14.22	112	310749	52.23 ug/kg	100
68) 1,1,1,2-Tetrachloroethane	14.25	131	103635	56.35 ug/kg	99
69) Ethylbenzene	14.19	106	173372	56.98 ug/kg	98
70) m-xylene & p-xylene	14.31	106	422942	110.72 ug/kg	99
71) O-Xylene	14.71	106	202458	53.91 ug/kg	99
72) Bromoform	14.85	173	65830	51.53 ug/kg	100
73) Styrene	14.75	104	321460	58.67 ug/kg	99
74) Isopropylbenzene	14.97	105	567141	56.29 ug/kg	100
75) 1,2,3-Trichloropropane	15.62	75	122875	56.05 ug/kg	100
76) 1,1,2,2-Tetrachloroethane	15.43	83	113886	52.27 ug/kg	100
78) Bromofluorobenzene	15.30	95	131994	49.57 ug/kg#	69
79) T-1,4-dichloro-2-butene	15.61	53	25231	59.87 ug/kg#	89
80) N-Propylbenzene	15.36	91	695642	57.19 ug/kg	100
82) Bromobenzene	15.45	156	119620	57.02 ug/kg	97
83) 1,3,5-Trimethylbenzene	15.52	105	431766	55.84 ug/kg	100
84) 2-Chlorotoluene	15.59	91	376959	52.82 ug/kg	99
85) 4-Chlorotoluene	15.74	91	374423	54.22 ug/kg	99
86) 1,2,4-Trimethylbenzene	15.94	105	401434	56.17 ug/kg	99
87) s-Butylbenzene	16.06	105	615238	57.69 ug/kg	100
88) tert-Butylbenzene	15.88	119	377505	56.71 ug/kg	99
89) p-Isopropyltoluene	16.18	119	457968	64.78 ug/kg	99
90) 1,3-Dichlorobenzene	16.39	146	209952	53.89 ug/kg	100
91) 1,4-Dichlorobenzene	16.49	146	207843	54.45 ug/kg	99
92) 1,2-Dichlorobenzene	17.02	146	190653	53.37 ug/kg	100
93) N-Butylbenzene	16.66	91	430278	57.68 ug/kg	100
94) DBCP	18.10	75	17359	51.51 ug/kg	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6023.D Vial: 21
Acq On : 6 Aug 2014 23:31 Operator: JFL
Sample : 50 ICV Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:45 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95) Naphthalene	19.87	128	187914	52.44 ug/kg	100
96) 1,2,4-Trichlorobenzene	19.21	180	106318	53.45 ug/kg	99
97) Hexachlorobutadiene	19.05	225	71988	60.83 ug/kg	100
98) 1,2,3-Trichlorobenzene	20.26	180	93646	51.45 ug/kg	100

(#) = qualifier out of range (m) = manual integration

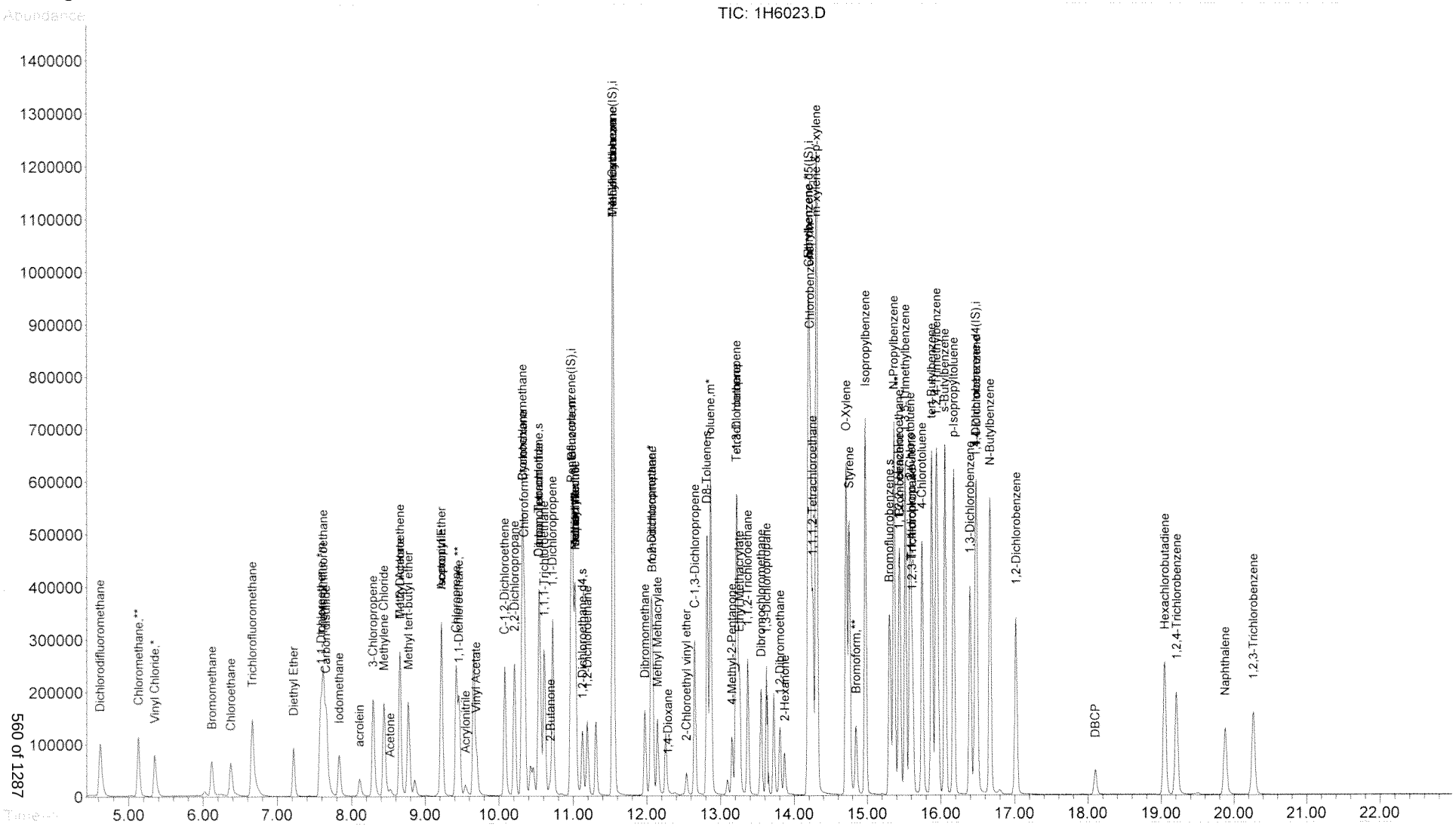
Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6023.D
Acq On : 6 Aug 2014 23:31
Sample : 50 ICV
Misc :
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:45 2014

Vial: 21
Operator: JFL
Inst : OVGCMS1
Multiplr: 1.00

Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6024.D Vial: 22
Acq On : 7 Aug 2014 00:00 Operator: JFL
Sample : BS1/ICV GAS 20PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:56 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene(IS)	10.97	168	214721	50.00	ug/kg	0.00
38) 1,4-Difluorobenzene(IS)	11.54	114	342455	50.00	ug/kg	0.00
58) Chlorobenzene-d5(IS)	14.21	117	293018	50.00	ug/kg	0.00
81) 1,4-Dichlorobenzene-d4(IS)	16.47	152	127485	50.00	ug/kg	0.00
System Monitoring Compounds						
30) Dibromofluoromethane	10.55	113	110732	47.02	ug/kg	0.00
Spiked Amount 50.000	Range 53 - 146		Recovery = 94.04%			
44) 1,2-Dichloroethane-d4	11.13	65	88754	49.50	ug/kg	0.00
Spiked Amount 50.000	Range 45 - 174		Recovery = 99.00%			
56) D8-Toluene	12.82	98	360621	49.60	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 146		Recovery = 99.20%			
77) Bromofluorobenzene	15.30	95	135973	50.13	ug/kg	0.00
Spiked Amount 50.000	Range 41 - 142		Recovery = 100.26%			

Target Compounds						Qvalue
2) Dichlorodifluoromethane	4.62	85	65671	21.37	ug/kg	99
3) Chloromethane	5.13	50	65199	20.77	ug/kg	99
4) Vinyl Chloride	5.34	62	45482	19.15	ug/kg	99
5) Bromomethane	6.11	94	26778	19.43	ug/kg	98
6) Chloroethane	6.39	64	34824	24.94	ug/kg	99
7) Trichlorofluoromethane	6.67	101	84666	22.61	ug/kg	100
8) Trichlorotrifluoroethane	7.62	101	50661	20.51	ug/kg	99
9) acrolein	8.11	56	16391	208.63	ug/kg	98
10) Acetone	8.53	43	9598	21.71	ug/kg	97
11) 1,1-Dichloroethene	7.58	96	41199	17.42	ug/kg	97
12) 3-Chloropropene	8.29	76	24068	20.57	ug/kg	100
13) Acetonitrile	9.22	41	24678m	143.61	ug/kg	80
14) Iodomethane	7.83	142	48106	19.15	ug/kg	98
15) Carbon disulfide	7.66	76	122329	17.02	ug/kg	99
16) Methylene Chloride	8.44	84	47885	18.87	ug/kg	98
17) Methyl tert-butyl ether	8.77	73	89369	17.78	ug/kg	98
18) Acrylonitrile	9.55	53	9281	21.79	ug/kg	98
19) T-1,2-Dichloroethene	8.66	96	49935	18.93	ug/kg	99
20) Isopropyl Ether	9.22	45	142012	18.93	ug/kg#	100
21) C-1,2-Dichloroethene	10.08	96	52949	19.23	ug/kg	98
22) 1,1-Dichloroethane	9.47	63	79499	20.31	ug/kg	100
23) Vinyl Acetate	9.71	43	63754	14.63	ug/kg	98
24) Chloroprene	9.42	53	61677	20.35	ug/kg	98
25) 2-Butanone	10.72	72	5920	40.60	ug/kg#	1
26) Propionitrile	11.03	54	3818	22.29	ug/kg	100
27) 2,2-Dichloropropane	10.21	77	73055	21.03	ug/kg	100
28) Methacrylonitrile	11.04	67	11913m	21.75	ug/kg	100
29) Chloroform	10.35	83	91582	20.59	ug/kg	100
31) Dibromofluoromethane	10.55	113	110732	47.02	ug/kg	100
32) Bromochloromethane	10.31	128	21637	20.66	ug/kg	98
33) 1,1,1-Trichloroethane	10.61	97	76454	21.23	ug/kg	100
34) 1,1-Dichloropropene	10.72	75	67812	20.48	ug/kg	99
35) Diethyl Ether	7.22	59	24913	15.63	ug/kg	98
36) Methyl Acetate	8.66	74	5375	16.21	ug/kg	95
37) Cyclohexane	10.32	56	71977	19.35	ug/kg	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6024.D Vial: 22
Acq On : 7 Aug 2014 00:00 Operator: JFL
Sample : BS1/ICV GAS 20PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:56 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39) Methyl Cyclohexane	11.55	55	64201	23.67 ug/kg	98
40) Carbon Tetrachloride	10.54	117	63064	22.56 ug/kg	100
41) 1,2-Dichloroethane	11.19	62	46662	20.39 ug/kg	98
42) Benzene	10.99	78	181785	20.60 ug/kg	74
43) Isobutyl Alcohol	11.03	43	37148	478.34 ug/kg#	1
45) 1,2-Dichloroethane-d4	11.13	65	88754	49.50 ug/kg#	94
46) Trichloroethene	11.54	130	50686	22.56 ug/kg	96
47) 1,2-Dichloropropane	12.06	63	44277	21.54 ug/kg	99
48) Methyl Methacrylate	12.15	100	10314	20.38 ug/kg	99
49) 1,4-Dioxane	12.31	88	435	21.22 ug/kg#	81
50) Bromodichloromethane	12.08	83	65059	21.88 ug/kg	99
51) Dibromomethane	11.98	93	28766	21.59 ug/kg	100
52) 4-Methyl-2-Pentanone	13.16	100	5343	22.04 ug/kg	83
53) 2-Chloroethyl vinyl ether	12.54	63	4067	9.23 ug/kg	99
54) 2-Hexanone	13.87	43	28710	23.04 ug/kg	95
55) C-1,3-Dichloropropene	12.65	75	71826	21.04 ug/kg	99
57) D8-Toluene	12.82	98	360621	49.60 ug/kg	93
59) Toluene	12.87	92	120254	21.29 ug/kg	99
60) Ethyl Methacrylate	13.26	69	48738	22.06 ug/kg	96
61) T-1,3-Dichloropropene	13.21	75	62715	24.28 ug/kg	99
62) 1,1,2-Trichloroethane	13.37	97	36086	21.79 ug/kg	99
63) 1,3-Dichloropropane	13.63	76	63791	21.31 ug/kg	100
64) Tetrachloroethene	13.23	164	42560	23.39 ug/kg	98
65) Dibromochloromethane	13.55	129	44089	22.16 ug/kg	100
66) 1,2-Dibromoethane	13.81	107	38789	22.08 ug/kg	100
67) Chlorobenzene	14.22	112	128603	21.22 ug/kg	99
68) 1,1,1,2-Tetrachloroethane	14.25	131	41742	22.28 ug/kg	96
69) Ethylbenzene	14.19	106	70468	22.74 ug/kg	100
70) m-xylene & p-xylene	14.31	106	172038	44.21 ug/kg	100
71) O-Xylene	14.71	106	83502	21.83 ug/kg	98
72) Bromoform	14.85	173	25667	19.72 ug/kg	99
73) Styrene	14.75	104	131181	23.51 ug/kg	99
74) Isopropylbenzene	14.97	105	230895	22.50 ug/kg	100
75) 1,2,3-Trichloropropane	15.62	75	49595	22.21 ug/kg	100
76) 1,1,2,2-Tetrachloroethane	15.43	83	47783	21.53 ug/kg	100
78) Bromofluorobenzene	15.30	95	135973	50.13 ug/kg#	77
79) T-1,4-dichloro-2-butene	15.61	53	10501	24.46 ug/kg#	86
80) N-Propylbenzene	15.36	91	285104	23.01 ug/kg	100
82) Bromobenzene	15.45	156	48816	23.14 ug/kg	98
83) 1,3,5-Trimethylbenzene	15.52	105	174222	22.41 ug/kg	99
84) 2-Chlorotoluene	15.59	91	152985	21.31 ug/kg	100
85) 4-Chlorotoluene	15.75	91	126974	18.28 ug/kg	95
86) 1,2,4-Trimethylbenzene	15.94	105	166219	23.13 ug/kg	100
87) s-Butylbenzene	16.06	105	247518	23.08 ug/kg	100
88) tert-Butylbenzene	15.88	119	151873	22.69 ug/kg	100
89) p-Isopropyltoluene	16.18	119	182931	25.73 ug/kg	99
90) 1,3-Dichlorobenzene	16.40	146	86399	22.05 ug/kg	100
91) 1,4-Dichlorobenzene	16.49	146	87813	22.88 ug/kg	99
92) 1,2-Dichlorobenzene	17.02	146	79648	22.17 ug/kg	100
93) N-Butylbenzene	16.66	91	168782	22.50 ug/kg	100
94) DBCP	18.10	75	6929	20.45 ug/kg	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\080614\1H6024.D Vial: 22
Acq On : 7 Aug 2014 00:00 Operator: JFL
Sample : BS1/ICV GAS 20PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:56 2014 Quant Results File: 080614.RES

Quant Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:41:44 2014
Response via : Initial Calibration
DataAcq Meth : BFB

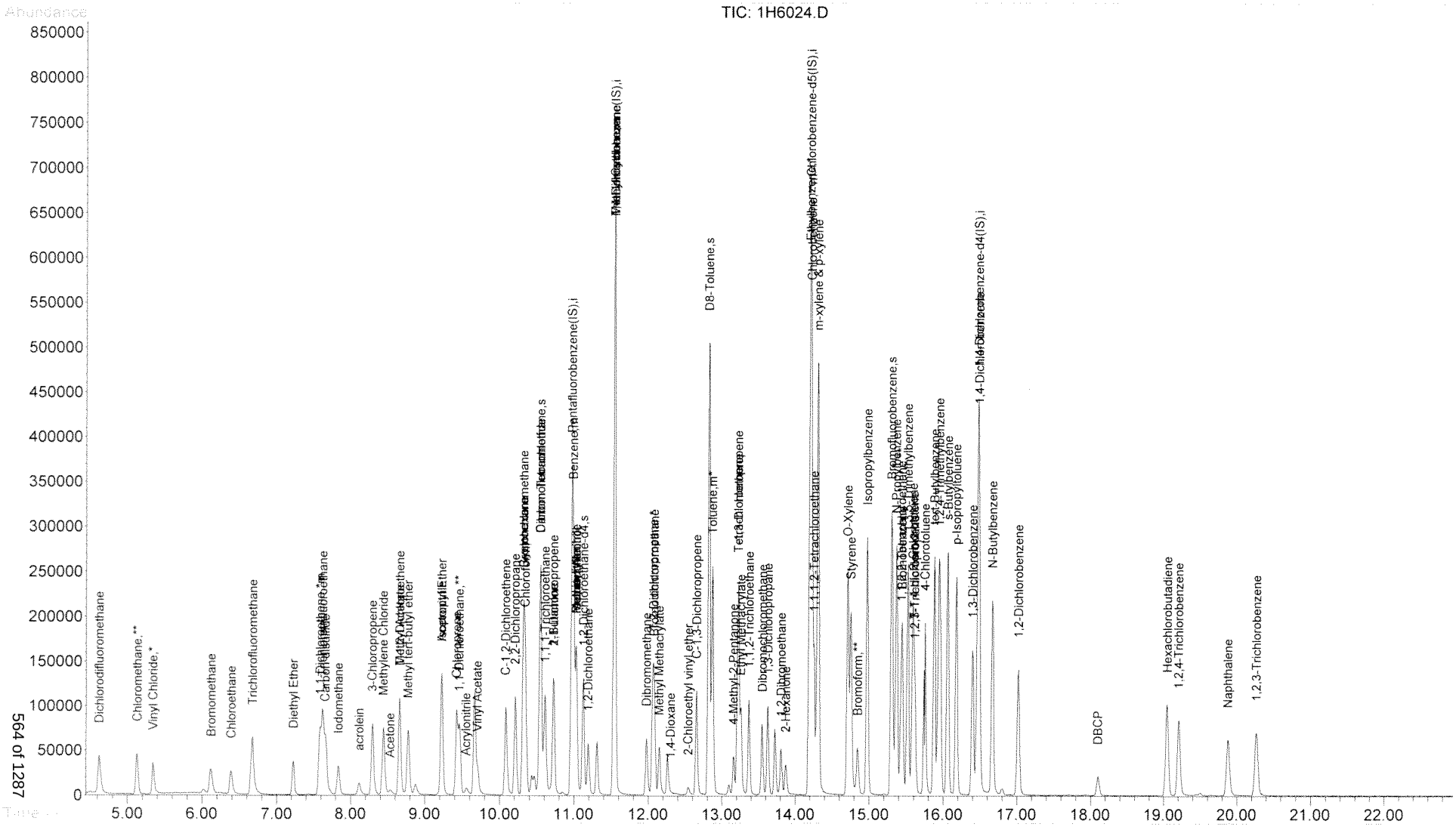
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
95)	Naphthalene	19.87	128	96547	26.79 ug/kg	100
96)	1,2,4-Trichlorobenzene	19.21	180	46863	23.43 ug/kg	100
97)	Hexachlorobutadiene	19.05	225	28506	23.95 ug/kg	99
98)	1,2,3-Trichlorobenzene	20.26	180	42480	23.21 ug/kg	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\080614\1H6024.D Vial: 22
Acq On : 7 Aug 2014 00:00 Operator: JFL
Sample : BS1/ICV GAS 20PPB Inst : OVGCMS1
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Aug 7 10:56 2014 Quant Results File: 080614.RES

Method : C:\HPCHEM\1\METHODS\080614.M (RTE Integrator)
Title : ENCO SOP VGCMS/05; element cal s1406029
Last Update : Thu Aug 07 10:56:07 2014
Response via : Initial Calibration



ENCO Orlando

SDG: A404270-CTO0017

CLASS: 09_SVOA_SIM

METHOD: EPA 8270D

ANALYSES DATA PACKAGE COVER PAGE

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Client Sample Id:	Lab Sample Id:
TR-5TH-CSW01-0814	A404270-01
TR-5TH-CSW02-0814	A404270-02
TR-5TH-CSW03-0814	A404270-03
TR-5TH-CSW04-0814	A404270-04
TR-5TH-CSW05-0814	A404270-05
TR-5TH-CSW06-0814	A404270-06
TR-5TH-CSW07-0814	A404270-07
TR-5TH-CSW07D-0814	A404270-08
TR-5TH-CSW08-0814	A404270-09
TR-5TH-CSW09-0814	A404270-10
TR-5TH-CSW010-0814	A404270-11
TR-5TH-CSW11-0814	A404270-12
TR-5TH-CSW11D-0814	A404270-13
TR-5TH-CSW12-0814	A404270-14
TR-5TH-CSW13-0814	A404270-15
TR-5TH-CSW14-0814	A404270-16
TR-5TH-CSW15-0814	A404270-18
TR-5TH-CSF01-0814	A404270-19
TR-5TH-CSF02-0814	A404270-20
TR-5TH-CSF03-0814	A404270-21
TR-5TH-CSF04-0814	A404270-22
TR-5TH-CSF05-0814	A404270-23
TR-5TH-CSF05D-0814	A404270-24
TR-5TH-CSF06-0814	A404270-25
TR-5TH-CSF07-0814	A404270-26
TR-5TH-CSF08-0814	A404270-27
TR-5TH-CSF09-0814	A404270-28
TR-5TH-CS-EB-080114	A404270-29

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-01	File ID:	2ha013.D
Sampled:	08/01/14 12:10	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 11:34
Solids:	81.79	Preparation:	EPA 3550C_MS	Initial/Final:	15.2 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.033	U	0.018	0.033	0.043

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.41	1.8	76	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	215864	5.628	291841	5.595	
Acenaphthene-d10	159717	7.4	212305	7.371	
Phenanthrene-d10	292191	8.888	395591	8.855	
Chrysene-d12	320182	12.011	452622	11.957	
Perylene-d12	286268	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-02	File ID:	2ha014.D
Sampled:	08/01/14 12:15	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 11:56
Solids:	78.60	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	0.033	J	0.019	0.034	0.045

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.54	2.1	81	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	203340	5.627	291841	5.595	
Acenaphthene-d10	149008	7.393	212305	7.371	
Phenanthrene-d10	276844	8.888	395591	8.855	
Chrysene-d12	297580	12.011	452622	11.957	
Perylene-d12	269097	14.3	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-03	File ID:	2ha015.D
Sampled:	08/01/14 12:20	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 12:19
Solids:	77.99	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.035	U	0.019	0.035	0.045

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.56	2.0	79	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	193104	5.621	291841	5.595	
Acenaphthene-d10	140189	7.394	212305	7.371	
Phenanthrene-d10	264087	8.889	395591	8.855	
Chrysene-d12	286902	12.012	452622	11.957	
Perylene-d12	259486	14.307	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-04	File ID:	2ha016.D
Sampled:	08/01/14 12:30	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 12:41
Solids:	85.57	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.032	U	0.018	0.032	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.34	2.2	94	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	184314	5.623	291841	5.595	
Acenaphthene-d10	139944	7.394	212305	7.371	
Phenanthrene-d10	268119	8.889	395591	8.855	
Chrysene-d12	293578	12.011	452622	11.957	
Perylene-d12	262913	14.307	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-05	File ID:	2ha017.D
Sampled:	08/01/14 12:35	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 13:03
Solids:	99.26	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.00	1.9	94	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	202165	5.621	291841	5.595	
Acenaphthene-d10	147715	7.393	212305	7.371	
Phenanthrene-d10	280723	8.889	395591	8.855	
Chrysene-d12	308528	12.011	452622	11.957	
Perylene-d12	277305	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-06	File ID:	2ha018.D
Sampled:	08/01/14 12:40	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 13:25
Solids:	94.63	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.029	U	0.016	0.029	0.037

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.11	2.0	93	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	183336	5.622	291841	5.595	
Acenaphthene-d10	134797	7.393	212305	7.371	
Phenanthrene-d10	272556	8.888	395591	8.855	
Chrysene-d12	311255	12.01	452622	11.957	
Perylene-d12	278516	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-07	File ID:	2ha019.D
Sampled:	08/01/14 12:50	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 13:47
Solids:	90.23	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.030	U	0.017	0.030	0.039

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.22	2.1	95	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	171226	5.623	291841	5.595	
Acenaphthene-d10	132867	7.394	212305	7.371	
Phenanthrene-d10	262213	8.887	395591	8.855	
Chrysene-d12	291986	12.011	452622	11.957	
Perylene-d12	263228	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW07D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-08	File ID:	2ha020.D
Sampled:	08/01/14 12:50	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 14:09
Solids:	98.35	Preparation:	EPA 3550C_MS	Initial/Final:	15.2 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.01	2.0	100	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	176536	5.627	291841	5.595	
Acenaphthene-d10	134310	7.393	212305	7.371	
Phenanthrene-d10	261613	8.888	395591	8.855	
Chrysene-d12	296762	12.011	452622	11.957	
Perylene-d12	268446	14.3	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-09	File ID:	2ha021.D
Sampled:	08/01/14 12:55	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 14:31
Solids:	99.50	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.00	1.7	86	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	201073	5.624	291841	5.595	
Acenaphthene-d10	146185	7.394	212305	7.371	
Phenanthrene-d10	287999	8.887	395591	8.855	
Chrysene-d12	324371	12.011	452622	11.957	
Perylene-d12	293062	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-10	File ID:	2ha022.D
Sampled:	08/01/14 13:00	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 14:53
Solids:	98.90	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.02	1.9	92	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	168840	5.628	291841	5.595	
Acenaphthene-d10	127569	7.394	212305	7.371	
Phenanthrene-d10	254293	8.888	395591	8.855	
Chrysene-d12	292522	12.011	452622	11.957	
Perylene-d12	263448	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW010-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-11	File ID:	2ha012.D
Sampled:	08/01/14 11:30	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 11:12
Solids:	96.48	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.028	U	0.016	0.028	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.07	2.0	99	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	150688	5.622	291841	5.595	
Acenaphthene-d10	129993	7.394	212305	7.371	
Phenanthrene-d10	231370	8.889	395591	8.855	
Chrysene-d12	247530	12.011	452622	11.957	
Perylene-d12	222936	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW11-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-12	File ID:	2ha023.D
Sampled:	08/01/14 11:35	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 15:14
Solids:	99.47	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	0.018	J	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.01	2.0	102	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	182902	5.622	291841	5.595	
Acenaphthene-d10	132425	7.394	212305	7.371	
Phenanthrene-d10	266099	8.889	395591	8.855	
Chrysene-d12	314763	12.011	452622	11.957	
Perylene-d12	281176	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW11D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-13	File ID:	2ha024.D
Sampled:	08/01/14 11:35	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 15:36
Solids:	98.87	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.02	2.0	97	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	187189	5.621	291841	5.595	
Acenaphthene-d10	141813	7.395	212305	7.371	
Phenanthrene-d10	272604	8.887	395591	8.855	
Chrysene-d12	297340	12.012	452622	11.957	
Perylene-d12	267005	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW12-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-14	File ID:	2ha025.D
Sampled:	08/01/14 11:40	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 15:58
Solids:	96.57	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.028	U	0.016	0.028	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.07	2.0	95	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	199112	5.623	291841	5.595	
Acenaphthene-d10	145450	7.394	212305	7.371	
Phenanthrene-d10	279511	8.887	395591	8.855	
Chrysene-d12	308797	12.011	452622	11.957	
Perylene-d12	278222	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW13-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-15	File ID:	2ha026.D
Sampled:	08/01/14 11:45	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 16:20
Solids:	99.63	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	1.99	1.7	85	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	183806	5.62	291841	5.595	
Acenaphthene-d10	133420	7.393	212305	7.371	
Phenanthrene-d10	268999	8.888	395591	8.855	
Chrysene-d12	297377	12.011	452622	11.957	
Perylene-d12	267601	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW14-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-16	File ID:	2ha027.D
Sampled:	08/01/14 11:50	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 16:42
Solids:	79.56	Preparation:	EPA 3550C_MS	Initial/Final:	15.2 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.034	U	0.019	0.034	0.044

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.48	2.2	88	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	161980	5.623	291841	5.595	
Acenaphthene-d10	122457	7.394	212305	7.371	
Phenanthrene-d10	249141	8.889	395591	8.855	
Chrysene-d12	282848	12.012	452622	11.957	
Perylene-d12	253297	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSW15-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-18	File ID:	2ha028.D
Sampled:	08/01/14 12:00	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 17:04
Solids:	78.92	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.034	U	0.019	0.034	0.044

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.52	2.3	92	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	195297	5.622	291841	5.595	
Acenaphthene-d10	143552	7.393	212305	7.371	
Phenanthrene-d10	283474	8.888	395591	8.855	
Chrysene-d12	324145	12.011	452622	11.957	
Perylene-d12	288522	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19	File ID:	2ha029.D
Sampled:	08/01/14 13:10	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 17:25
Solids:	94.31	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.029	U	0.016	0.029	0.037

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.11	1.9	88	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	213772	5.621	291841	5.595	
Acenaphthene-d10	164464	7.394	212305	7.371	
Phenanthrene-d10	363450	8.889	395591	8.855	
Chrysene-d12	411335	12.011	452622	11.957	
Perylene-d12	366333	14.307	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-20	File ID:	2ha030.D
Sampled:	08/01/14 13:15	Prepared:	08/05/14 16:30	Analyzed:	08/06/14 17:47
Solids:	99.47	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.01	1.8	92	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	170079	5.621	291841	5.595	
Acenaphthene-d10	125689	7.393	212305	7.371	
Phenanthrene-d10	265443	8.888	395591	8.855	
Chrysene-d12	308351	12.011	452622	11.957	
Perylene-d12	275207	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-21	File ID:	2hb009.D
Sampled:	08/01/14 13:20	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 13:24
Solids:	93.31	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.029	U	0.016	0.029	0.038

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.14	1.9	90	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	175288	5.623	291841	5.595	
Acenaphthene-d10	131181	7.393	212305	7.371	
Phenanthrene-d10	248537	8.889	395591	8.855	
Chrysene-d12	270476	12.011	452622	11.957	
Perylene-d12	239156	14.3	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22	File ID:	2hb010.D
Sampled:	08/01/14 13:30	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 13:46
Solids:	80.44	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.034	U	0.019	0.034	0.044

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.49	2.1	84	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	187795	5.622	291841	5.595	
Acenaphthene-d10	138681	7.393	212305	7.371	
Phenanthrene-d10	262128	8.888	395591	8.855	
Chrysene-d12	285599	12.011	452622	11.957	
Perylene-d12	251591	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23	File ID:	2hb011.D
Sampled:	08/01/14 13:35	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 14:08
Solids:	98.80	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.02	2.0	97	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	146284	5.624	291841	5.595	
Acenaphthene-d10	110818	7.393	212305	7.371	
Phenanthrene-d10	227220	8.888	395591	8.855	
Chrysene-d12	256152	12.011	452622	11.957	
Perylene-d12	230902	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF05D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-24	File ID:	2hb012.D
Sampled:	08/01/14 13:35	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 14:30
Solids:	98.30	Preparation:	EPA 3550C_MS	Initial/Final:	15.2 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.01	1.8	91	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	162256	5.624	291841	5.595	
Acenaphthene-d10	119683	7.394	212305	7.371	
Phenanthrene-d10	239232	8.889	395591	8.855	
Chrysene-d12	261551	12.007	452622	11.957	
Perylene-d12	233262	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-25	File ID:	2hb013.D
Sampled:	08/01/14 13:45	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 14:51
Solids:	95.10	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.028	U	0.016	0.028	0.037

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.10	1.9	92	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	152747	5.623	291841	5.595	
Acenaphthene-d10	113439	7.394	212305	7.371	
Phenanthrene-d10	227446	8.889	395591	8.855	
Chrysene-d12	254033	12.006	452622	11.957	
Perylene-d12	226905	14.3	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-26	File ID:	2hb014.D
Sampled:	08/01/14 13:50	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 15:13
Solids:	98.50	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.03	1.9	95	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	171714	5.621	291841	5.595	
Acenaphthene-d10	128051	7.394	212305	7.371	
Phenanthrene-d10	247429	8.887	395591	8.855	
Chrysene-d12	270675	12.011	452622	11.957	
Perylene-d12	244532	14.302	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-27	File ID:	2hb015.D
Sampled:	08/01/14 14:00	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 15:35
Solids:	98.33	Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.036

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.02	1.9	96	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	163726	5.623	291841	5.595	
Acenaphthene-d10	124824	7.394	212305	7.371	
Phenanthrene-d10	253941	8.889	395591	8.855	
Chrysene-d12	282404	12.012	452622	11.957	
Perylene-d12	254484	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-28	File ID:	2hb008.D
Sampled:	08/01/14 14:05	Prepared:	08/05/14 18:30	Analyzed:	08/07/14 13:02
Solids:	99.25	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.027	U	0.015	0.027	0.035

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl	2.02	1.9	94	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	196737	5.621	291841	5.595	
Acenaphthene-d10	148493	7.394	212305	7.371	
Phenanthrene-d10	280332	8.889	395591	8.855	
Chrysene-d12	302949	12.012	452622	11.957	
Perylene-d12	272722	14.301	364367	14.239	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8270D

TR-5TH-CS-EB-080114

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	A404270-29	File ID:	2ha007.D
Sampled:	08/01/14 21:00	Prepared:	08/05/14 20:30	Analyzed:	08/06/14 09:23
Solids:		Preparation:	EPA 3511_MS	Initial/Final:	35 mL / 2 mL

Batch:	4H05046	Sequence:	AA29923	Calibration:	1405053	Instrument:	OSVGCMS2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	LOD	LOQ
50-32-8	Benzo(a)pyrene	1	<0.090	U	0.043	0.090	0.10

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
p-Terphenyl	5.71	5.9	104	58 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	206698	5.62	291841	5.595	
Acenaphthene-d10	149837	7.393	212305	7.371	
Phenanthrene-d10	273198	8.888	395591	8.855	
Chrysene-d12	296960	12.011	452622	11.957	
Perylene-d12	267399	14.306	364367	14.239	

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSW01-0814	08/01/14 12:10	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 11:34	0.00	40.00	
TR-5TH-CSW02-0814	08/01/14 12:15	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 11:56	0.00	40.00	
TR-5TH-CSW03-0814	08/01/14 12:20	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 12:19	0.00	40.00	
TR-5TH-CSW04-0814	08/01/14 12:30	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 12:41	0.00	40.00	
TR-5TH-CSW05-0814	08/01/14 12:35	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 13:03	0.00	40.00	
TR-5TH-CSW06-0814	08/01/14 12:40	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 13:25	0.00	40.00	
TR-5TH-CSW07-0814	08/01/14 12:50	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 13:47	0.00	40.00	
TR-5TH-CSW07D-0814	08/01/14 12:50	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 14:09	0.00	40.00	
TR-5TH-CSW08-0814	08/01/14 12:55	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 14:31	0.00	40.00	
TR-5TH-CSW09-0814	08/01/14 13:00	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 14:53	0.00	40.00	
TR-5TH-CSW010-0814	08/01/14 11:30	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 11:12	0.00	40.00	
TR-5TH-CSW11-0814	08/01/14 11:35	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 15:14	0.00	40.00	
TR-5TH-CSW11D-0814	08/01/14 11:35	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 15:36	0.00	40.00	
TR-5TH-CSW12-0814	08/01/14 11:40	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 15:58	0.00	40.00	
TR-5TH-CSW13-0814	08/01/14 11:45	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 16:20	0.00	40.00	
TR-5TH-CSW14-0814	08/01/14 11:50	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 16:42	1.00	40.00	
TR-5TH-CSW15-0814	08/01/14 12:00	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 17:04	1.00	40.00	
TR-5TH-CSF01-0814	08/01/14 13:10	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 17:25	1.00	40.00	
TR-5TH-CSF02-0814	08/01/14 13:15	08/05/14 06:45	08/05/14 16:30	4.00	14.00	08/06/14 17:47	1.00	40.00	
TR-5TH-CSF03-0814	08/01/14 13:20	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 13:24	1.00	40.00	
TR-5TH-CSF04-0814	08/01/14 13:30	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 13:46	1.00	40.00	
TR-5TH-CSF05-0814	08/01/14 13:35	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 14:08	1.00	40.00	
TR-5TH-CSF05D-0814	08/01/14 13:35	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 14:30	1.00	40.00	

HOLDING TIME SUMMARY

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSF06-0814	08/01/14 13:45	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 14:51	1.00	40.00	
TR-5TH-CSF07-0814	08/01/14 13:50	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 15:13	1.00	40.00	
TR-5TH-CSF08-0814	08/01/14 14:00	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 15:35	1.00	40.00	
TR-5TH-CSF09-0814	08/01/14 14:05	08/05/14 06:45	08/05/14 18:30	4.00	14.00	08/07/14 13:02	1.00	40.00	
TR-5TH-CS-EB-080114	08/01/14 21:00	08/05/14 06:45	08/05/14 20:30	4.00	7.00	08/06/14 09:23	0.00	40.00	

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H05022 Batch Matrix: Soil Preparation: EPA 3550C_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H05022-BLK1	2ha008.D	08/05/14 16:30	
LCS	4H05022-BS1	2ha009.D	08/05/14 16:30	
TR-5TH-CSW010-0814	4H05022-MS1	2ha010.D	08/05/14 16:30	
TR-5TH-CSW010-0814	4H05022-MSD1	2ha011.D	08/05/14 16:30	
TR-5TH-CSW01-0814	A404270-01	2ha013.D	08/05/14 16:30	
TR-5TH-CSW02-0814	A404270-02	2ha014.D	08/05/14 16:30	
TR-5TH-CSW03-0814	A404270-03	2ha015.D	08/05/14 16:30	
TR-5TH-CSW04-0814	A404270-04	2ha016.D	08/05/14 16:30	
TR-5TH-CSW05-0814	A404270-05	2ha017.D	08/05/14 16:30	
TR-5TH-CSW06-0814	A404270-06	2ha018.D	08/05/14 16:30	
TR-5TH-CSW07-0814	A404270-07	2ha019.D	08/05/14 16:30	
TR-5TH-CSW07D-0814	A404270-08	2ha020.D	08/05/14 16:30	
TR-5TH-CSW08-0814	A404270-09	2ha021.D	08/05/14 16:30	
TR-5TH-CSW09-0814	A404270-10	2ha022.D	08/05/14 16:30	
TR-5TH-CSW010-0814	A404270-11	2ha012.D	08/05/14 16:30	
TR-5TH-CSW11-0814	A404270-12	2ha023.D	08/05/14 16:30	
TR-5TH-CSW11D-0814	A404270-13	2ha024.D	08/05/14 16:30	
TR-5TH-CSW12-0814	A404270-14	2ha025.D	08/05/14 16:30	
TR-5TH-CSW13-0814	A404270-15	2ha026.D	08/05/14 16:30	
TR-5TH-CSW14-0814	A404270-16	2ha027.D	08/05/14 16:30	
TR-5TH-CSW15-0814	A404270-18	2ha028.D	08/05/14 16:30	
TR-5TH-CSF01-0814	A404270-19	2ha029.D	08/05/14 16:30	
TR-5TH-CSF02-0814	A404270-20	2ha030.D	08/05/14 16:30	

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H05023 Batch Matrix: Soil Preparation: EPA 3550C_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H05023-BLK1	2hb004.D	08/05/14 18:30	
LCS	4H05023-BS1	2hb005.D	08/05/14 18:30	
TR-5TH-CSF09-0814	4H05023-MS1	2hb006.D	08/05/14 18:30	
TR-5TH-CSF09-0814	4H05023-MSD1	2hb007.D	08/05/14 18:30	
TR-5TH-CSF03-0814	A404270-21	2hb009.D	08/05/14 18:30	
TR-5TH-CSF04-0814	A404270-22	2hb010.D	08/05/14 18:30	
TR-5TH-CSF05-0814	A404270-23	2hb011.D	08/05/14 18:30	
TR-5TH-CSF05D-0814	A404270-24	2hb012.D	08/05/14 18:30	
TR-5TH-CSF06-0814	A404270-25	2hb013.D	08/05/14 18:30	
TR-5TH-CSF07-0814	A404270-26	2hb014.D	08/05/14 18:30	
TR-5TH-CSF08-0814	A404270-27	2hb015.D	08/05/14 18:30	
TR-5TH-CSF09-0814	A404270-28	2hb008.D	08/05/14 18:30	

PREPARATION BATCH SUMMARY

EPA 8270D

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H05046 Batch Matrix: Water Preparation: EPA 3511_MS

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H05046-BLK1	2ha004.D	08/05/14 20:30	
LCS	4H05046-BS1	2ha005.D	08/05/14 20:30	
LCS Dup	4H05046-BSD1	2ha006.D	08/05/14 20:30	
TR-5TH-CS-EB-080114	A404270-29	2ha007.D	08/05/14 20:30	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H05022-BLK1	File ID:	2ha008.D
Prepared:	08/05/14 16:30	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL
Analyzed:	08/06/14 09:44	Instrument:	OSVGCMS2		
Batch:	4H05022	Sequence:	AA29923	Calibration:	1405053

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
50-32-8	Benzo(a)pyrene	<0.027	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
p-Terphenyl	2.00	1.9	95	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	198785	5.623	291841	5.595	
Acenaphthene-d10	146831	7.394	212305	7.371	
Phenanthrene-d10	264184	8.889	395591	8.855	
Chrysene-d12	287191	12.011	452622	11.957	
Perylene-d12	257302	14.306	364367	14.239	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H05023-BLK1	File ID:	2hb004.D
Prepared:	08/05/14 18:30	Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL
Analyzed:	08/07/14 11:35	Instrument:	OSVGCMS2		
Batch:	4H05023	Sequence:	AA29951	Calibration:	1405053

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
50-32-8	Benzo(a)pyrene	<0.027	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
p-Terphenyl	2.00	1.8	92	50 - 150	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	187771	5.624	291841	5.595	
Acenaphthene-d10	140270	7.393	212305	7.371	
Phenanthrene-d10	258084	8.888	395591	8.855	
Chrysene-d12	282012	12.011	452622	11.957	
Perylene-d12	251322	14.301	364367	14.239	

METHOD BLANK DATA SHEET
EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	4H05046-BLK1	File ID:	2ha004.D
Prepared:	08/05/14 20:30	Preparation:	EPA 3511_MS	Initial/Final:	35 mL / 2 mL
Analyzed:	08/06/14 08:17	Instrument:	OSVGCMS2		
Batch:	4H05046	Sequence:	AA29923	Calibration:	1405053

CAS NO.	COMPOUND	CONC. (ug/L)	Q
50-32-8	Benzo(a)pyrene	<0.090	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
p-Terphenyl	5.71	6.2	109	58 - 132	

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Naphthalene-d8	199332	5.617	291841	5.595	
Acenaphthene-d10	145057	7.394	212305	7.371	
Phenanthrene-d10	265964	8.887	395591	8.855	
Chrysene-d12	292997	12.011	452622	11.957	
Perylene-d12	260930	14.307	364367	14.239	

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H05022	Laboratory ID:	4H05022-BS1
Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	2.00	1.8	92	50 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H05023	Laboratory ID:	4H05023-BS1
Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	2.00	1.7	85	50 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Water		
Batch:	4H05046	Laboratory ID:	4H05046-BS1
Preparation:	EPA 3511_MS	Initial/Final:	35 mL / 2 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	5.71	5.3	93	53 - 120

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzo(a)pyrene	5.71	4.7	82	12	20	53 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

TR-5TH-CSW010-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H05022	Laboratory ID:	4H05022-MS1
Preparation:	EPA 3550C_MS	Initial/Final:	15 g / 300 mL

Source Sample Name: TR-5TH-CSW010-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	2.07	ND	2.0	94	50 - 110

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzo(a)pyrene	2.07	1.9	91	4	30	50 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8270D

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H05023	Laboratory ID:	4H05023-MS1
Preparation:	EPA 3550C_MS	Initial/Final:	15.1 g / 300 mL

Source Sample Name: TR-5TH-CSF09-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
Benzo(a)pyrene	2.00	ND	2.1	102	50 - 110

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Benzo(a)pyrene	2.00	1.9	96	7	30	50 - 110

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA28739	Instrument:	OSVGCMS2
Matrix:	Water	Calibration:	1405053

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Secondary Cal Check (AA28739-SCV1)			Lab File ID: 2eh014.D		Analyzed: 05/13/14 16:38			
p-Terphenyl	0.100	100	80 - 120	10.516	10.52014	-0.0041	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29923-CCV1)			Lab File ID: 2ha003.D		Analyzed: 08/06/14 07:55			
p-Terphenyl	0.100	95	80 - 120	10.556	10.52014	0.0359	+/-1.0	
p-Terphenyl	0.100	95	80 - 120	10.556	10.52014	0.0359	+/-1.0	
Blank (4H05046-BLK1)			Lab File ID: 2ha004.D		Analyzed: 08/06/14 08:17			
p-Terphenyl	5.71	109	58 - 132	10.554	10.52014	0.0339	+/-1.0	
p-Terphenyl	5.71	109	58 - 132	10.554	10.52014	0.0339	+/-1.0	
LCS (4H05046-BS1)			Lab File ID: 2ha005.D		Analyzed: 08/06/14 08:39			
p-Terphenyl	5.71	96	58 - 132	10.555	10.52014	0.0349	+/-1.0	
p-Terphenyl	5.71	96	58 - 132	10.555	10.52014	0.0349	+/-1.0	
LCS Dup (4H05046-BSD1)			Lab File ID: 2ha006.D		Analyzed: 08/06/14 09:01			
p-Terphenyl	5.71	102	58 - 132	10.556	10.52014	0.0359	+/-1.0	
p-Terphenyl	5.71	102	58 - 132	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CS-EB-080114 (A404270-29)			Lab File ID: 2ha007.D		Analyzed: 08/06/14 09:23			
p-Terphenyl	5.71	104	58 - 132	10.555	10.52014	0.0349	+/-1.0	
Blank (4H05022-BLK1)			Lab File ID: 2ha008.D		Analyzed: 08/06/14 09:44			
p-Terphenyl	2.00	95	50 - 150	10.556	10.52014	0.0359	+/-1.0	
p-Terphenyl	2.00	95	50 - 150	10.556	10.52014	0.0359	+/-1.0	
LCS (4H05022-BS1)			Lab File ID: 2ha009.D		Analyzed: 08/06/14 10:06			
p-Terphenyl	2.00	97	50 - 150	10.556	10.52014	0.0359	+/-1.0	
p-Terphenyl	2.00	97	50 - 150	10.556	10.52014	0.0359	+/-1.0	
Matrix Spike (4H05022-MS1)			Lab File ID: 2ha010.D		Analyzed: 08/06/14 10:28			
p-Terphenyl	2.07	94	50 - 150	10.555	10.52014	0.0349	+/-1.0	
p-Terphenyl	2.07	94	50 - 150	10.555	10.52014	0.0349	+/-1.0	
Matrix Spike Dup (4H05022-MSD1)			Lab File ID: 2ha011.D		Analyzed: 08/06/14 10:50			
p-Terphenyl	2.07	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
p-Terphenyl	2.07	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW010-0814 (A404270-11)			Lab File ID: 2ha012.D		Analyzed: 08/06/14 11:12			
p-Terphenyl	2.07	99	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW01-0814 (A404270-01)			Lab File ID: 2ha013.D		Analyzed: 08/06/14 11:34			
p-Terphenyl	2.41	76	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW02-0814 (A404270-02)			Lab File ID: 2ha014.D		Analyzed: 08/06/14 11:56			
p-Terphenyl	2.54	81	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW03-0814 (A404270-03)			Lab File ID: 2ha015.D		Analyzed: 08/06/14 12:19			
p-Terphenyl	2.56	79	50 - 150	10.556	10.52014	0.0359	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW04-0814 (A404270-04)			Lab File ID: 2ha016.D		Analyzed: 08/06/14 12:41			
p-Terphenyl	2.34	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW05-0814 (A404270-05)			Lab File ID: 2ha017.D		Analyzed: 08/06/14 13:03			
p-Terphenyl	2.00	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW06-0814 (A404270-06)			Lab File ID: 2ha018.D		Analyzed: 08/06/14 13:25			
p-Terphenyl	2.11	93	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW07-0814 (A404270-07)			Lab File ID: 2ha019.D		Analyzed: 08/06/14 13:47			
p-Terphenyl	2.22	95	50 - 150	10.554	10.52014	0.0339	+/-1.0	
TR-5TH-CSW07D-0814 (A404270-08)			Lab File ID: 2ha020.D		Analyzed: 08/06/14 14:09			
p-Terphenyl	2.01	100	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW08-0814 (A404270-09)			Lab File ID: 2ha021.D		Analyzed: 08/06/14 14:31			
p-Terphenyl	2.00	86	50 - 150	10.554	10.52014	0.0339	+/-1.0	
TR-5TH-CSW09-0814 (A404270-10)			Lab File ID: 2ha022.D		Analyzed: 08/06/14 14:53			
p-Terphenyl	2.02	92	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW11-0814 (A404270-12)			Lab File ID: 2ha023.D		Analyzed: 08/06/14 15:14			
p-Terphenyl	2.01	102	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW11D-0814 (A404270-13)			Lab File ID: 2ha024.D		Analyzed: 08/06/14 15:36			
p-Terphenyl	2.02	97	50 - 150	10.554	10.52014	0.0339	+/-1.0	
TR-5TH-CSW12-0814 (A404270-14)			Lab File ID: 2ha025.D		Analyzed: 08/06/14 15:58			
p-Terphenyl	2.07	95	50 - 150	10.554	10.52014	0.0339	+/-1.0	
TR-5TH-CSW13-0814 (A404270-15)			Lab File ID: 2ha026.D		Analyzed: 08/06/14 16:20			
p-Terphenyl	1.99	85	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSW14-0814 (A404270-16)			Lab File ID: 2ha027.D		Analyzed: 08/06/14 16:42			
p-Terphenyl	2.48	88	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSW15-0814 (A404270-18)			Lab File ID: 2ha028.D		Analyzed: 08/06/14 17:04			
p-Terphenyl	2.52	92	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSF01-0814 (A404270-19)			Lab File ID: 2ha029.D		Analyzed: 08/06/14 17:25			
p-Terphenyl	2.11	88	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF02-0814 (A404270-20)			Lab File ID: 2ha030.D		Analyzed: 08/06/14 17:47			
p-Terphenyl	2.01	92	50 - 150	10.555	10.52014	0.0349	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29951
Instrument: OSVGCMS2
Matrix: Soil
Calibration: 1405053

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29951-CCV1)			Lab File ID: 2hb003.D		Analyzed: 08/07/14 11:13			
p-Terphenyl	0.100	99	80 - 120	10.556	10.52014	0.0359	+/-1.0	
Blank (4H05023-BLK1)			Lab File ID: 2hb004.D		Analyzed: 08/07/14 11:35			
p-Terphenyl	2.00	92	50 - 150	10.555	10.52014	0.0349	+/-1.0	
LCS (4H05023-BS1)			Lab File ID: 2hb005.D		Analyzed: 08/07/14 11:57			
p-Terphenyl	2.00	87	50 - 150	10.556	10.52014	0.0359	+/-1.0	
Matrix Spike (4H05023-MS1)			Lab File ID: 2hb006.D		Analyzed: 08/07/14 12:18			
p-Terphenyl	2.00	96	50 - 150	10.555	10.52014	0.0349	+/-1.0	
Matrix Spike Dup (4H05023-MSD1)			Lab File ID: 2hb007.D		Analyzed: 08/07/14 12:40			
p-Terphenyl	2.00	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF09-0814 (A404270-28)			Lab File ID: 2hb008.D		Analyzed: 08/07/14 13:02			
p-Terphenyl	2.02	94	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF03-0814 (A404270-21)			Lab File ID: 2hb009.D		Analyzed: 08/07/14 13:24			
p-Terphenyl	2.14	90	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF04-0814 (A404270-22)			Lab File ID: 2hb010.D		Analyzed: 08/07/14 13:46			
p-Terphenyl	2.49	84	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSF05-0814 (A404270-23)			Lab File ID: 2hb011.D		Analyzed: 08/07/14 14:08			
p-Terphenyl	2.02	97	50 - 150	10.555	10.52014	0.0349	+/-1.0	
TR-5TH-CSF05D-0814 (A404270-24)			Lab File ID: 2hb012.D		Analyzed: 08/07/14 14:30			
p-Terphenyl	2.01	91	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF06-0814 (A404270-25)			Lab File ID: 2hb013.D		Analyzed: 08/07/14 14:51			
p-Terphenyl	2.10	92	50 - 150	10.556	10.52014	0.0359	+/-1.0	
TR-5TH-CSF07-0814 (A404270-26)			Lab File ID: 2hb014.D		Analyzed: 08/07/14 15:13			
p-Terphenyl	2.03	95	50 - 150	10.554	10.52014	0.0339	+/-1.0	
TR-5TH-CSF08-0814 (A404270-27)			Lab File ID: 2hb015.D		Analyzed: 08/07/14 15:35			
p-Terphenyl	2.02	96	50 - 150	10.556	10.52014	0.0359	+/-1.0	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA28739
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA28739-CAL1)			Lab File ID: 2eh007.D			Analyzed: 05/13/14 14:06			
Naphthalene-d8	266000	5.593	291841	5.595	91	50 - 200	-0.0020	+/-0.50	
Acenaphthene-d10	207818	7.37	212305	7.371	98	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	382223	8.855	395591	8.855	97	50 - 200	0.0000	+/-0.50	
Chrysene-d12	426086	11.962	452622	11.957	94	50 - 200	0.0050	+/-0.50	
Perylene-d12	337515	14.241	364367	14.239	93	50 - 200	0.0020	+/-0.50	
Cal Standard (AA28739-CAL2)			Lab File ID: 2eh008.D			Analyzed: 05/13/14 14:27			
Naphthalene-d8	196783	5.595	291841	5.595	67	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	198559	7.37	212305	7.371	94	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	370562	8.855	395591	8.855	94	50 - 200	0.0000	+/-0.50	
Chrysene-d12	412814	11.956	452622	11.957	91	50 - 200	-0.0010	+/-0.50	
Perylene-d12	329462	14.235	364367	14.239	90	50 - 200	-0.0040	+/-0.50	
Cal Standard (AA28739-CAL3)			Lab File ID: 2eh009.D			Analyzed: 05/13/14 14:49			
Naphthalene-d8	246290	5.594	291841	5.595	84	50 - 200	-0.0010	+/-0.50	
Acenaphthene-d10	201026	7.372	212305	7.371	95	50 - 200	0.0010	+/-0.50	
Phenanthrene-d10	373130	8.854	395591	8.855	94	50 - 200	-0.0010	+/-0.50	
Chrysene-d12	419073	11.957	452622	11.957	93	50 - 200	0.0000	+/-0.50	
Perylene-d12	334005	14.24	364367	14.239	92	50 - 200	0.0010	+/-0.50	
Cal Standard (AA28739-CAL4)			Lab File ID: 2eh010.D			Analyzed: 05/13/14 15:11			
Naphthalene-d8	245554	5.595	291841	5.595	84	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	200449	7.371	212305	7.371	94	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	375404	8.855	395591	8.855	95	50 - 200	0.0000	+/-0.50	
Chrysene-d12	415793	11.956	452622	11.957	92	50 - 200	-0.0010	+/-0.50	
Perylene-d12	332640	14.235	364367	14.239	91	50 - 200	-0.0040	+/-0.50	
Cal Standard (AA28739-CAL5)			Lab File ID: 2eh011.D			Analyzed: 05/13/14 15:32			
Naphthalene-d8	291841	5.595	291841	5.595	100	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	212305	7.371	212305	7.371	100	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	395591	8.855	395591	8.855	100	50 - 200	0.0000	+/-0.50	
Chrysene-d12	452622	11.957	452622	11.957	100	50 - 200	0.0000	+/-0.50	
Perylene-d12	364367	14.239	364367	14.239	100	50 - 200	0.0000	+/-0.50	
Cal Standard (AA28739-CAL6)			Lab File ID: 2eh012.D			Analyzed: 05/13/14 15:54			
Naphthalene-d8	275371	5.594	291841	5.595	94	50 - 200	-0.0010	+/-0.50	
Acenaphthene-d10	205303	7.371	212305	7.371	97	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	383416	8.855	395591	8.855	97	50 - 200	0.0000	+/-0.50	
Chrysene-d12	433487	11.957	452622	11.957	96	50 - 200	0.0000	+/-0.50	
Perylene-d12	347152	14.239	364367	14.239	95	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA28739
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Cal Standard (AA28739-CAL7)			Lab File ID: 2eh013.D			Analyzed: 05/13/14 16:16			
Naphthalene-d8	286458	5.596	291841	5.595	98	50 - 200	0.0010	+/-0.50	
Acenaphthene-d10	211531	7.372	212305	7.371	100	50 - 200	0.0010	+/-0.50	
Phenanthrene-d10	392102	8.856	395591	8.855	99	50 - 200	0.0010	+/-0.50	
Chrysene-d12	449218	11.962	452622	11.957	99	50 - 200	0.0050	+/-0.50	
Perylene-d12	355965	14.24	364367	14.239	98	50 - 200	0.0010	+/-0.50	
Secondary Cal Check (AA28739-SCV1)			Lab File ID: 2eh014.D			Analyzed: 05/13/14 16:38			
Naphthalene-d8	273184	5.594	291841	5.595	94	50 - 200	-0.0010	+/-0.50	
Acenaphthene-d10	201680	7.364	212305	7.371	95	50 - 200	-0.0070	+/-0.50	
Phenanthrene-d10	377785	8.856	395591	8.855	95	50 - 200	0.0010	+/-0.50	
Chrysene-d12	431594	11.957	452622	11.957	95	50 - 200	0.0000	+/-0.50	
Perylene-d12	347435	14.239	364367	14.239	95	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29923-CCV1)			Lab File ID: 2ha003.D			Analyzed: 08/06/14 07:55			
Naphthalene-d8	192010	5.621	291841	5.595	66	50 - 200	0.0260	+/-0.50	
Naphthalene-d8	192010	5.621	291841	5.595	66	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	143954	7.394	212305	7.371	68	50 - 200	0.0230	+/-0.50	
Acenaphthene-d10	143954	7.394	212305	7.371	68	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	263711	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Phenanthrene-d10	263711	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Chrysene-d12	288473	12.011	452622	11.957	64	50 - 200	0.0540	+/-0.50	
Chrysene-d12	288473	12.011	452622	11.957	64	50 - 200	0.0540	+/-0.50	
Perylene-d12	260758	14.306	364367	14.239	72	50 - 200	0.0670	+/-0.50	
Perylene-d12	260758	14.306	364367	14.239	72	50 - 200	0.0670	+/-0.50	
Blank (4H05046-BLK1)			Lab File ID: 2ha004.D			Analyzed: 08/06/14 08:17			
Naphthalene-d8	199332	5.617	291841	5.595	68	50 - 200	0.0220	+/-0.50	
Naphthalene-d8	199332	5.617	291841	5.595	68	50 - 200	0.0220	+/-0.50	
Acenaphthene-d10	145057	7.394	212305	7.371	68	50 - 200	0.0230	+/-0.50	
Acenaphthene-d10	145057	7.394	212305	7.371	68	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	265964	8.887	395591	8.855	67	50 - 200	0.0320	+/-0.50	
Phenanthrene-d10	265964	8.887	395591	8.855	67	50 - 200	0.0320	+/-0.50	
Chrysene-d12	292997	12.011	452622	11.957	65	50 - 200	0.0540	+/-0.50	
Chrysene-d12	292997	12.011	452622	11.957	65	50 - 200	0.0540	+/-0.50	
Perylene-d12	260930	14.307	364367	14.239	72	50 - 200	0.0680	+/-0.50	
Perylene-d12	260930	14.307	364367	14.239	72	50 - 200	0.0680	+/-0.50	
LCS (4H05046-BS1)			Lab File ID: 2ha005.D			Analyzed: 08/06/14 08:39			
Naphthalene-d8	197434	5.615	291841	5.595	68	50 - 200	0.0200	+/-0.50	
Naphthalene-d8	197434	5.615	291841	5.595	68	50 - 200	0.0200	+/-0.50	
Acenaphthene-d10	146697	7.393	212305	7.371	69	50 - 200	0.0220	+/-0.50	
Acenaphthene-d10	146697	7.393	212305	7.371	69	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	274598	8.888	395591	8.855	69	50 - 200	0.0330	+/-0.50	
Phenanthrene-d10	274598	8.888	395591	8.855	69	50 - 200	0.0330	+/-0.50	
Chrysene-d12	299752	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Chrysene-d12	299752	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Perylene-d12	270104	14.308	364367	14.239	74	50 - 200	0.0690	+/-0.50	
Perylene-d12	270104	14.308	364367	14.239	74	50 - 200	0.0690	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Soil
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (4H05046-BSD1)			Lab File ID: 2ha006.D			Analyzed: 08/06/14 09:01			
Naphthalene-d8	200749	5.621	291841	5.595	69	50 - 200	0.0260	+/-0.50	
Naphthalene-d8	200749	5.621	291841	5.595	69	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	150438	7.393	212305	7.371	71	50 - 200	0.0220	+/-0.50	
Acenaphthene-d10	150438	7.393	212305	7.371	71	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	272629	8.889	395591	8.855	69	50 - 200	0.0340	+/-0.50	
Phenanthrene-d10	272629	8.889	395591	8.855	69	50 - 200	0.0340	+/-0.50	
Chrysene-d12	296309	12.012	452622	11.957	65	50 - 200	0.0550	+/-0.50	
Chrysene-d12	296309	12.012	452622	11.957	65	50 - 200	0.0550	+/-0.50	
Perylene-d12	266509	14.306	364367	14.239	73	50 - 200	0.0670	+/-0.50	
Perylene-d12	266509	14.306	364367	14.239	73	50 - 200	0.0670	+/-0.50	
TR-5TH-CS-EB-080114 (A404270-29)			Lab File ID: 2ha007.D			Analyzed: 08/06/14 09:23			
Naphthalene-d8	206698	5.62	291841	5.595	71	50 - 200	0.0250	+/-0.50	
Acenaphthene-d10	149837	7.393	212305	7.371	71	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	273198	8.888	395591	8.855	69	50 - 200	0.0330	+/-0.50	
Chrysene-d12	296960	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Perylene-d12	267399	14.306	364367	14.239	73	50 - 200	0.0670	+/-0.50	
Blank (4H05022-BLK1)			Lab File ID: 2ha008.D			Analyzed: 08/06/14 09:44			
Naphthalene-d8	198785	5.623	291841	5.595	68	50 - 200	0.0280	+/-0.50	
Naphthalene-d8	198785	5.623	291841	5.595	68	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	146831	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Acenaphthene-d10	146831	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	264184	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Phenanthrene-d10	264184	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Chrysene-d12	287191	12.011	452622	11.957	63	50 - 200	0.0540	+/-0.50	
Chrysene-d12	287191	12.011	452622	11.957	63	50 - 200	0.0540	+/-0.50	
Perylene-d12	257302	14.306	364367	14.239	71	50 - 200	0.0670	+/-0.50	
Perylene-d12	257302	14.306	364367	14.239	71	50 - 200	0.0670	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS (4H05022-BS1)			Lab File ID: 2ha009.D			Analyzed: 08/06/14 10:06			
Naphthalene-d8	219084	5.623	291841	5.595	75	50 - 200	0.0280	+/-0.50	
Naphthalene-d8	219084	5.623	291841	5.595	75	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	159382	7.393	212305	7.371	75	50 - 200	0.0220	+/-0.50	
Acenaphthene-d10	159382	7.393	212305	7.371	75	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	290356	8.889	395591	8.855	73	50 - 200	0.0340	+/-0.50	
Phenanthrene-d10	290356	8.889	395591	8.855	73	50 - 200	0.0340	+/-0.50	
Chrysene-d12	323215	12.011	452622	11.957	71	50 - 200	0.0540	+/-0.50	
Chrysene-d12	323215	12.011	452622	11.957	71	50 - 200	0.0540	+/-0.50	
Perylene-d12	289564	14.306	364367	14.239	79	50 - 200	0.0670	+/-0.50	
Perylene-d12	289564	14.306	364367	14.239	79	50 - 200	0.0670	+/-0.50	
Matrix Spike (4H05022-MS1)			Lab File ID: 2ha010.D			Analyzed: 08/06/14 10:28			
Naphthalene-d8	188601	5.623	291841	5.595	65	50 - 200	0.0280	+/-0.50	
Naphthalene-d8	188601	5.623	291841	5.595	65	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	142277	7.393	212305	7.371	67	50 - 200	0.0220	+/-0.50	
Acenaphthene-d10	142277	7.393	212305	7.371	67	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	265556	8.888	395591	8.855	67	50 - 200	0.0330	+/-0.50	
Phenanthrene-d10	265556	8.888	395591	8.855	67	50 - 200	0.0330	+/-0.50	
Chrysene-d12	289219	12.011	452622	11.957	64	50 - 200	0.0540	+/-0.50	
Chrysene-d12	289219	12.011	452622	11.957	64	50 - 200	0.0540	+/-0.50	
Perylene-d12	262392	14.302	364367	14.239	72	50 - 200	0.0630	+/-0.50	
Perylene-d12	262392	14.302	364367	14.239	72	50 - 200	0.0630	+/-0.50	
Matrix Spike Dup (4H05022-MSD1)			Lab File ID: 2ha011.D			Analyzed: 08/06/14 10:50			
Naphthalene-d8	198321	5.623	291841	5.595	68	50 - 200	0.0280	+/-0.50	
Naphthalene-d8	198321	5.623	291841	5.595	68	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	147382	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Acenaphthene-d10	147382	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	271841	8.889	395591	8.855	69	50 - 200	0.0340	+/-0.50	
Phenanthrene-d10	271841	8.889	395591	8.855	69	50 - 200	0.0340	+/-0.50	
Chrysene-d12	296254	12.012	452622	11.957	65	50 - 200	0.0550	+/-0.50	
Chrysene-d12	296254	12.012	452622	11.957	65	50 - 200	0.0550	+/-0.50	
Perylene-d12	268298	14.301	364367	14.239	74	50 - 200	0.0620	+/-0.50	
Perylene-d12	268298	14.301	364367	14.239	74	50 - 200	0.0620	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW010-0814 (A404270-11)			Lab File ID: 2ha012.D			Analyzed: 08/06/14 11:12			
Naphthalene-d8	150688	5.622	291841	5.595	52	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	129993	7.394	212305	7.371	61	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	231370	8.889	395591	8.855	58	50 - 200	0.0340	+/-0.50	
Chrysene-d12	247530	12.011	452622	11.957	55	50 - 200	0.0540	+/-0.50	
Perylene-d12	222936	14.301	364367	14.239	61	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW01-0814 (A404270-01)			Lab File ID: 2ha013.D			Analyzed: 08/06/14 11:34			
Naphthalene-d8	215864	5.628	291841	5.595	74	50 - 200	0.0330	+/-0.50	
Acenaphthene-d10	159717	7.4	212305	7.371	75	50 - 200	0.0290	+/-0.50	
Phenanthrene-d10	292191	8.888	395591	8.855	74	50 - 200	0.0330	+/-0.50	
Chrysene-d12	320182	12.011	452622	11.957	71	50 - 200	0.0540	+/-0.50	
Perylene-d12	286268	14.302	364367	14.239	79	50 - 200	0.0630	+/-0.50	
TR-5TH-CSW02-0814 (A404270-02)			Lab File ID: 2ha014.D			Analyzed: 08/06/14 11:56			
Naphthalene-d8	203340	5.627	291841	5.595	70	50 - 200	0.0320	+/-0.50	
Acenaphthene-d10	149008	7.393	212305	7.371	70	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	276844	8.888	395591	8.855	70	50 - 200	0.0330	+/-0.50	
Chrysene-d12	297580	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Perylene-d12	269097	14.3	364367	14.239	74	50 - 200	0.0610	+/-0.50	
TR-5TH-CSW03-0814 (A404270-03)			Lab File ID: 2ha015.D			Analyzed: 08/06/14 12:19			
Naphthalene-d8	193104	5.621	291841	5.595	66	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	140189	7.394	212305	7.371	66	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	264087	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Chrysene-d12	286902	12.012	452622	11.957	63	50 - 200	0.0550	+/-0.50	
Perylene-d12	259486	14.307	364367	14.239	71	50 - 200	0.0680	+/-0.50	
TR-5TH-CSW04-0814 (A404270-04)			Lab File ID: 2ha016.D			Analyzed: 08/06/14 12:41			
Naphthalene-d8	184314	5.623	291841	5.595	63	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	139944	7.394	212305	7.371	66	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	268119	8.889	395591	8.855	68	50 - 200	0.0340	+/-0.50	
Chrysene-d12	293578	12.011	452622	11.957	65	50 - 200	0.0540	+/-0.50	
Perylene-d12	262913	14.307	364367	14.239	72	50 - 200	0.0680	+/-0.50	
TR-5TH-CSW05-0814 (A404270-05)			Lab File ID: 2ha017.D			Analyzed: 08/06/14 13:03			
Naphthalene-d8	202165	5.621	291841	5.595	69	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	147715	7.393	212305	7.371	70	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	280723	8.889	395591	8.855	71	50 - 200	0.0340	+/-0.50	
Chrysene-d12	308528	12.011	452622	11.957	68	50 - 200	0.0540	+/-0.50	
Perylene-d12	277305	14.302	364367	14.239	76	50 - 200	0.0630	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW06-0814 (A404270-06)			Lab File ID: 2ha018.D			Analyzed: 08/06/14 13:25			
Naphthalene-d8	183336	5.622	291841	5.595	63	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	134797	7.393	212305	7.371	63	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	272556	8.888	395591	8.855	69	50 - 200	0.0330	+/-0.50	
Chrysene-d12	311255	12.01	452622	11.957	69	50 - 200	0.0530	+/-0.50	
Perylene-d12	278516	14.302	364367	14.239	76	50 - 200	0.0630	+/-0.50	
TR-5TH-CSW07-0814 (A404270-07)			Lab File ID: 2ha019.D			Analyzed: 08/06/14 13:47			
Naphthalene-d8	171226	5.623	291841	5.595	59	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	132867	7.394	212305	7.371	63	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	262213	8.887	395591	8.855	66	50 - 200	0.0320	+/-0.50	
Chrysene-d12	291986	12.011	452622	11.957	65	50 - 200	0.0540	+/-0.50	
Perylene-d12	263228	14.301	364367	14.239	72	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW07D-0814 (A404270-08)			Lab File ID: 2ha020.D			Analyzed: 08/06/14 14:09			
Naphthalene-d8	176536	5.627	291841	5.595	60	50 - 200	0.0320	+/-0.50	
Acenaphthene-d10	134310	7.393	212305	7.371	63	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	261613	8.888	395591	8.855	66	50 - 200	0.0330	+/-0.50	
Chrysene-d12	296762	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Perylene-d12	268446	14.3	364367	14.239	74	50 - 200	0.0610	+/-0.50	
TR-5TH-CSW08-0814 (A404270-09)			Lab File ID: 2ha021.D			Analyzed: 08/06/14 14:31			
Naphthalene-d8	201073	5.624	291841	5.595	69	50 - 200	0.0290	+/-0.50	
Acenaphthene-d10	146185	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	287999	8.887	395591	8.855	73	50 - 200	0.0320	+/-0.50	
Chrysene-d12	324371	12.011	452622	11.957	72	50 - 200	0.0540	+/-0.50	
Perylene-d12	293062	14.301	364367	14.239	80	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW09-0814 (A404270-10)			Lab File ID: 2ha022.D			Analyzed: 08/06/14 14:53			
Naphthalene-d8	168840	5.628	291841	5.595	58	50 - 200	0.0330	+/-0.50	
Acenaphthene-d10	127569	7.394	212305	7.371	60	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	254293	8.888	395591	8.855	64	50 - 200	0.0330	+/-0.50	
Chrysene-d12	292522	12.011	452622	11.957	65	50 - 200	0.0540	+/-0.50	
Perylene-d12	263448	14.301	364367	14.239	72	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW11-0814 (A404270-12)			Lab File ID: 2ha023.D			Analyzed: 08/06/14 15:14			
Naphthalene-d8	182902	5.622	291841	5.595	63	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	132425	7.394	212305	7.371	62	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	266099	8.889	395591	8.855	67	50 - 200	0.0340	+/-0.50	
Chrysene-d12	314763	12.011	452622	11.957	70	50 - 200	0.0540	+/-0.50	
Perylene-d12	281176	14.301	364367	14.239	77	50 - 200	0.0620	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSW11D-0814 (A404270-13)			Lab File ID: 2ha024.D			Analyzed: 08/06/14 15:36			
Naphthalene-d8	187189	5.621	291841	5.595	64	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	141813	7.395	212305	7.371	67	50 - 200	0.0240	+/-0.50	
Phenanthrene-d10	272604	8.887	395591	8.855	69	50 - 200	0.0320	+/-0.50	
Chrysene-d12	297340	12.012	452622	11.957	66	50 - 200	0.0550	+/-0.50	
Perylene-d12	267005	14.301	364367	14.239	73	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW12-0814 (A404270-14)			Lab File ID: 2ha025.D			Analyzed: 08/06/14 15:58			
Naphthalene-d8	199112	5.623	291841	5.595	68	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	145450	7.394	212305	7.371	69	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	279511	8.887	395591	8.855	71	50 - 200	0.0320	+/-0.50	
Chrysene-d12	308797	12.011	452622	11.957	68	50 - 200	0.0540	+/-0.50	
Perylene-d12	278222	14.302	364367	14.239	76	50 - 200	0.0630	+/-0.50	
TR-5TH-CSW13-0814 (A404270-15)			Lab File ID: 2ha026.D			Analyzed: 08/06/14 16:20			
Naphthalene-d8	183806	5.62	291841	5.595	63	50 - 200	0.0250	+/-0.50	
Acenaphthene-d10	133420	7.393	212305	7.371	63	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	268999	8.888	395591	8.855	68	50 - 200	0.0330	+/-0.50	
Chrysene-d12	297377	12.011	452622	11.957	66	50 - 200	0.0540	+/-0.50	
Perylene-d12	267601	14.302	364367	14.239	73	50 - 200	0.0630	+/-0.50	
TR-5TH-CSW14-0814 (A404270-16)			Lab File ID: 2ha027.D			Analyzed: 08/06/14 16:42			
Naphthalene-d8	161980	5.623	291841	5.595	56	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	122457	7.394	212305	7.371	58	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	249141	8.889	395591	8.855	63	50 - 200	0.0340	+/-0.50	
Chrysene-d12	282848	12.012	452622	11.957	62	50 - 200	0.0550	+/-0.50	
Perylene-d12	253297	14.301	364367	14.239	70	50 - 200	0.0620	+/-0.50	
TR-5TH-CSW15-0814 (A404270-18)			Lab File ID: 2ha028.D			Analyzed: 08/06/14 17:04			
Naphthalene-d8	195297	5.622	291841	5.595	67	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	143552	7.393	212305	7.371	68	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	283474	8.888	395591	8.855	72	50 - 200	0.0330	+/-0.50	
Chrysene-d12	324145	12.011	452622	11.957	72	50 - 200	0.0540	+/-0.50	
Perylene-d12	288522	14.302	364367	14.239	79	50 - 200	0.0630	+/-0.50	
TR-5TH-CSF01-0814 (A404270-19)			Lab File ID: 2ha029.D			Analyzed: 08/06/14 17:25			
Naphthalene-d8	213772	5.621	291841	5.595	73	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	164464	7.394	212305	7.371	77	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	363450	8.889	395591	8.855	92	50 - 200	0.0340	+/-0.50	
Chrysene-d12	411335	12.011	452622	11.957	91	50 - 200	0.0540	+/-0.50	
Perylene-d12	366333	14.307	364367	14.239	101	50 - 200	0.0680	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29923
Instrument: OSVGCMS2
Matrix: Water
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSF02-0814 (A404270-20)			Lab File ID: 2ha030.D			Analyzed: 08/06/14 17:47			
Naphthalene-d8	170079	5.621	291841	5.595	58	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	125689	7.393	212305	7.371	59	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	265443	8.888	395591	8.855	67	50 - 200	0.0330	+/-0.50	
Chrysene-d12	308351	12.011	452622	11.957	68	50 - 200	0.0540	+/-0.50	
Perylene-d12	275207	14.302	364367	14.239	76	50 - 200	0.0630	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29951
Instrument: OSVGCMS2
Matrix: Soil
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (AA29951-CCV1)			Lab File ID: 2hb003.D			Analyzed: 08/07/14 11:13			
Naphthalene-d8	213872	5.62	291841	5.595	73	50 - 200	0.0250	+/-0.50	
Acenaphthene-d10	157194	7.394	212305	7.371	74	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	290164	8.889	395591	8.855	73	50 - 200	0.0340	+/-0.50	
Chrysene-d12	313044	12.011	452622	11.957	69	50 - 200	0.0540	+/-0.50	
Perylene-d12	280709	14.307	364367	14.239	77	50 - 200	0.0680	+/-0.50	
Blank (4H05023-BLK1)			Lab File ID: 2hb004.D			Analyzed: 08/07/14 11:35			
Naphthalene-d8	187771	5.624	291841	5.595	64	50 - 200	0.0290	+/-0.50	
Acenaphthene-d10	140270	7.393	212305	7.371	66	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	258084	8.888	395591	8.855	65	50 - 200	0.0330	+/-0.50	
Chrysene-d12	282012	12.011	452622	11.957	62	50 - 200	0.0540	+/-0.50	
Perylene-d12	251322	14.301	364367	14.239	69	50 - 200	0.0620	+/-0.50	
LCS (4H05023-BS1)			Lab File ID: 2hb005.D			Analyzed: 08/07/14 11:57			
Naphthalene-d8	193959	5.62	291841	5.595	66	50 - 200	0.0250	+/-0.50	
Acenaphthene-d10	147883	7.394	212305	7.371	70	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	277919	8.889	395591	8.855	70	50 - 200	0.0340	+/-0.50	
Chrysene-d12	310224	12.012	452622	11.957	69	50 - 200	0.0550	+/-0.50	
Perylene-d12	279830	14.301	364367	14.239	77	50 - 200	0.0620	+/-0.50	
Matrix Spike (4H05023-MS1)			Lab File ID: 2hb006.D			Analyzed: 08/07/14 12:18			
Naphthalene-d8	159795	5.622	291841	5.595	55	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	131652	7.393	212305	7.371	62	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	249178	8.888	395591	8.855	63	50 - 200	0.0330	+/-0.50	
Chrysene-d12	268088	12.011	452622	11.957	59	50 - 200	0.0540	+/-0.50	
Perylene-d12	240592	14.302	364367	14.239	66	50 - 200	0.0630	+/-0.50	
Matrix Spike Dup (4H05023-MSD1)			Lab File ID: 2hb007.D			Analyzed: 08/07/14 12:40			
Naphthalene-d8	184690	5.621	291841	5.595	63	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	135213	7.394	212305	7.371	64	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	261654	8.889	395591	8.855	66	50 - 200	0.0340	+/-0.50	
Chrysene-d12	285560	12.011	452622	11.957	63	50 - 200	0.0540	+/-0.50	
Perylene-d12	256774	14.3	364367	14.239	70	50 - 200	0.0610	+/-0.50	
TR-5TH-CSF09-0814 (A404270-28)			Lab File ID: 2hb008.D			Analyzed: 08/07/14 13:02			
Naphthalene-d8	196737	5.621	291841	5.595	67	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	148493	7.394	212305	7.371	70	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	280332	8.889	395591	8.855	71	50 - 200	0.0340	+/-0.50	
Chrysene-d12	302949	12.012	452622	11.957	67	50 - 200	0.0550	+/-0.50	
Perylene-d12	272722	14.301	364367	14.239	75	50 - 200	0.0620	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29951
Instrument: OSVGCMS2
Matrix: Soil
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSF03-0814 (A404270-21)			Lab File ID: 2hb009.D			Analyzed: 08/07/14 13:24			
Naphthalene-d8	175288	5.623	291841	5.595	60	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	131181	7.393	212305	7.371	62	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	248537	8.889	395591	8.855	63	50 - 200	0.0340	+/-0.50	
Chrysene-d12	270476	12.011	452622	11.957	60	50 - 200	0.0540	+/-0.50	
Perylene-d12	239156	14.3	364367	14.239	66	50 - 200	0.0610	+/-0.50	
TR-5TH-CSF04-0814 (A404270-22)			Lab File ID: 2hb010.D			Analyzed: 08/07/14 13:46			
Naphthalene-d8	187795	5.622	291841	5.595	64	50 - 200	0.0270	+/-0.50	
Acenaphthene-d10	138681	7.393	212305	7.371	65	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	262128	8.888	395591	8.855	66	50 - 200	0.0330	+/-0.50	
Chrysene-d12	285599	12.011	452622	11.957	63	50 - 200	0.0540	+/-0.50	
Perylene-d12	251591	14.302	364367	14.239	69	50 - 200	0.0630	+/-0.50	
TR-5TH-CSF05-0814 (A404270-23)			Lab File ID: 2hb011.D			Analyzed: 08/07/14 14:08			
Naphthalene-d8	146284	5.624	291841	5.595	50	50 - 200	0.0290	+/-0.50	
Acenaphthene-d10	110818	7.393	212305	7.371	52	50 - 200	0.0220	+/-0.50	
Phenanthrene-d10	227220	8.888	395591	8.855	57	50 - 200	0.0330	+/-0.50	
Chrysene-d12	256152	12.011	452622	11.957	57	50 - 200	0.0540	+/-0.50	
Perylene-d12	230902	14.302	364367	14.239	63	50 - 200	0.0630	+/-0.50	
TR-5TH-CSF05D-0814 (A404270-24)			Lab File ID: 2hb012.D			Analyzed: 08/07/14 14:30			
Naphthalene-d8	162256	5.624	291841	5.595	56	50 - 200	0.0290	+/-0.50	
Acenaphthene-d10	119683	7.394	212305	7.371	56	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	239232	8.889	395591	8.855	60	50 - 200	0.0340	+/-0.50	
Chrysene-d12	261551	12.007	452622	11.957	58	50 - 200	0.0500	+/-0.50	
Perylene-d12	233262	14.301	364367	14.239	64	50 - 200	0.0620	+/-0.50	
TR-5TH-CSF06-0814 (A404270-25)			Lab File ID: 2hb013.D			Analyzed: 08/07/14 14:51			
Naphthalene-d8	152747	5.623	291841	5.595	52	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	113439	7.394	212305	7.371	53	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	227446	8.889	395591	8.855	57	50 - 200	0.0340	+/-0.50	
Chrysene-d12	254033	12.006	452622	11.957	56	50 - 200	0.0490	+/-0.50	
Perylene-d12	226905	14.3	364367	14.239	62	50 - 200	0.0610	+/-0.50	
TR-5TH-CSF07-0814 (A404270-26)			Lab File ID: 2hb014.D			Analyzed: 08/07/14 15:13			
Naphthalene-d8	171714	5.621	291841	5.595	59	50 - 200	0.0260	+/-0.50	
Acenaphthene-d10	128051	7.394	212305	7.371	60	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	247429	8.887	395591	8.855	63	50 - 200	0.0320	+/-0.50	
Chrysene-d12	270675	12.011	452622	11.957	60	50 - 200	0.0540	+/-0.50	
Perylene-d12	244532	14.302	364367	14.239	67	50 - 200	0.0630	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29951
Instrument: OSVGCMS2
Matrix: Soil
Calibration: 1405053

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
TR-5TH-CSF08-0814 (A404270-27)			Lab File ID: 2hb015.D			Analyzed: 08/07/14 15:35			
Naphthalene-d8	163726	5.623	291841	5.595	56	50 - 200	0.0280	+/-0.50	
Acenaphthene-d10	124824	7.394	212305	7.371	59	50 - 200	0.0230	+/-0.50	
Phenanthrene-d10	253941	8.889	395591	8.855	64	50 - 200	0.0340	+/-0.50	
Chrysene-d12	282404	12.012	452622	11.957	62	50 - 200	0.0550	+/-0.50	
Perylene-d12	254484	14.301	364367	14.239	70	50 - 200	0.0620	+/-0.50	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA28739

Instrument: OSVGCMS2

Calibration: 1405053

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA28739-TUN1	2eh006.D	05/13/14 13:47
Cal Standard	AA28739-CAL1	2eh007.D	05/13/14 14:06
Cal Standard	AA28739-CAL2	2eh008.D	05/13/14 14:27
Cal Standard	AA28739-CAL3	2eh009.D	05/13/14 14:49
Cal Standard	AA28739-CAL4	2eh010.D	05/13/14 15:11
Cal Standard	AA28739-CAL5	2eh011.D	05/13/14 15:32
Cal Standard	AA28739-CAL6	2eh012.D	05/13/14 15:54
Cal Standard	AA28739-CAL7	2eh013.D	05/13/14 16:16
Secondary Cal Check	AA28739-SCV1	2eh014.D	05/13/14 16:38

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA29923
Instrument: OSVGCMS2
Calibration: 1405053

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29923-TUN1	2ha002.D	08/06/14 07:39
Calibration Check	AA29923-CCV1	2ha003.D	08/06/14 07:55
Blank	4H05046-BLK1	2ha004.D	08/06/14 08:17
LCS	4H05046-BS1	2ha005.D	08/06/14 08:39
LCS Dup	4H05046-BSD1	2ha006.D	08/06/14 09:01
TR-5TH-CS-EB-080114	A404270-29	2ha007.D	08/06/14 09:23
Blank	4H05022-BLK1	2ha008.D	08/06/14 09:44
LCS	4H05022-BS1	2ha009.D	08/06/14 10:06
TR-5TH-CSW010-0814	4H05022-MS1	2ha010.D	08/06/14 10:28
TR-5TH-CSW010-0814	4H05022-MSD1	2ha011.D	08/06/14 10:50
TR-5TH-CSW010-0814	A404270-11	2ha012.D	08/06/14 11:12
TR-5TH-CSW01-0814	A404270-01	2ha013.D	08/06/14 11:34
TR-5TH-CSW02-0814	A404270-02	2ha014.D	08/06/14 11:56
TR-5TH-CSW03-0814	A404270-03	2ha015.D	08/06/14 12:19
TR-5TH-CSW04-0814	A404270-04	2ha016.D	08/06/14 12:41
TR-5TH-CSW05-0814	A404270-05	2ha017.D	08/06/14 13:03
TR-5TH-CSW06-0814	A404270-06	2ha018.D	08/06/14 13:25
TR-5TH-CSW07-0814	A404270-07	2ha019.D	08/06/14 13:47
TR-5TH-CSW07D-0814	A404270-08	2ha020.D	08/06/14 14:09
TR-5TH-CSW08-0814	A404270-09	2ha021.D	08/06/14 14:31
TR-5TH-CSW09-0814	A404270-10	2ha022.D	08/06/14 14:53
TR-5TH-CSW11-0814	A404270-12	2ha023.D	08/06/14 15:14
TR-5TH-CSW11D-0814	A404270-13	2ha024.D	08/06/14 15:36
TR-5TH-CSW12-0814	A404270-14	2ha025.D	08/06/14 15:58
TR-5TH-CSW13-0814	A404270-15	2ha026.D	08/06/14 16:20
TR-5TH-CSW14-0814	A404270-16	2ha027.D	08/06/14 16:42
TR-5TH-CSW15-0814	A404270-18	2ha028.D	08/06/14 17:04
TR-5TH-CSF01-0814	A404270-19	2ha029.D	08/06/14 17:25
TR-5TH-CSF02-0814	A404270-20	2ha030.D	08/06/14 17:47

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29951

Instrument: OSVGCMS2

Calibration: 1405053

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	AA29951-TUN1	2hb002.D	08/07/14 10:57
Calibration Check	AA29951-CCV1	2hb003.D	08/07/14 11:13
Blank	4H05023-BLK1	2hb004.D	08/07/14 11:35
LCS	4H05023-BS1	2hb005.D	08/07/14 11:57
TR-5TH-CSF09-0814	4H05023-MS1	2hb006.D	08/07/14 12:18
TR-5TH-CSF09-0814	4H05023-MSD1	2hb007.D	08/07/14 12:40
TR-5TH-CSF09-0814	A404270-28	2hb008.D	08/07/14 13:02
TR-5TH-CSF03-0814	A404270-21	2hb009.D	08/07/14 13:24
TR-5TH-CSF04-0814	A404270-22	2hb010.D	08/07/14 13:46
TR-5TH-CSF05-0814	A404270-23	2hb011.D	08/07/14 14:08
TR-5TH-CSF05D-0814	A404270-24	2hb012.D	08/07/14 14:30
TR-5TH-CSF06-0814	A404270-25	2hb013.D	08/07/14 14:51
TR-5TH-CSF07-0814	A404270-26	2hb014.D	08/07/14 15:13
TR-5TH-CSF08-0814	A404270-27	2hb015.D	08/07/14 15:35

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	2eh006.D	Injection Date:	05/13/14
Instrument ID:	OSVGCMS2	Injection Time:	13:47
Sequence:	AA28739	Lab Sample ID:	AA28739-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
69	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	26	PASS
68	Less than 2% of 69	0	PASS
70	Less than 2% of 69	0	PASS
127	10 - 80% of 198	36.6	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.58	PASS
275	10 - 60% of 198	26.1	PASS
365	1 - 200% of 198	2.4	PASS
441	0.1 - 24% of 442	14.5	PASS
442	50 - 200% of 198	78.2	PASS
443	15 - 24% of 442	19.1	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	2ha002.D	Injection Date:	08/06/14
Instrument ID:	OSVGCMS2	Injection Time:	07:39
Sequence:	AA29923	Lab Sample ID:	AA29923-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
69	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	31	PASS
68	Less than 2% of 69	0	PASS
70	Less than 2% of 69	0	PASS
127	10 - 80% of 198	46.9	PASS
197	Less than 2% of 198	0.301	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.94	PASS
275	10 - 60% of 198	31	PASS
365	1 - 200% of 198	5.25	PASS
441	0.1 - 24% of 442	15.2	PASS
442	50 - 200% of 198	61.5	PASS
443	15 - 24% of 442	19.7	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Lab File ID:	2hb002.D	Injection Date:	08/07/14
Instrument ID:	OSVGCMS2	Injection Time:	10:57
Sequence:	AA29951	Lab Sample ID:	AA29951-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
69	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	32.5	PASS
68	Less than 2% of 69	1.19	PASS
70	Less than 2% of 69	0	PASS
127	10 - 80% of 198	48.7	PASS
197	Less than 2% of 198	0.365	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.16	PASS
275	10 - 60% of 198	32.9	PASS
365	1 - 200% of 198	5.42	PASS
441	0.1 - 24% of 442	13.1	PASS
442	50 - 200% of 198	71.2	PASS
443	15 - 24% of 442	19.2	PASS

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCMS2	Calibration:	1405053
Lab File ID:	2ha003.D	Calibration Date:	05/14/14 07:55
Sequence:	AA29923	Injection Date:	08/06/14
Lab Sample ID:	AA29923-CCV1	Injection Time:	07:55

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzo(a)pyrene	A	0.100	0.095	1.353078	1.287535		-4.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCMS2	Calibration:	1405053
Lab File ID:	2hb003.D	Calibration Date:	05/14/14 07:55
Sequence:	AA29951	Injection Date:	08/07/14
Lab Sample ID:	AA29951-CCV1	Injection Time:	11:13

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Benzo(a)pyrene	A	0.100	0.097	1.353078	1.306905		-3.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INITIAL CALIBRATION STANDARDS

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA28739		
Calibration:	1405053	Instrument:	OSVGCMS2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4E0240	pahsims 0.00175ug/ml	AA28739-CAL1	2eh007.D	05/13/14 14:06
A4E0241	pahsims 0.01ug/ml	AA28739-CAL2	2eh008.D	05/13/14 14:27
A4E0242	pahsims 0.02ug/ml	AA28739-CAL3	2eh009.D	05/13/14 14:49
A4E0243	pahsims 0.05ug/ml	AA28739-CAL4	2eh010.D	05/13/14 15:11
A4E0244	pahsims 0.1ug/ml	AA28739-CAL5	2eh011.D	05/13/14 15:32
A4E0245	pahsims 0.2ug/ml	AA28739-CAL6	2eh012.D	05/13/14 15:54
A4E0246	pahsims 0.4ug/ml	AA28739-CAL7	2eh013.D	05/13/14 16:16
A4E0247	pahsims (icv) 0.1ug/ml	AA28739-SCV1	2eh014.D	05/13/14 16:38

INITIAL CALIBRATION DATA

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1405053

Instrument: OSVGCMS2

Matrix: Water

Calibration Date: 05/14/14 07:55

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Benzo(a)pyrene	0.00175	1.266399	0.01	1.292865	0.02	1.252676	0.05	1.296837	0.1	1.410446	0.2	1.46739
Benzo(a)pyrene	0.00175	1.266399	0.01	1.292865	0.02	1.252676	0.05	1.296837	0.1	1.410446	0.2	1.46739
p-Terphenyl	0.00175	1.219184	0.01	1.253097	0.02	1.221089	0.05	1.22873	0.1	1.350144	0.2	1.361041
p-Terphenyl	0.00175	1.219184	0.01	1.253097	0.02	1.221089	0.05	1.22873	0.1	1.350144	0.2	1.361041

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1405053
Instrument: OSVGCMS2
Matrix: Water
Calibration Date: 05/14/14 07:55

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
Benzo(a)pyrene	0.4	1.484935										
Benzo(a)pyrene	0.4	1.484935										
p-Terphenyl	0.4	1.370504										
p-Terphenyl	0.4	1.370504										

INITIAL CALIBRATION DATA (Continued)

EPA 8270D

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Calibration:	1405053	Instrument:	OSVGCMS2
Matrix:	Water	Calibration Date:	05/14/14 07:55

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Benzo(a)pyrene	1.353078	7.274293	14.15329	1.347334E-02			CCC (30)	
Benzo(a)pyrene	1.353078	7.274293	14.15329	1.347334E-02			CCC (30)	
p-Terphenyl	1.286256	5.490643	10.52014	3.121898E-02			15	
p-Terphenyl	1.286256	5.490643	10.52014	3.121898E-02			15	

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270D

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1405053

Laboratory ID: AA28739-SCV1

Sequence: AA28739

Standard ID: A4E0247

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
p-Terphenyl	0.100	0.10	0.2	20.00
Benzo(a)pyrene	0.100	0.10	0.5	20.00

* Values outside of QC limits

ANALYSIS SEQUENCE

AA29923

Instrument: OSVGCMS2

Calibration ID: 1405053

Printed: 8/6/2014 18:17:38

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
AA29923-TUN1	QC		1		A4D0161	A4G0392		
AA29923-CCV1	QC		2		A4E0515	A4G0392		
4H05046-BLK1	QC		3			A4G0392		
4H05046-BS1	QC		4			A4G0392		
4H05046-BSD1	QC		5			A4G0392		
A404270-29	8270D PAH SIM DOD	C	6			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
4H05022-BLK1	QC		7			A4G0392		
4H05022-BS1	QC		8			A4G0392		
4H05022-MS1	QC		9			A4G0392		
4H05022-MSD1	QC		10			A4G0392		
A404270-11	8270D PAH SIM DOD	D	11			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only. USE for MS/MS
A404270-01	8270D PAH SIM DOD	D	12			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-02	8270D PAH SIM DOD	D	13			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-03	8270D PAH SIM DOD	D	14			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-04	8270D PAH SIM DOD	D	15			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-05	8270D PAH SIM DOD	D	16			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-06	8270D PAH SIM DOD	D	17			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-07	8270D PAH SIM DOD	D	18			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-08	8270D PAH SIM DOD	D	19			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-09	8270D PAH SIM DOD	D	20			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-10	8270D PAH SIM DOD	D	21			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-12	8270D PAH SIM DOD	D	22			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-13	8270D PAH SIM DOD	D	23			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

ANALYSIS SEQUENCE

AA29923

Instrument: OSVGCMS2

Calibration ID: 1405053

Printed: 8/6/2014 18:17:38

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
A404270-14	8270D PAH SIM DOD	D	24			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-15	8270D PAH SIM DOD	D	25			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-16	8270D PAH SIM DOD	D	26			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-18	8270D PAH SIM DOD	D	27			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-19	8270D PAH SIM DOD	D	28			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-20	8270D PAH SIM DOD	D	29			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only

Samples Loaded By Date

Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/5/2014 8:16:13PM

Analysis
8270D PAH SIM DOD [EPA 8270D]

4H05046
ENCO Orlando

Prepared using: EPA 3511_MS

Surrogate Solution
___ A4H0002 PAHSIM 3511 Surrogate

Spiking Solution
A4D0593 PAHSIM 3511 Spike Mix

Matrix: Water

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (mL)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H05046-BLK1		Blank		QC	–	<0.5	35	2			100		
4H05046-BS1		LCS		QC	–	<0.5	35	2	A4D0593	100	100		
4H05046-BSD1		LCS Dup		QC	–	<0.5	35	2	A4D0593	100	100		
A404270-29	D	TR-5TH-CS-EB-080114 C[C10]	08-Aug-14	8270D PAH SIM DOD	–	<0.5	35	2			100		Benzo(a)pyrene only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

PAH SIM Water

Start Date/Time 08-05-14 20:30

StopDate/Time 08-05-14 21:10

Standard ID#	Description	Manufacture Lot#
A3L0573	Sodium Chloride	Solvent Lot #56234
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

Equipment Used

Sonicator _____ Tuned per manufacturer instructions? [ ] Yes [ ] No [ ] NA

Turbovap _____ Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____

Turbovap _____ Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____

Turbovap _____ Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____

Balance _____ Daily calibration complete? [ ] Yes [ ] No [ ] NA

Thermometer _____

Other _____ CKP 08-05-14

40ml Vial (W) B-1
Lot # 031014-3HWK
DEXTCENT 1

CKP 08-05-14

Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

639 of 1287

PREPARATION BENCH SHEET

Printed: 8/5/2014 3:11:51PM

4H05022

ENCO Orlando

Analysis
8270D PAH SIM DOD [EPA 8270D]

Prepared using: EPA 3550C_MS

Surrogate Solution
__ A4G0543 PAHSIM SOIL Surrogate

Spiking Solution
A4G0045 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H05022-BLK1		Blank		QC	—	—	15.0	300			1000		
4H05022-BS1		LCS		QC	—	—	15.0	300	A4G0045	1000	1000		
4H05022-MS1		Matrix Spike [A404270-11]		QC	—	—	15.0	300	A4G0045	1000	1000		
4H05022-MSD1		Matrix Spike Dup [A404270-11]		QC	—	—	15.0	300	A4G0045	1000	1000		
A404270-01 1	D	TR-5TH-CSW01-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.2	300			1000		Benzo(a)pyrene only
A404270-02 2	D	TR-5TH-CSW02-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-03 3	D	TR-5TH-CSW03-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-04 4	D	TR-5TH-CSW04-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-05 5	D	TR-5TH-CSW05-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.1	300			1000		Benzo(a)pyrene only
A404270-06 6	D	TR-5TH-CSW06-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-07 7	D	TR-5TH-CSW07-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-08 8	D	TR-5TH-CSW07D-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.2	300			1000		Benzo(a)pyrene only
A404270-09 9	D	TR-5TH-CSW08-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.1	300			1000		Benzo(a)pyrene only
A404270-10 10	D	TR-5TH-CSW09-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	150	300			1000		Benzo(a)pyrene only
A404270-11 11	D	TR-5TH-CSW010-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only. USE for M
A404270-12 12	D	TR-5TH-CSW11-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-13 13	D	TR-5TH-CSW11D-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only
A404270-14 14	D	TR-5TH-CSW12-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only

PREPARATION BENCH SHEET

Printed: 8/5/2014 3:11:51PM

4H05022

ENCO Orlando

Prepared using: EPA 3550C_MS

Surrogate Solution
___ A4G0543 PAHSIM SOIL Surrogate

Spiking Solution
A4G0045 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
A404270-15	15 D	TR-5TH-CSW13-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.1	300			1000		Benzo(a)pyrene only
A404270-16	16 D	TR-5TH-CSW14-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.2	300			1000		Benzo(a)pyrene only
A404270-17	16 D	TR-5TH-CSW14-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	—	—	—	—	1000	—	Benzo(a)pyrene only not real sample
A404270-18	17 D	TR-5TH-CSW15-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.1	300			1000		Benzo(a)pyrene only
A404270-19	18 D	TR-5TH-CSF01-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.1	300			1000		Benzo(a)pyrene only
A404270-20	19 D	TR-5TH-CSF02-0814	D[C10]	08-Aug-14	8270D PAH SIM DOD	—	—	15.0	300			1000		Benzo(a)pyrene only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

PAH SIM soil

Start Date/Time 08-05-14 16:30

StopDate/Time 08-05-14 20:30

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

Equipment Used

Sonicator OSON 1,2,3 — Tuned per manufacturer instructions? [X] Yes [ ] No [ ] NA

Turbovap OTVAP1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi

Turbovap OTVAP2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi

Turbovap OTVAP3 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi

Balance OBATBA27 — Daily calibration complete? [X] Yes [ ] No [ ] NA

Thermometer

Other

PREPARATION BENCH SHEET

Printed: 8/5/2014 3:11:51PM

4H05022

ENCO Orlando

Prepared using: EPA 3550C_MS

Surrogate Solution
___ A4G0543 PAHSIM SOIL Surrogate

Spiking Solution
A4G0045 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

CKP 08-05-14
Samples Prepared By Date

Samples Prepared By Date

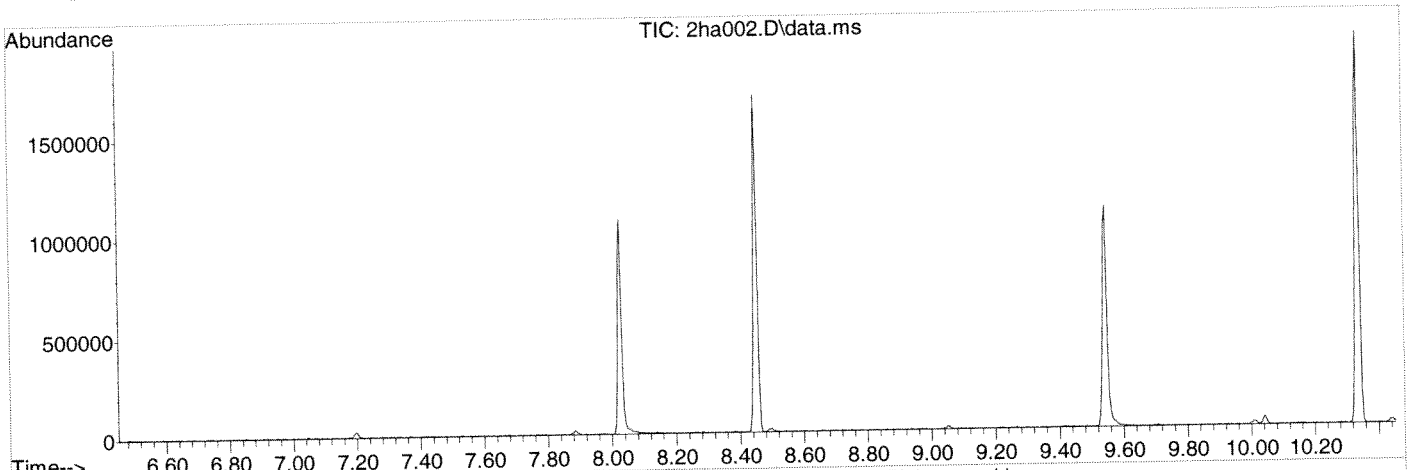
Samples Prepared By Date

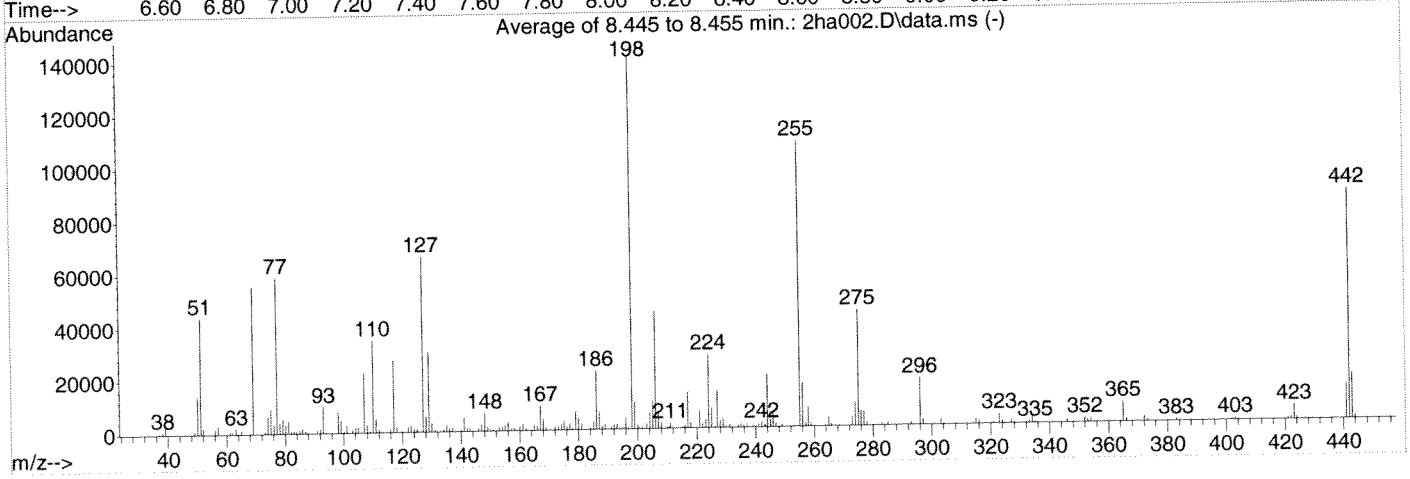
642 of 1287

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha002.D
Acq On : 6 Aug 2014 7:39
Operator : jjb
Sample : aa29923-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT4.P

Method : C:\msdchem\1\METHODS\DFTPPD.M
Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
Last Update : Tue Jul 22 10:10:07 2014





AutoFind: Scans 698, 699, 700; Background Corrected with Scan 692

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	31.0	43709	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.4	55405	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	46.9	66085	PASS
197	198	0.00	2	0.3	424	PASS
198	198	50	100	100.0	140773	PASS
199	198	5	9	6.9	9772	PASS
275	198	10	60	31.0	43656	PASS
365	198	1	100	5.3	7394	PASS
441	443	0.01	100	77.1	13124	PASS
442	198	50	100	61.5	86589	PASS
443	442	15	24	19.7	17023	PASS

8/6/14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha002.D
Acq On : 6 Aug 2014 7:39
Operator : jjb
Sample : aa29923-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 07:54:43 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)	Qvalue
Target Compounds						
1) Pentachlorophenol	8.027	266	111733	59.6839 ug/ml		100
2) DFTPP	8.450	198	147207	112.4679 ug/ml		100
3) Benzidine	9.546	184	440281	86.0828 ug/ml		100
4) DDE	0.000		0	N.D.		
5) DDD	10.042	TIC	32853	259.9541	#	82
6) DDT	10.340	TIC	1722123	129.2185	#	1

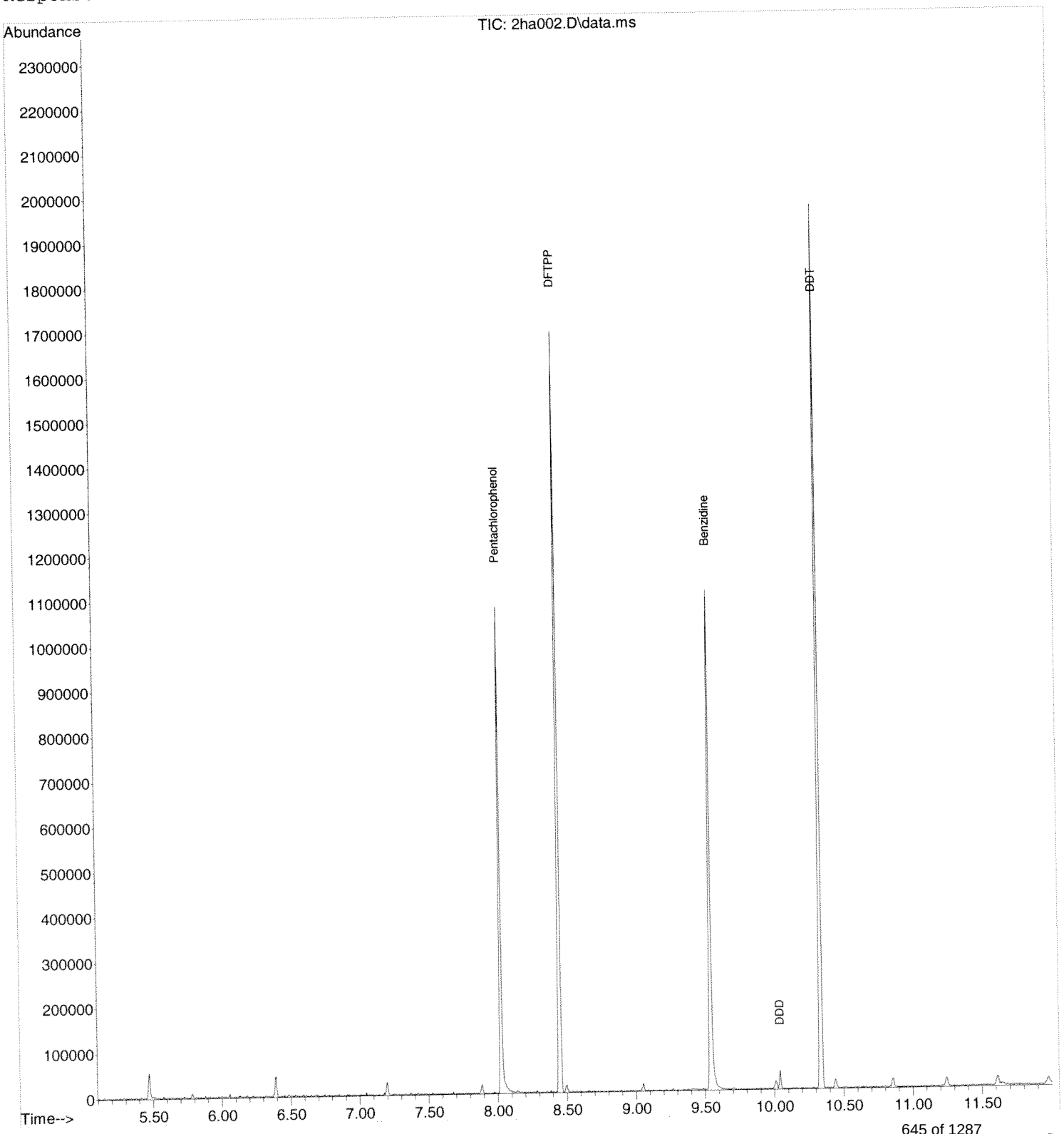
(#) = qualifier out of range (m) = manual integration (+) = signals summed

8/6/14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha002.D
Acq On : 6 Aug 2014 7:39
Operator : jjb
Sample : aa29923-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 07:54:43 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration

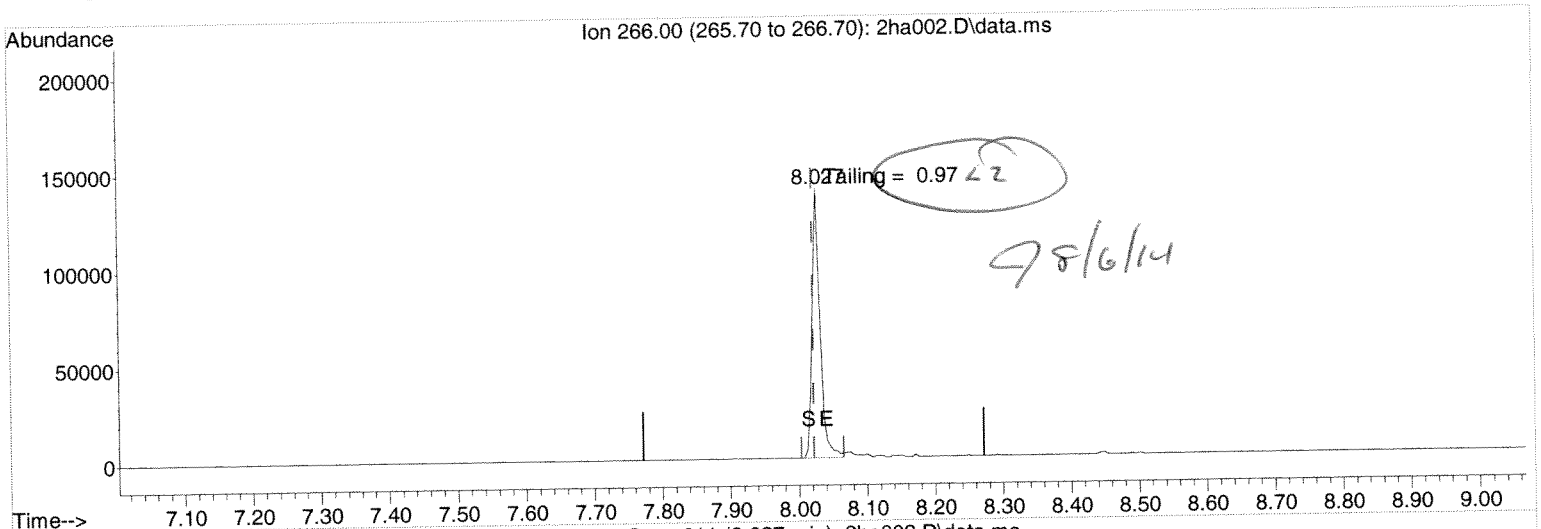


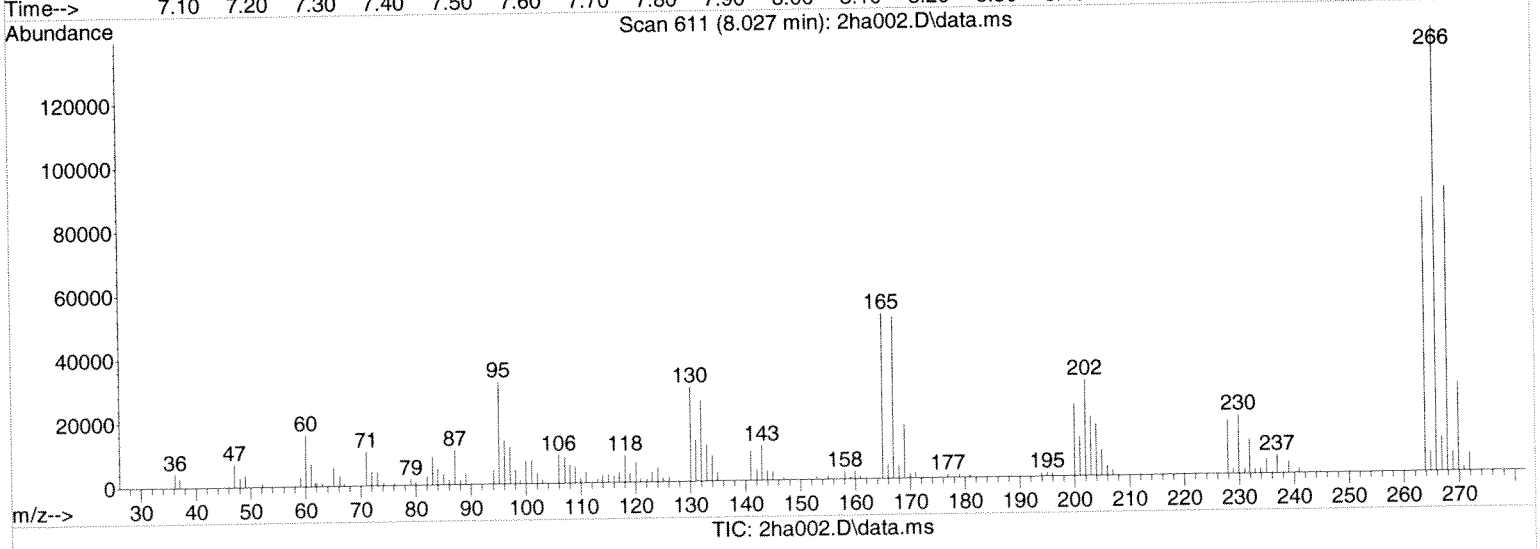
DFTPPD.M Wed Aug 06 07:55:20 2014

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha002.D
Acq On : 6 Aug 2014 7:39
Operator : jjb
Sample : aa29923-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 07:54:43 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration





(1) Pentachlorophenol

8.027min (+0.006) 59.68 ug/ml

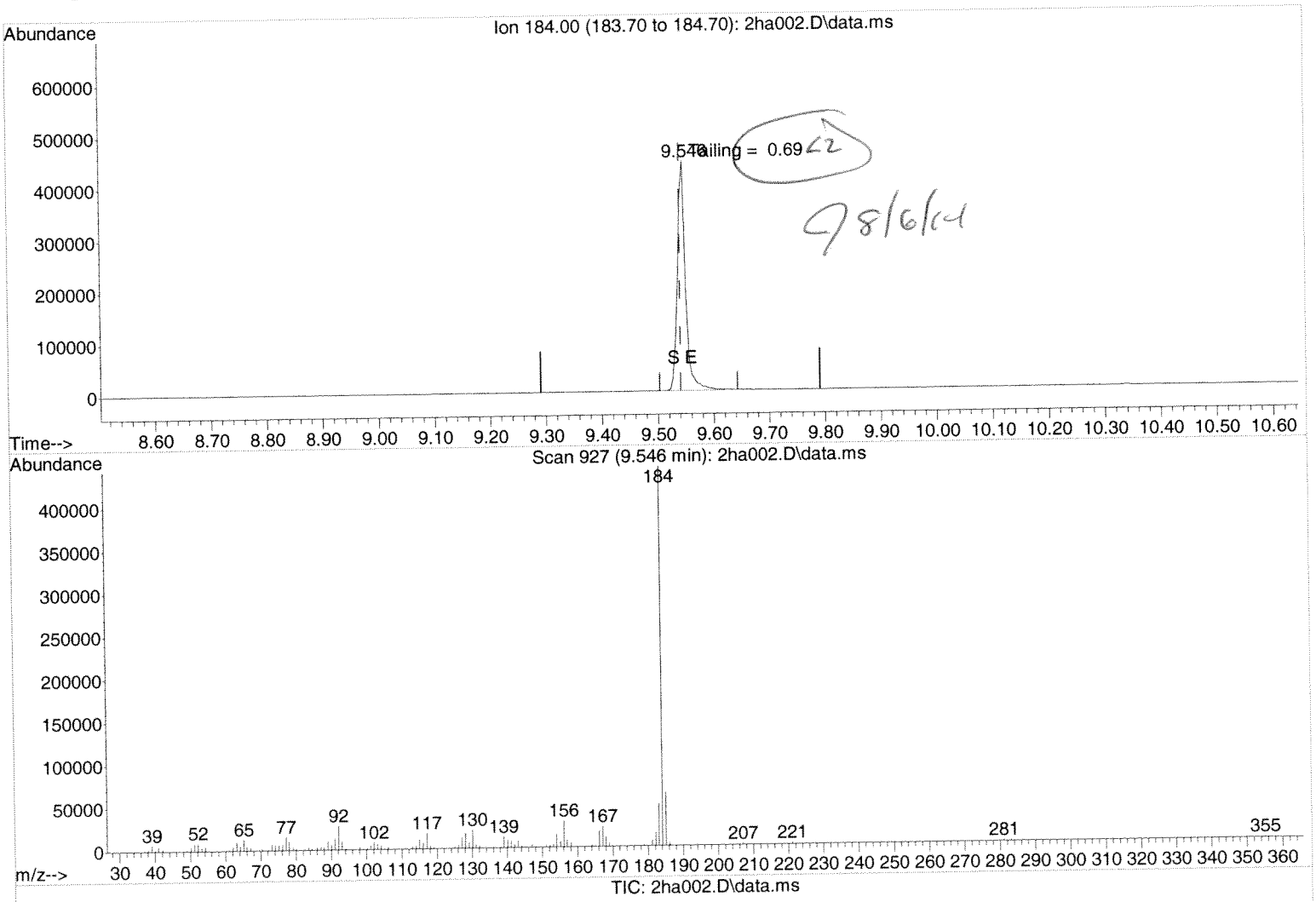
response 111733

Ion	Exp%	Act%
266.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha002.D
Acq On : 6 Aug 2014 7:39
Operator : jjb
Sample : aa29923-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 06 07:54:43 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration



8/6/14

(3) Benzidine

9.546min (+0.006) 86.08 ug/ml

response 440281

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha003.D
Acq On : 6 Aug 2014 7:55
Operator : jjb
Sample : aa29923-ccv1
Misc : a4e0515
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 08:13:36 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

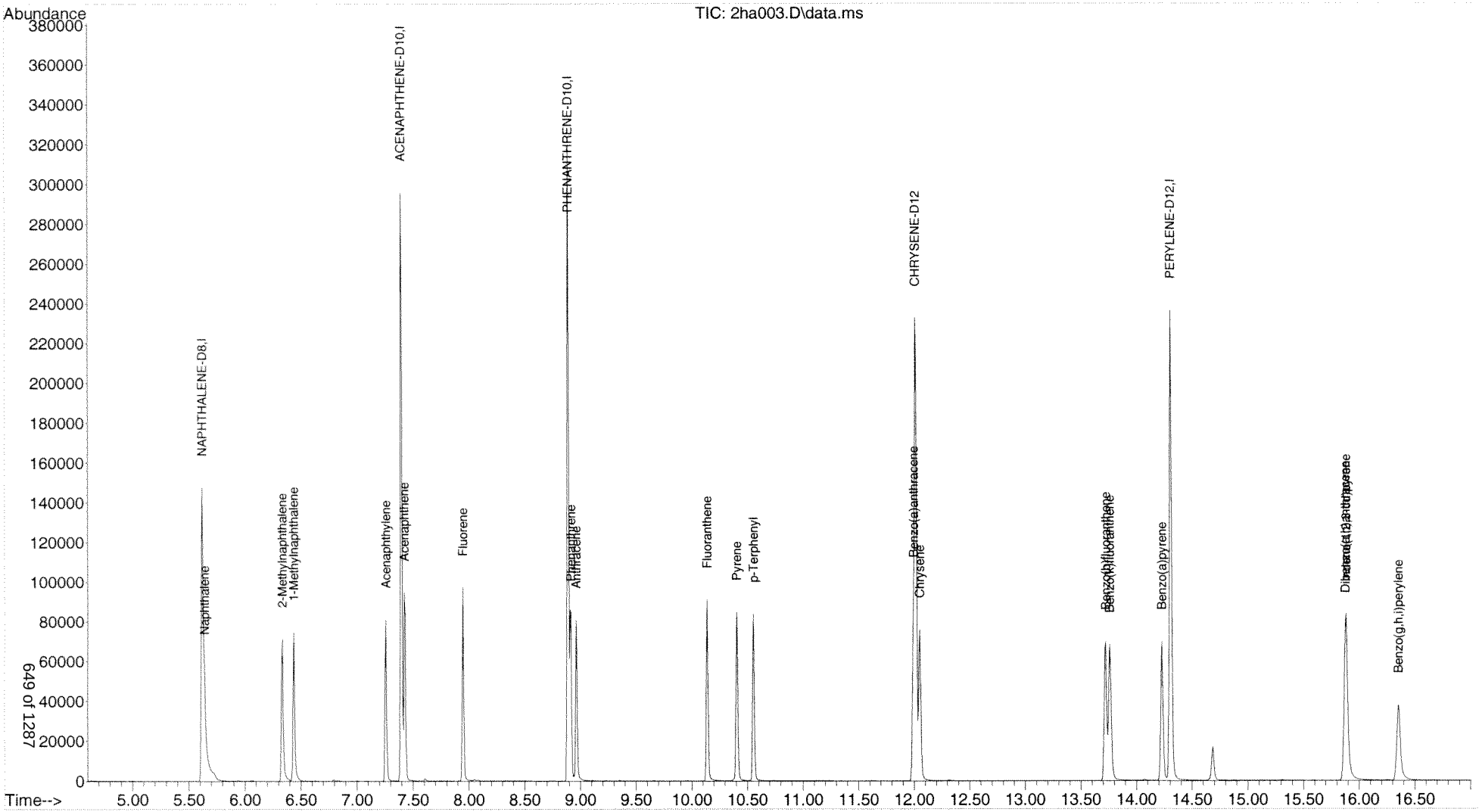
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.621	136	192010	0.50	ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	143954	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	263711	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	288473	0.50	ug/mL	0.01
18) PERYLENE-D12	14.306	264	260758	0.50	ug/mL	0.01
Target Compounds						Qvalue
2) Naphthalene	5.641	128	43918	0.0931	ug/mL	99
3) 2-Methylnaphthalene	6.335	142	34543	0.0852	ug/mL	87
4) 1-Methylnaphthalene	6.436	142	33094	0.0839	ug/mL	86
6) Acenaphthylene	7.259	152	54801	0.0928	ug/mL	99
7) Acenaphthene	7.424	154	33217	0.0873	ug/mL	90
8) Fluorene	7.947	166	42150	0.0899	ug/mL	97
10) Phenanthrene	8.915	178	63942	0.0918	ug/mL	95
11) Anthracene	8.962	178	60816	0.0962	ug/mL	97
12) Fluoranthene	10.139	202	76241	0.0980	ug/mL	94
13) Pyrene	10.404	202	77713	0.0985	ug/mL	91
14) p-Terphenyl	10.556	230	64735	0.0954	ug/mL	100
16) Benzo(a)anthracene	11.995	228	78381	0.1012	ug/mL	97
17) Chrysene	12.050	228	75803	0.1033	ug/mL	98
19) Benzo(b)fluoranthene	13.721	252	74030	0.0970	ug/mL	96
20) Benzo(k)fluoranthene	13.758	252	74279	0.0981	ug/mL	96
21) Benzo(a)pyrene	14.227	252	67147	0.0952	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.881	276	77892	0.1009	ug/mL	82
23) Dibenzo(a,h)anthracene	15.874	278	63960	0.0996	ug/mL	86
24) Benzo(g,h,i)perylene	16.350	276	65125	0.1018	ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha003.D
Acq On : 6 Aug 2014 7:55
Operator : jjb
Sample : aa29923-ccv1
Misc : a4e0515
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 06 08:13:36 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha004.D
Acq On : 6 Aug 2014 8:17
Operator : jjb
Sample : 4h05046-blk1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 08:36:22 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

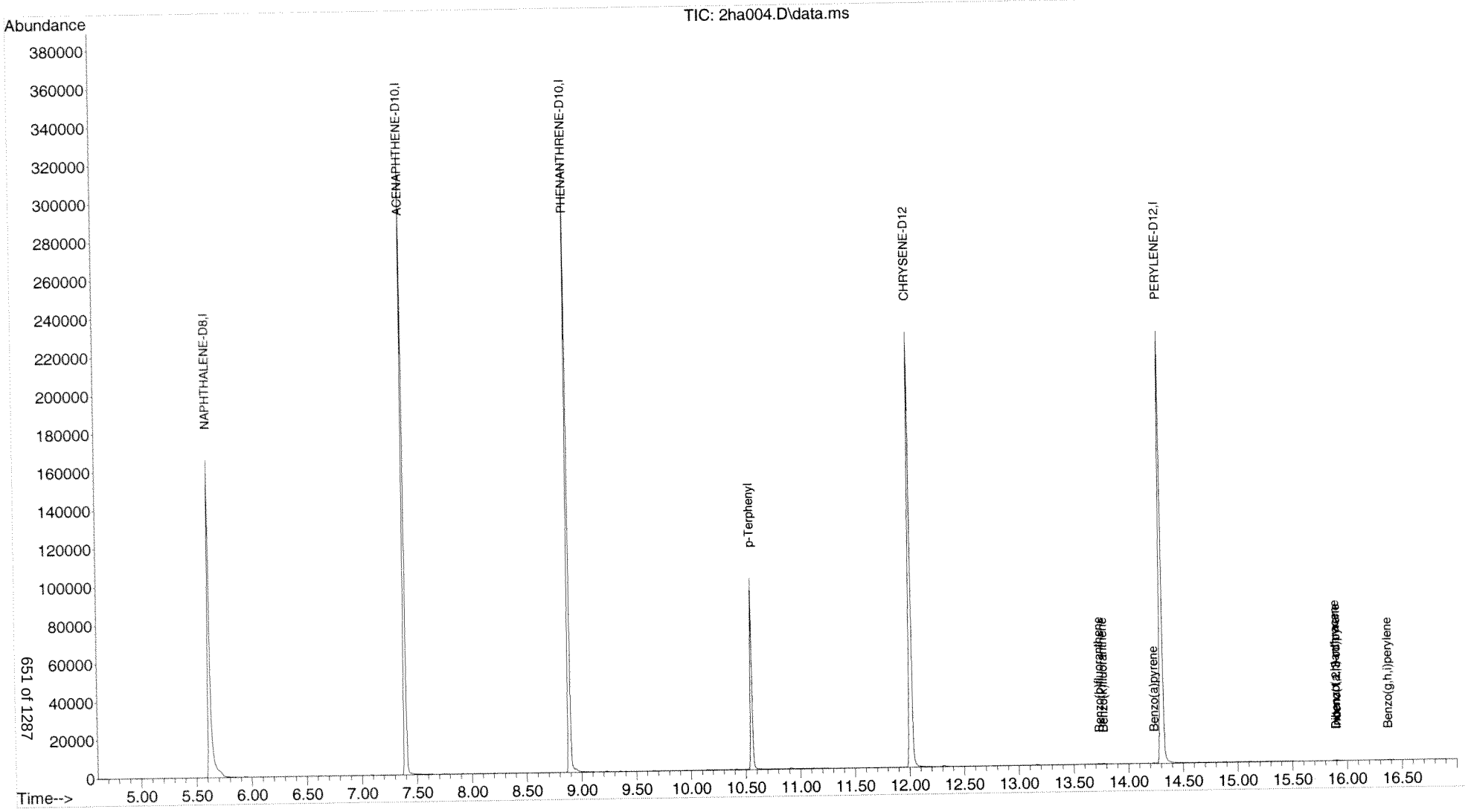
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.617	136	199332	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	145057	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	265964	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	292997	0.50 ug/mL	0.00
18) PERYLENE-D12	14.307	264	260930	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	74704	0.1092 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	13.734	252	266	0.0003 ug/mL#	60
20) Benzo(k)fluoranthene	13.771	252	309	0.0004 ug/mL#	60
21) Benzo(a)pyrene	14.234	252	288	0.0004 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.901	276	395	0.0005 ug/mL#	53
23) Dibenzo(a,h)anthracene	15.894	278	319	0.0005 ug/mL#	64
24) Benzo(g,h,i)perylene	16.370	276	324	0.0005 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha004.D
Acq On : 6 Aug 2014 8:17
Operator : jjb
Sample : 4h05046-blk1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 06 08:36:22 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha005.D
Acq On : 6 Aug 2014 8:39
Operator : jjb
Sample : 4h05046-bs1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 08:57:38 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

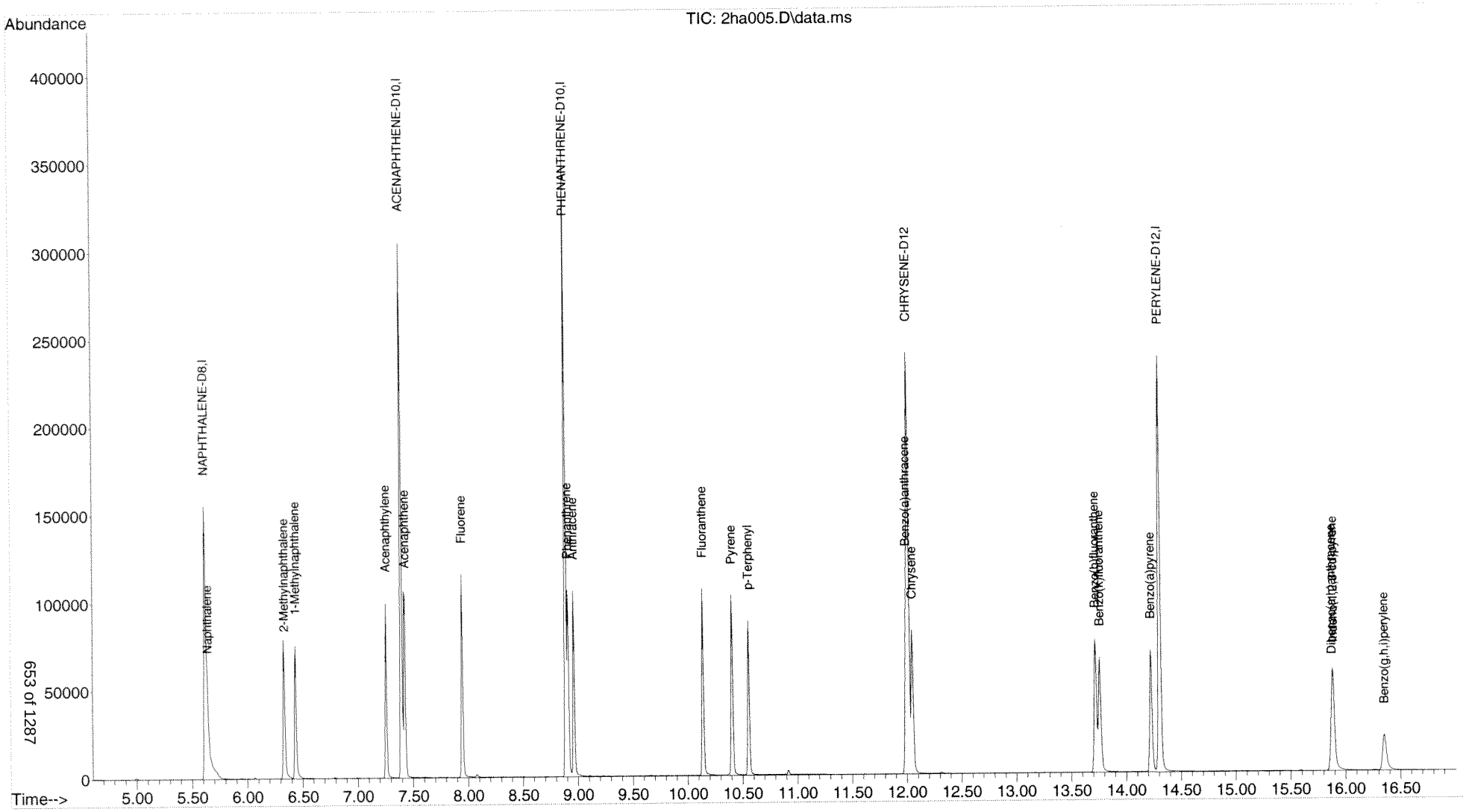
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.615	136	197434	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	146697	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	274598	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	299752	0.50 ug/mL	0.00
18) PERYLENE-D12	14.308	264	270104	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	5.642	128	47137	0.0972 ug/mL	99
3) 2-Methylnaphthalene	6.336	142	37235	0.0893 ug/mL	87
4) 1-Methylnaphthalene	6.437	142	35268	0.0870 ug/mL	87
6) Acenaphthylene	7.258	152	64929	0.1079 ug/mL	99
7) Acenaphthene	7.430	154	39269	0.1012 ug/mL	91
8) Fluorene	7.946	166	49041	0.1027 ug/mL	95
10) Phenanthrene	8.908	178	76264	0.1051 ug/mL	95
11) Anthracene	8.961	178	76891	0.1168 ug/mL	97
12) Fluoranthene	10.138	202	89057	0.1100 ug/mL	93
13) Pyrene	10.403	202	94044	0.1145 ug/mL	91
14) p-Terphenyl	10.555	230	67590	0.0957 ug/mL	99
16) Benzo(a)anthracene	11.994	228	88481	0.1098 ug/mL	97
17) Chrysene	12.049	228	84921	0.1114 ug/mL	98
19) Benzo(b)fluoranthene	13.717	252	81718	0.1034 ug/mL	96
20) Benzo(k)fluoranthene	13.759	252	65858	0.0840 ug/mL	97
21) Benzo(a)pyrene	14.223	252	68025	0.0931 ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.886	276	63167	0.0790 ug/mL	80
23) Dibenzo(a,h)anthracene	15.873	278	35118	0.0528 ug/mL	87
24) Benzo(g,h,i)perylene	16.348	276	38102	0.0575 ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha005.D
Acq On : 6 Aug 2014 8:39
Operator : jjb
Sample : 4h05046-bs1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 06 08:57:38 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha006.D
Acq On : 6 Aug 2014 9:01
Operator : jjb
Sample : 4h05046-bsd1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 09:18:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

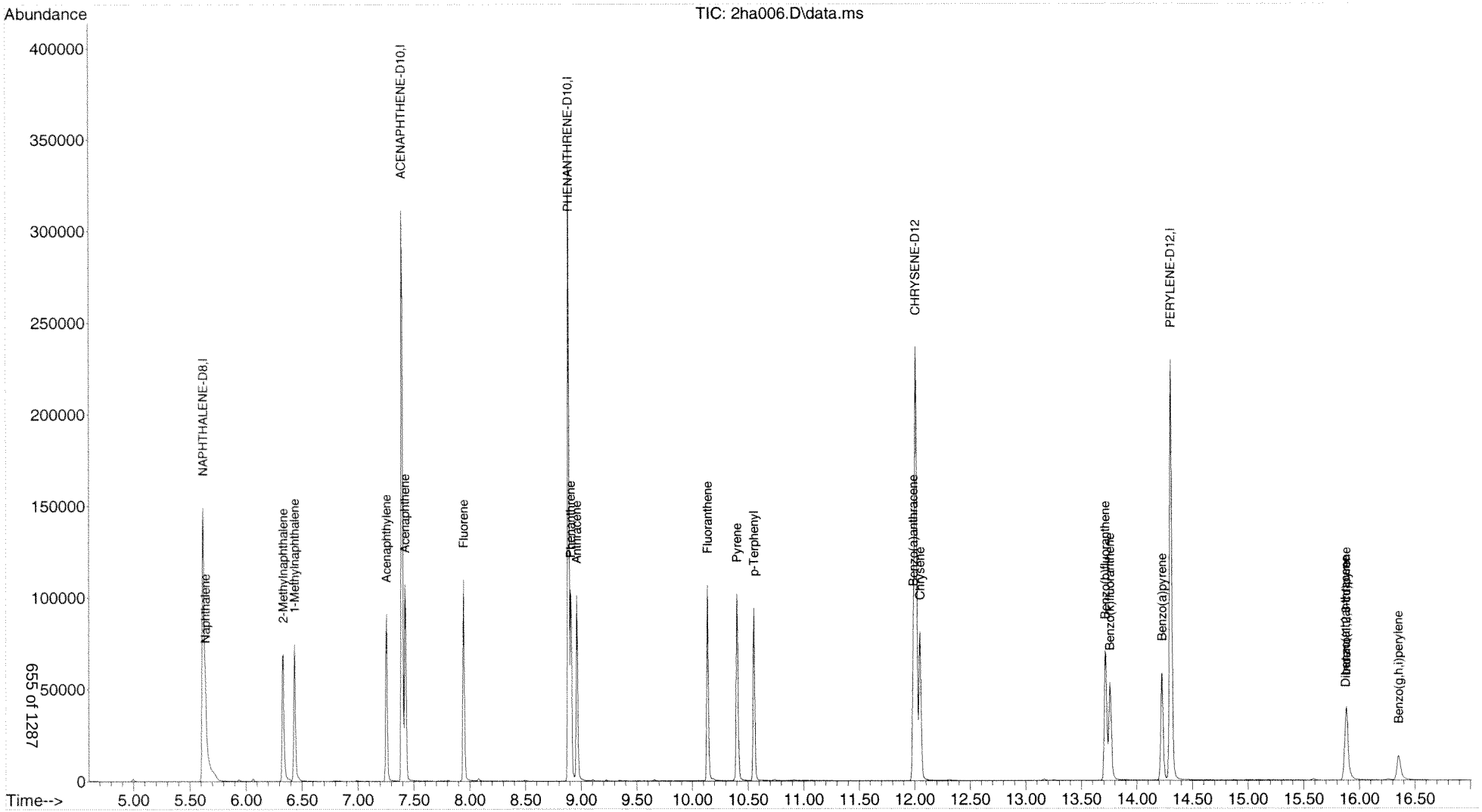
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.621	136	200749	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	150438	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	272629	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.012	240	296309	0.50	ug/mL	0.00
18) PERYLENE-D12	14.306	264	266509	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.641	128	44727	0.0907	ug/mL	99
3) 2-Methylnaphthalene	6.336	142	35063	0.0827	ug/mL	86
4) 1-Methylnaphthalene	6.437	142	33325	0.0808	ug/mL	86
6) Acenaphthylene	7.259	152	63059	0.1022	ug/mL	100
7) Acenaphthene	7.423	154	37485	0.0942	ug/mL	90
8) Fluorene	7.947	166	47451	0.0969	ug/mL	96
10) Phenanthrene	8.909	178	73711	0.1023	ug/mL	94
11) Anthracene	8.962	178	73832	0.1130	ug/mL	97
12) Fluoranthene	10.139	202	87259	0.1085	ug/mL	93
13) Pyrene	10.404	202	91576	0.1123	ug/mL	91
14) p-Terphenyl	10.556	230	71598	0.1021	ug/mL	100
16) Benzo(a)anthracene	11.990	228	85603	0.1075	ug/mL	97
17) Chrysene	12.050	228	81887	0.1086	ug/mL	98
19) Benzo(b)fluoranthene	13.715	252	75690	0.0970	ug/mL	96
20) Benzo(k)fluoranthene	13.758	252	57358	0.0741	ug/mL	95
21) Benzo(a)pyrene	14.227	252	59514	0.0825	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.881	276	47633	0.0604	ug/mL	78
23) Dibenzo(a,h)anthracene	15.874	278	19654	0.0299	ug/mL	86
24) Benzo(g,h,i)perylene	16.350	276	24640	0.0377	ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha006.D
Acq On : 6 Aug 2014 9:01
Operator : jjb
Sample : 4h05046-bsd1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 06 09:18:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha008.D
Acq On : 6 Aug 2014 9:44
Operator : jjb
Sample : 4h05022-blk1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 10:03:34 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

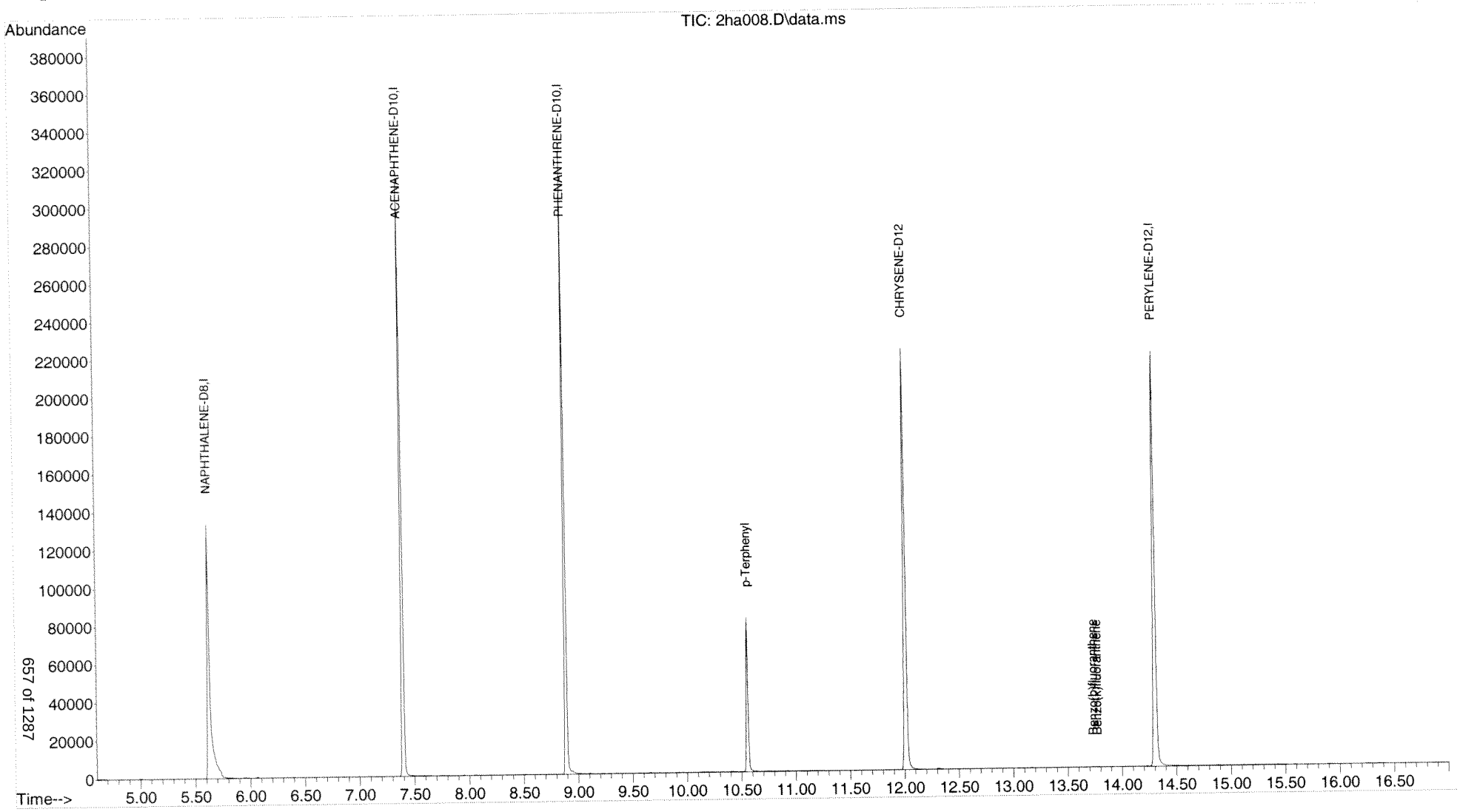
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	198785	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	146831	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	264184	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	287191	0.50 ug/mL	0.00
18) PERYLENE-D12	14.306	264	257302	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D. d	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	64501	0.0949 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	13.733	252	193	0.0003 ug/mL#	60
20) Benzo(k)fluoranthene	13.770	252	247	0.0003 ug/mL#	60
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha008.D
Acq On : 6 Aug 2014 9:44
Operator : jjb
Sample : 4h05022-blk1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 06 10:03:34 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha009.D
Acq On : 6 Aug 2014 10:06
Operator : jjb
Sample : 4h05022-bs1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 06 10:23:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

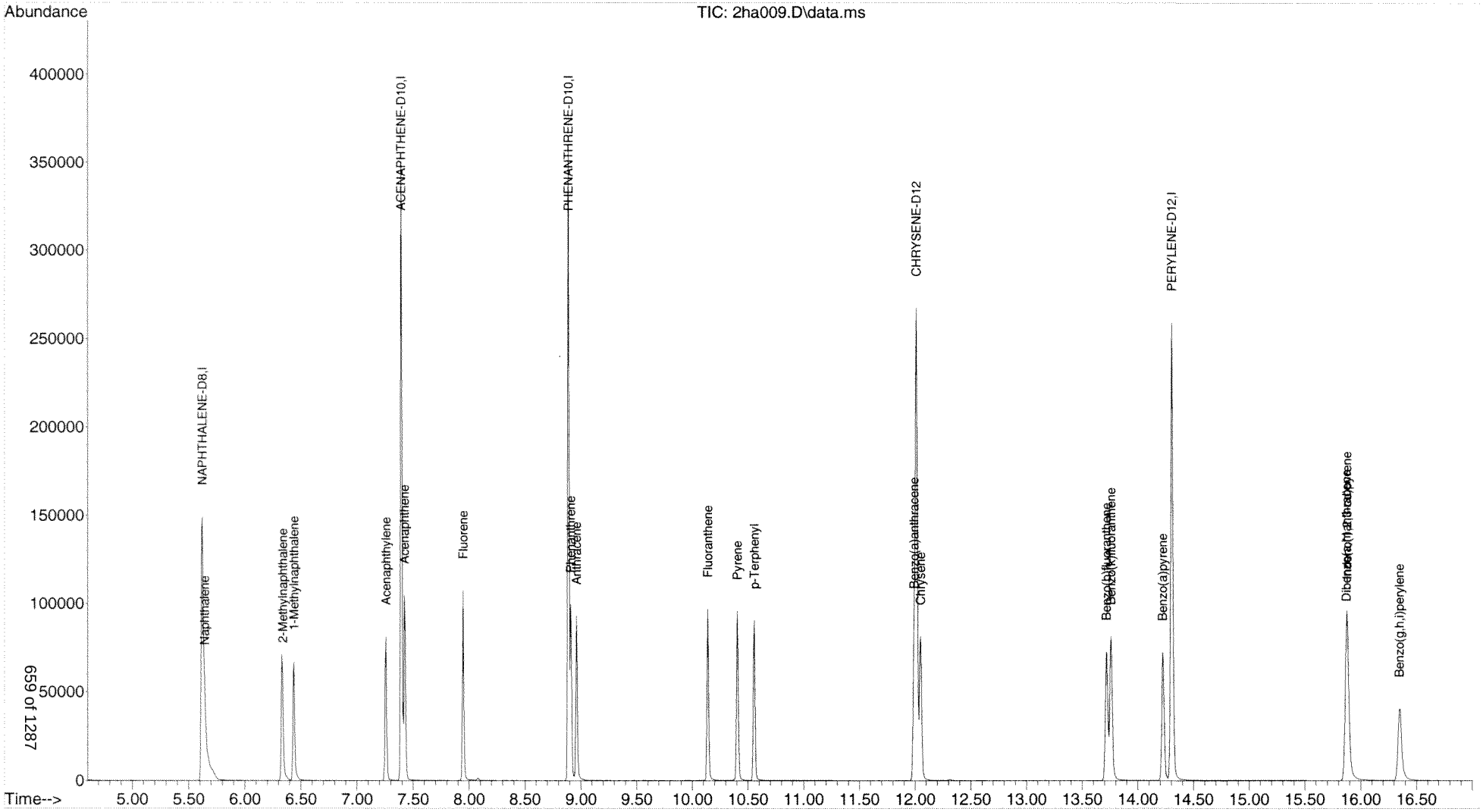
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.623	136	219084	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	159382	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	290356	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	323215	0.50	ug/mL	0.00
18) PERYLENE-D12	14.306	264	289564	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.643	128	44352	0.0824	ug/mL	98
3) 2-Methylnaphthalene	6.337	142	34832	0.0753	ug/mL	87
4) 1-Methylnaphthalene	6.439	142	32582	0.0724	ug/mL	86
6) Acenaphthylene	7.259	152	57245	0.0876	ug/mL	99
7) Acenaphthene	7.423	154	35684	0.0847	ug/mL	91
8) Fluorene	7.947	166	45155	0.0870	ug/mL	98
10) Phenanthrene	8.909	178	69138	0.0901	ug/mL	95
11) Anthracene	8.962	178	67110	0.0964	ug/mL	97
12) Fluoranthene	10.139	202	81955	0.0957	ug/mL	92
13) Pyrene	10.404	202	86773	0.0999	ug/mL	91
14) p-Terphenyl	10.556	230	72177	0.0966	ug/mL	100
16) Benzo(a)anthracene	11.989	228	86235	0.0994	ug/mL	96
17) Chrysene	12.049	228	85140	0.1036	ug/mL	99
19) Benzo(b)fluoranthene	13.715	252	79736	0.0941	ug/mL	96
20) Benzo(k)fluoranthene	13.758	252	84040	0.0999	ug/mL	97
21) Benzo(a)pyrene	14.221	252	71879	0.0917	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.874	276	89353	0.1042	ug/mL	81
23) Dibenzo(a,h)anthracene	15.867	278	73718	0.1034	ug/mL	86
24) Benzo(g,h,i)perylene	16.343	276	72423	0.1020	ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha009.D
Acq On : 6 Aug 2014 10:06
Operator : jjb
Sample : 4h05022-bs1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 06 10:23:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha010.D
Acq On : 6 Aug 2014 10:28
Operator : jjb
Sample : 4h05022-ms1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 06 10:47:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

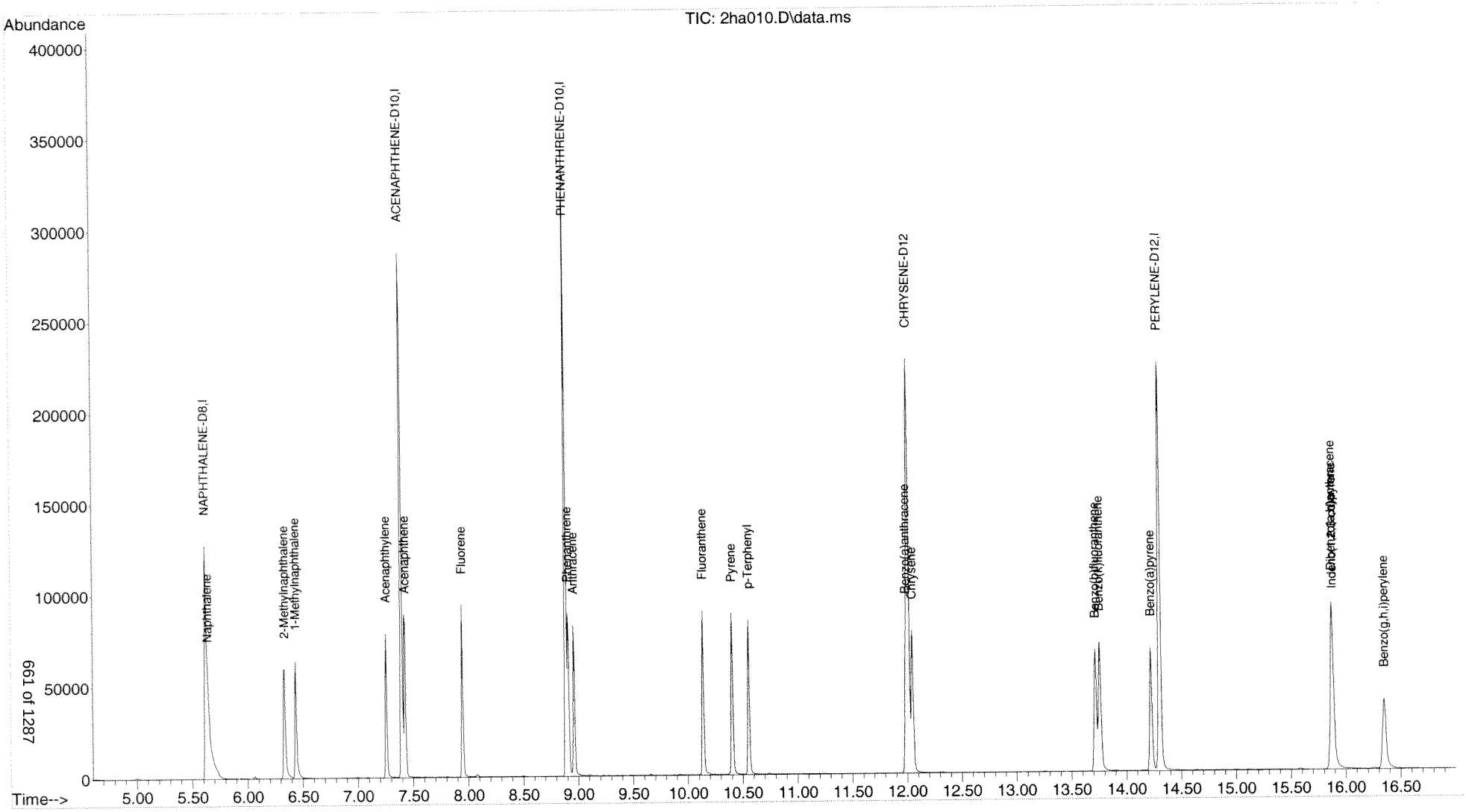
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.623	136	188601	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	142277	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	265556	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	289219	0.50	ug/mL	0.00
18) PERYLENE-D12	14.302	264	262392	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.643	128	39500	0.0852	ug/mL	99
3) 2-Methylnaphthalene	6.338	142	31790	0.0799	ug/mL	87
4) 1-Methylnaphthalene	6.439	142	29791	0.0769	ug/mL	87
6) Acenaphthylene	7.259	152	53333	0.0914	ug/mL	100
7) Acenaphthene	7.431	154	32647	0.0868	ug/mL	91
8) Fluorene	7.947	166	40420	0.0873	ug/mL	96
10) Phenanthrene	8.908	178	64375	0.0918	ug/mL	94
11) Anthracene	8.961	178	62325	0.0979	ug/mL	97
12) Fluoranthene	10.138	202	75588	0.0965	ug/mL	93
13) Pyrene	10.403	202	80021	0.1008	ug/mL	91
14) p-Terphenyl	10.555	230	64284	0.0941	ug/mL	100
16) Benzo(a)anthracene	11.989	228	77579	0.1000	ug/mL	96
17) Chrysene	12.049	228	76302	0.1037	ug/mL	98
19) Benzo(b)fluoranthene	13.717	252	70107	0.0913	ug/mL	96
20) Benzo(k)fluoranthene	13.754	252	78663	0.1032	ug/mL	96
21) Benzo(a)pyrene	14.223	252	66786	0.0941	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.879	276	82089	0.1056	ug/mL	81
23) Dibenzo(a,h)anthracene	15.873	278	67569	0.1046	ug/mL	86
24) Benzo(g,h,i)perylene	16.348	276	66772	0.1038	ug/mL	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha010.D
Acq On : 6 Aug 2014 10:28
Operator : jjb
Sample : 4h05022-ms1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 06 10:47:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha011.D
Acq On : 6 Aug 2014 10:50
Operator : jjb
Sample : 4h05022-msd1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 06 11:08:30 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

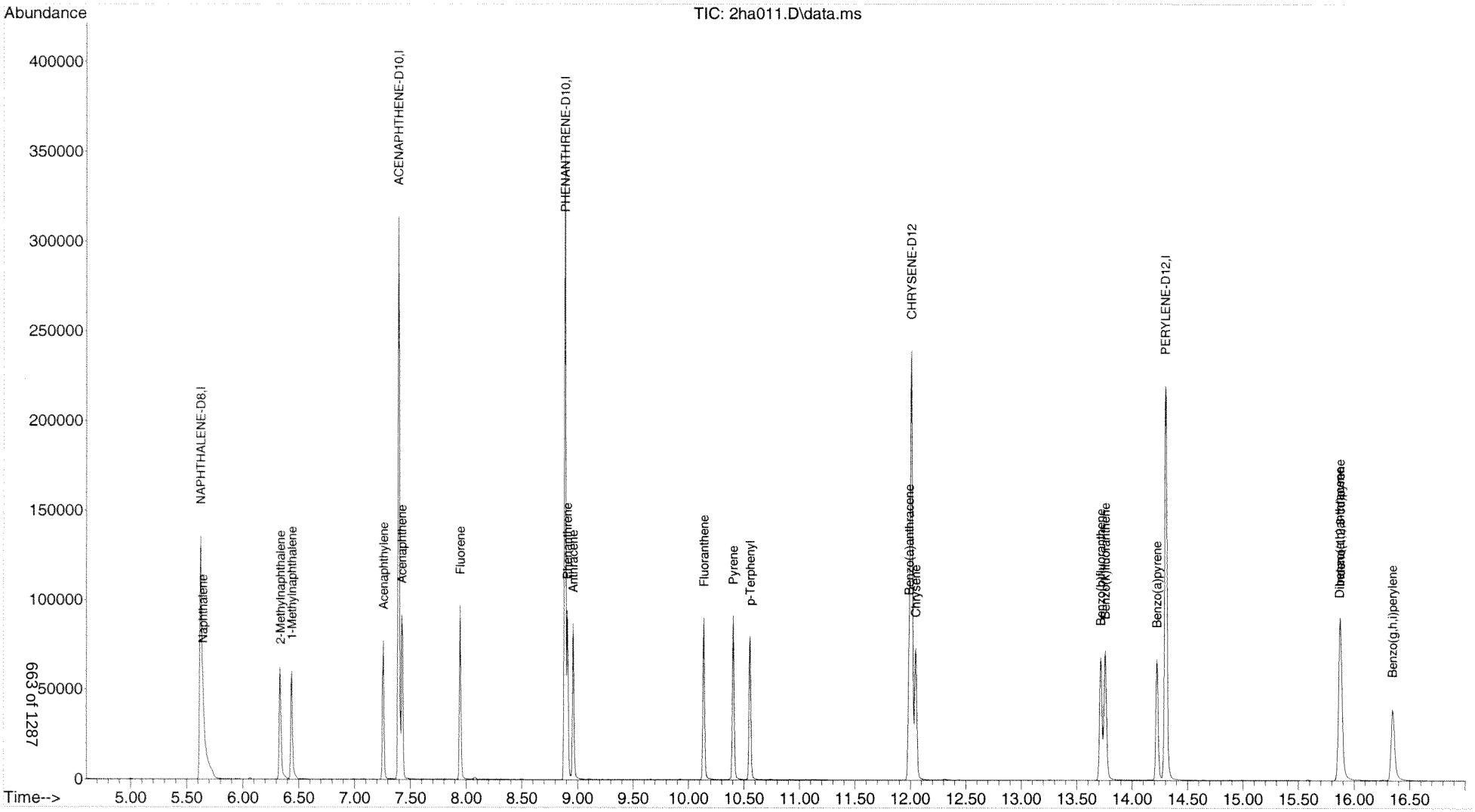
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.623	136	198321	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	147382	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	271841	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.012	240	296254	0.50	ug/mL	0.00
18) PERYLENE-D12	14.301	264	268298	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.644	128	39021	0.0801	ug/mL	99
3) 2-Methylnaphthalene	6.338	142	31264	0.0747	ug/mL	87
4) 1-Methylnaphthalene	6.439	142	29558	0.0726	ug/mL	88
6) Acenaphthylene	7.259	152	51984	0.0860	ug/mL	100
7) Acenaphthene	7.424	154	32131	0.0824	ug/mL	91
8) Fluorene	7.947	166	40525	0.0844	ug/mL	97
10) Phenanthrene	8.909	178	63451	0.0884	ug/mL	95
11) Anthracene	8.962	178	61929	0.0951	ug/mL	97
12) Fluoranthene	10.139	202	77333	0.0965	ug/mL	93
13) Pyrene	10.404	202	81189	0.0999	ug/mL	91
14) p-Terphenyl	10.556	230	65848	0.0942	ug/mL	99
16) Benzo(a)anthracene	11.990	228	78723	0.0990	ug/mL	97
17) Chrysene	12.050	228	77120	0.1023	ug/mL	98
19) Benzo(b)fluoranthene	13.716	252	69888	0.0890	ug/mL	94
20) Benzo(k)fluoranthene	13.759	252	79694	0.1023	ug/mL	94
21) Benzo(a)pyrene	14.222	252	65828	0.0907	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.874	276	82989	0.1044	ug/mL	81
23) Dibenzo(a,h)anthracene	15.867	278	68622	0.1039	ug/mL	86
24) Benzo(g,h,i)perylene	16.343	276	67449	0.1025	ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha011.D
Acq On : 6 Aug 2014 10:50
Operator : jjb
Sample : 4h05022-msd1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 06 11:08:30 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha007.D
Acq On : 6 Aug 2014 9:23
Operator : jjb
Sample : a404270-29
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 09:43:43 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

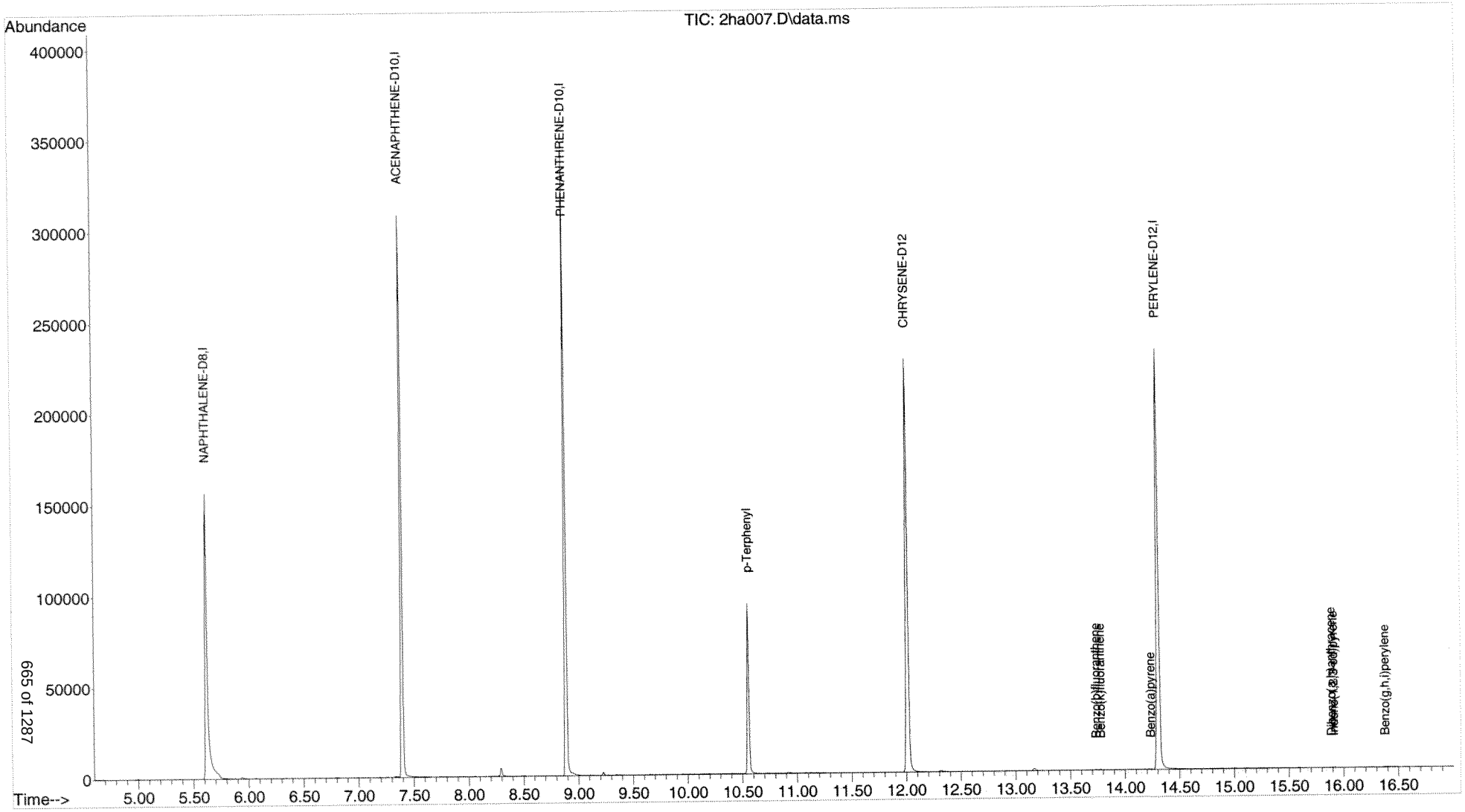
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.620	136	206698	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	149837	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	273198	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	296960	0.50 ug/mL	0.00
18) PERYLENE-D12	14.306	264	267399	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	72742	0.1035 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	13.734	252	296	0.0004 ug/mL#	60
20) Benzo(k)fluoranthene	13.776	252	247	0.0003 ug/mL#	60
21) Benzo(a)pyrene	14.233	252	233m	0.0003 ug/mL	
22) Indeno(1,2,3-cd)pyrene	15.906	276	283	0.0004 ug/mL#	53
23) Dibenzo(a,h)anthracene	15.886	278	264	0.0004 ug/mL#	64
24) Benzo(g,h,i)perylene	16.375	276	377	0.0006 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha007.D
Acq On : 6 Aug 2014 9:23
Operator : jjb
Sample : a404270-29
Misc :
ALS Vial : 6 Sample Multiplier: 1

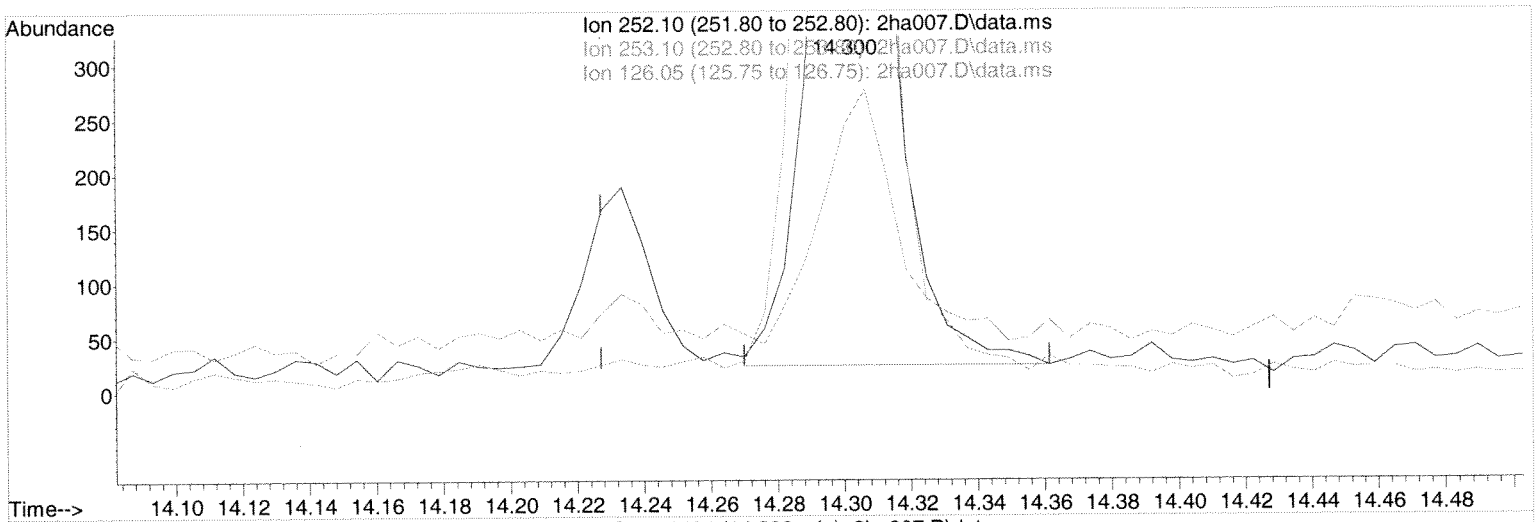
Quant Time: Aug 06 09:43:43 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

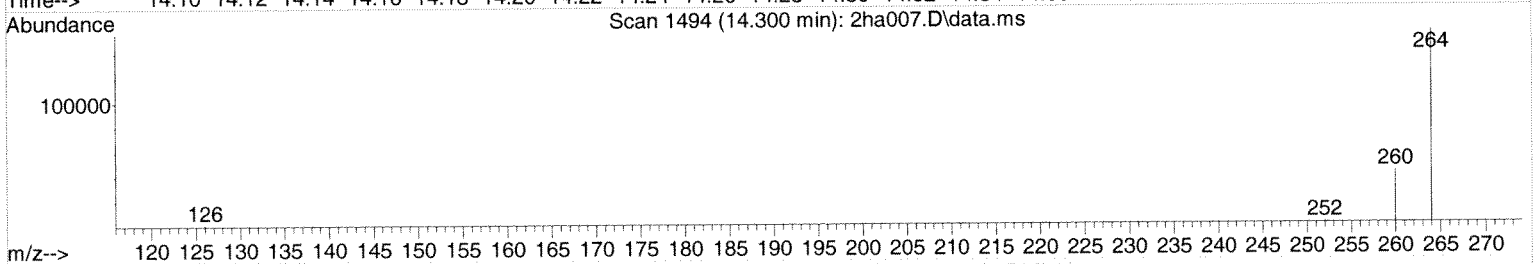


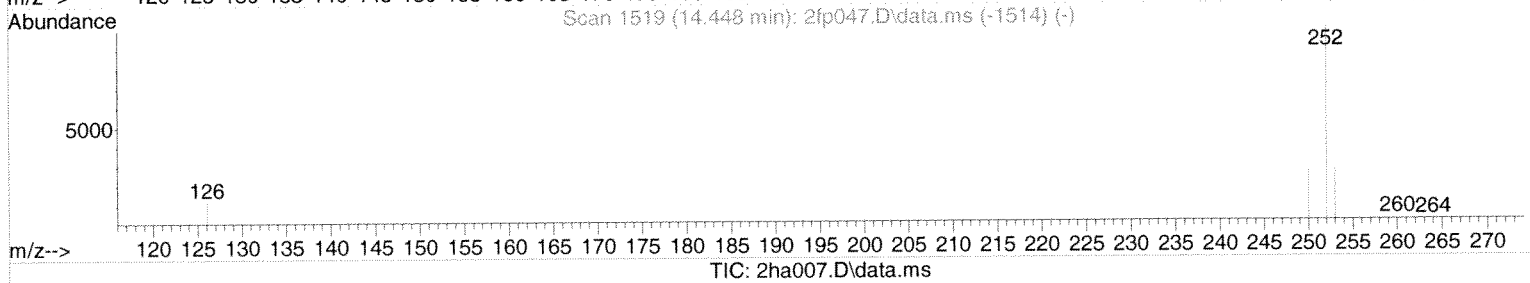
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha007.D
Acq On : 6 Aug 2014 9:23
Operator : jjb
Sample : a404270-29
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 09:42:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha007.D\data.ms

(21) Benzo(a)pyrene

14.300min (+0.073) 0.00 ug/mL

response 1206

Ion	Exp%	Act%
252.10	100	100
253.10	21.70	30.68
126.05	11.90	155.89#
0.00	0.00	0.00

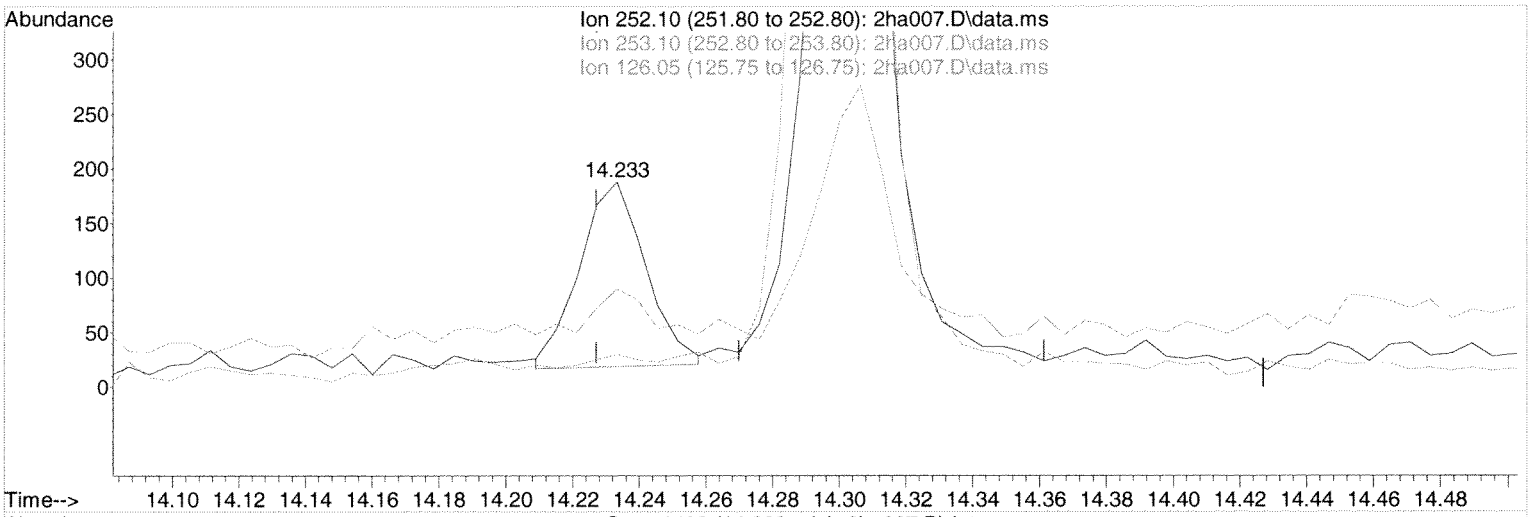
Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date 8/6/14
Review by/Date: 8/6/14

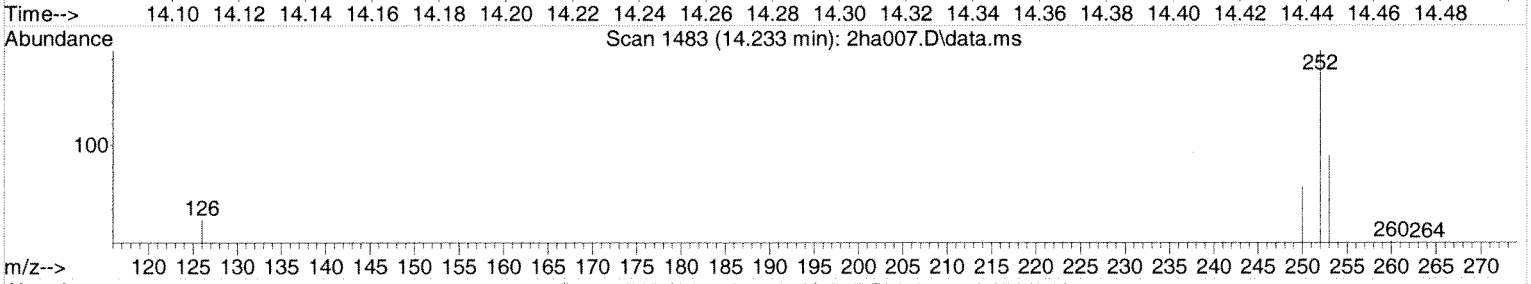
051314.M Wed Aug 06 09:43:39 2014

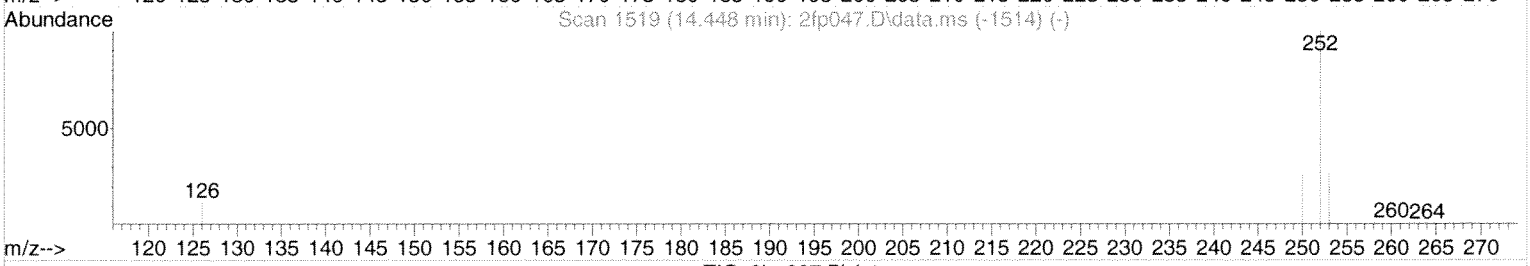
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha007.D
Acq On : 6 Aug 2014 9:23
Operator : jjb
Sample : a404270-29
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 06 09:42:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha007.D\data.ms

(21) Benzo(a)pyrene

14.233min (+0.006) 0.00 ug/mL m

response 233

Ion	Exp%	Act%
252.10	100	100
253.10	21.70	158.80#
126.05	11.90	806.87#
0.00	0.00	0.00

Select One:
[ ] Original Integration [✓] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date 8/6/14
Review by/Date: 8.6.14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha012.D
Acq On : 6 Aug 2014 11:12
Operator : jjb
Sample : a404270-11
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 06 11:29:48 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

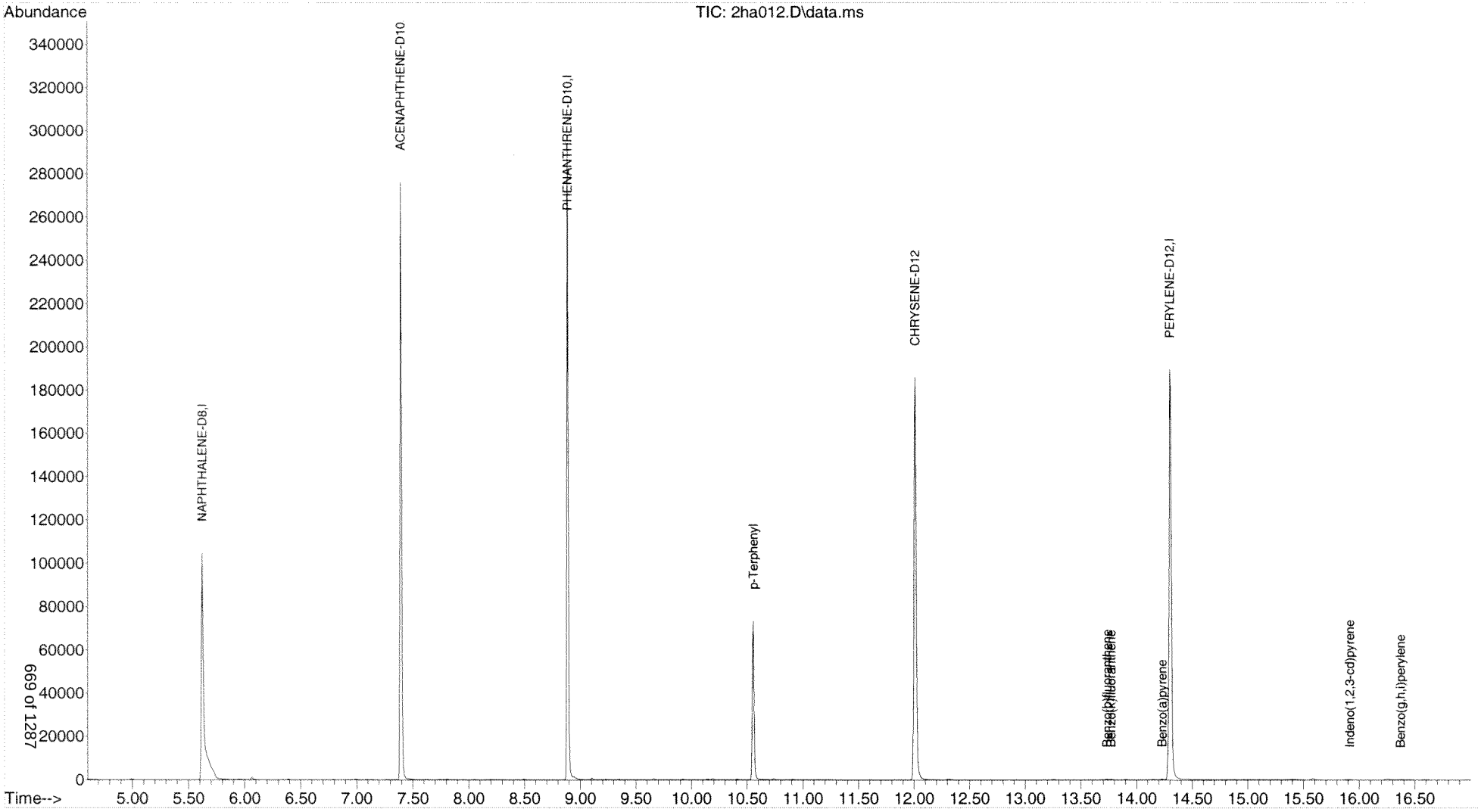
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.622	136	150688	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	129993	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	231370	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	247530	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	222936	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D. d	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	58792	0.0988 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	13.734	252	416	0.0006 ug/mL#	56
20) Benzo(k)fluoranthene	13.770	252	300	0.0005 ug/mL#	60
21) Benzo(a)pyrene	14.227	252	330	0.0005 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.912	276	374	0.0006 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	16.368	276	341	0.0006 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha012.D
Acq On : 6 Aug 2014 11:12
Operator : jjb
Sample : a404270-11
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 06 11:29:48 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha013.D
Acq On : 6 Aug 2014 11:34
Operator : jjb
Sample : a404270-01
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 11:52:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

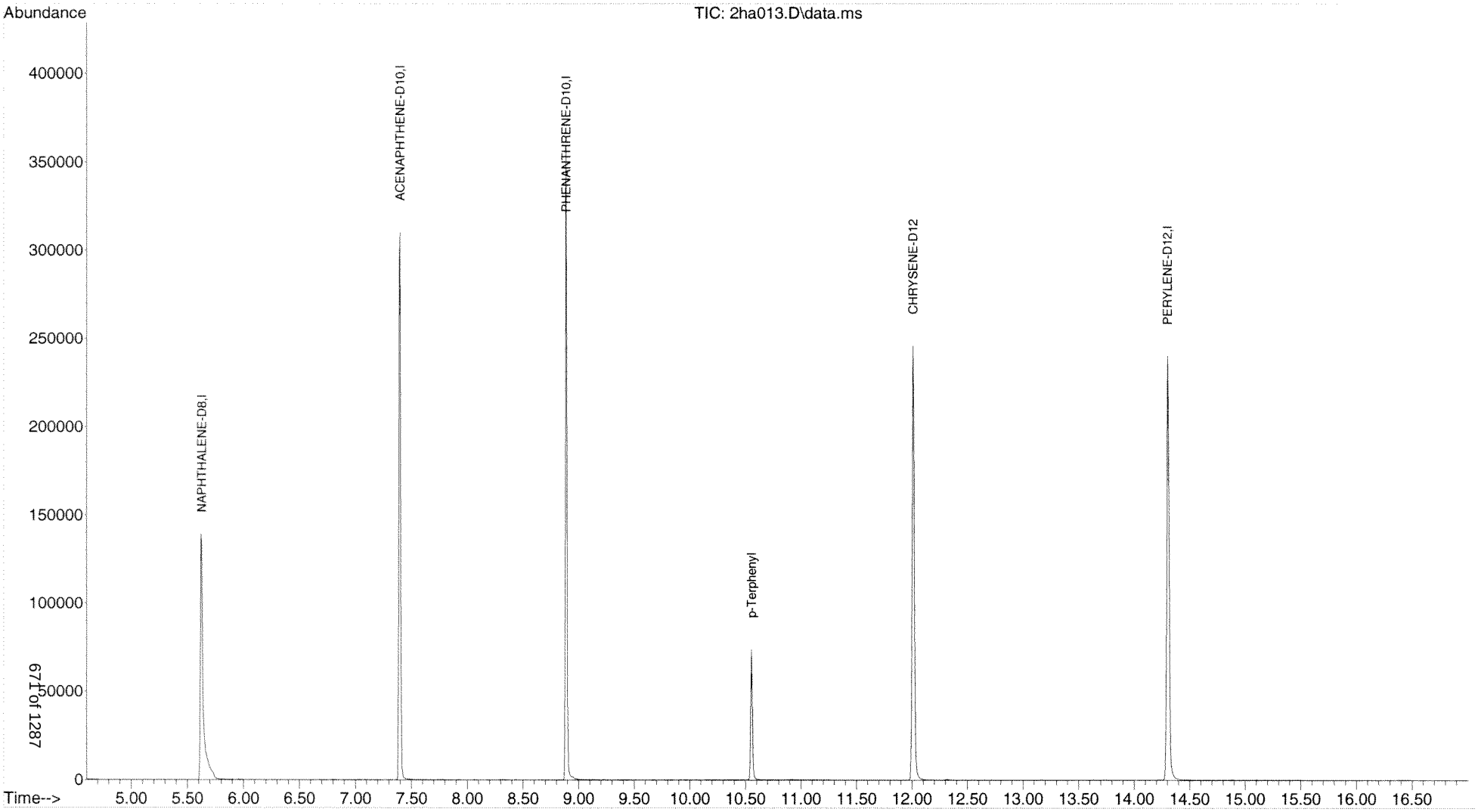
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.628	136	215864	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.400	164	159717	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	292191	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	320182	0.50 ug/mL	0.00
18) PERYLENE-D12	14.302	264	286268	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	57276	0.0762 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D. d	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha013.D
Acq On : 6 Aug 2014 11:34
Operator : jjb
Sample : a404270-01
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 06 11:52:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:35:14 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

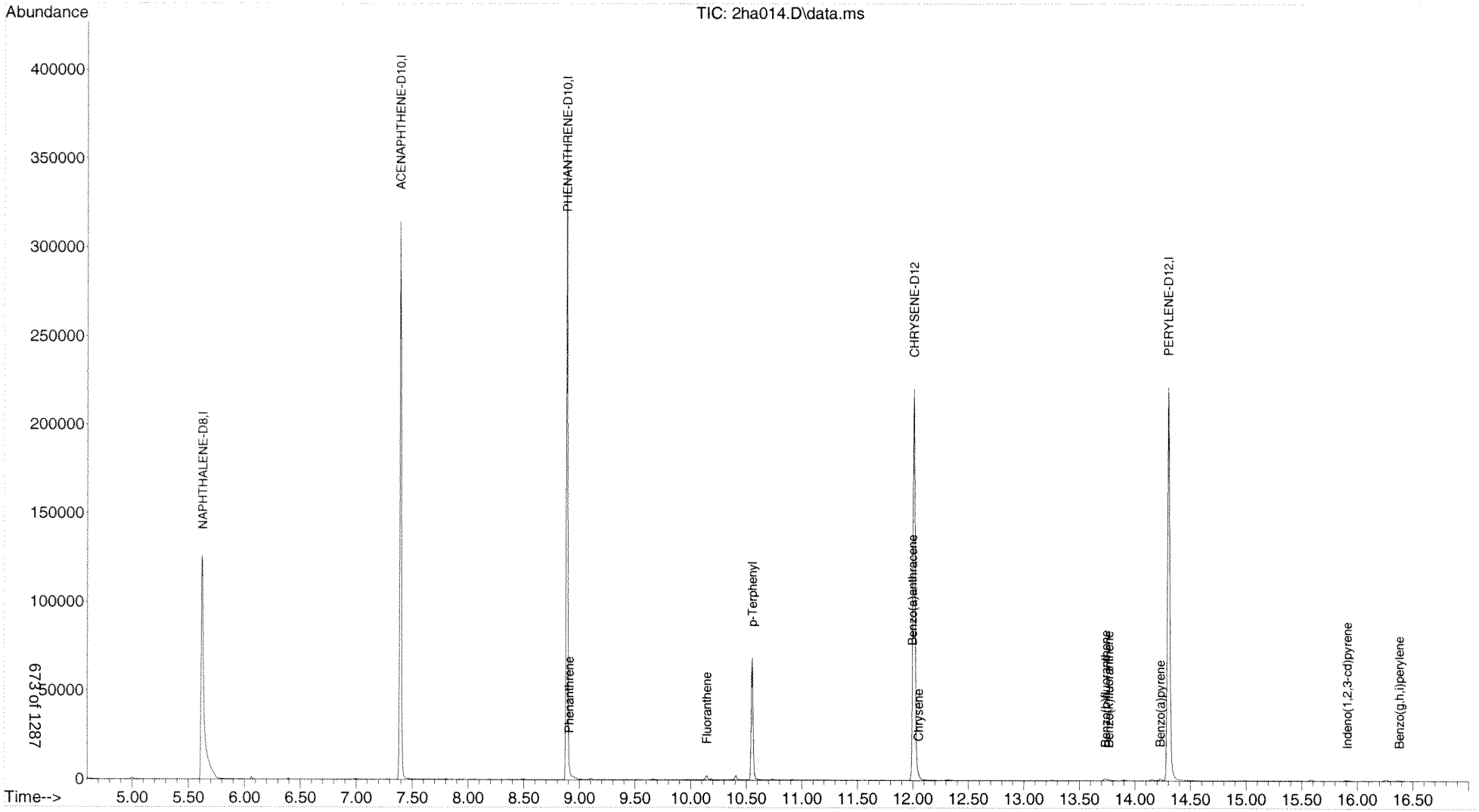
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.627	136	203340	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	149008	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	276844	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	297580	0.50 ug/mL	0.00
18) PERYLENE-D12	14.300	264	269097	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	8.908	178	1004	0.0014 ug/mL	66
11) Anthracene	0.000		0	N.D. d	
12) Fluoranthene	10.145	202	2591	0.0032 ug/mL#	76
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	57514	0.0808 ug/mL	100
16) Benzo(a)anthracene	11.995	228	2451	0.0030 ug/mL	90
17) Chrysene	12.049	228	1330m	0.0018 ug/mL	
19) Benzo(b)fluoranthene	13.733	252	1347m	0.0017 ug/mL	
20) Benzo(k)fluoranthene	13.763	252	841m	0.0011 ug/mL	
21) Benzo(a)pyrene	14.227	252	976	0.0013 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.906	276	718	0.0009 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	16.376	276	672	0.0010 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

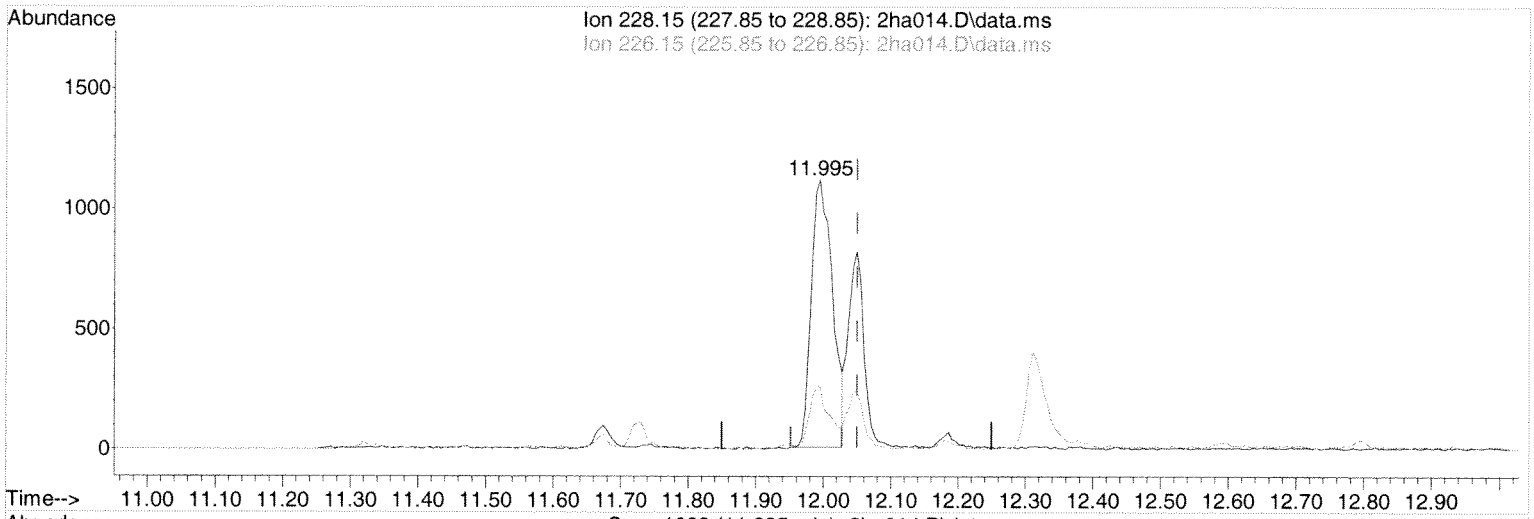
Quant Time: Aug 06 12:35:14 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

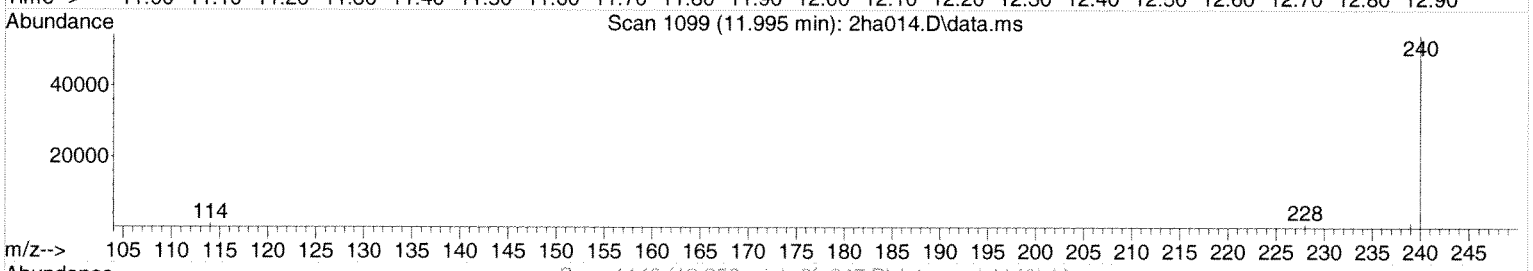


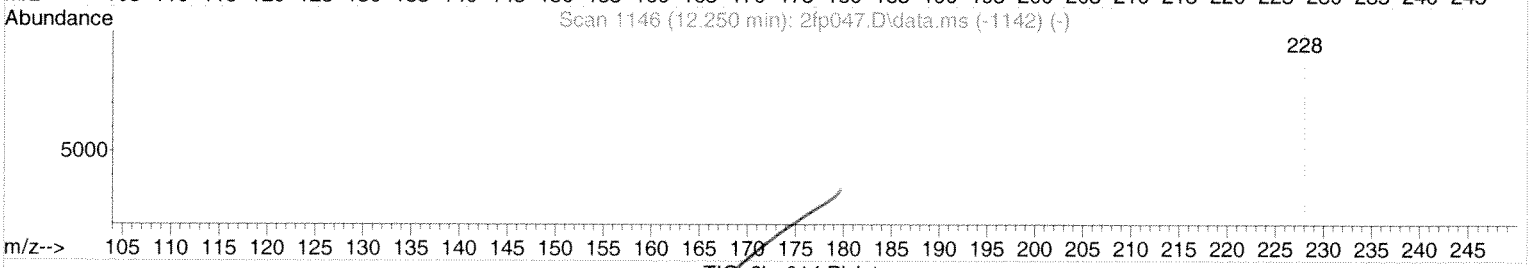
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha014.D\data.ms

(17) Chrysene

11.995min (-0.055) 0.00 ug/mL

response 2451

Ion	Exp%	Act%
228.15	100	100
226.15	28.00	19.46
0.00	0.00	0.00
0.00	0.00	0.00

Select One:

[-] Original Integration [ ] Manual Integration

Select reason for manual integration:

[ ] Poor integration (peak tailing, baseline selection)

[ ] Incorrect peak selection/Peak not found

[ ] Hump integration

[ ] Baseline drop for split peaks

[ ] ISTD reintegration

[ ] Other:

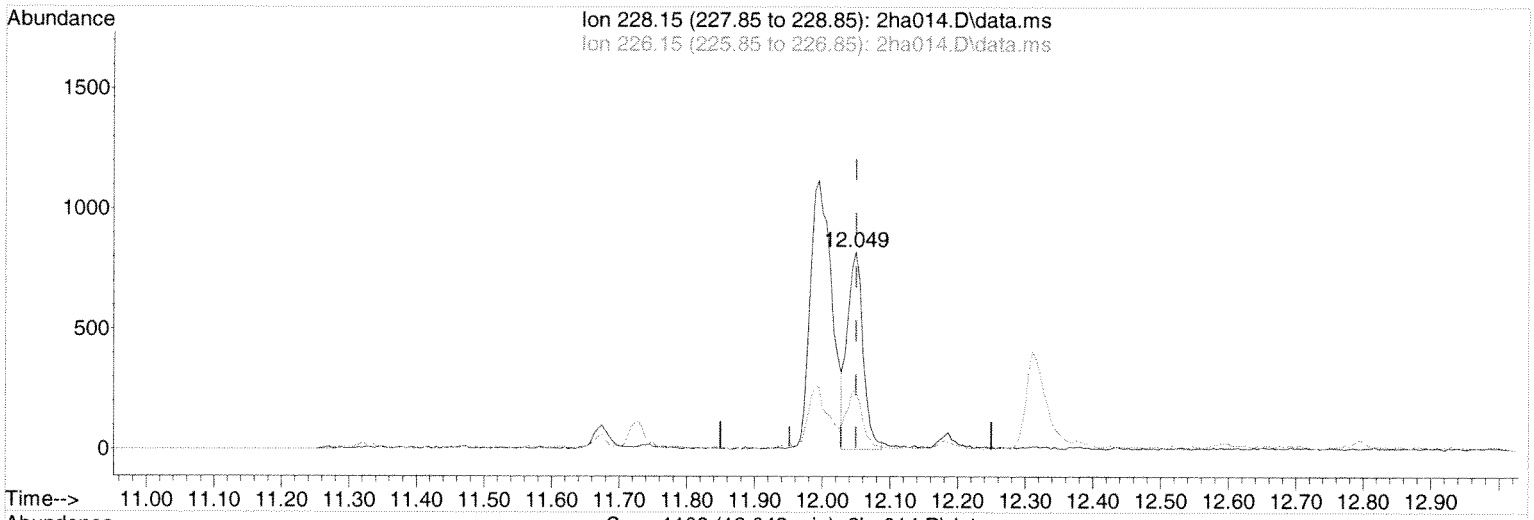
Review by/Date: 8-6-14

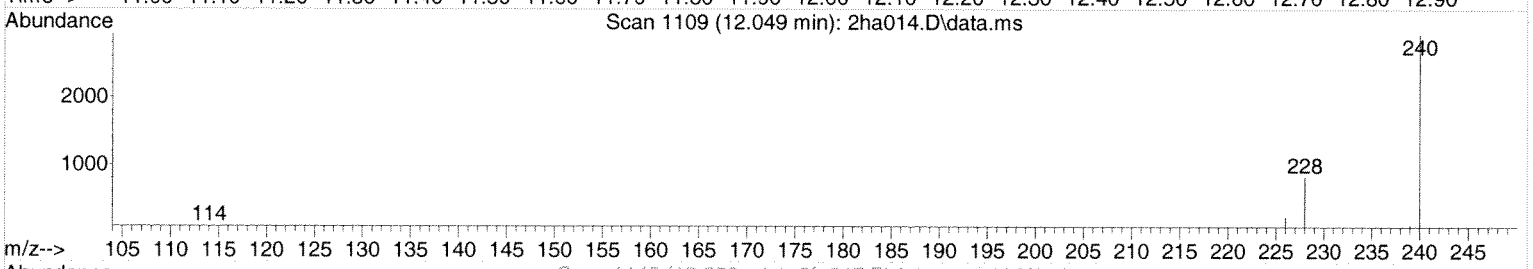
Review by/Date: 20220604

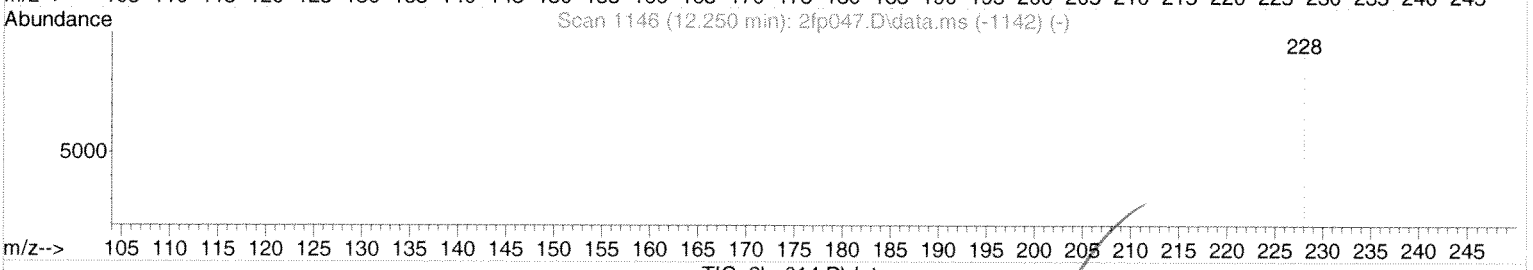
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha014.D\data.ms

(17) Chrysene

12.049min (-0.000) 0.00 ug/mL m

response 1330

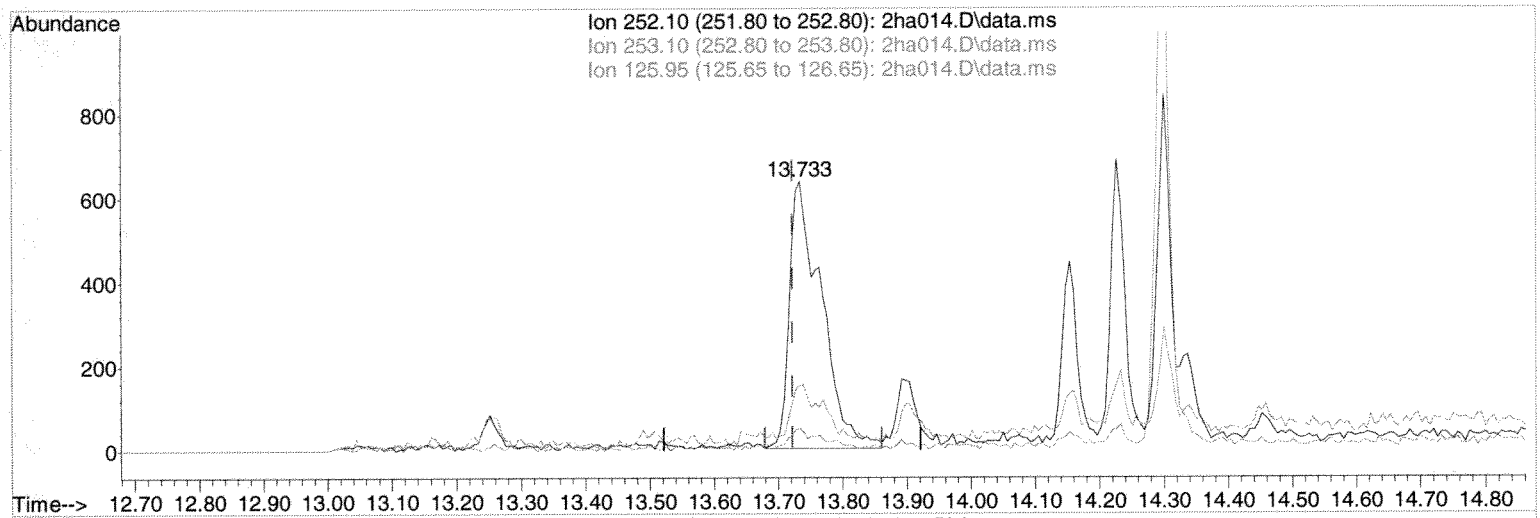
Ion	Exp%	Act%
228.15	100	100
226.15	28.00	35.86
0.00	0.00	0.00
0.00	0.00	0.00

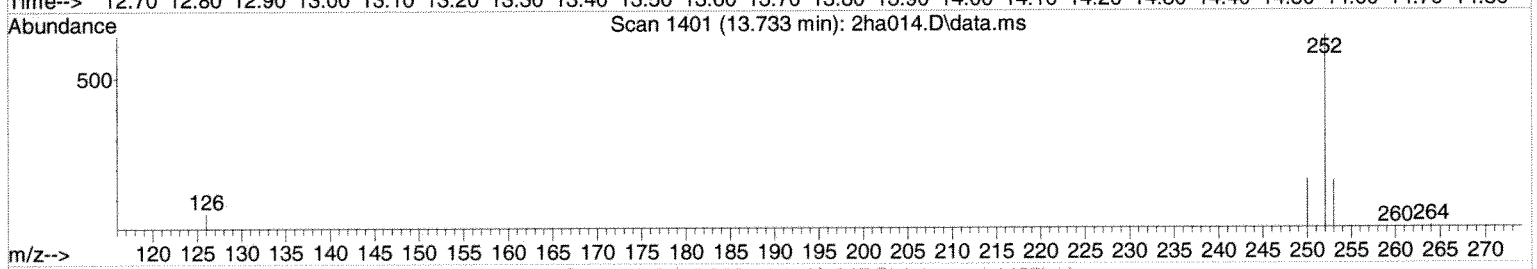
Select One:
[ ] Original Integration [✓] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8.6.14
Review by/Date: 08/06/14

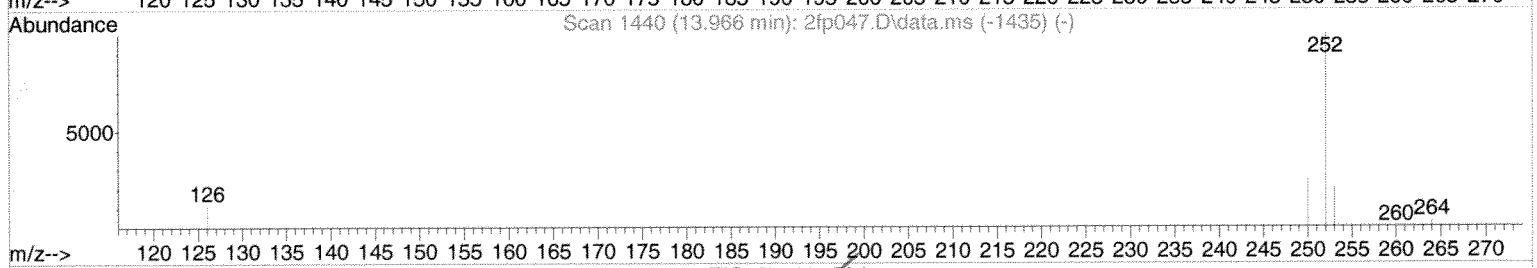
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha014.D\data.ms

(19) Benzo(b)fluoranthene

13.733min (+0.012) 0.00 ug/mL

response 2193

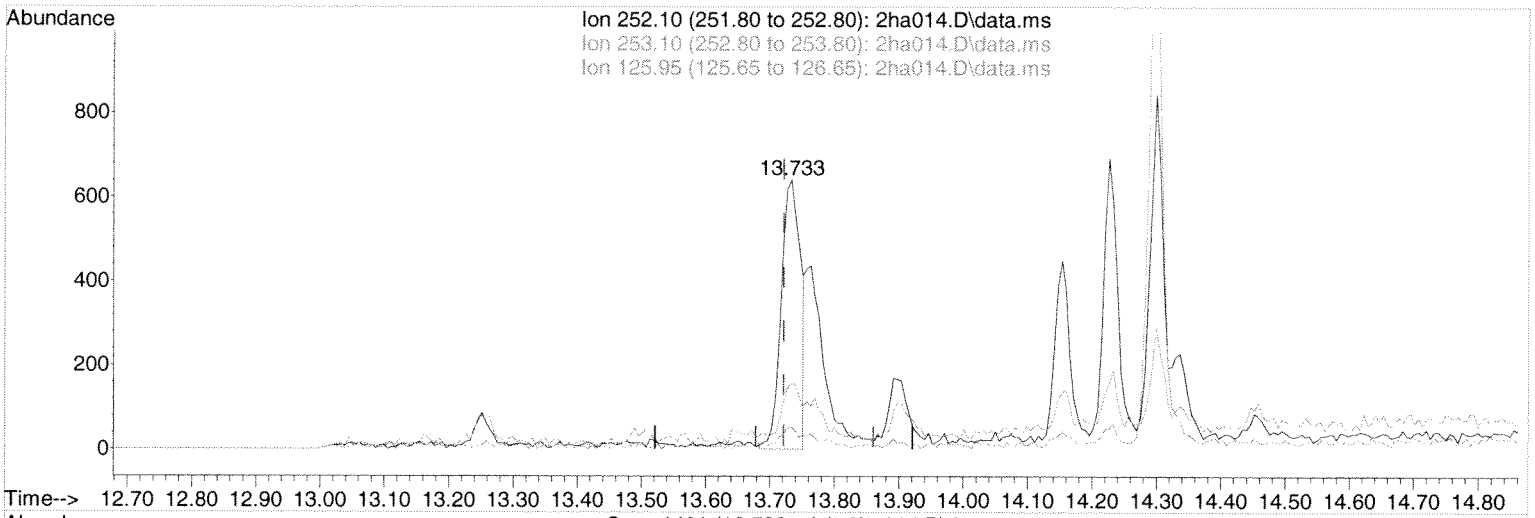
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	14.27
125.95	11.50	0.00
0.00	0.00	0.00

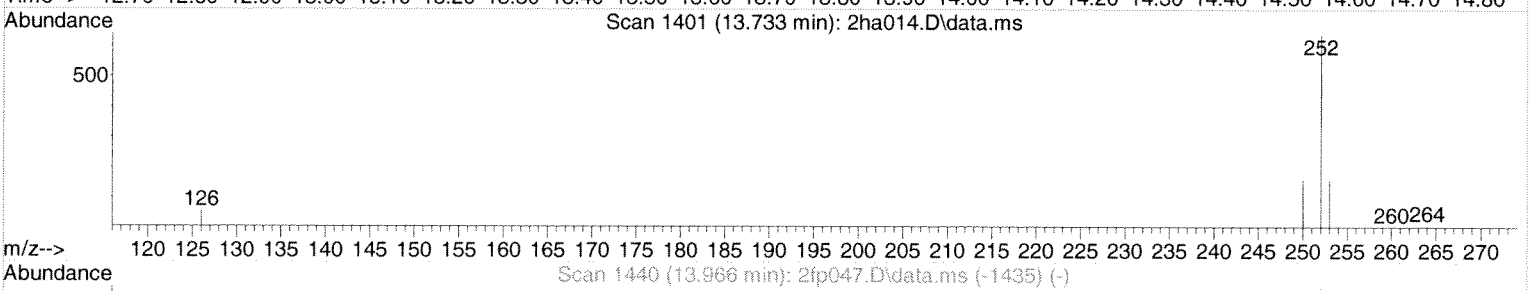
Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8.6.14
Review by/Date: 8/8/2014

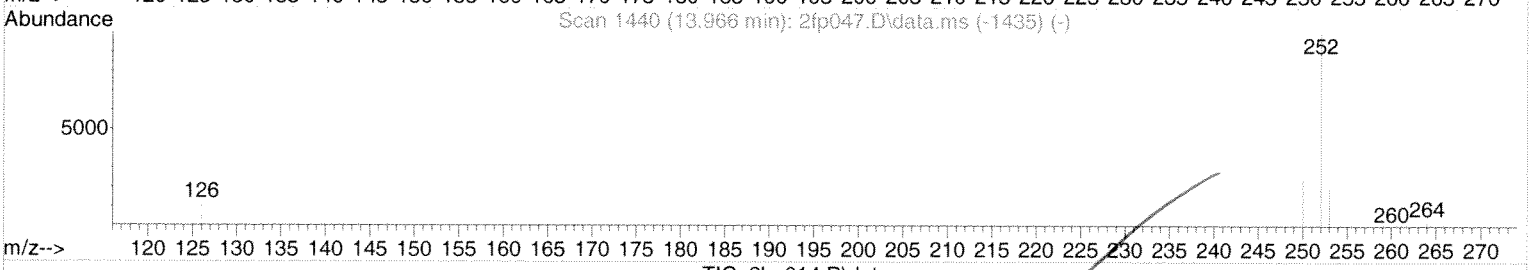
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha014.D\data.ms

(19) Benzo(b)fluoranthene

13.733min (+0.012) 0.00 ug/mL m

response 1347

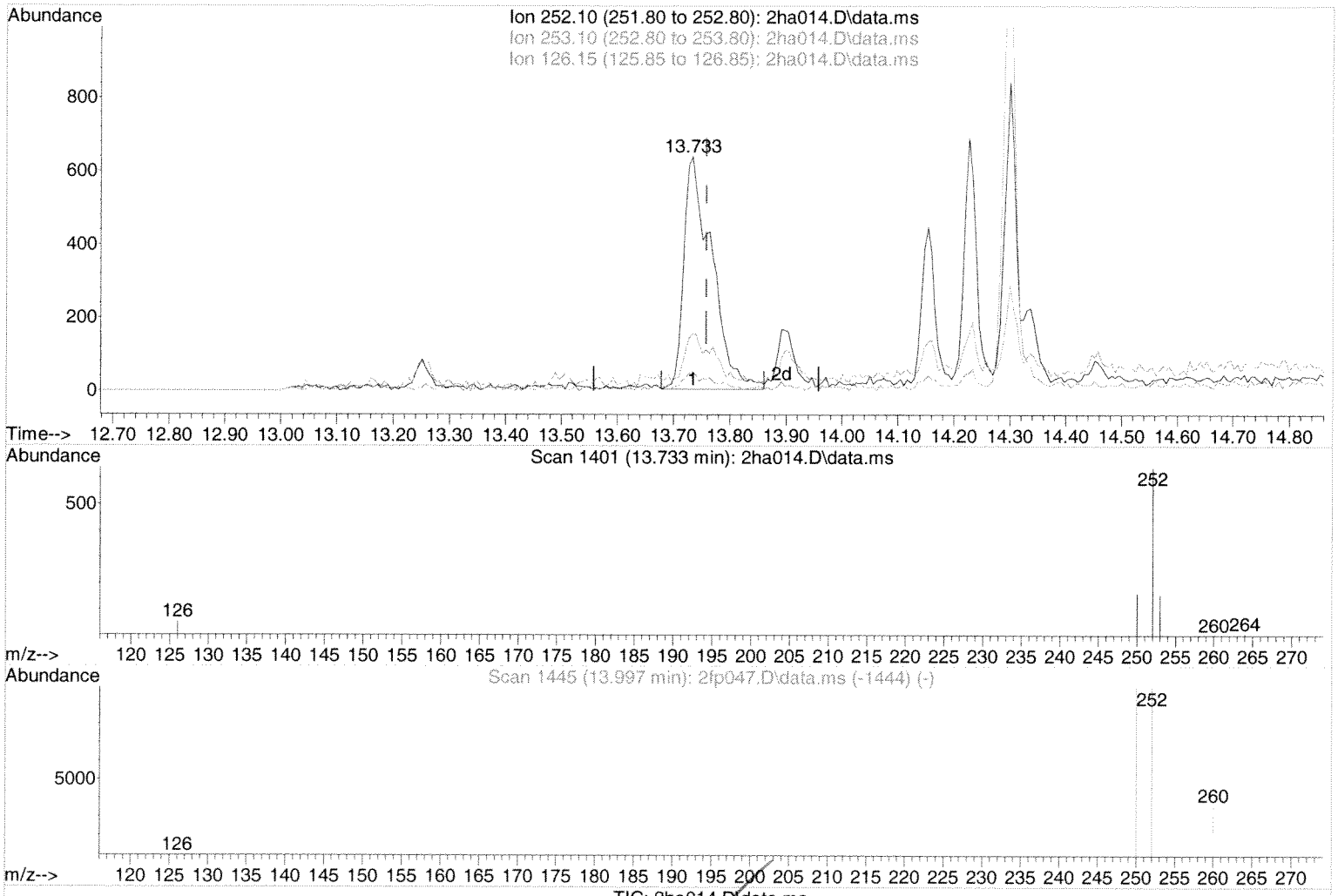
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	23.24
125.95	11.50	0.00
0.00	0.00	0.00

[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8-6-14
Review by/Date: RC 080614

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



TIC: 2ha014.D\data.ms

(20) Benzo(k)fluoranthene

13.733min (-0.025) 0.00 ug/mL

response 2193

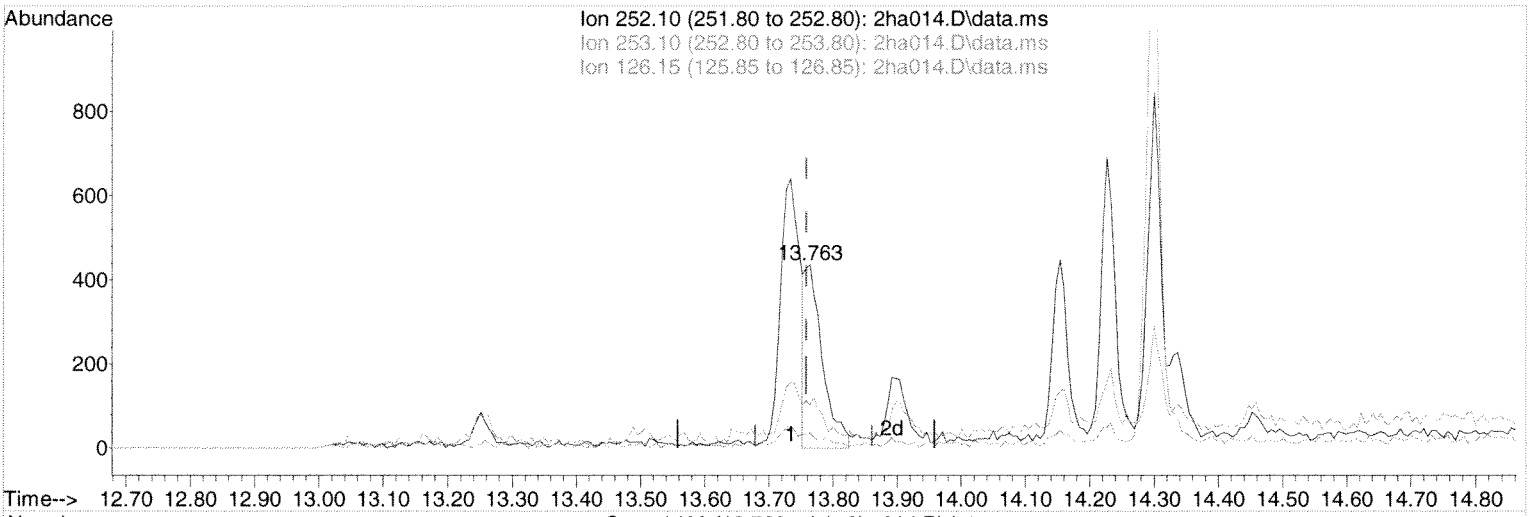
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	14.27
126.15	11.70	0.00
0.00	0.00	0.00

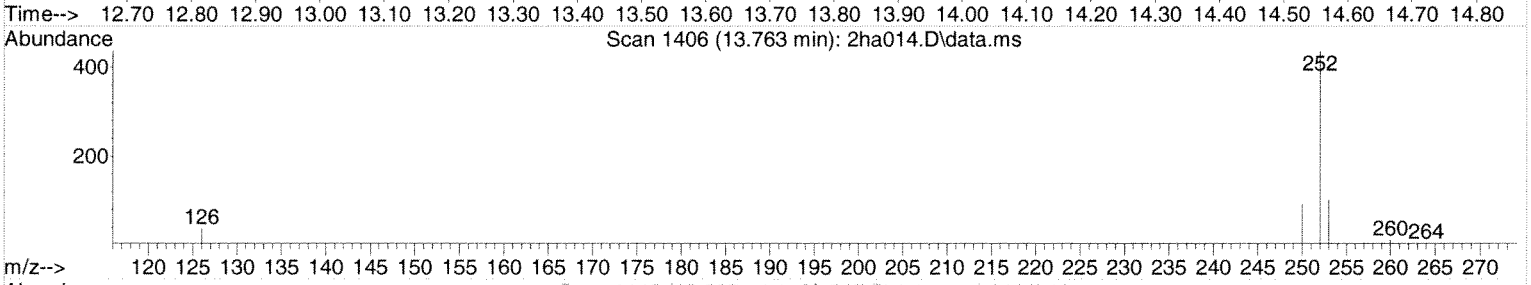
Manual Code:
[x] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8/6/14
Review by/Date: 8/06/14

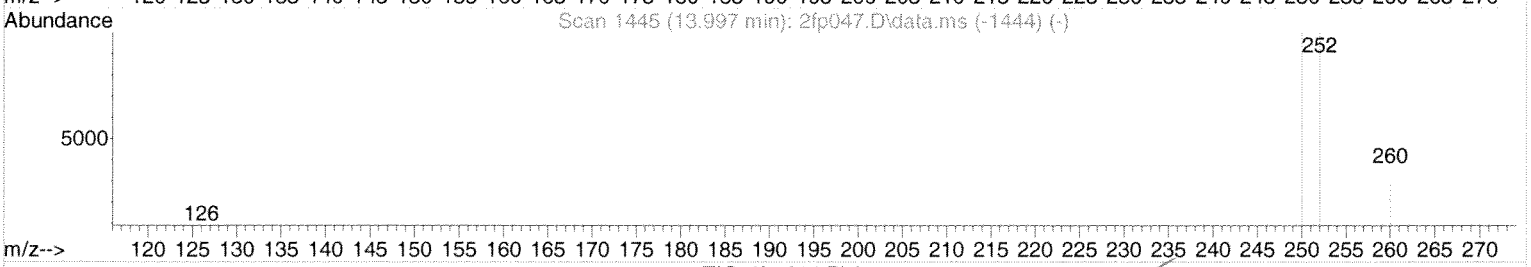
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha014.D
Acq On : 6 Aug 2014 11:56
Operator : jjb
Sample : a404270-02
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 06 12:16:44 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha014.D\data.ms

(20) Benzo(k)fluoranthene

13.763min (+0.006) 0.00 ug/mL m

response 841

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	37.22
126.15	11.70	0.00
0.00	0.00	0.00

Method OPS:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date JR 8-6-14
Review by/Date: RCOR 8/6/14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha015.D
Acq On : 6 Aug 2014 12:19
Operator : jjb
Sample : a404270-03
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 06 12:37:51 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

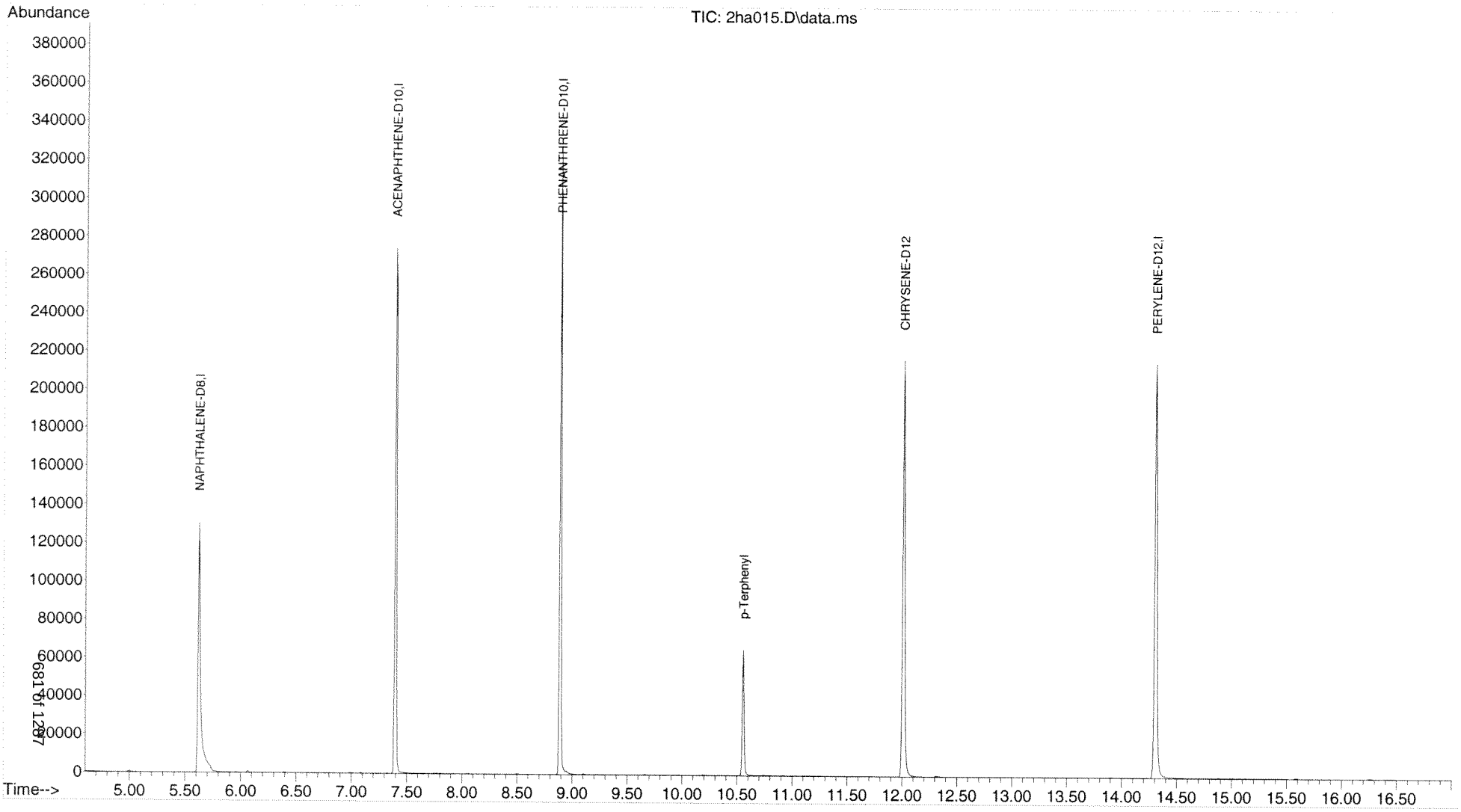
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	193104	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	140189	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	264087	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.012	240	286902	0.50 ug/mL	0.00
18) PERYLENE-D12	14.307	264	259486	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	53679	0.0790 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha015.D
Acq On : 6 Aug 2014 12:19
Operator : jjb
Sample : a404270-03
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 06 12:37:51 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha016.D
Acq On : 6 Aug 2014 12:41
Operator : jjb
Sample : a404270-04
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 06 13:00:24 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

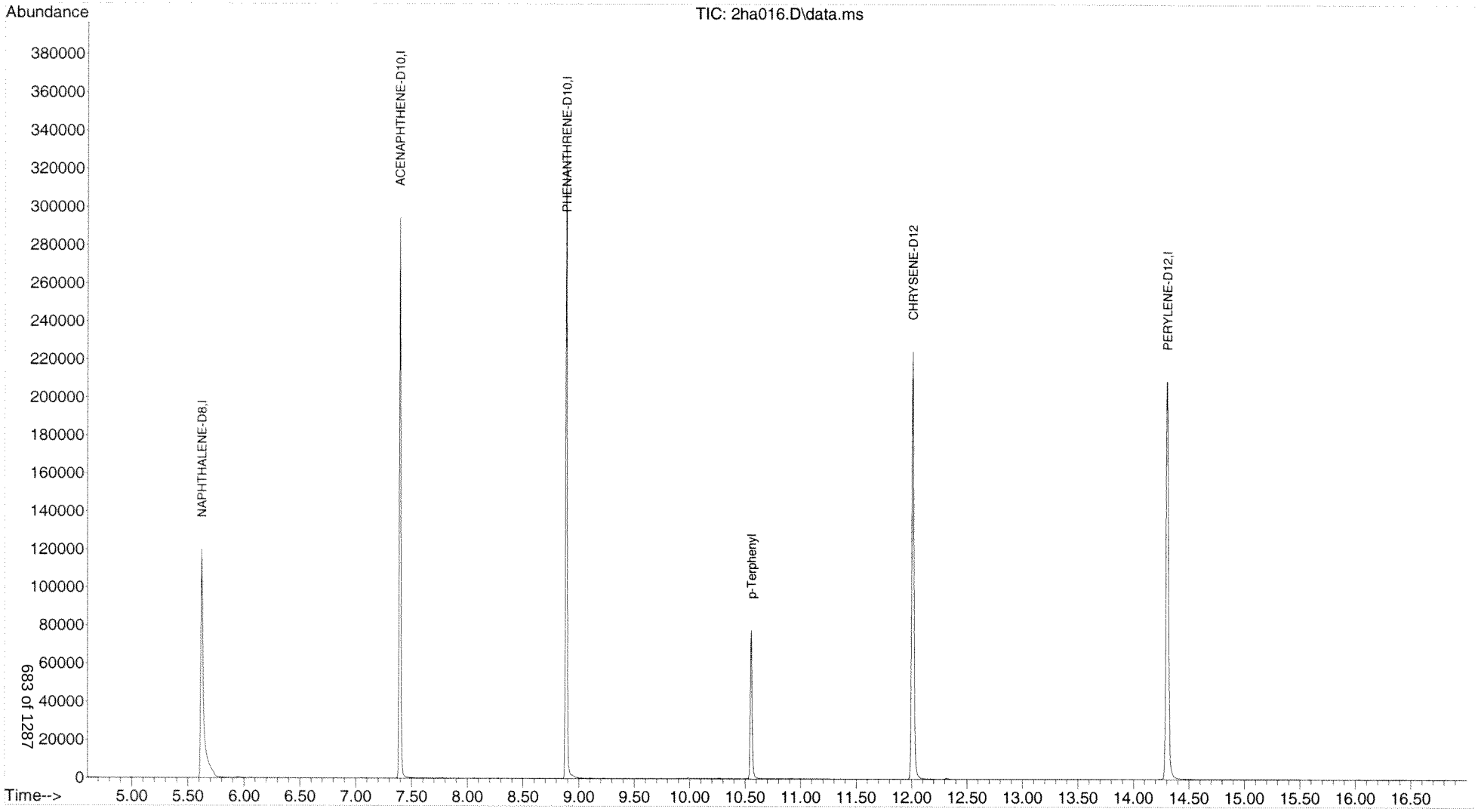
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	184314	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	139944	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	268119	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	293578	0.50 ug/mL	0.00
18) PERYLENE-D12	14.307	264	262913	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	64930	0.0941 ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha016.D
Acq On : 6 Aug 2014 12:41
Operator : jjb
Sample : a404270-04
Misc :
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 06 13:00:24 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha017.D
Acq On : 6 Aug 2014 13:03
Operator : jjb
Sample : a404270-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 06 13:27:15 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

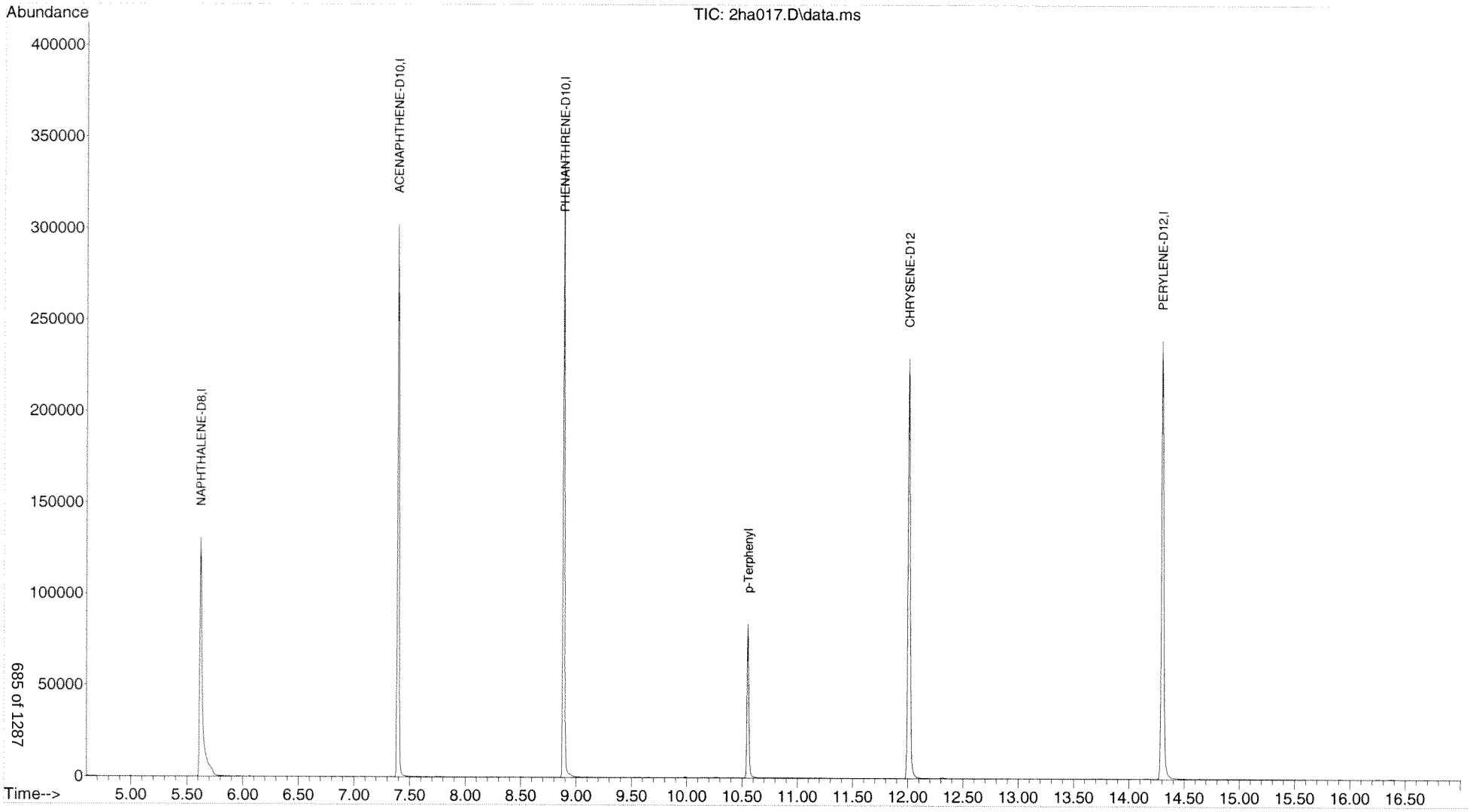
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.621	136	202165	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	147715	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	280723	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	308528	0.50	ug/mL	0.00
18) PERYLENE-D12	14.302	264	277305	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	0.000		0	N.D.		
3) 2-Methylnaphthalene	0.000		0	N.D.		
4) 1-Methylnaphthalene	0.000		0	N.D.		
6) Acenaphthylene	0.000		0	N.D.		
7) Acenaphthene	0.000		0	N.D. d		
8) Fluorene	0.000		0	N.D.		
10) Phenanthrene	0.000		0	N.D.		
11) Anthracene	0.000		0	N.D.		
12) Fluoranthene	0.000		0	N.D.		
13) Pyrene	0.000		0	N.D. d		
14) p-Terphenyl	10.556	230	68084	0.0943	ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d		
17) Chrysene	0.000		0	N.D. d		
19) Benzo(b)fluoranthene	0.000		0	N.D. d		
20) Benzo(k)fluoranthene	0.000		0	N.D. d		
21) Benzo(a)pyrene	0.000		0	N.D. d		
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.		
23) Dibenzo(a,h)anthracene	0.000		0	N.D.		
24) Benzo(g,h,i)perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha017.D
Acq On : 6 Aug 2014 13:03
Operator : jjb
Sample : a404270-05
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Aug 06 13:27:15 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha018.D
Acq On : 6 Aug 2014 13:25
Operator : jjb
Sample : a404270-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 06 13:43:56 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

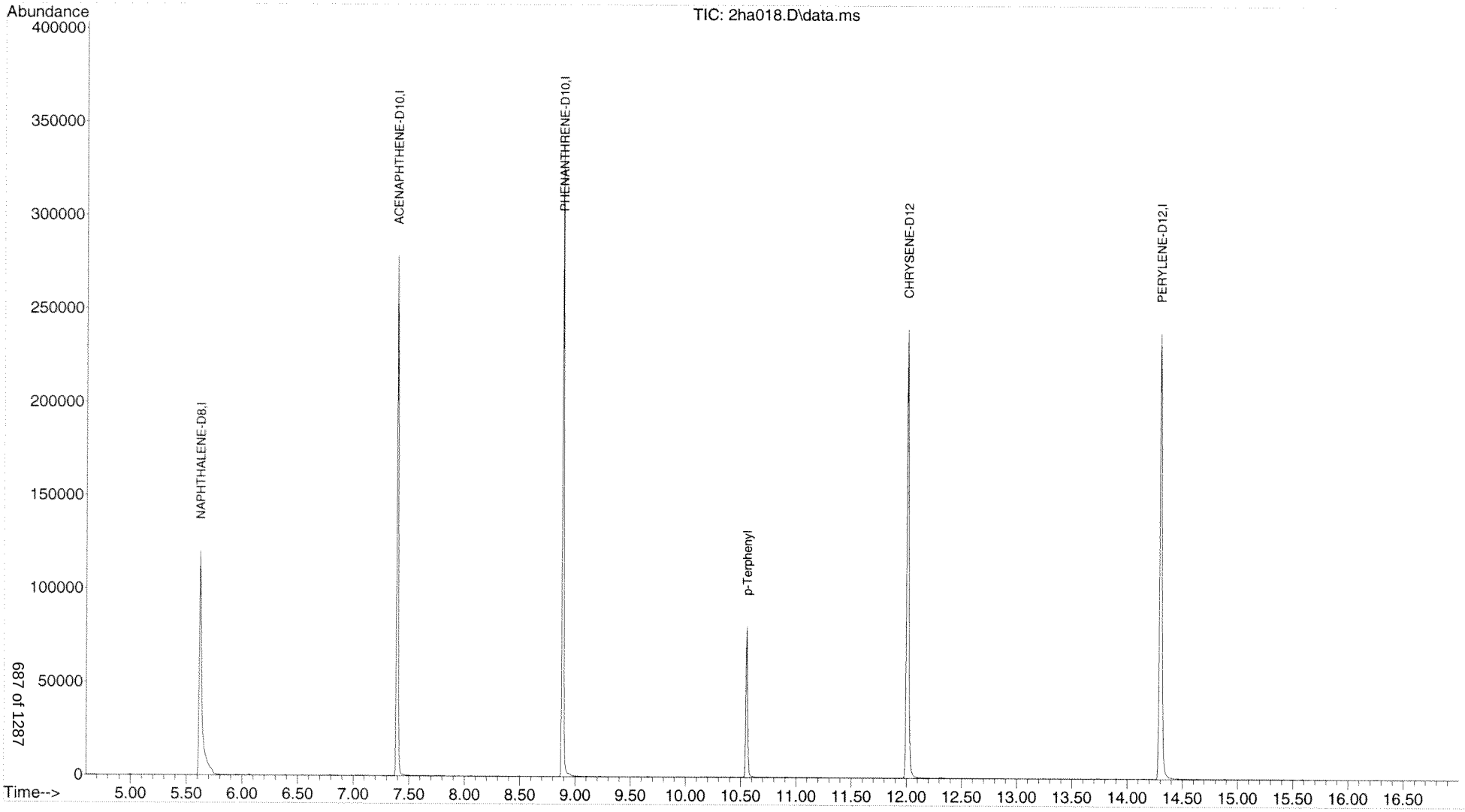
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.622	136	183336	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	134797	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	272556	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.010	240	311255	0.50	ug/mL	0.00
18) PERYLENE-D12	14.302	264	278516	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	0.000		0	N.D.		
3) 2-Methylnaphthalene	0.000		0	N.D.		
4) 1-Methylnaphthalene	0.000		0	N.D.		
6) Acenaphthylene	0.000		0	N.D.		
7) Acenaphthene	0.000		0	N.D. d		
8) Fluorene	0.000		0	N.D.		
10) Phenanthrene	0.000		0	N.D.		
11) Anthracene	0.000		0	N.D.		
12) Fluoranthene	0.000		0	N.D.		
13) Pyrene	0.000		0	N.D. d		
14) p-Terphenyl	10.555	230	64917	0.0926	ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d		
17) Chrysene	0.000		0	N.D. d		
19) Benzo(b)fluoranthene	0.000		0	N.D. d		
20) Benzo(k)fluoranthene	0.000		0	N.D. d		
21) Benzo(a)pyrene	0.000		0	N.D. d		
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.		
23) Dibenzo(a,h)anthracene	0.000		0	N.D.		
24) Benzo(g,h,i)perylene	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha018.D
Acq On : 6 Aug 2014 13:25
Operator : jjb
Sample : a404270-06
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Aug 06 13:43:56 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha019.D
Acq On : 6 Aug 2014 13:47
Operator : jjb
Sample : a404270-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 06 14:21:55 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

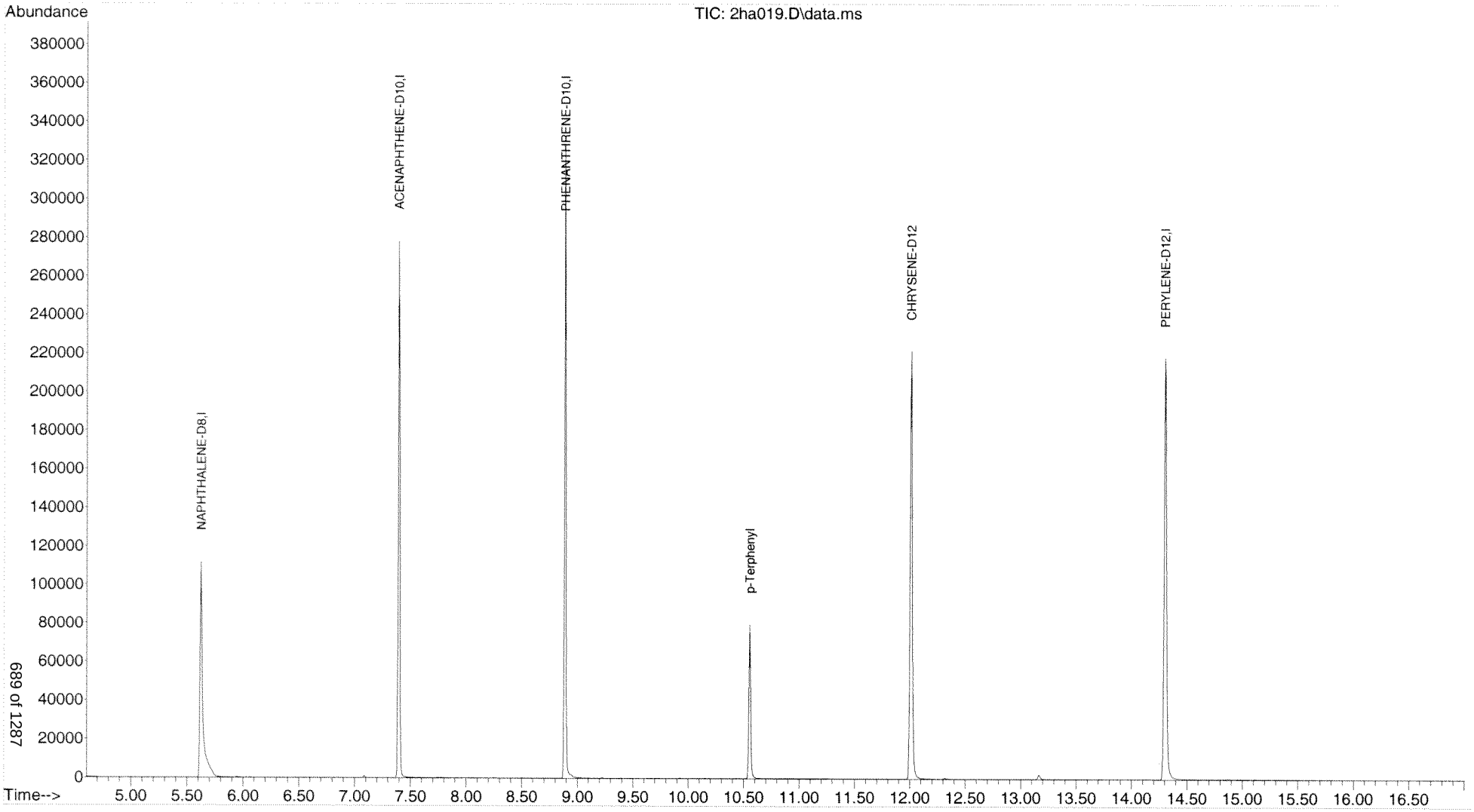
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	171226	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	132867	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	262213	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	291986	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	263228	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	64372	0.0954 ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha019.D
Acq On : 6 Aug 2014 13:47
Operator : jjb
Sample : a404270-07
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Aug 06 14:21:55 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha020.D
Acq On : 6 Aug 2014 14:09
Operator : jjb
Sample : a404270-08
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 06 14:29:05 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

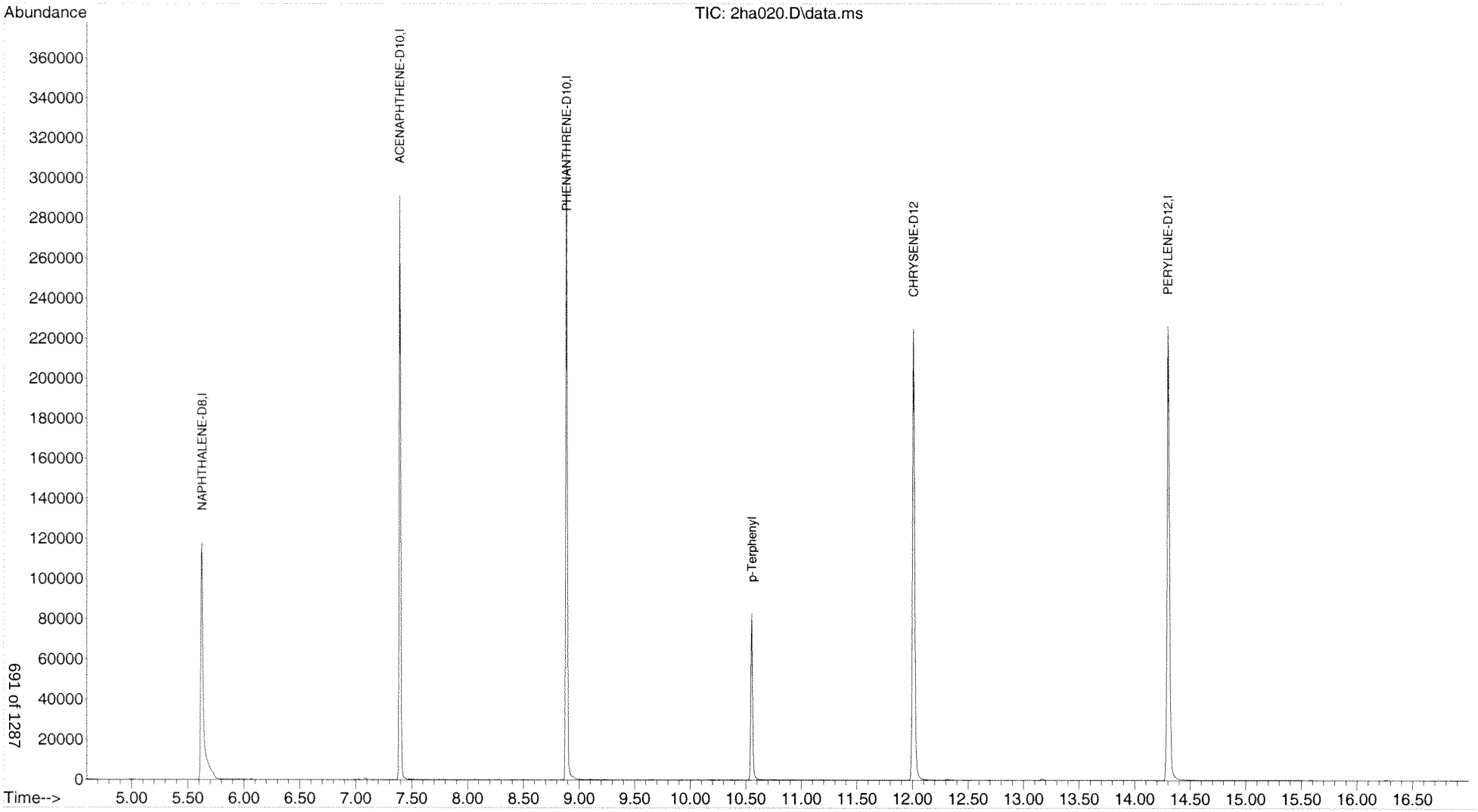
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.627	136	176536	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	134310	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	261613	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	296762	0.50	ug/mL	0.00
18) PERYLENE-D12	14.300	264	268446	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	0.000		0	N.D.		
3) 2-Methylnaphthalene	0.000		0	N.D.		
4) 1-Methylnaphthalene	0.000		0	N.D.		
6) Acenaphthylene	0.000		0	N.D.		
7) Acenaphthene	0.000		0	N.D. d		
8) Fluorene	0.000		0	N.D.		
10) Phenanthrene	0.000		0	N.D.		
11) Anthracene	0.000		0	N.D.		
12) Fluoranthene	0.000		0	N.D.		
13) Pyrene	0.000		0	N.D. d		
14) p-Terphenyl	10.555	230	67299	0.1000	ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d		
17) Chrysene	0.000		0	N.D. d		
19) Benzo(b)fluoranthene	0.000		0	N.D.		
20) Benzo(k)fluoranthene	0.000		0	N.D.		
21) Benzo(a)pyrene	0.000		0	N.D. d		
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.		
23) Dibenzo(a,h)anthracene	0.000		0	N.D.		
24) Benzo(g,h,i)perylene	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha020.D
Acq On : 6 Aug 2014 14:09
Operator : jjb
Sample : a404270-08
Misc :
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Aug 06 14:29:05 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha021.D
Acq On : 6 Aug 2014 14:31
Operator : jjb
Sample : a404270-09
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 06 14:50:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

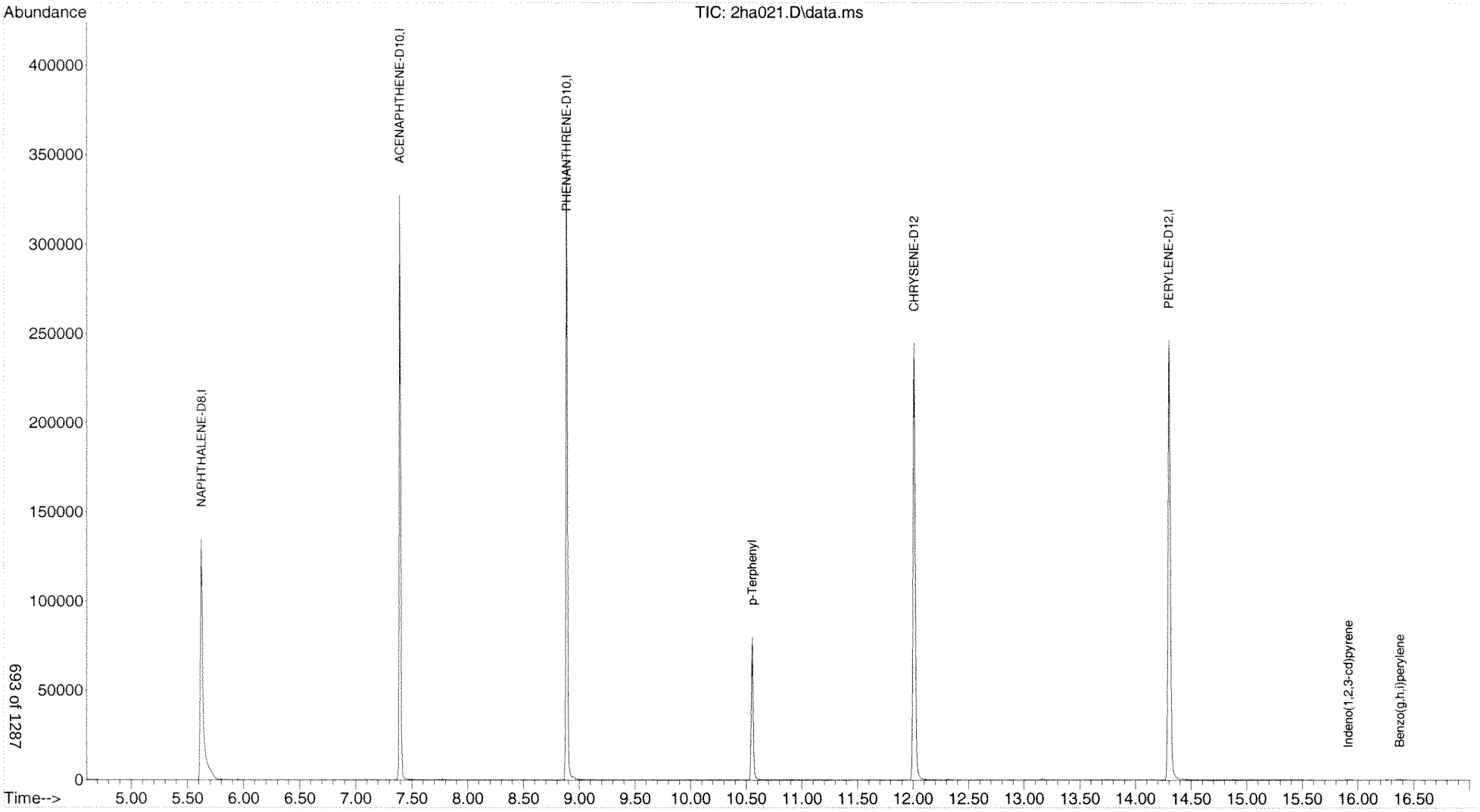
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.624	136	201073	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	146185	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	287999	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	324371	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	293062	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	63520	0.0857 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D. d	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	15.908	276	404	0.0005 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	16.370	276	675	0.0009 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha021.D
Acq On : 6 Aug 2014 14:31
Operator : jjb
Sample : a404270-09
Misc :
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 06 14:50:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha022.D
Acq On : 6 Aug 2014 14:53
Operator : jjb
Sample : a404270-10
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 06 15:56:37 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

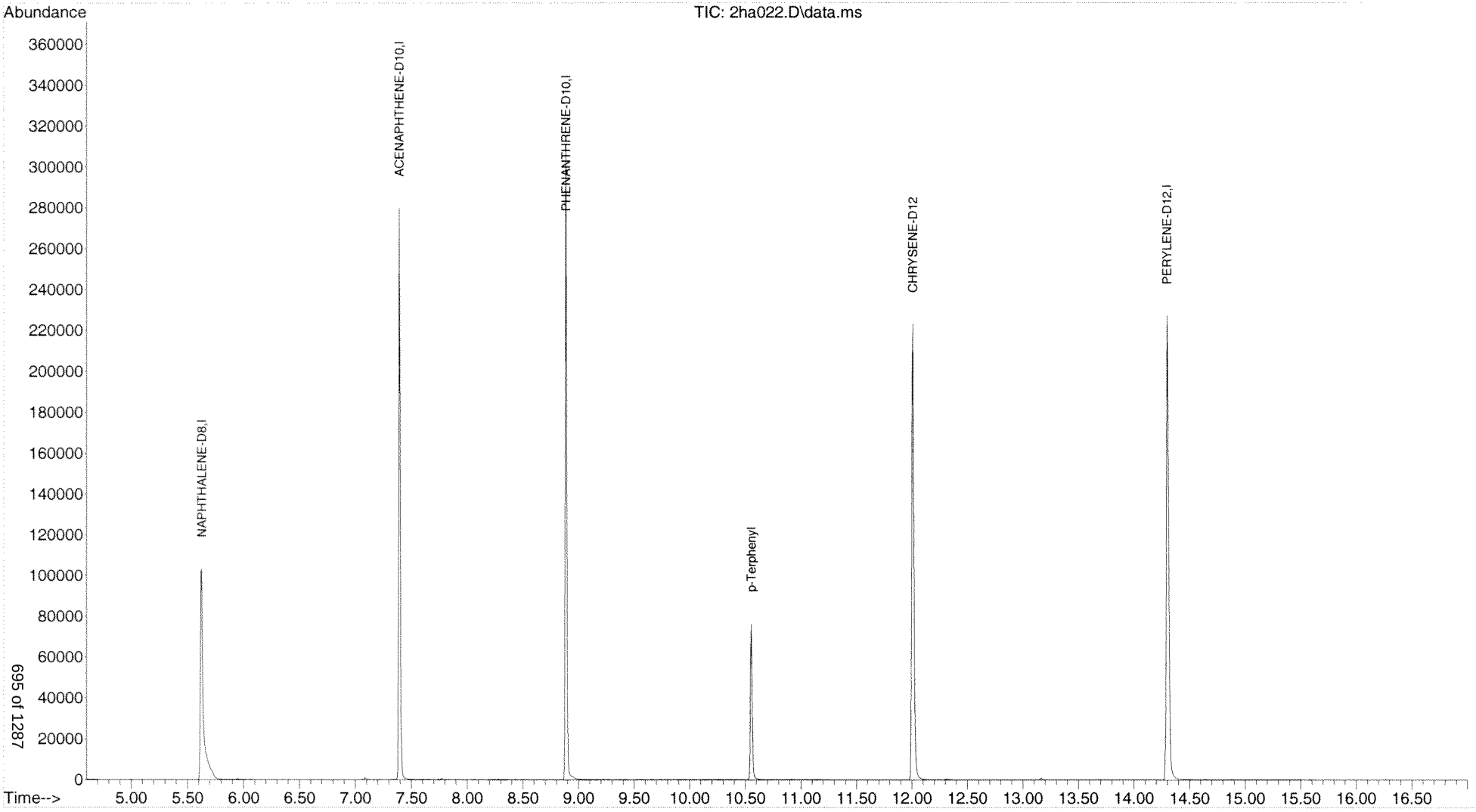
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.628	136	168840	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	127569	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	254293	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	292522	0.50	ug/mL	0.00
18) PERYLENE-D12	14.301	264	263448	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	0.000		0	N.D.		
3) 2-Methylnaphthalene	0.000		0	N.D.		
4) 1-Methylnaphthalene	0.000		0	N.D.		
6) Acenaphthylene	0.000		0	N.D.		
7) Acenaphthene	0.000		0	N.D. d		
8) Fluorene	0.000		0	N.D.		
10) Phenanthrene	0.000		0	N.D.		
11) Anthracene	0.000		0	N.D.		
12) Fluoranthene	0.000		0	N.D.		
13) Pyrene	0.000		0	N.D. d		
14) p-Terphenyl	10.555	230	59981	0.0917	ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d		
17) Chrysene	0.000		0	N.D. d		
19) Benzo(b)fluoranthene	0.000		0	N.D.		
20) Benzo(k)fluoranthene	0.000		0	N.D.		
21) Benzo(a)pyrene	0.000		0	N.D. d		
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.		
23) Dibenzo(a,h)anthracene	0.000		0	N.D.		
24) Benzo(g,h,i)perylene	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha022.D
Acq On : 6 Aug 2014 14:53
Operator : jjb
Sample : a404270-10
Misc :
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Aug 06 15:56:37 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:57:43 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

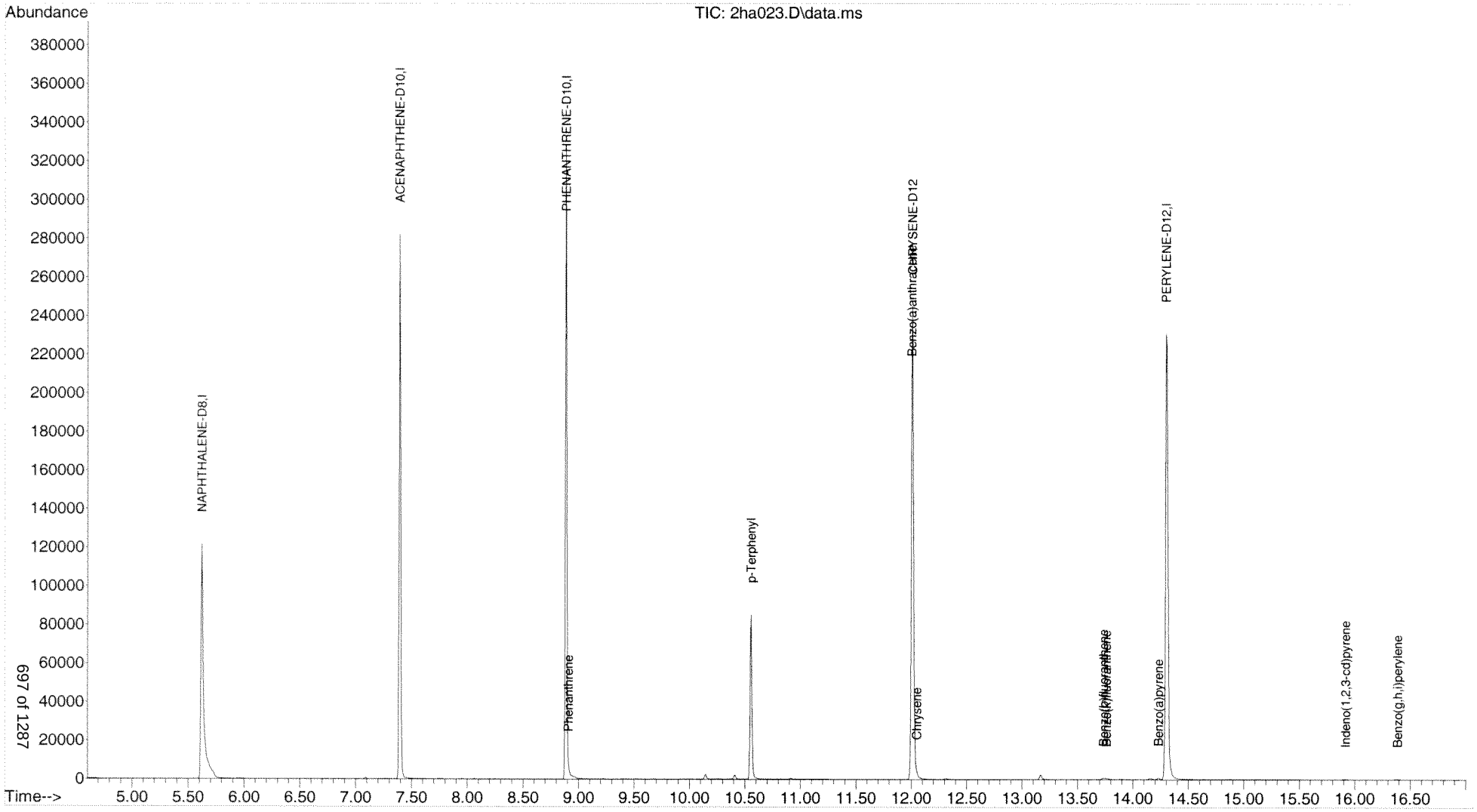
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.622	136	182902	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	132425	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	266099	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	314763	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	281176	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	8.909	178	1507	0.0021 ug/mL#	60
11) Anthracene	0.000		0	N.D. d	
12) Fluoranthene	0.000		0	N.D. d	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	69617	0.1017 ug/mL	100
16) Benzo(a)anthracene	12.006	228	2028	0.0023 ug/mL	100
17) Chrysene	12.049	228	992m	0.0012 ug/mL	
19) Benzo(b)fluoranthene	13.734	252	1073m	0.0013 ug/mL	
20) Benzo(k)fluoranthene	13.759	252	502m	0.0006 ug/mL	
21) Benzo(a)pyrene	14.228	252	684	0.0009 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.913	276	454	0.0005 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	16.382	276	482	0.0007 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

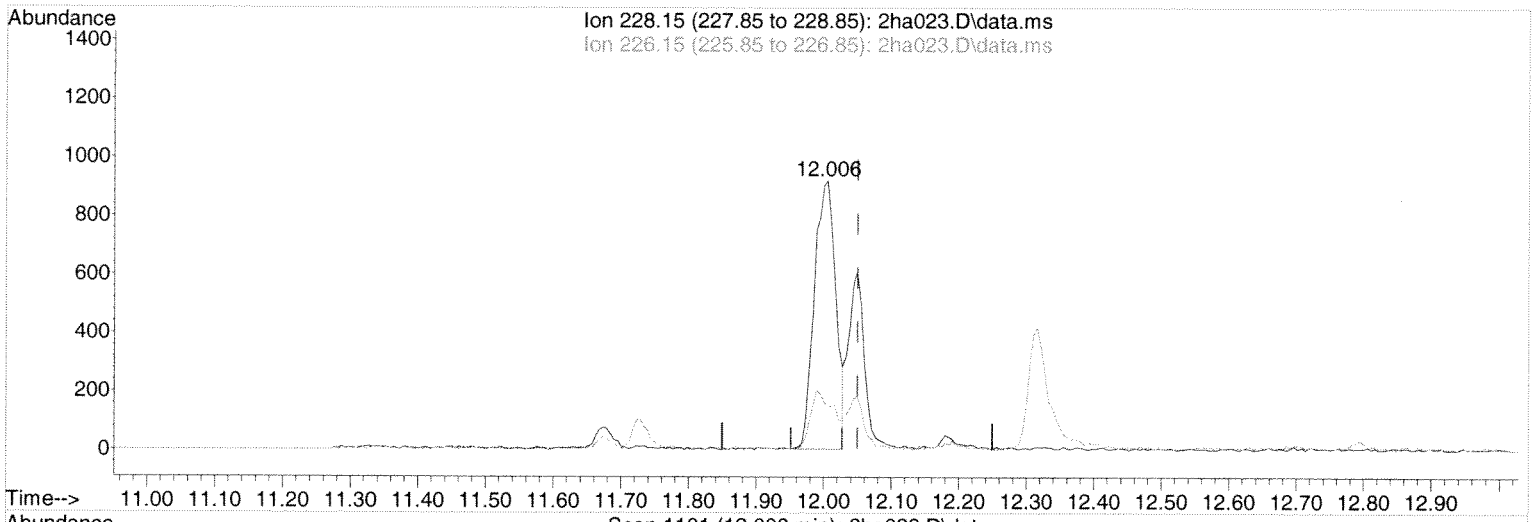
Quant Time: Aug 06 15:57:43 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

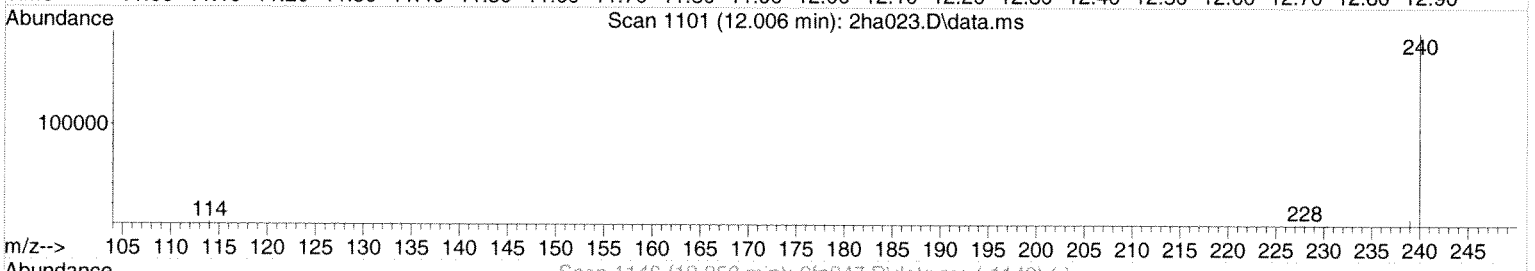


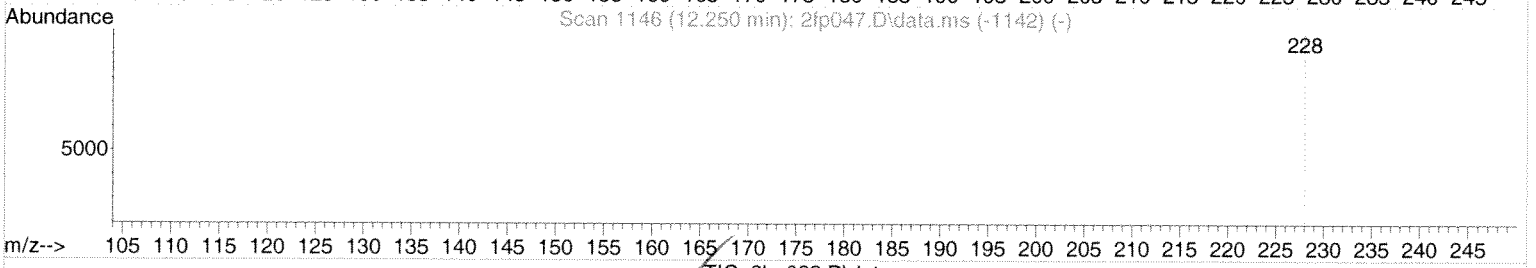
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(17) Chrysene

12.006min (-0.044) 0.00 ug/mL

response 2028

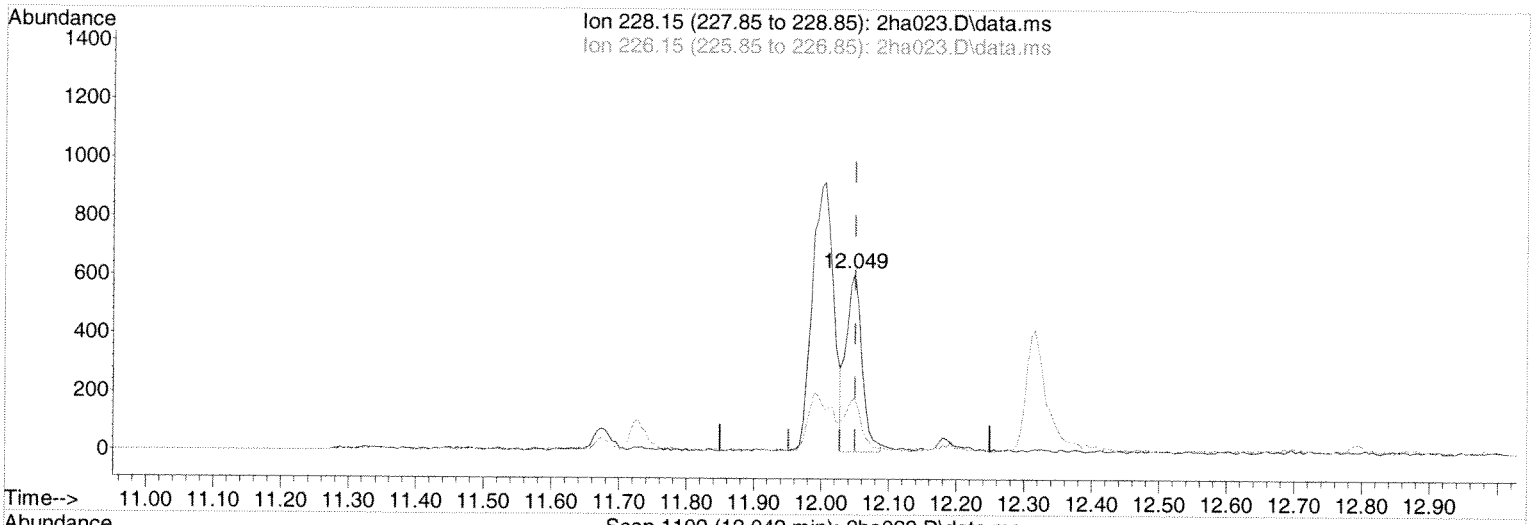
Ion	Exp%	Act%
228.15	100	100
226.15	28.00	24.31
0.00	0.00	0.00
0.00	0.00	0.00

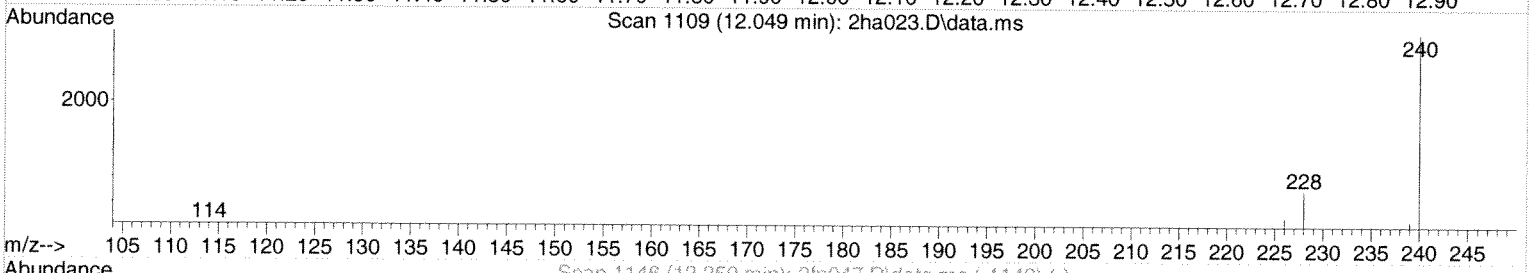
Select One:
[✓] Original Integration [] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8-6-14
Review by/Date: 10/20/14

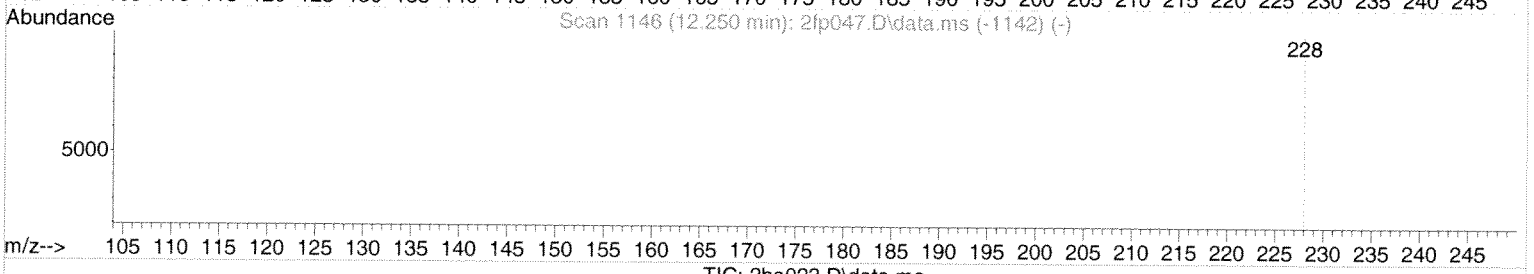
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(17) Chrysene

12.049min (-0.000) 0.00 ug/mL m

response 992

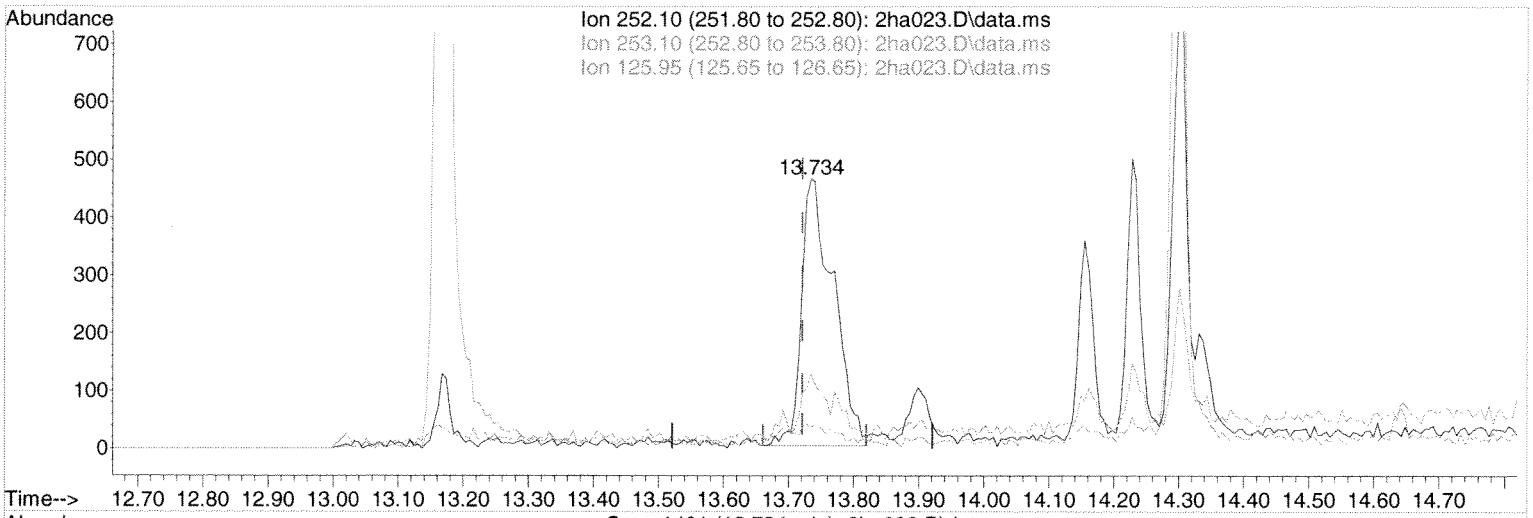
Ion	Exp%	Act%
228.15	100	100
226.15	28.00	49.70#
0.00	0.00	0.00
0.00	0.00	0.00

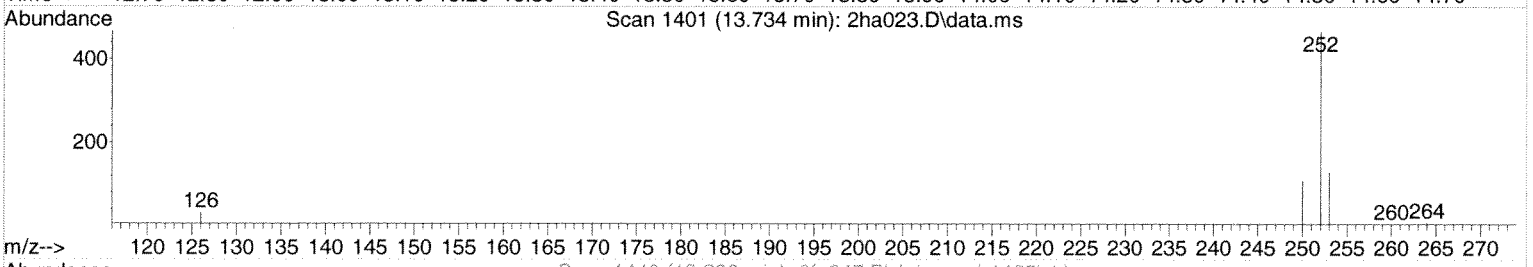
Select One:
[ ] Original Integration [✓] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8-6-14
Review by/Date: CD 80614

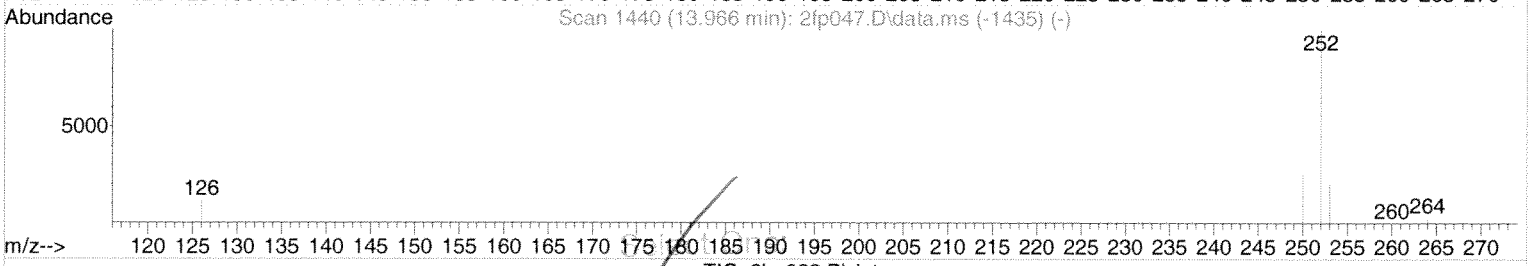
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(19) Benzo(b)fluoranthene

13.734min (+0.013) 0.00 ug/mL

response 1577

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	15.03
125.95	11.50	0.00
0.00	0.00	0.00

[] Original Integration [] Manual Integration

Select reason for manual integration:

[] Poor integration (peak tailing, baseline selection)

[] Incorrect peak selection/Peak not found

[] Hump integration

[] Baseline drop for split peaks

[] ISTD reintegration

[] Other:

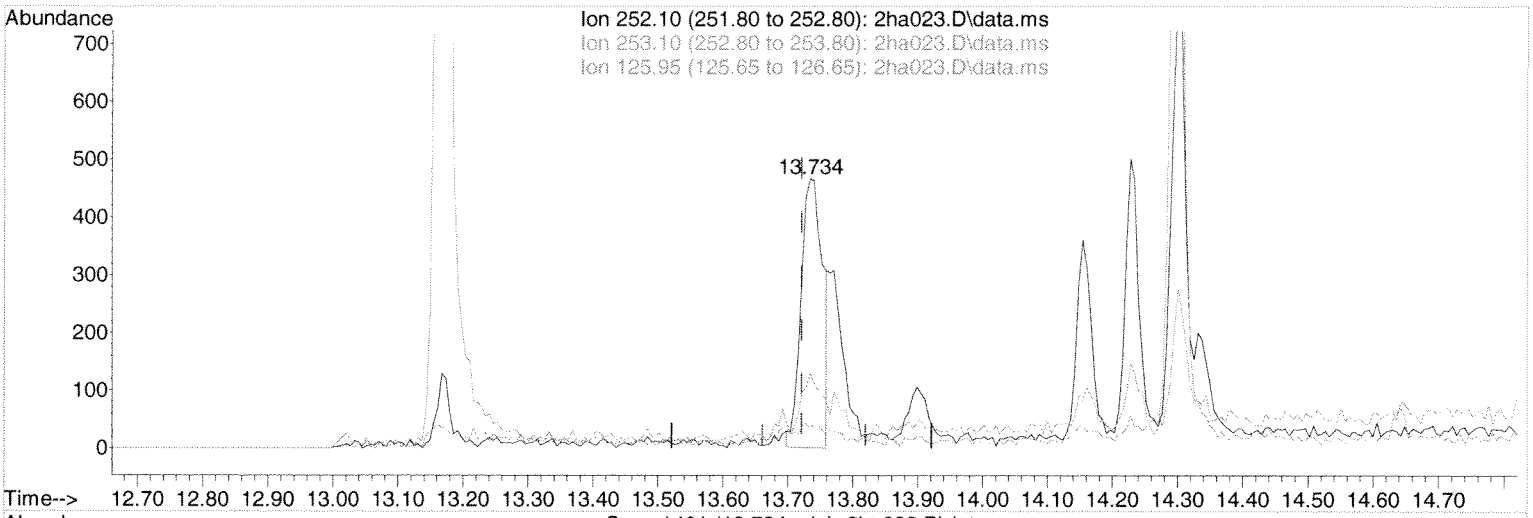
Review by/Date: 8.6.14

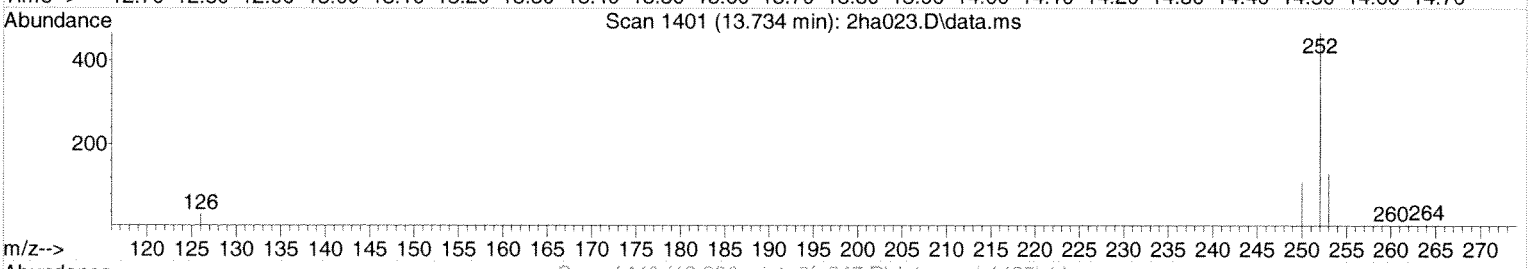
Review by/Date: RCDTOLN

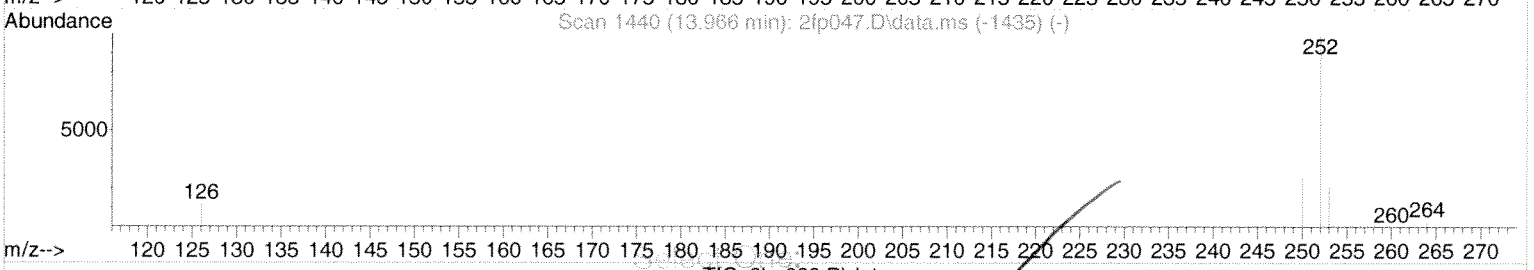
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(19) Benzo(b)fluoranthene

13.734min (+0.013) 0.00 ug/mL m

response 1073

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	22.09
125.95	11.50	0.00
0.00	0.00	0.00

[] Original Integration [✓] Manual Integration

Select reason for manual integration:

[] Poor integration (peak tailing, baseline selection)

[✓] Incorrect peak selection/Peak not found

[] Hump integration

[] Baseline drop for split peaks

[] ISTD reintegration

[] Other:

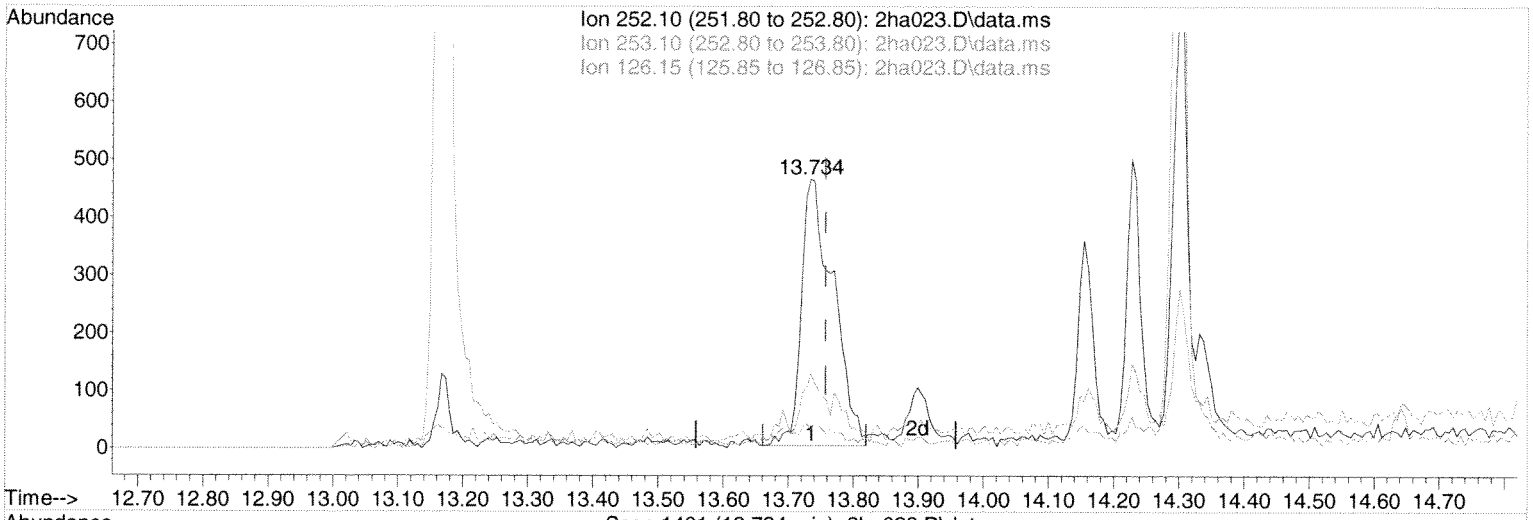
Review by/Date: 8.6.14

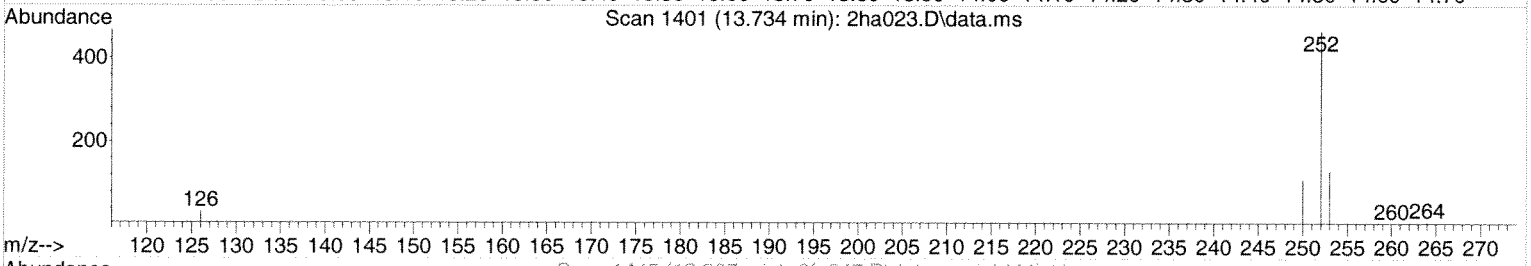
Review by/Date: 8/06/14

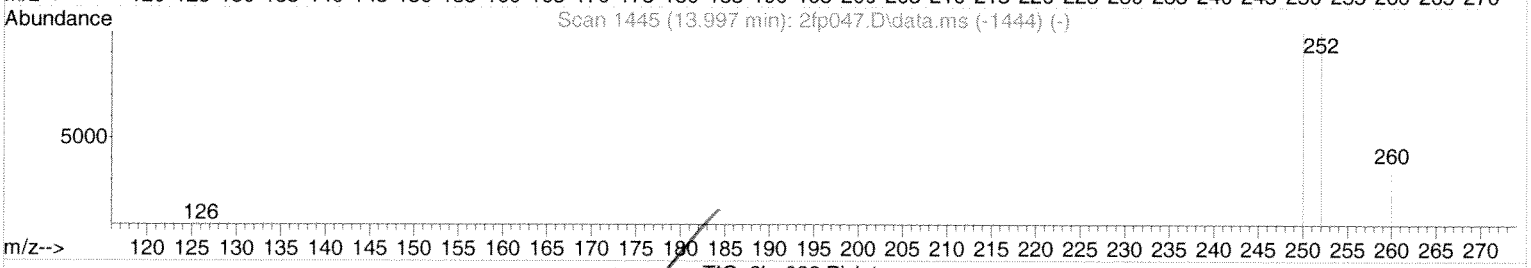
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(20) Benzo(k)fluoranthene

13.734min (-0.024) 0.00 ug/mL

response 1577

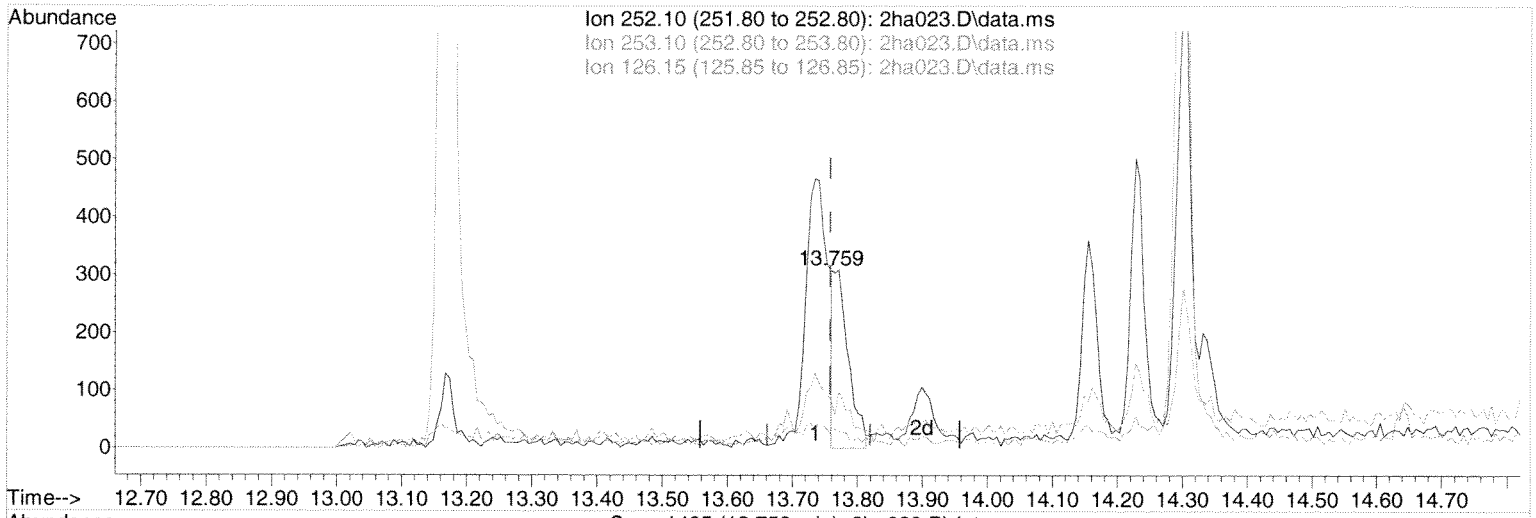
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	15.03
126.15	11.70	0.00
0.00	0.00	0.00

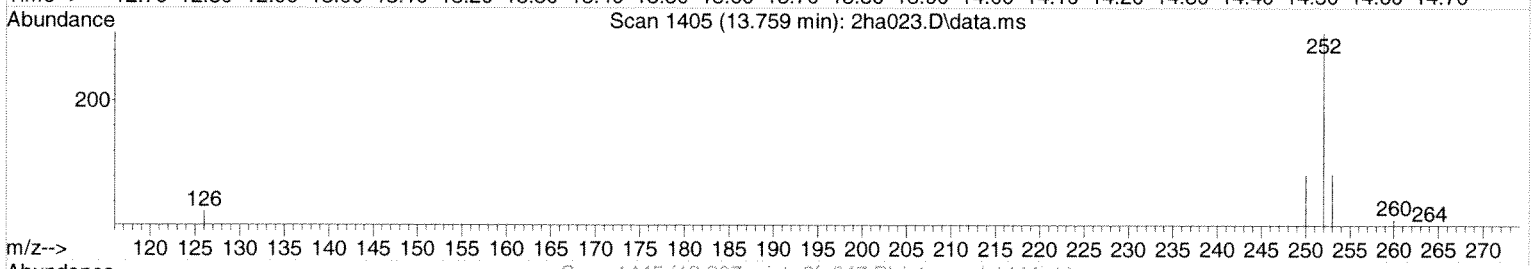
Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8.6.14
Review by/Date: RC 0506 14

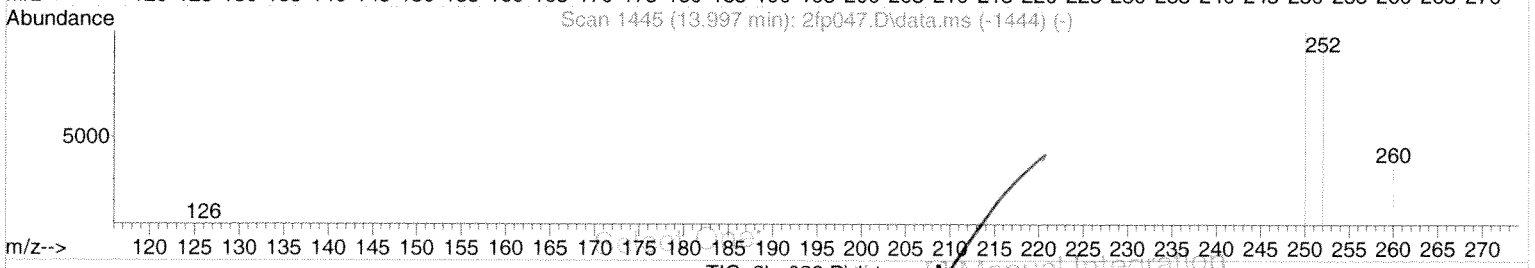
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha023.D
Acq On : 6 Aug 2014 15:14
Operator : jjb
Sample : a404270-12
Misc :
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Aug 06 15:56:49 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration







TIC: 2ha023.D\data.ms

(20) Benzo(k)fluoranthene

13.759min (+0.001) 0.00 ug/mL m

response 502

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	47.21#
126.15	11.70	0.00
0.00	0.00	0.00

[] Original integration [✓] Manual Integration

Select reason for manual integration:

[] Poor integration (peak tailing, baseline selection)

[✓] Incorrect peak selection/Peak not found

[] Hump integration

[] Baseline drop for split peaks

[] ISTD reintegration

[] Other:

Review by/Date: 8.6.14

Review by/Date: 08/06/14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha024.D
Acq On : 6 Aug 2014 15:36
Operator : jjb
Sample : a404270-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 06 15:58:33 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

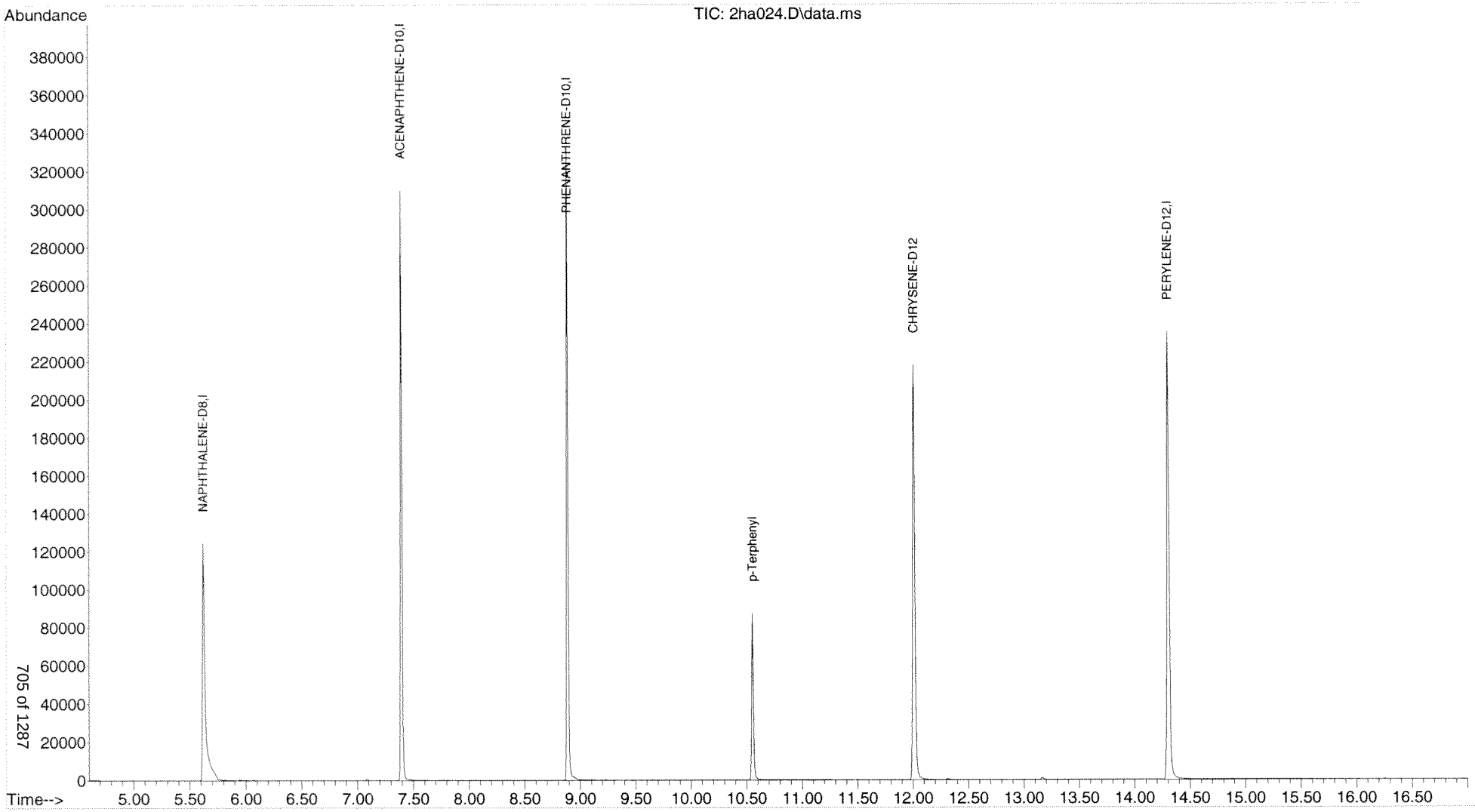
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	187189	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.395	164	141813	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	272604	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.012	240	297340	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	267005	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	68039	0.0970 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha024.D
Acq On : 6 Aug 2014 15:36
Operator : jjb
Sample : a404270-13
Misc :
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Aug 06 15:58:33 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha025.D
Acq On : 6 Aug 2014 15:58
Operator : jjb
Sample : a404270-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 06 16:38:35 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

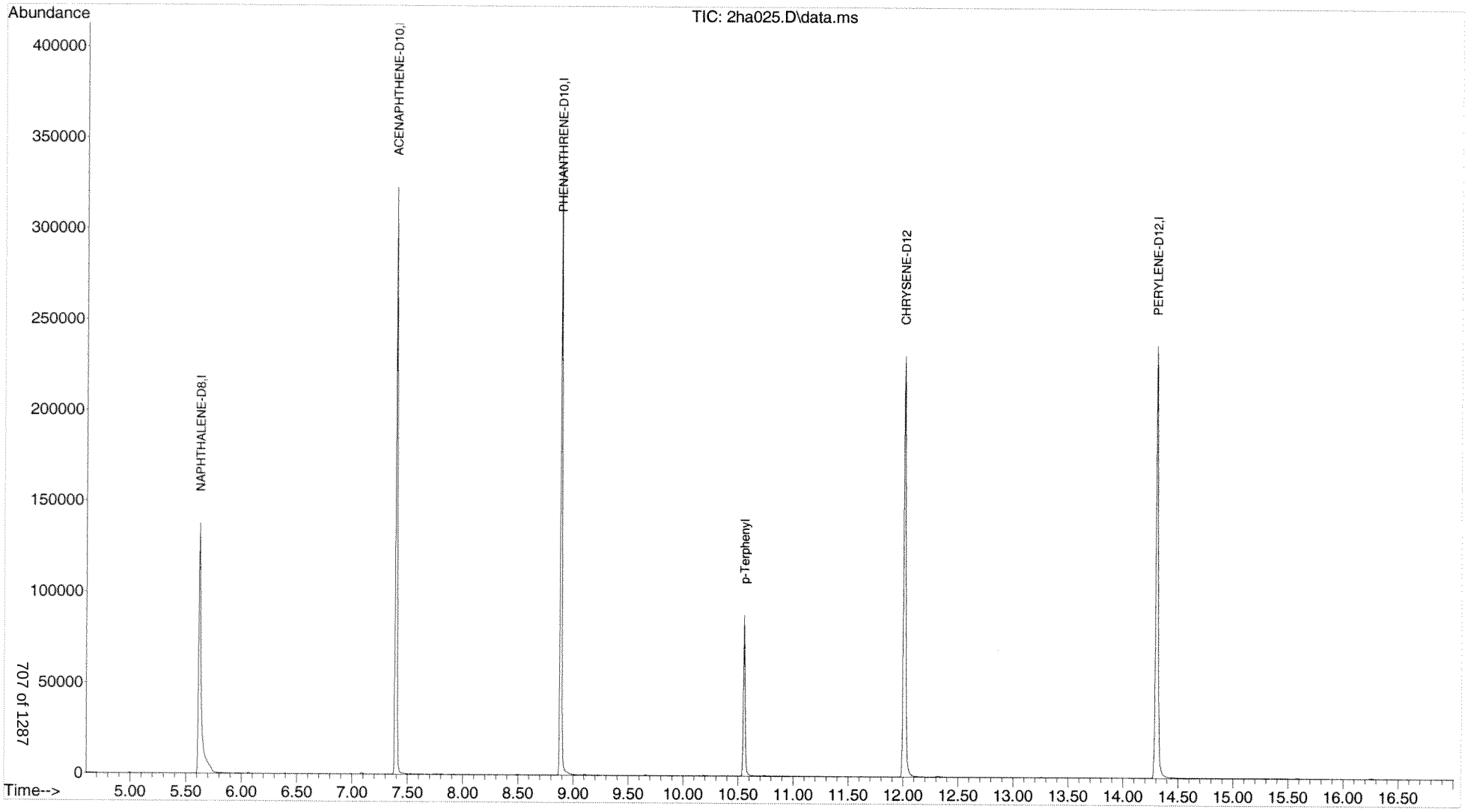
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	199112	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	145450	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	279511	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	308797	0.50 ug/mL	0.00
18) PERYLENE-D12	14.302	264	278222	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	68242	0.0949 ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha025.D
Acq On : 6 Aug 2014 15:58
Operator : jjb
Sample : a404270-14
Misc :
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Aug 06 16:38:35 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha026.D
Acq On : 6 Aug 2014 16:20
Operator : jjb
Sample : a404270-15
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 06 16:39:13 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

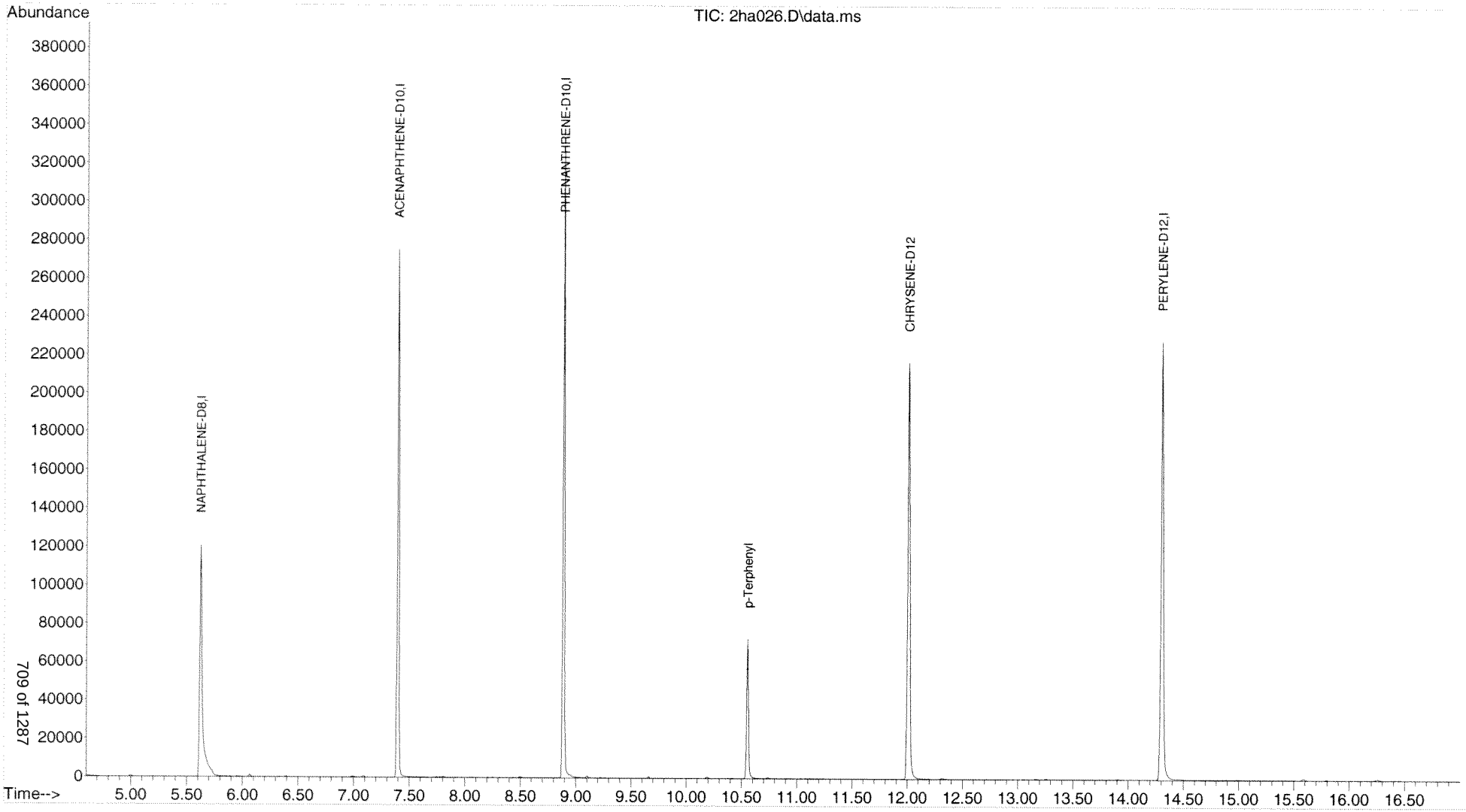
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.620	136	183806	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	133420	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	268999	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	297377	0.50 ug/mL	0.00
18) PERYLENE-D12	14.302	264	267601	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	58734	0.0849 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha026.D
Acq On : 6 Aug 2014 16:20
Operator : jjb
Sample : a404270-15
Misc :
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Aug 06 16:39:13 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha027.D
Acq On : 6 Aug 2014 16:42
Operator : jjb
Sample : a404270-16
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 06 17:04:56 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

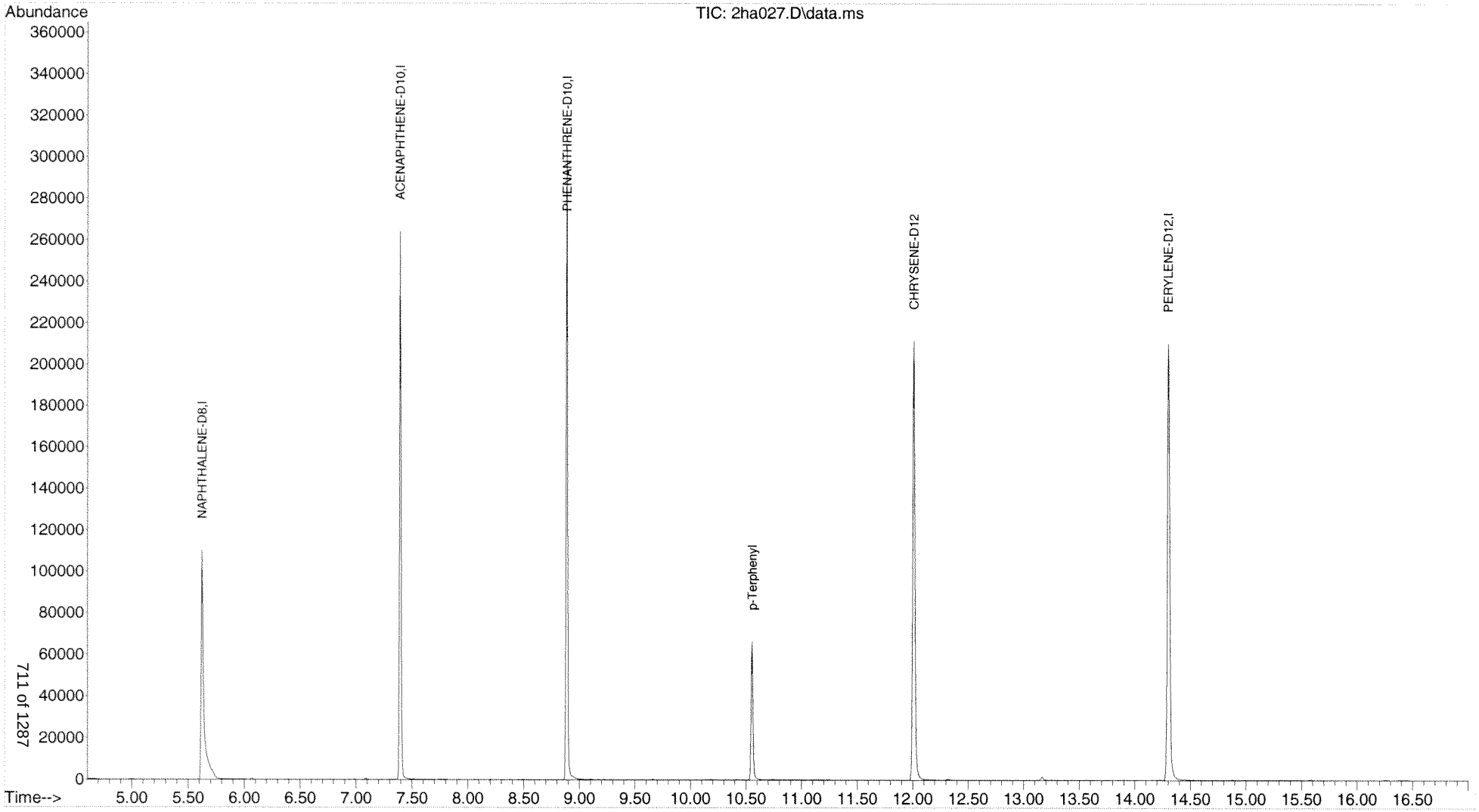
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	161980	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	122457	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	249141	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.012	240	282848	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	253297	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	56240	0.0877 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha027.D
Acq On : 6 Aug 2014 16:42
Operator : jjb
Sample : a404270-16
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Aug 06 17:04:56 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha028.D
Acq On : 6 Aug 2014 17:04
Operator : jjb
Sample : a404270-18
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 06 17:52:22 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

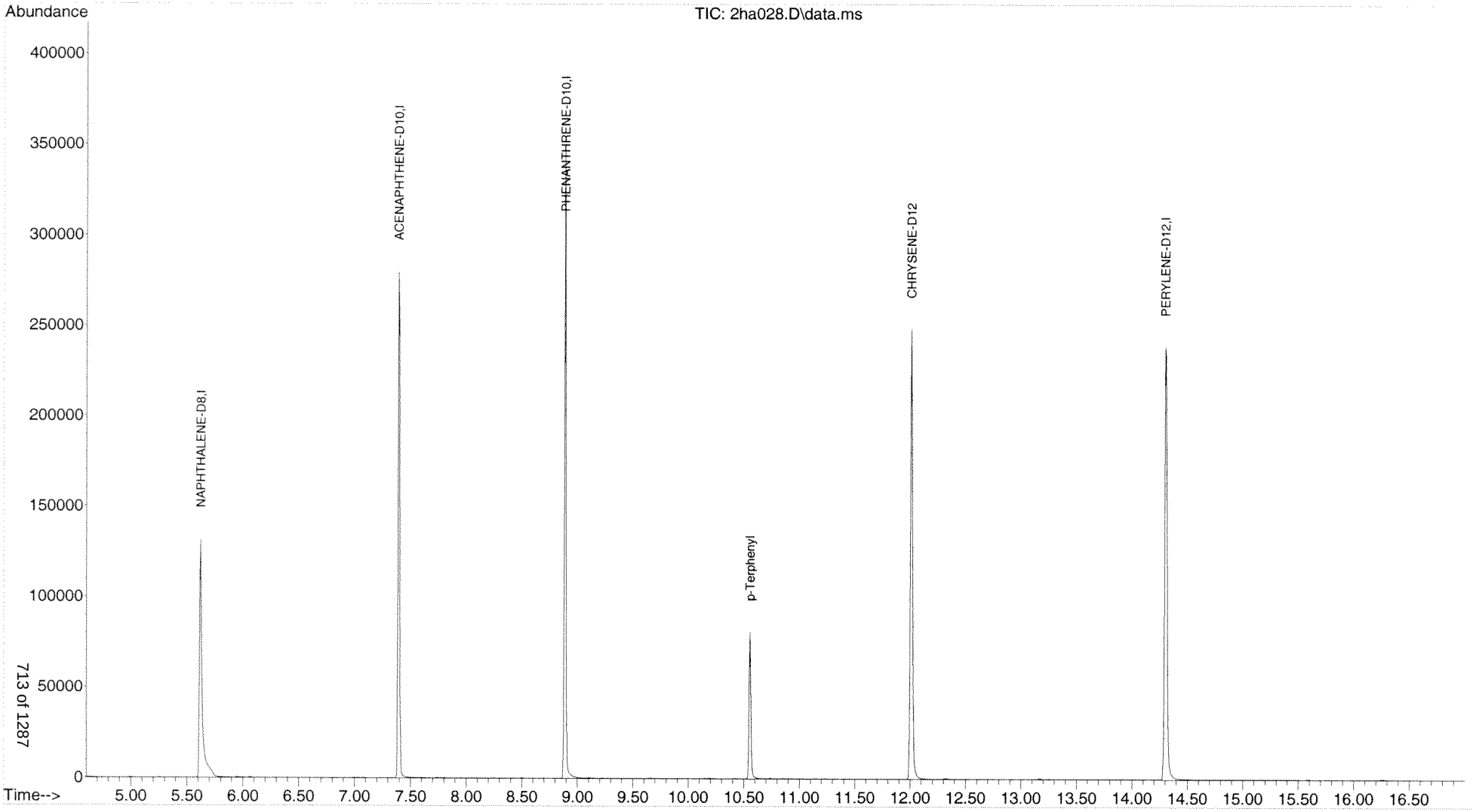
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.622	136	195297	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	143552	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	283474	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	324145	0.50	ug/mL	0.00
18) PERYLENE-D12	14.302	264	288522	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	0.000		0	N.D.		
3) 2-Methylnaphthalene	0.000		0	N.D.		
4) 1-Methylnaphthalene	0.000		0	N.D.		
6) Acenaphthylene	0.000		0	N.D.		
7) Acenaphthene	0.000		0	N.D. d		
8) Fluorene	0.000		0	N.D.		
10) Phenanthrene	0.000		0	N.D.		
11) Anthracene	0.000		0	N.D.		
12) Fluoranthene	0.000		0	N.D.		
13) Pyrene	0.000		0	N.D. d		
14) p-Terphenyl	10.555	230	66973	0.0918	ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d		
17) Chrysene	0.000		0	N.D. d		
19) Benzo(b)fluoranthene	0.000		0	N.D.		
20) Benzo(k)fluoranthene	0.000		0	N.D.		
21) Benzo(a)pyrene	0.000		0	N.D. d		
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.		
23) Dibenzo(a,h)anthracene	0.000		0	N.D.		
24) Benzo(g,h,i)perylene	0.000		0	N.D.		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha028.D
Acq On : 6 Aug 2014 17:04
Operator : jjb
Sample : a404270-18
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Aug 06 17:52:22 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha029.D
Acq On : 6 Aug 2014 17:25
Operator : jjb
Sample : a404270-19
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 06 17:52:47 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

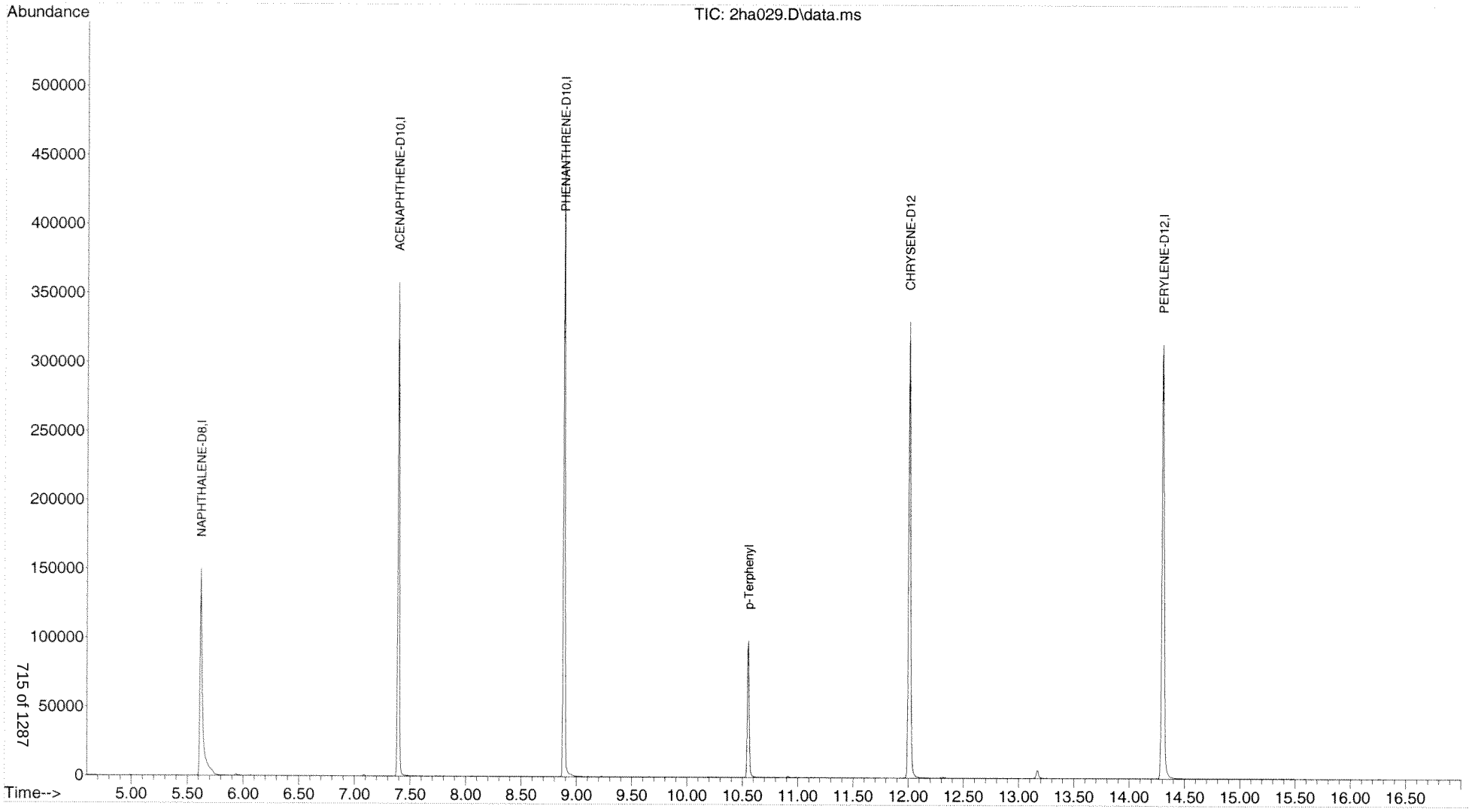
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	213772	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.394	164	164464	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	363450	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	411335	0.50 ug/mL	0.00
18) PERYLENE-D12	14.307	264	366333	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	82597	0.0883 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha029.D
Acq On : 6 Aug 2014 17:25
Operator : jjb
Sample : a404270-19
Misc :
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Aug 06 17:52:47 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha030.D
Acq On : 6 Aug 2014 17:47
Operator : jjb
Sample : a404270-20
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 06 18:07:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration

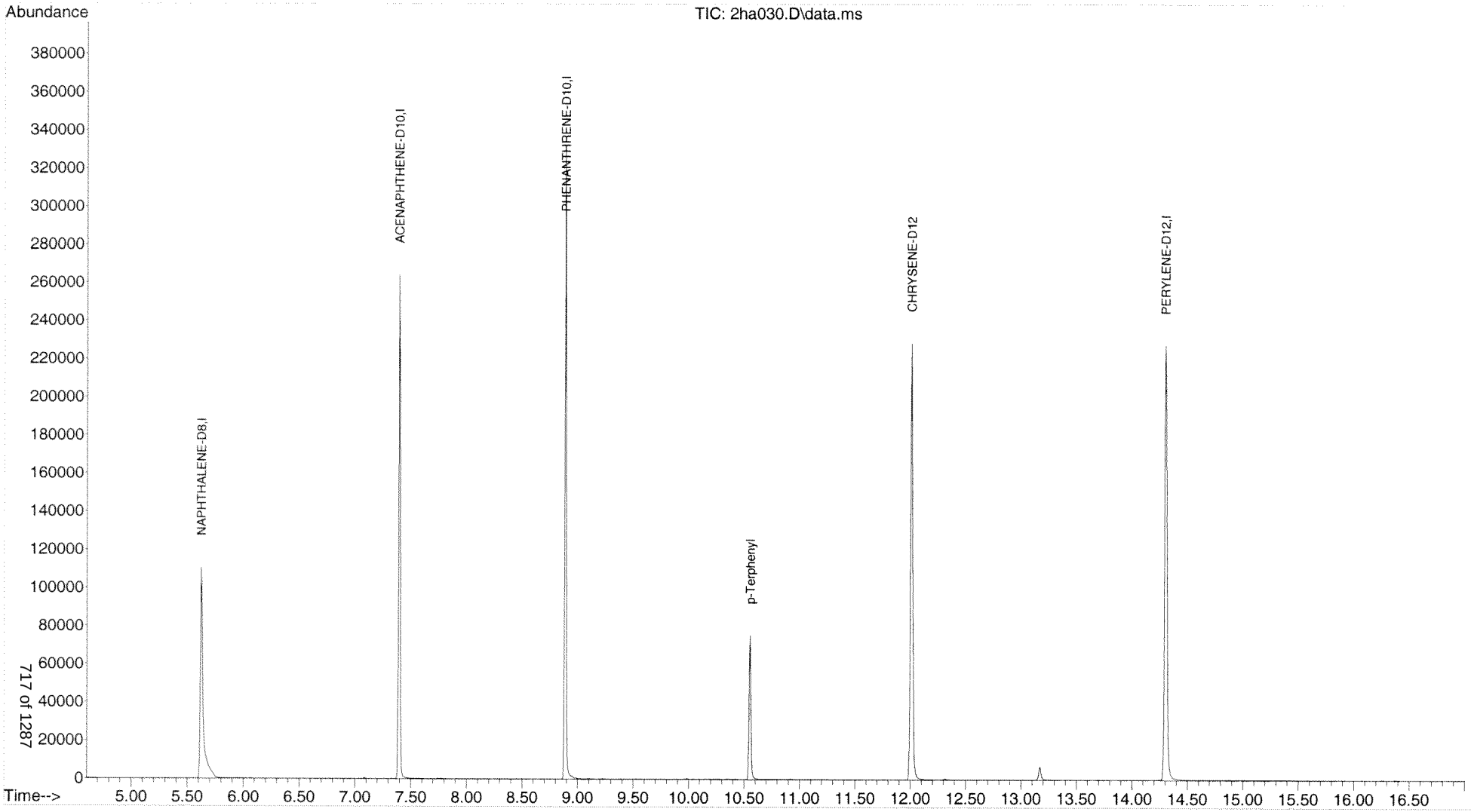
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	170079	0.50 ug/mL	0.00
5) ACENAPHTHENE-D10	7.393	164	125689	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	265443	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	308351	0.50 ug/mL	0.00
18) PERYLENE-D12	14.302	264	275207	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	62798	0.0920 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080614\
Data File : 2ha030.D
Acq On : 6 Aug 2014 17:47
Operator : jjb
Sample : a404270-20
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Aug 06 18:07:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Aug 06 08:36:05 2014
Response via : Initial Calibration



ANALYSIS SEQUENCE

AA29951

Instrument: OSVGCMS2

Calibration ID: 1405053

Printed: 8/7/2014 10:25:37

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
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AA29951-CCV1	QC		2		A4E0515	A4G0392		
4H05023-BLK1	QC		3			A4G0392		
4H05023-BS1	QC		4			A4G0392		
4H05023-MS1	QC		5			A4G0392		
4H05023-MSD1	QC		6			A4G0392		
A404270-28	8270D PAH SIM DOD	D	7			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only. USE for MS/MS
A404270-21	8270D PAH SIM DOD	D	8			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-22	8270D PAH SIM DOD	D	9			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-23	8270D PAH SIM DOD	D	10			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-24	8270D PAH SIM DOD	D	11			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-25	8270D PAH SIM DOD	D	12			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-26	8270D PAH SIM DOD	D	13			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
A404270-27	8270D PAH SIM DOD	D	14			A4G0392	CH2M Hill, Inc. (CH025)	Benzo(a)pyrene only
4H06038-BLK1	QC		15			A4G0392		
4H06038-BS1	QC		16			A4G0392		
4H06038-BSD1	QC		17			A4G0392		
A404510-01	8270D PAH SIM DOD	A	18			A4G0392	Resolution Consultants (RE030)	Potentially HOT samples, take caution
A404510-03	8270D PAH SIM DOD	A	19			A4G0392	Resolution Consultants (RE030)	Potentially HOT samples, take caution

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

PREPARATION BENCH SHEET

Printed: 8/5/2014 3:17:00PM

Analysis
8270D PAH SIM DOD [EPA 8270D]

4H05023
ENCO Orlando

Prepared using: EPA 3550C_MS

Surrogate Solution
___ A4G0543 PAHSIM SOIL Surrogate

Spiking Solution
A4G0045 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H05023-BLK1		Blank		QC	–	–	15.0	300			1000		
4H05023-BS1		LCS		QC	–	–	15.0	300	A4G0045	1000	1000		
4H05023-MS1		Matrix Spike [A404270-28]		QC	–	–	15.1	300	A4G0045	1000	1000		
4H05023-MSD1		Matrix Spike Dup [A404270-28]		QC	–	–	15.1	300	A4G0045	1000	1000		
A404270-21 1	D	TR-5TH-CSF03-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only
A404270-22 2	D	TR-5TH-CSF04-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only
A404270-23 3	D	TR-5TH-CSF05-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only
A404270-24 4	D	TR-5TH-CSF05D-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.2	300			1000		Benzo(a)pyrene only
A404270-25 5	D	TR-5TH-CSF06-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only
A404270-26 6	D	TR-5TH-CSF07-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only
A404270-27 7	D	TR-5TH-CSF08-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.1	300			1000		Benzo(a)pyrene only
A404270-28 8	D	TR-5TH-CSF09-0814 D[C10]	08-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Benzo(a)pyrene only. USE for M

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

PAH SIM soil

Start Date/Time 08-05-14 18:30

StopDate/Time 08-05-14 22:00

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

719 of 1287

PREPARATION BENCH SHEET

Printed: 8/5/2014 3:17:00PM

4H05023

ENCO Orlando

Prepared using: EPA 3550C_MS

Surrogate Solution
___ A4G0543 PAHSIM SOIL Surrogate

Spiking Solution
A4G0045 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

Equipment Used

Sonicator OSON 1,2,3 — Tuned per manufacturer instructions? [X] Yes [ ] No [ ] NA
Turbovap OTVAP1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Turbovap OTVAP2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Turbovap OTVAP3 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Balance OEXTBAL1 — Daily calibration complete? [X] Yes [ ] No [ ] NA
Thermometer
Other

CKP 08-05-14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

720 of 1287

PREPARATION BENCH SHEET

Printed: 8/6/2014 6:08:52PM

Analysis
8270D PAH SIM DOD [EPA 8270D]

4H06038
ENCO Orlando

Prepared using: EPA 3550C_MS

Surrogate Solution
___ A4H0144 PAHSIM SOIL Surrogate

Spiking Solution
A4H0145 PAHSIM SOIL Spike Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H06038-BLK1		Blank		QC	–	–	15.0	300			1000		
4H06038-BS1		LCS		QC	–	–	15.0	300	A4H0145	1000	1000		
4H06038-BSD1		LCS Dup		QC	–	–	15.0	300	A4H0145	1000	1000		
A404510-01 1	D	WHF-04-PLJ-SO05-20-080114A[S10]	11-Aug-14	8270D PAH SIM DOD	–	–	15.1	300			1000		Potentially HOT samples, take c Fuel Sucl
A404510-03 2	D	WHF-04-PLJ-SO06-30-080114A[S10]	11-Aug-14	8270D PAH SIM DOD	–	–	15.0	300			1000		Potentially HOT samples, take c Fuel Sucl

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

PAH SIM soil

Start Date/Time 08-06-14 17:10

StopDate/Time 08-06-14 20:40

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

Equipment Used

Sonicator QSON 1,2,3 — Tuned per manufacturer instructions? [X] Yes [ ] No [ ] NA

Turbovap OTVAP 1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi

Turbovap OTVAP 2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi

Turbovap ___ — Temperature (°C): ___ — N2 pressure (initial) (psi): ___ (final): ___

Balance OGXTBAL 7 — Daily calibration complete? [X] Yes [ ] No [ ] NA

Thermometer ___

Other ___

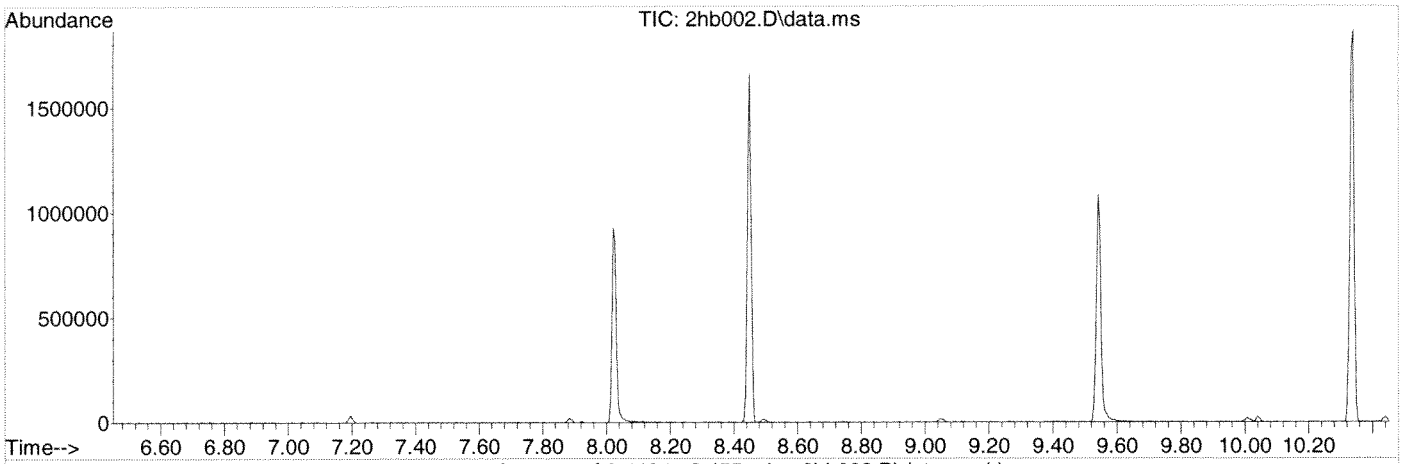
CKP 08-06-14

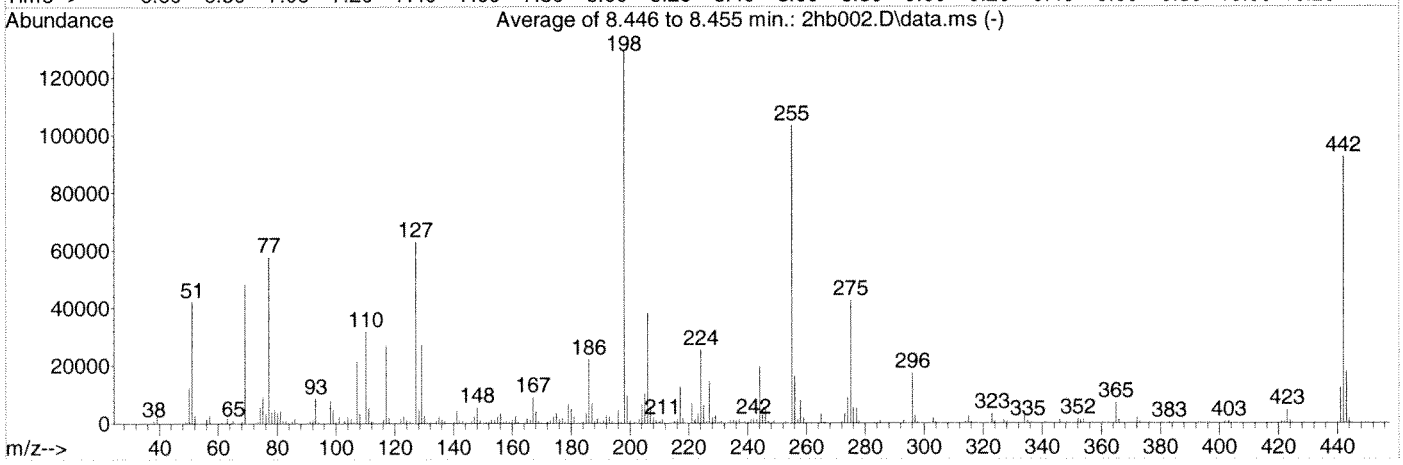
Samples Prepared By ___ Date ___ | Samples Prepared By ___ Date ___ | Samples Prepared By ___ Date ___

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb002.D
Acq On : 7 Aug 2014 10:57
Operator : jfi
Sample : aa29951-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT4.P

Method : C:\msdchem\1\METHODS\DFTPPD.M
Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
Last Update : Tue Jul 22 10:10:07 2014





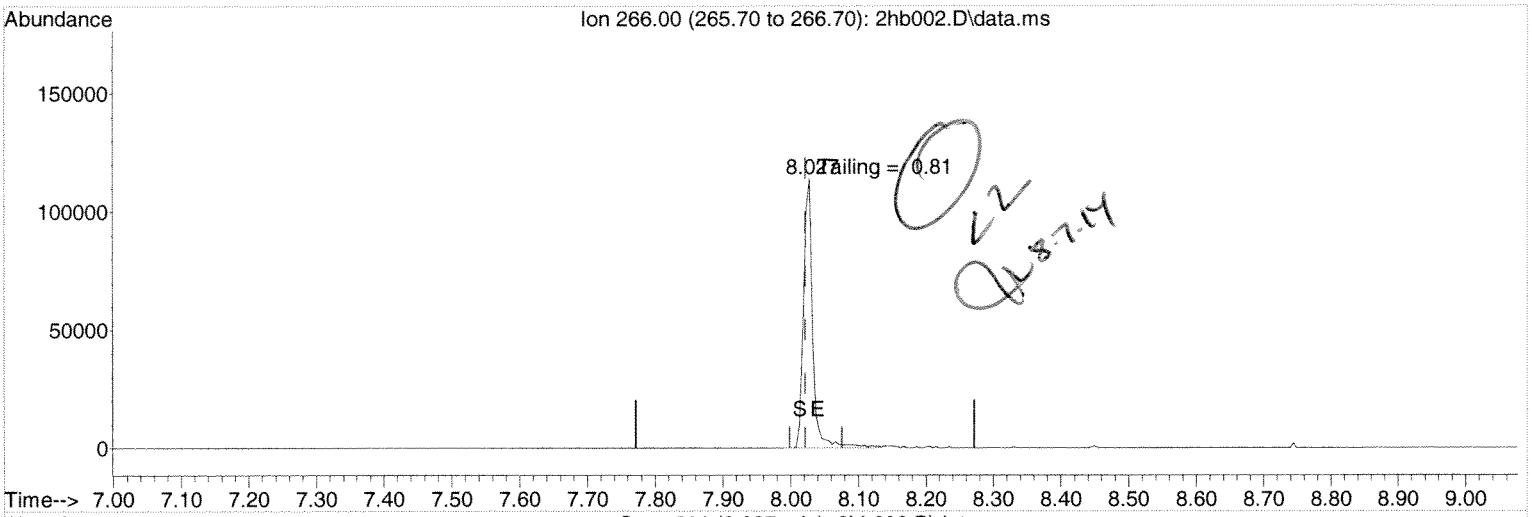
AutoFind: Scans 698, 699, 700; Background Corrected with Scan 692

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	32.5	42066	PASS
68	69	0.00	2	1.2	569	PASS
69	198	0.00	100	37.1	48000	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	48.7	63002	PASS
197	198	0.00	2	0.4	473	PASS
198	198	50	100	100.0	129496	PASS
199	198	5	9	7.2	9268	PASS
275	198	10	60	32.9	42554	PASS
365	198	1	100	5.4	7023	PASS
441	443	0.01	100	68.1	12078	PASS
442	198	50	100	71.2	92240	PASS
443	442	15	24	19.2	17747	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb002.D
Acq On : 7 Aug 2014 10:57
Operator : jfi
Sample : aa29951-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 07 11:10:50 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration



TIC: 2hb002.D\data.ms

(1) Pentachlorophenol

8.027min (+0.006) 55.29 ug/ml

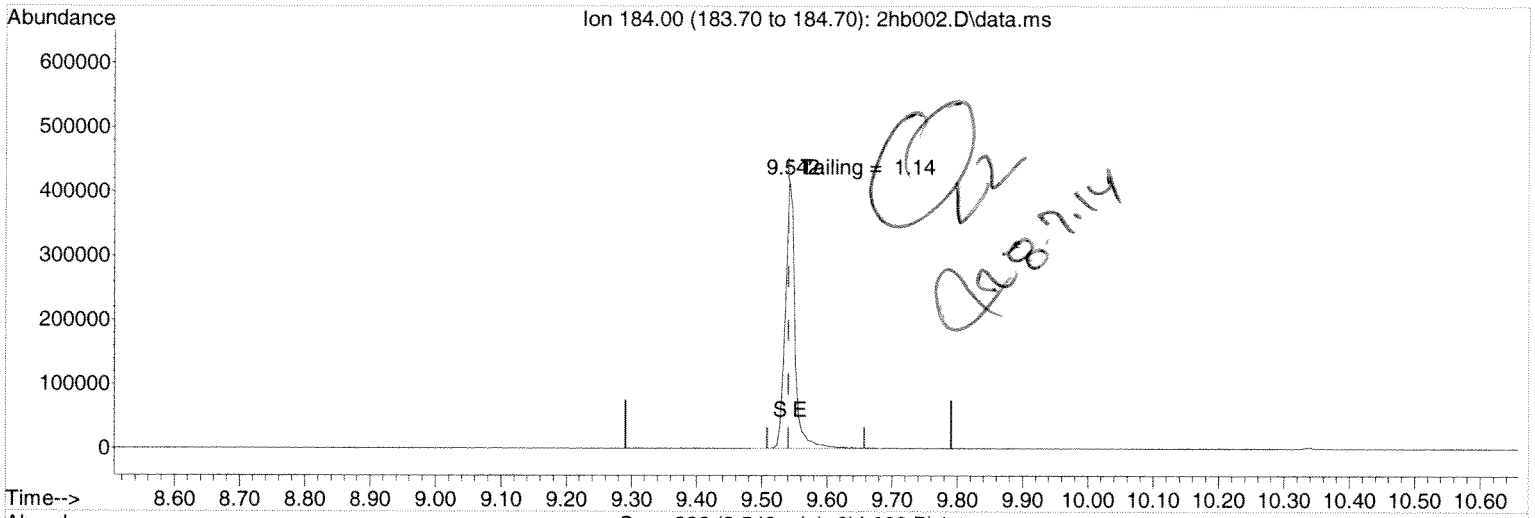
response 103513

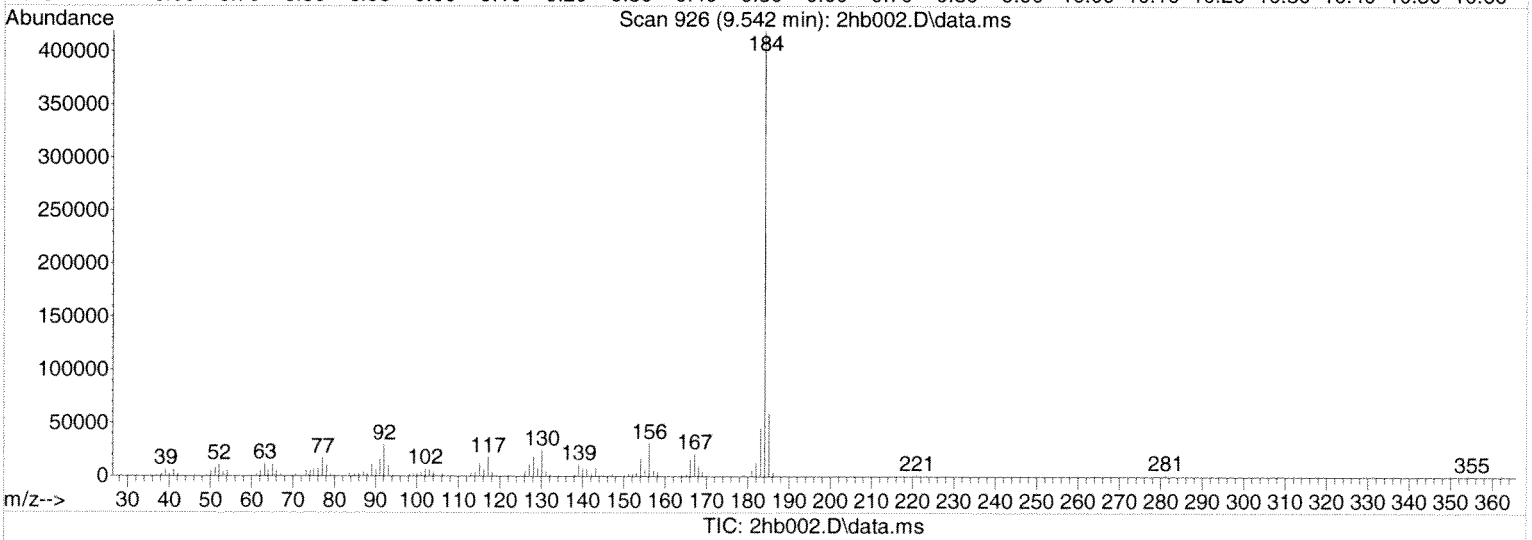
Ion	Exp%	Act%
266.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb002.D
Acq On : 7 Aug 2014 10:57
Operator : jfi
Sample : aa29951-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 07 11:10:50 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration





(3) Benzidine

9.542min (+0.001) 86.01 ug/ml

response 439908

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb002.D
Acq On : 7 Aug 2014 10:57
Operator : jfi
Sample : aa29951-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 07 11:10:50 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Target Compounds					Qvalue
1) Pentachlorophenol	8.027	266	103513	55.2930 ug/ml	100
2) DFTPP	8.451	198	136710	104.4481 ug/ml	100
3) Benzidine	9.542	184	439908	86.0099 ug/ml	100
4) DDE	0.000		0	N.D.	
5) DDD	10.037	TIC	20269	160.3814	# 74
6) DDT	10.340	TIC	1699404	127.5138	# 1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

$\frac{20269}{20269 + 1699404} \times 100 = 1.2\%$

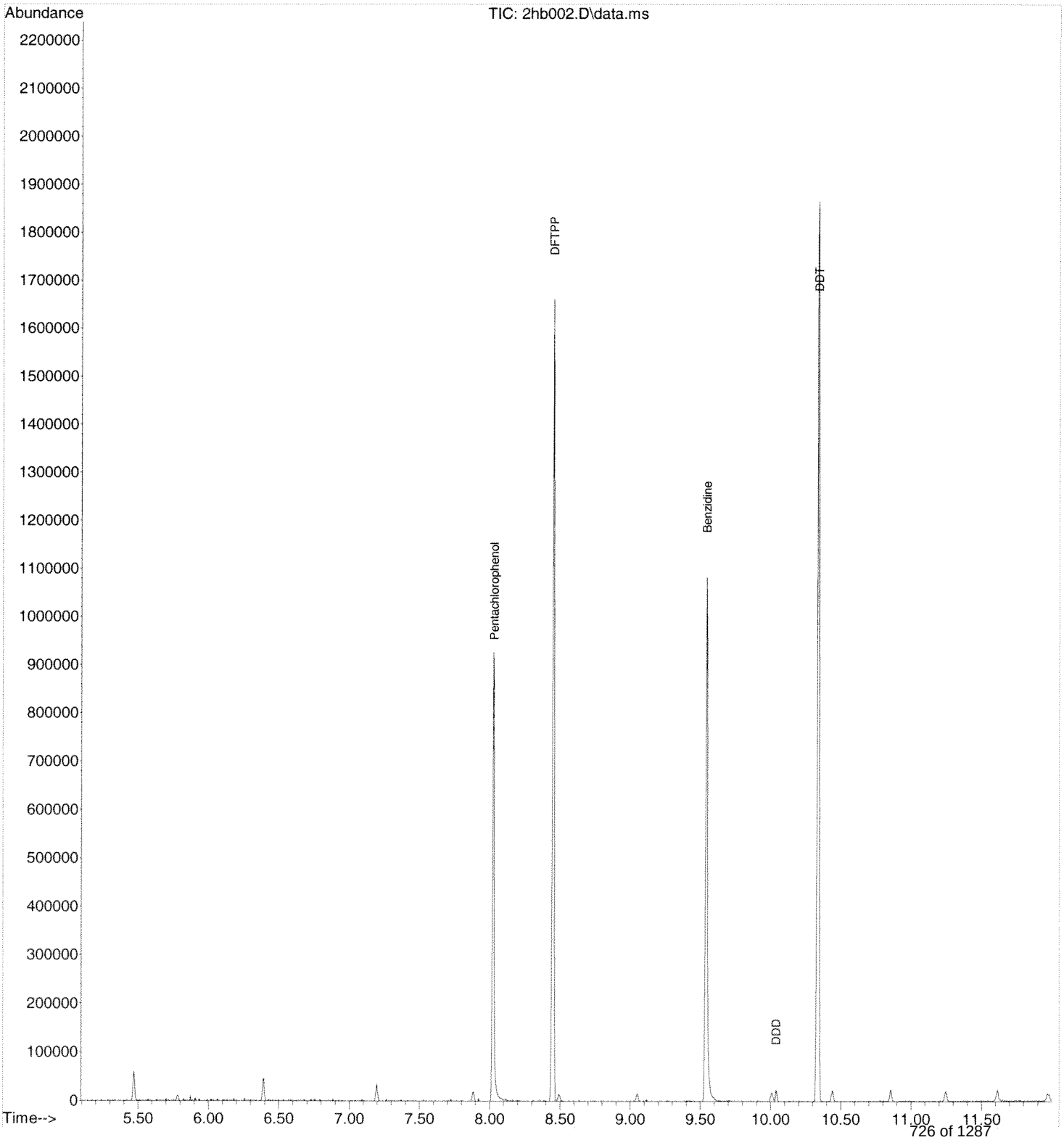
(1719673)

<2.0% DDT
DCG
8.7.14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb002.D
Acq On : 7 Aug 2014 10:57
Operator : jfi
Sample : aa29951-tun1
Misc : a4f0423
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 07 11:10:50 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue Jul 22 10:10:07 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb003.D
Acq On : 7 Aug 2014 11:13
Operator : jfi
Sample : aa29951-ccv1
Misc : a4e0515
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 07 11:41:27 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

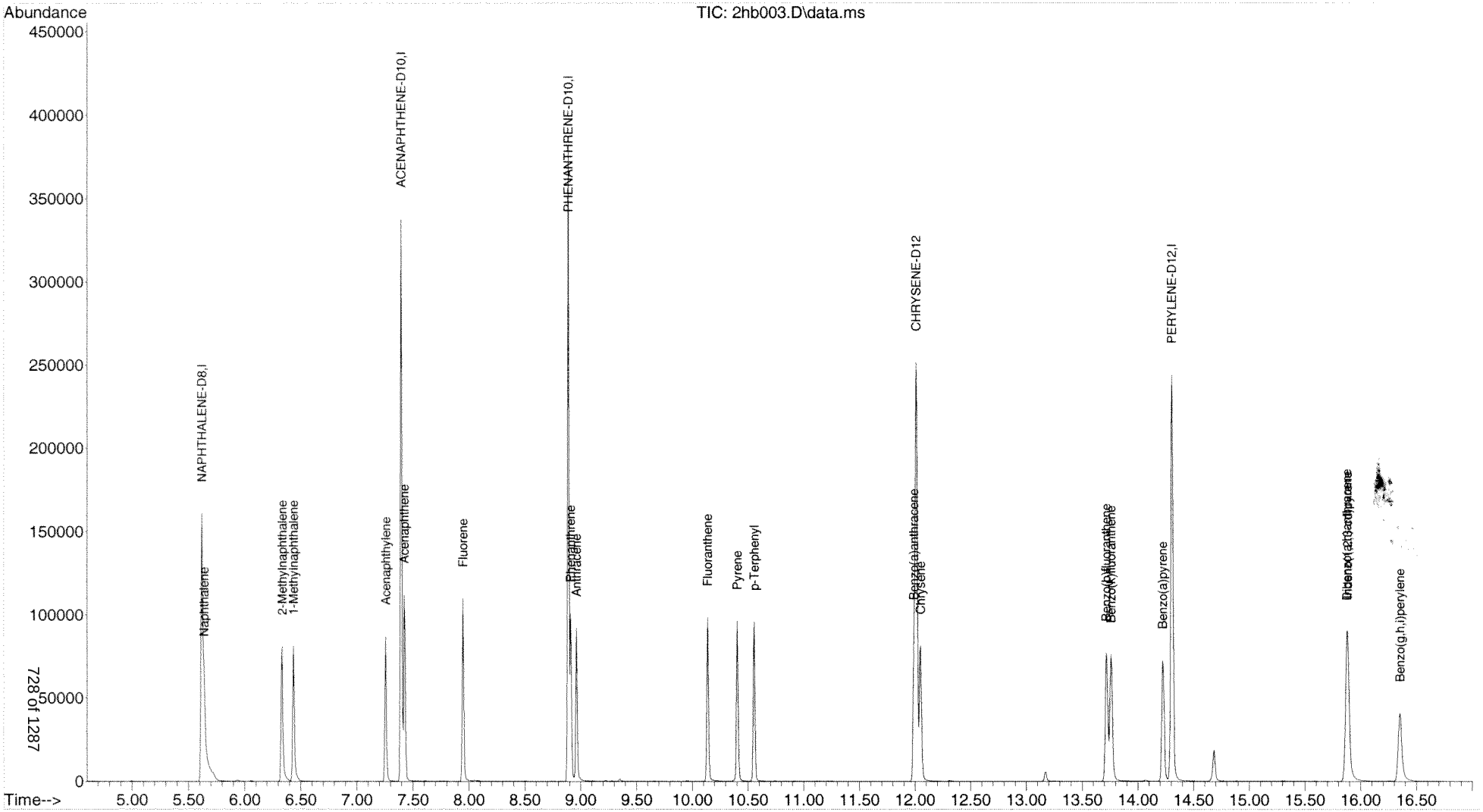
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.620	136	213872	0.50	ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	157194	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	290164	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	313044	0.50	ug/mL	0.01
18) PERYLENE-D12	14.307	264	280709	0.50	ug/mL	0.01
Target Compounds						Qvalue
2) Naphthalene	5.641	128	50510	0.0961	ug/mL	99
3) 2-Methylnaphthalene	6.335	142	38996	0.0864	ug/mL	88
4) 1-Methylnaphthalene	6.436	142	37923	0.0863	ug/mL	87
6) Acenaphthylene	7.259	152	60386	0.0937	ug/mL	100
7) Acenaphthene	7.424	154	38004	0.0914	ug/mL	92
8) Fluorene	7.947	166	46878	0.0916	ug/mL	97
10) Phenanthrene	8.909	178	69836	0.0911	ug/mL	95
11) Anthracene	8.962	178	66478	0.0956	ug/mL	97
12) Fluoranthene	10.139	202	83190	0.0972	ug/mL	93
13) Pyrene	10.404	202	83703	0.0965	ug/mL	92
14) p-Terphenyl	10.556	230	73875	0.0990	ug/mL	100
16) Benzo(a)anthracene	11.989	228	86201	0.1026	ug/mL	97
17) Chrysene	12.049	228	83556	0.1049	ug/mL	99
19) Benzo(b)fluoranthene	13.715	252	82163	0.1000	ug/mL	96
20) Benzo(k)fluoranthene	13.758	252	80166	0.0983	ug/mL	96
21) Benzo(a)pyrene	14.221	252	73372	0.0966	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.880	276	86945	0.1046	ug/mL	81
23) Dibenzo(a,h)anthracene	15.873	278	71782	0.1038	ug/mL	86
24) Benzo(g,h,i)perylene	16.349	276	72134	0.1048	ug/mL	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb003.D
Acq On : 7 Aug 2014 11:13
Operator : jfi
Sample : aa29951-ccv1
Misc : a4e0515
ALS Vial : 2 Sample Multiplier: 1

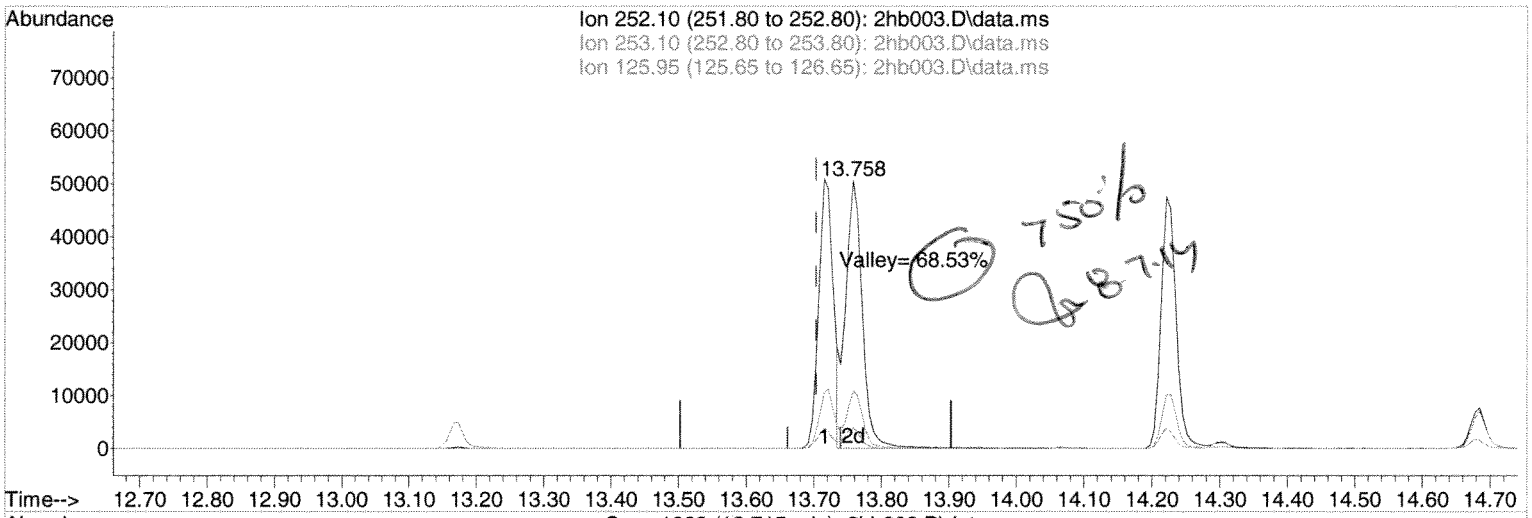
Quant Time: Aug 07 11:41:27 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

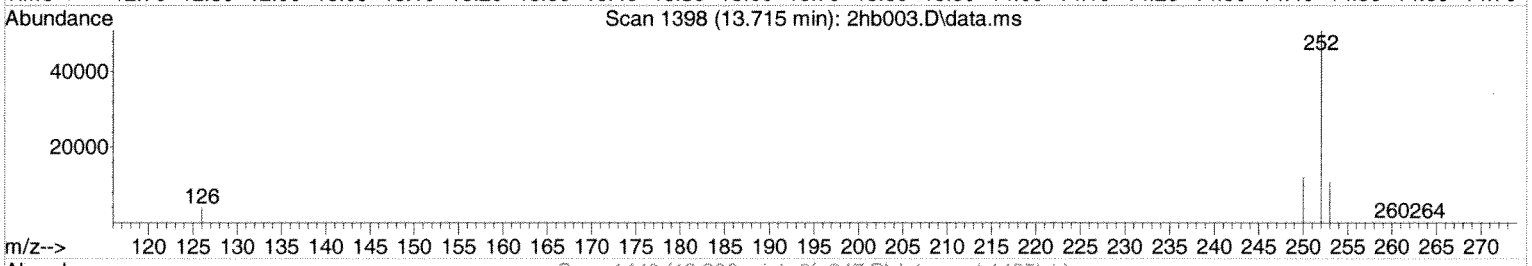


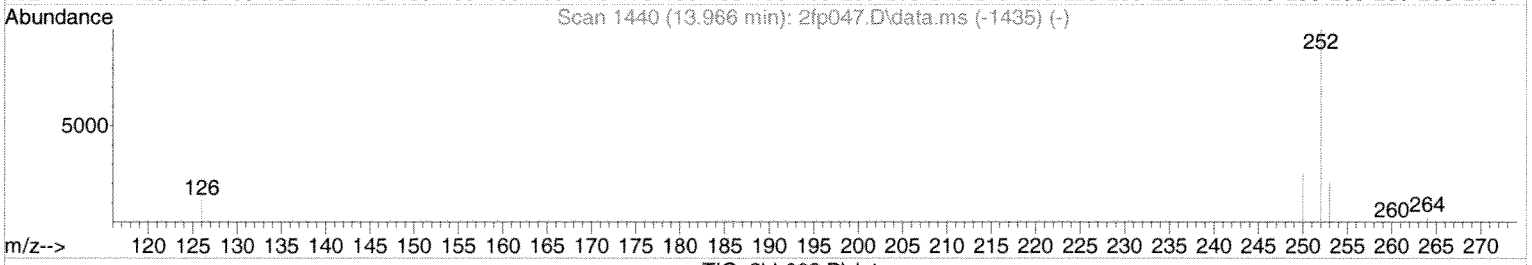
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb003.D
Acq On : 7 Aug 2014 11:13
Operator : jfi
Sample : aa29951-ccv1
Misc : a4e0515
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 07 11:41:27 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb003.D\data.ms

(19) Benzo(b)fluoranthene

13.715min (+0.012) 0.10 ug/mL

response 82163

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	21.63
125.95	11.50	6.82
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb004.D
Acq On : 7 Aug 2014 11:35
Operator : jfi
Sample : 4h05023-blk1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 07 11:54:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

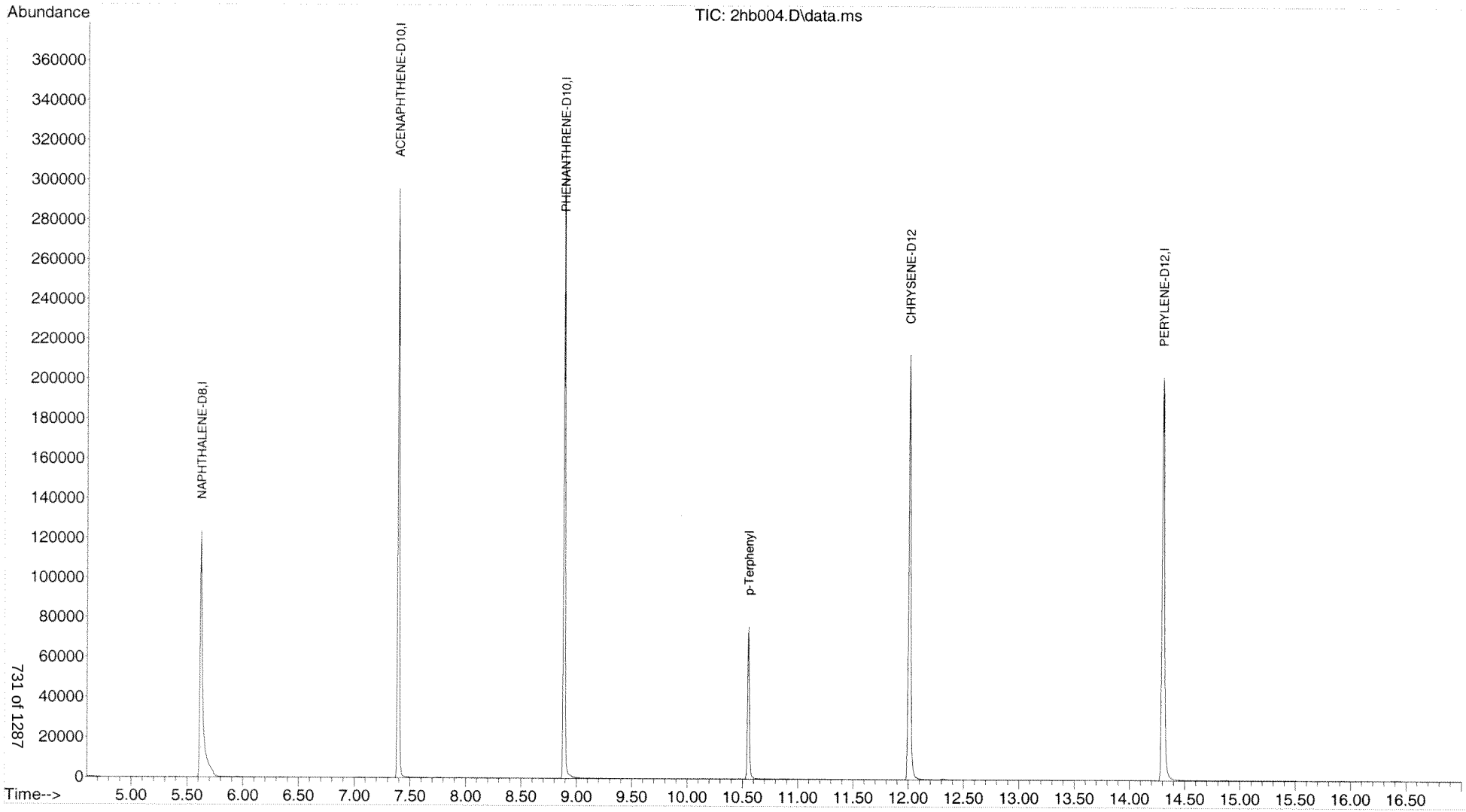
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.624	136	187771	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.393	164	140270	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	258084	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	282012	0.50 ug/mL	0.01
18) PERYLENE-D12	14.301	264	251322	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	60864	0.0917 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb004.D
Acq On : 7 Aug 2014 11:35
Operator : jfi
Sample : 4h05023-blk1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 07 11:54:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb005.D
Acq On : 7 Aug 2014 11:57
Operator : jfi
Sample : 4h05023-bs1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 07 12:15:15 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

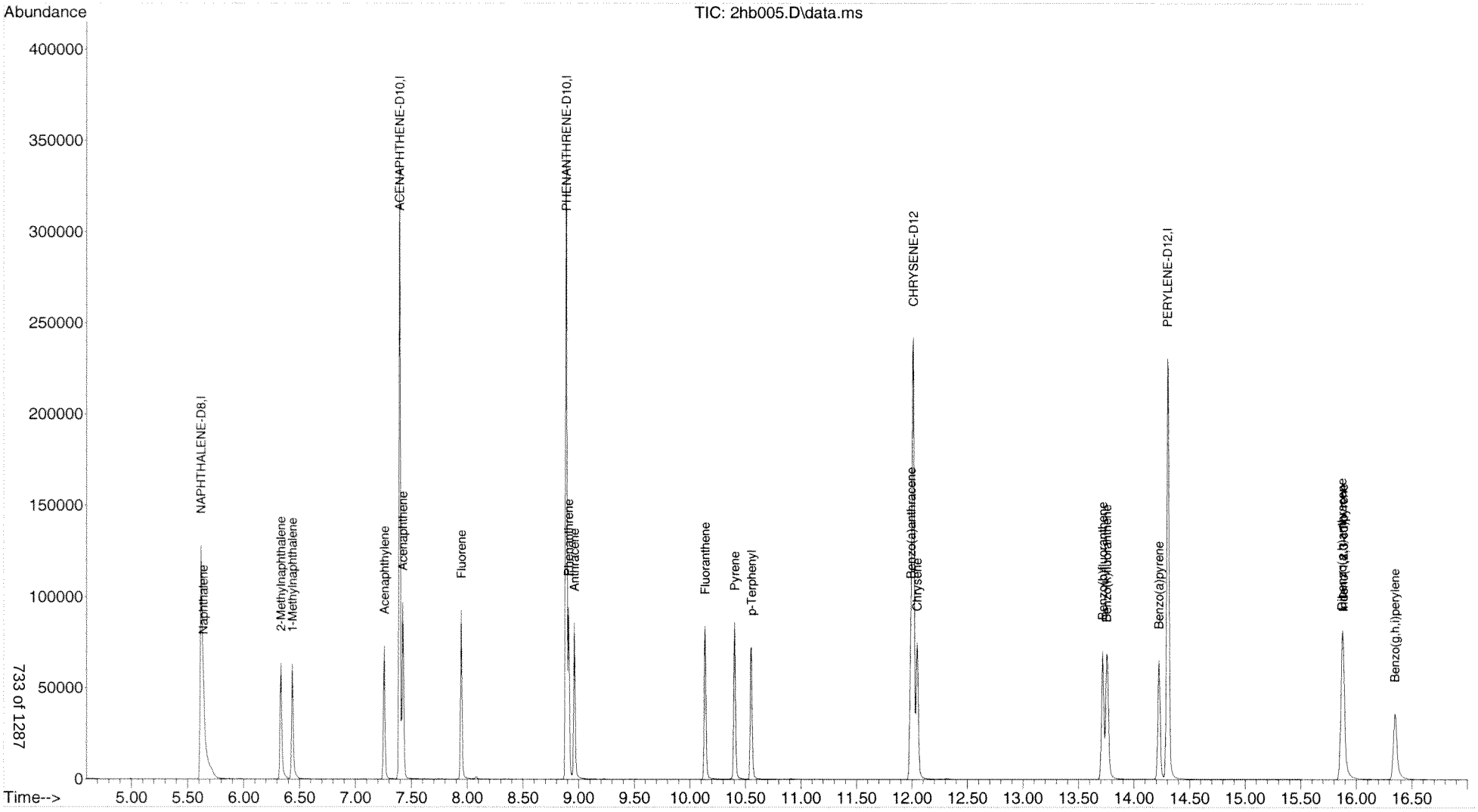
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.620	136	193959	0.50	ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	147883	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	277919	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.012	240	310224	0.50	ug/mL	0.01
18) PERYLENE-D12	14.301	264	279830	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.640	128	38711	0.0812	ug/mL	99
3) 2-Methylnaphthalene	6.335	142	30849	0.0754	ug/mL	87
4) 1-Methylnaphthalene	6.436	142	28986	0.0728	ug/mL	86
6) Acenaphthylene	7.259	152	52062	0.0859	ug/mL	100
7) Acenaphthene	7.424	154	31299	0.0800	ug/mL	89
8) Fluorene	7.947	166	40427	0.0840	ug/mL	98
10) Phenanthrene	8.909	178	63336	0.0863	ug/mL	95
11) Anthracene	8.962	178	61272	0.0920	ug/mL	97
12) Fluoranthene	10.139	202	75379	0.0920	ug/mL	92
13) Pyrene	10.404	202	78886	0.0949	ug/mL	91
14) p-Terphenyl	10.556	230	62294	0.0871	ug/mL	100
16) Benzo(a)anthracene	11.990	228	79196	0.0952	ug/mL	98
17) Chrysene	12.045	228	77423	0.0981	ug/mL	98
19) Benzo(b)fluoranthene	13.716	252	68722	0.0839	ug/mL	96
20) Benzo(k)fluoranthene	13.753	252	79574	0.0979	ug/mL	96
21) Benzo(a)pyrene	14.222	252	64377	0.0850	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.880	276	78576	0.0948	ug/mL	81
23) Dibenzo(a,h)anthracene	15.867	278	65012	0.0943	ug/mL	86
24) Benzo(g,h,i)perylene	16.343	276	63982	0.0932	ug/mL	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb005.D
Acq On : 7 Aug 2014 11:57
Operator : jfi
Sample : 4h05023-bs1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 07 12:15:15 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb006.D
Acq On : 7 Aug 2014 12:18
Operator : jfi
Sample : 4h05023-ms1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 07 12:53:21 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

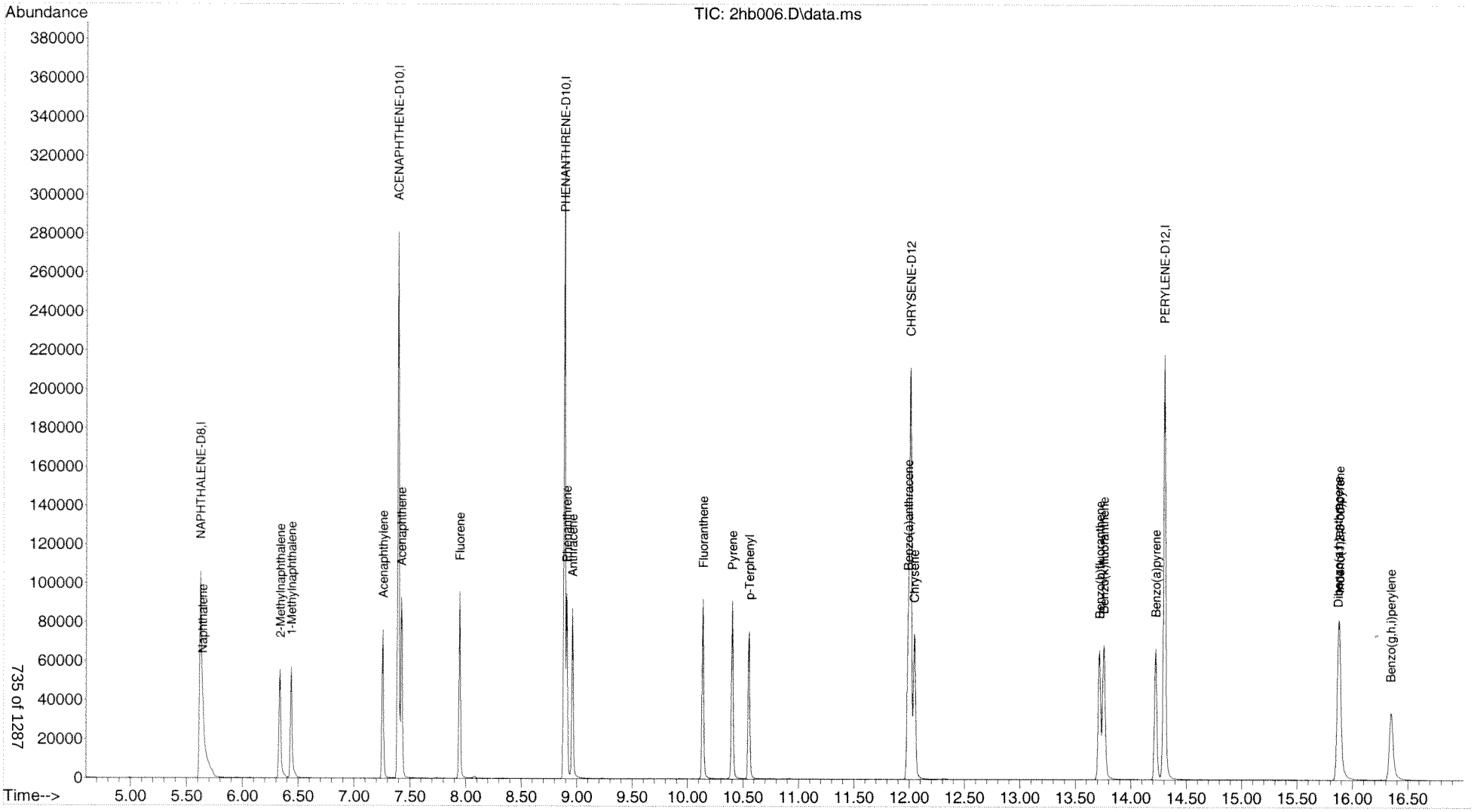
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.622	136	159795	0.50	ug/mL	0.01
5) ACENAPHTHENE-D10	7.393	164	131652	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	249178	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	268088	0.50	ug/mL	0.01
18) PERYLENE-D12	14.302	264	240592	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.643	128	33852	0.0862	ug/mL	99
3) 2-Methylnaphthalene	6.337	142	28743	0.0852	ug/mL	87
4) 1-Methylnaphthalene	6.438	142	27529	0.0839	ug/mL	86
6) Acenaphthylene	7.259	152	52288	0.0969	ug/mL	100
7) Acenaphthene	7.423	154	32264	0.0927	ug/mL	92
8) Fluorene	7.947	166	41123	0.0959	ug/mL	96
10) Phenanthrene	8.908	178	65795	0.0999	ug/mL	95
11) Anthracene	8.961	178	64068	0.1073	ug/mL	97
12) Fluoranthene	10.138	202	78489	0.1068	ug/mL	92
13) Pyrene	10.403	202	81984	0.1100	ug/mL	91
14) p-Terphenyl	10.555	230	61798	0.0964	ug/mL	100
16) Benzo(a)anthracene	11.990	228	79179	0.1099	ug/mL	97
17) Chrysene	12.044	228	77946	0.1143	ug/mL	98
19) Benzo(b)fluoranthene	13.717	252	71572	0.1017	ug/mL	96
20) Benzo(k)fluoranthene	13.754	252	78603	0.1125	ug/mL	96
21) Benzo(a)pyrene	14.223	252	66768	0.1025	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.879	276	80378	0.1128	ug/mL	81
23) Dibenzo(a,h)anthracene	15.866	278	66769	0.1127	ug/mL	85
24) Benzo(g,h,i)perylene	16.342	276	65294	0.1106	ug/mL	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb006.D
Acq On : 7 Aug 2014 12:18
Operator : jfi
Sample : 4h05023-ms1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 07 12:53:21 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb007.D
Acq On : 7 Aug 2014 12:40
Operator : jfi
Sample : 4h05023-msd1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 13:01:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

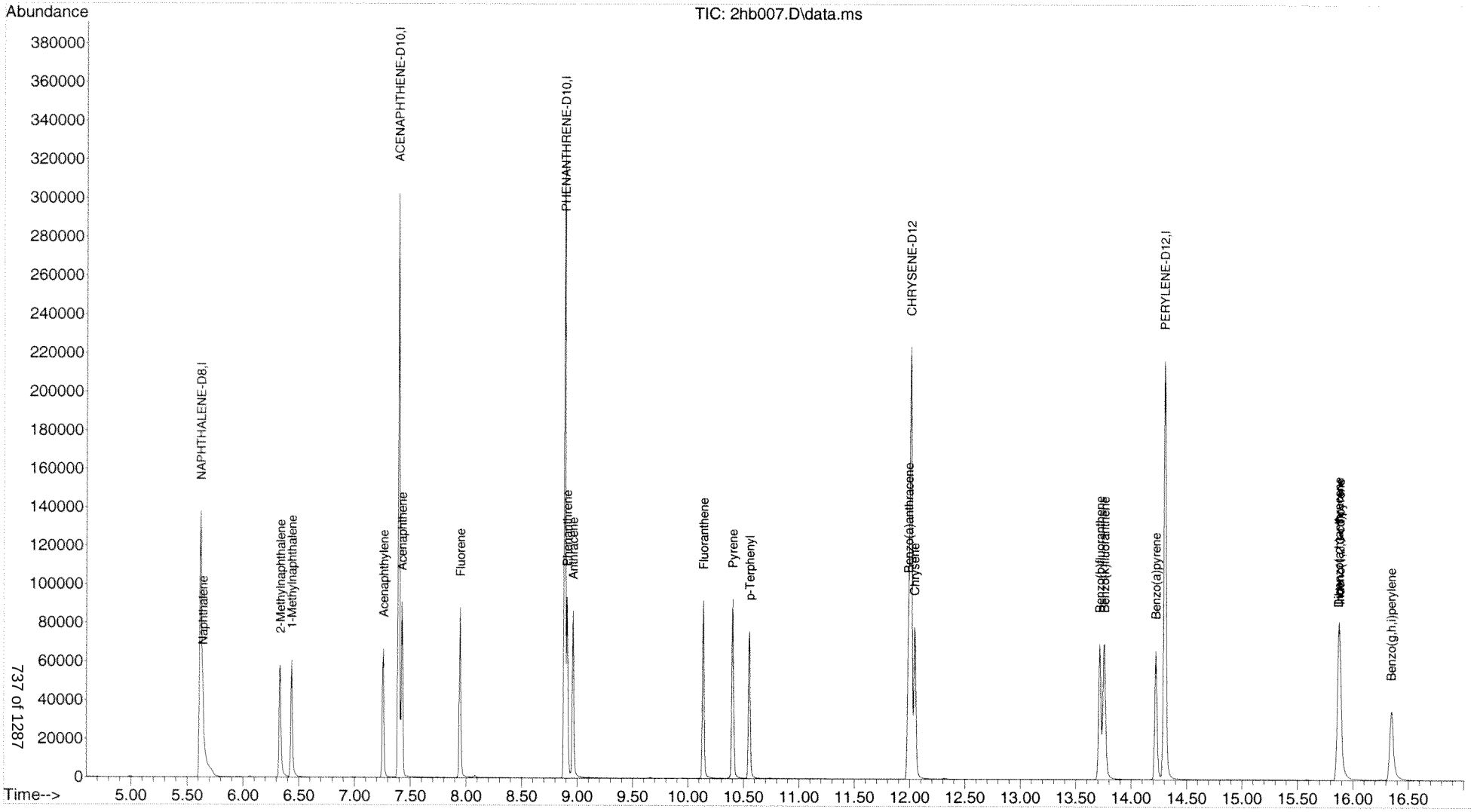
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.621	136	184690	0.50	ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	135213	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	261654	0.50	ug/mL	0.00
15) CHRYSENE-D12	12.011	240	285560	0.50	ug/mL	0.01
18) PERYLENE-D12	14.300	264	256774	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.641	128	38467	0.0848	ug/mL	100
3) 2-Methylnaphthalene	6.336	142	30476	0.0782	ug/mL	88
4) 1-Methylnaphthalene	6.437	142	28530	0.0752	ug/mL	87
6) Acenaphthylene	7.259	152	49392	0.0891	ug/mL	99
7) Acenaphthene	7.424	154	30221	0.0845	ug/mL	91
8) Fluorene	7.947	166	38220	0.0868	ug/mL	96
10) Phenanthrene	8.908	178	64822	0.0938	ug/mL	95
11) Anthracene	8.961	178	62798	0.1001	ug/mL	96
12) Fluoranthene	10.139	202	79367	0.1029	ug/mL	93
13) Pyrene	10.403	202	83421	0.1066	ug/mL	91
14) p-Terphenyl	10.556	230	63475	0.0943	ug/mL	100
16) Benzo(a)anthracene	11.990	228	80492	0.1050	ug/mL	97
17) Chrysene	12.044	228	79281	0.1091	ug/mL	99
19) Benzo(b)fluoranthene	13.715	252	70469	0.0938	ug/mL	96
20) Benzo(k)fluoranthene	13.758	252	81413	0.1092	ug/mL	96
21) Benzo(a)pyrene	14.221	252	66609	0.0959	ug/mL	96
22) Indeno(1,2,3-cd)pyrene	15.880	276	81191	0.1068	ug/mL	81
23) Dibenzo(a,h)anthracene	15.867	278	66504	0.1052	ug/mL	86
24) Benzo(g,h,i)perylene	16.343	276	66022	0.1048	ug/mL	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb007.D
Acq On : 7 Aug 2014 12:40
Operator : jfi
Sample : 4h05023-msd1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 07 13:01:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb008.D
Acq On : 7 Aug 2014 13:02
Operator : jfi
Sample : a404270-28
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 13:29:45 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

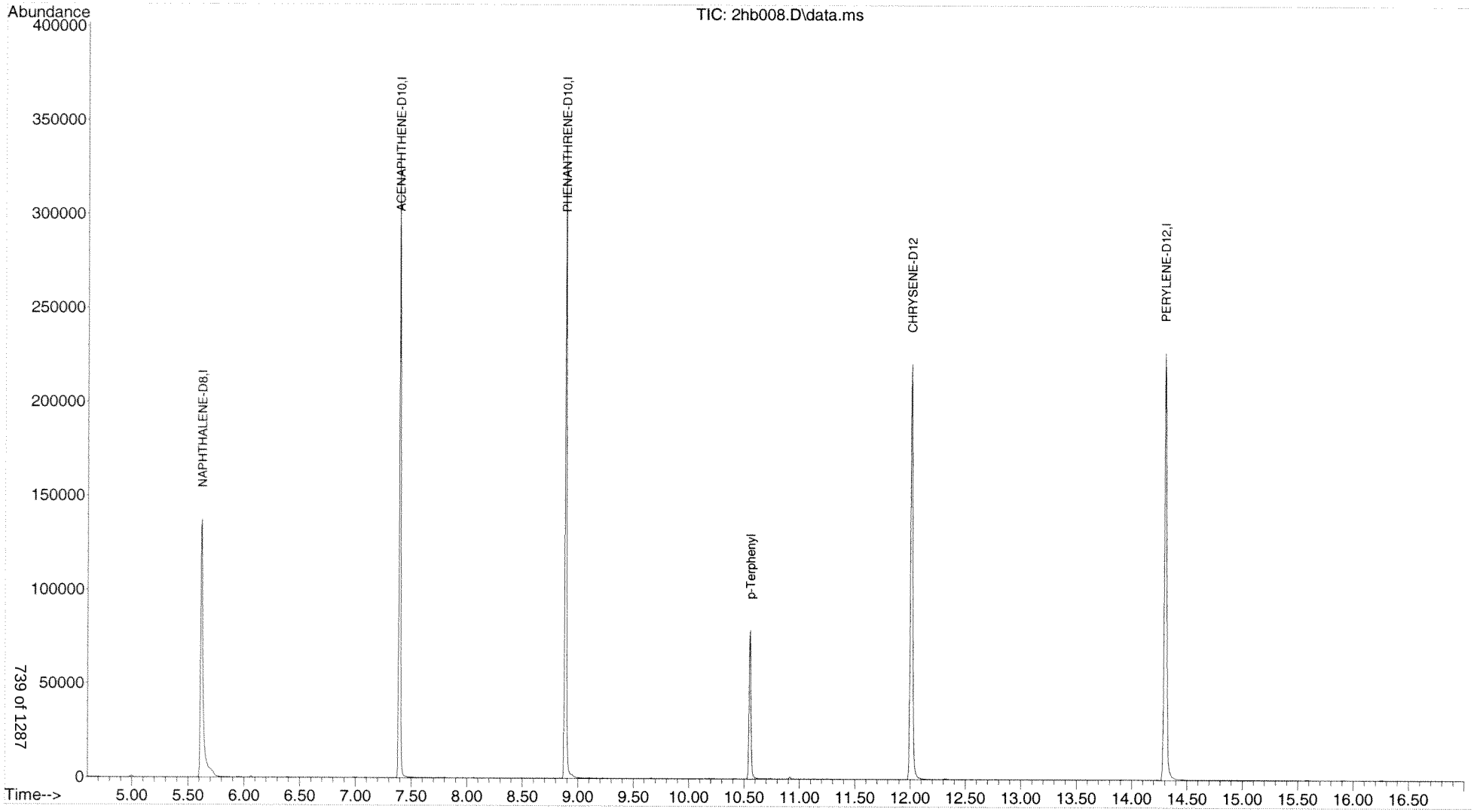
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	196737	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	148493	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	280332	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.012	240	302949	0.50 ug/mL	0.01
18) PERYLENE-D12	14.301	264	272722	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	67479	0.0936 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb008.D
Acq On : 7 Aug 2014 13:02
Operator : jfi
Sample : a404270-28
Misc :
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 07 13:29:45 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb009.D
Acq On : 7 Aug 2014 13:24
Operator : jfi
Sample : a404270-21
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 07 13:44:58 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

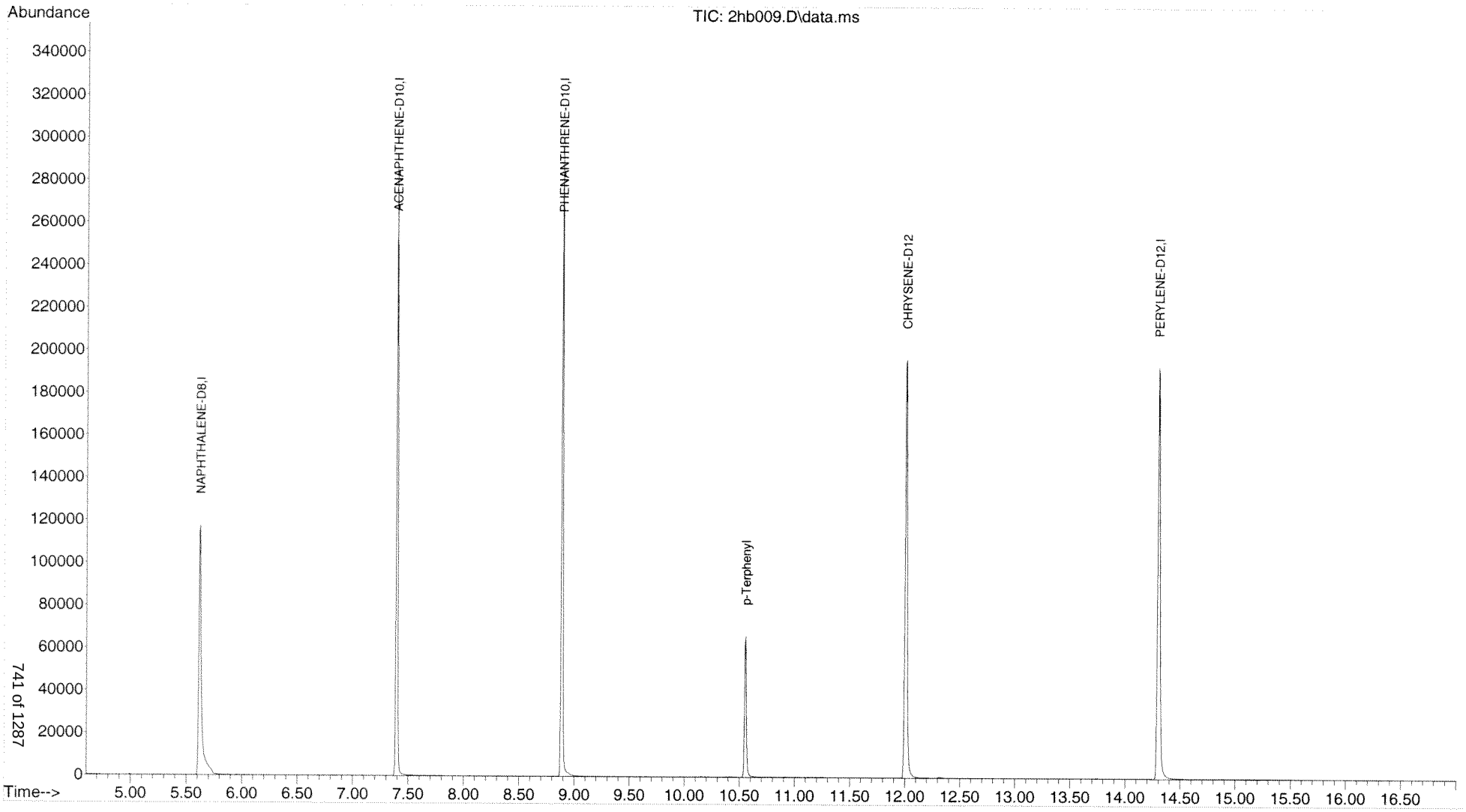
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	175288	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.393	164	131181	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	248537	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	270476	0.50 ug/mL	0.01
18) PERYLENE-D12	14.300	264	239156	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	57565	0.0900 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D. d	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb009.D
Acq On : 7 Aug 2014 13:24
Operator : jfi
Sample : a404270-21
Misc :
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 07 13:44:58 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb010.D
Acq On : 7 Aug 2014 13:46
Operator : jfi
Sample : a404270-22
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 07 14:05:17 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

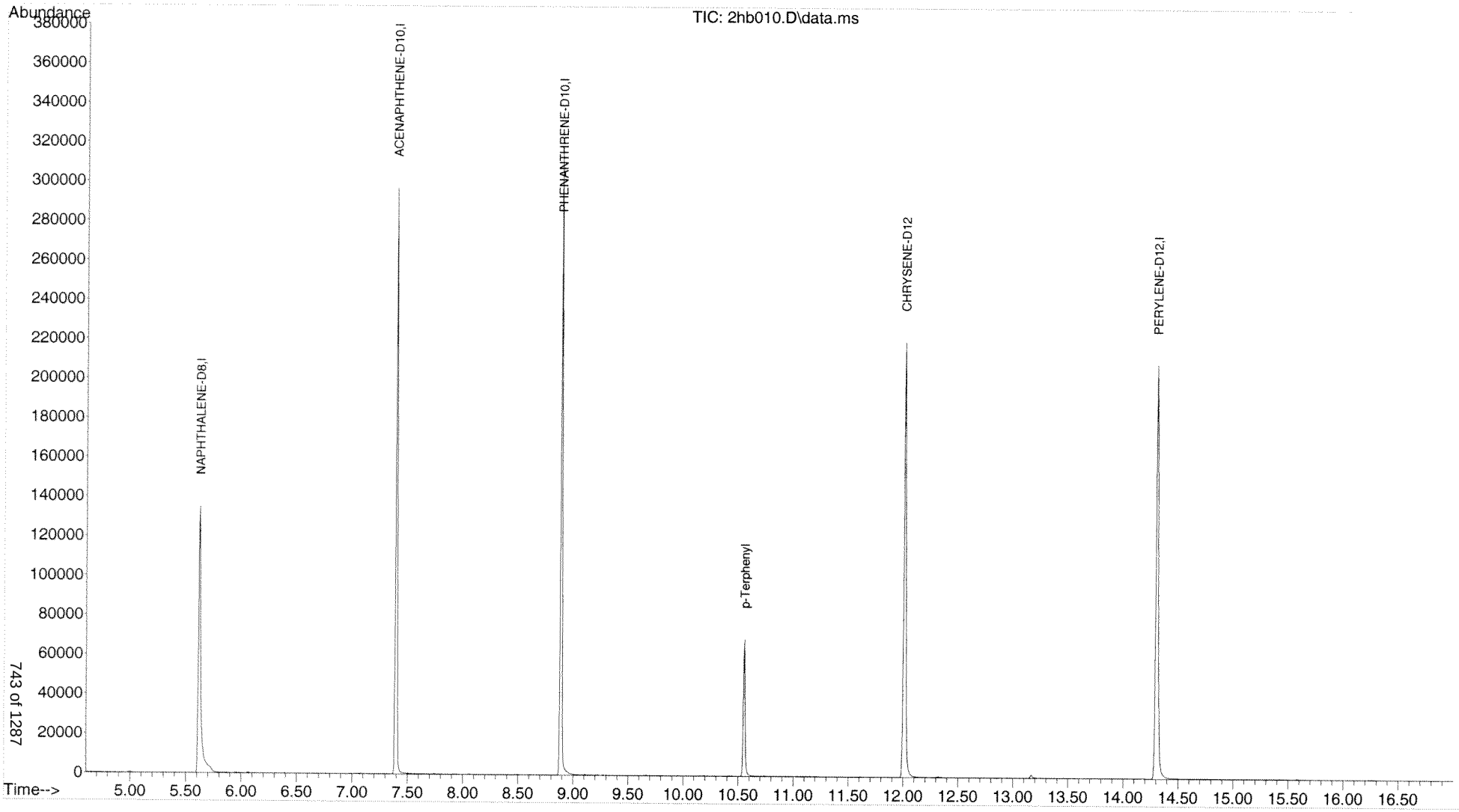
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.622	136	187795	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.393	164	138681	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	262128	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	285599	0.50 ug/mL	0.01
18) PERYLENE-D12	14.302	264	251591	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	56839	0.0843 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb010.D
Acq On : 7 Aug 2014 13:46
Operator : jfi
Sample : a404270-22
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 07 14:05:17 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:28:06 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

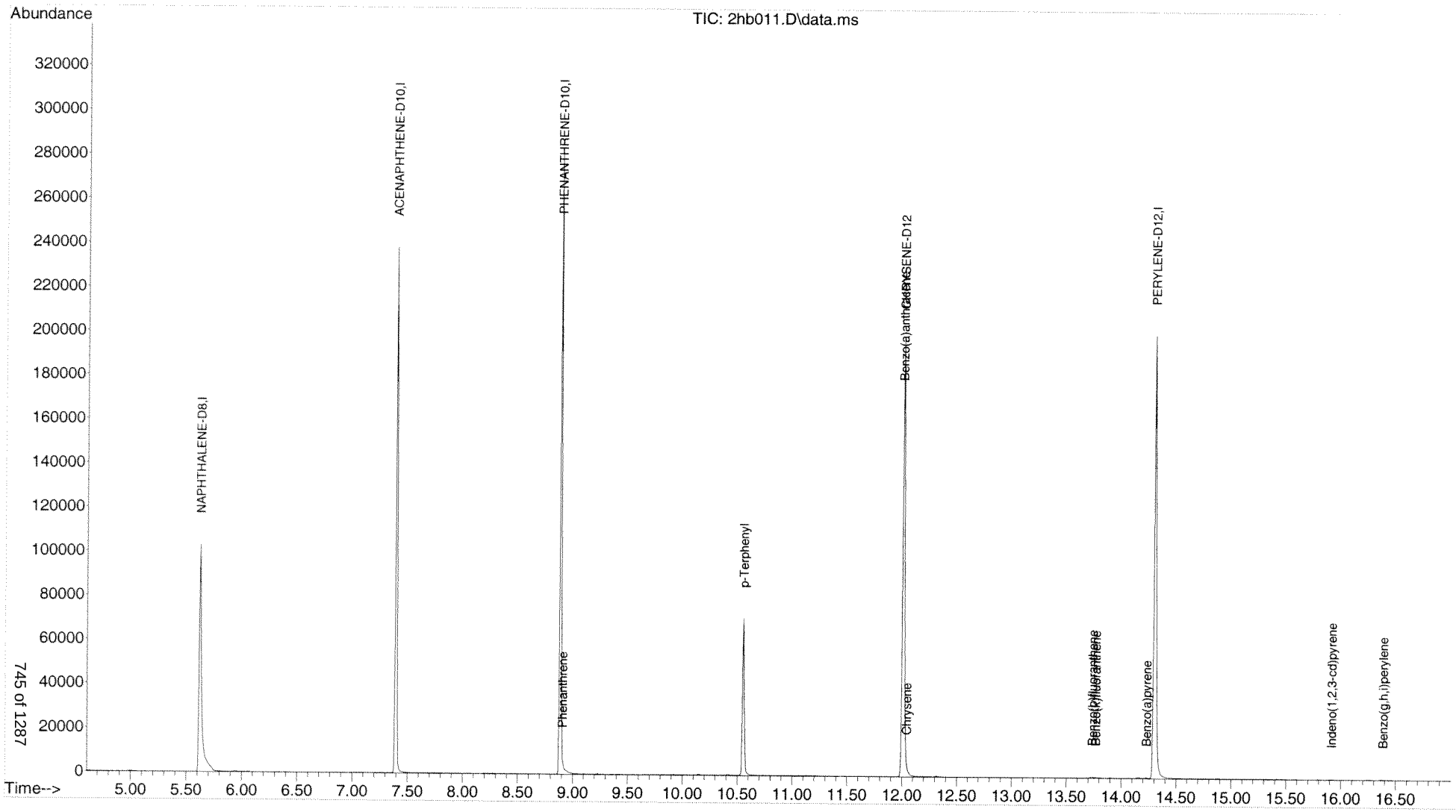
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.624	136	146284	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.393	164	110818	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.888	188	227220	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	256152	0.50 ug/mL	0.01
18) PERYLENE-D12	14.302	264	230902	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	8.908	178	294	0.0005 ug/mL#	60
11) Anthracene	0.000		0	N.D. d	
12) Fluoranthene	0.000		0	N.D. d	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.555	230	56741	0.0971 ug/mL	100
16) Benzo(a)anthracene	12.005	228	1196	0.0017 ug/mL#	51
17) Chrysene	12.043	228	428m	0.0007 ug/mL	
19) Benzo(b)fluoranthene	13.735	252	688m	0.0010 ug/mL	
20) Benzo(k)fluoranthene	13.765	252	298m	0.0004 ug/mL	
21) Benzo(a)pyrene	14.229	252	256	0.0004 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.912	276	283	0.0004 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	16.381	276	272	0.0005 ug/mL#	58

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

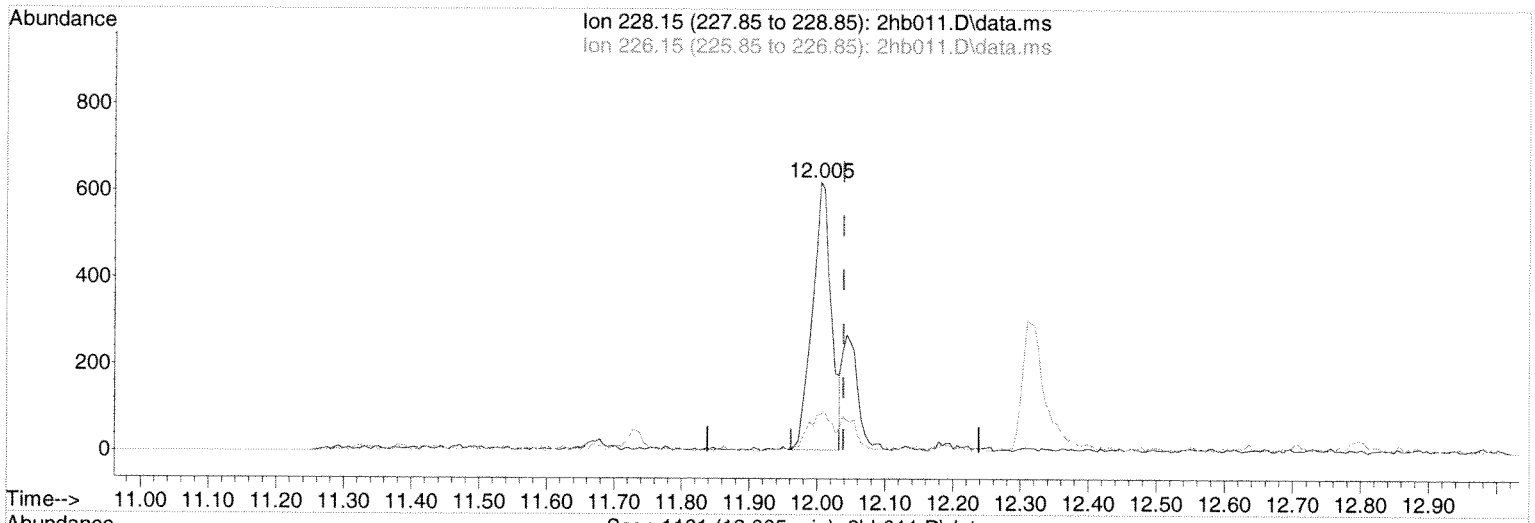
Quant Time: Aug 07 14:28:06 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

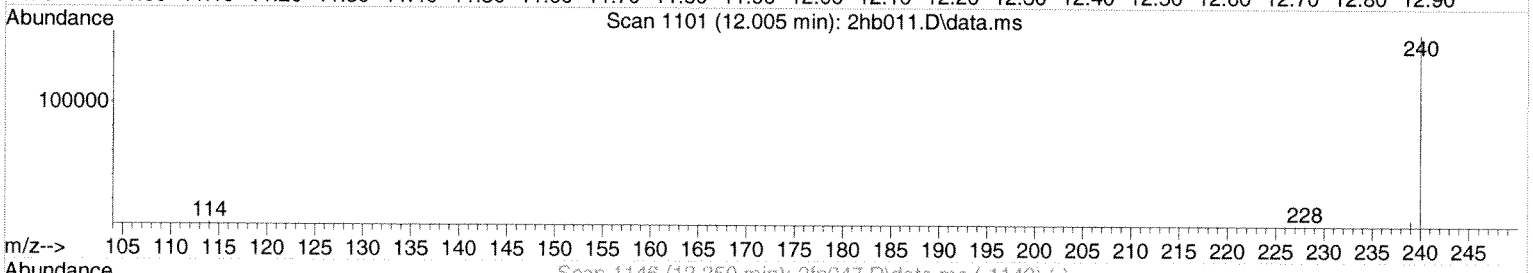


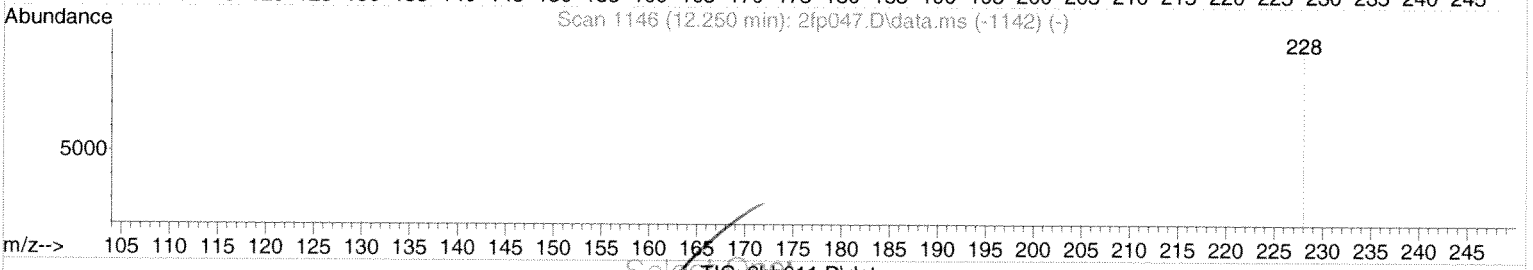
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb011.D\data.ms

(17) Chrysene

12.005min (-0.033) 0.00 ug/mL

response 1196

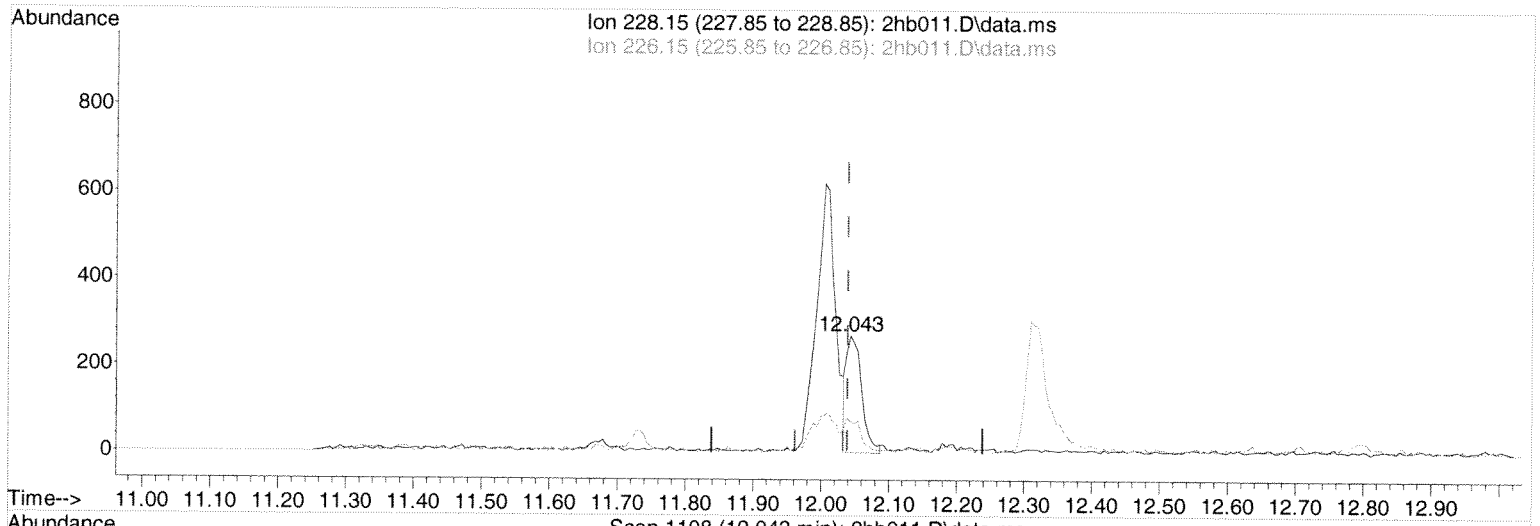
Ion	Exp%	Act%
228.15	100	100
226.15	28.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

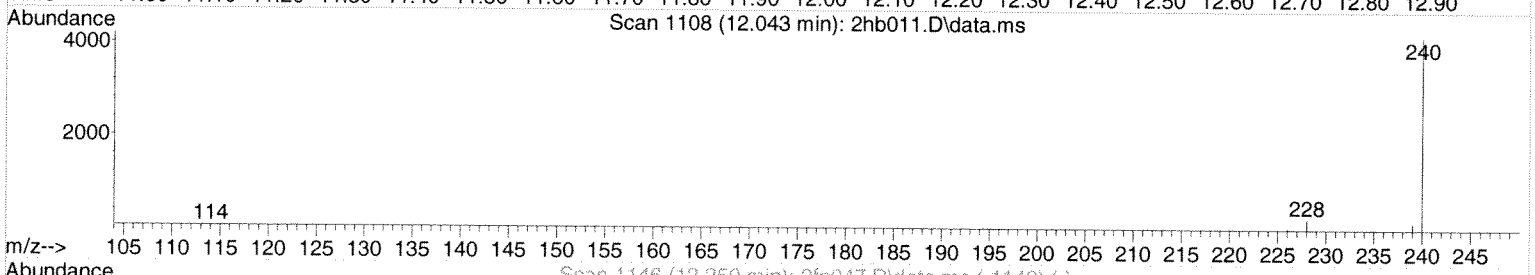
Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8.7.14
Review by/Date: 8/8/14

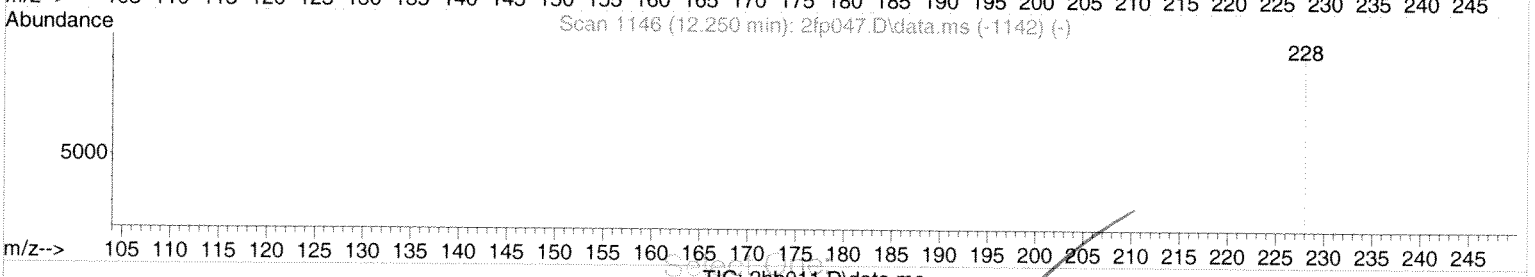
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb011.D\data.ms

(17) Chrysene

12.043min (+0.005) 0.00 ug/mL m

response 428

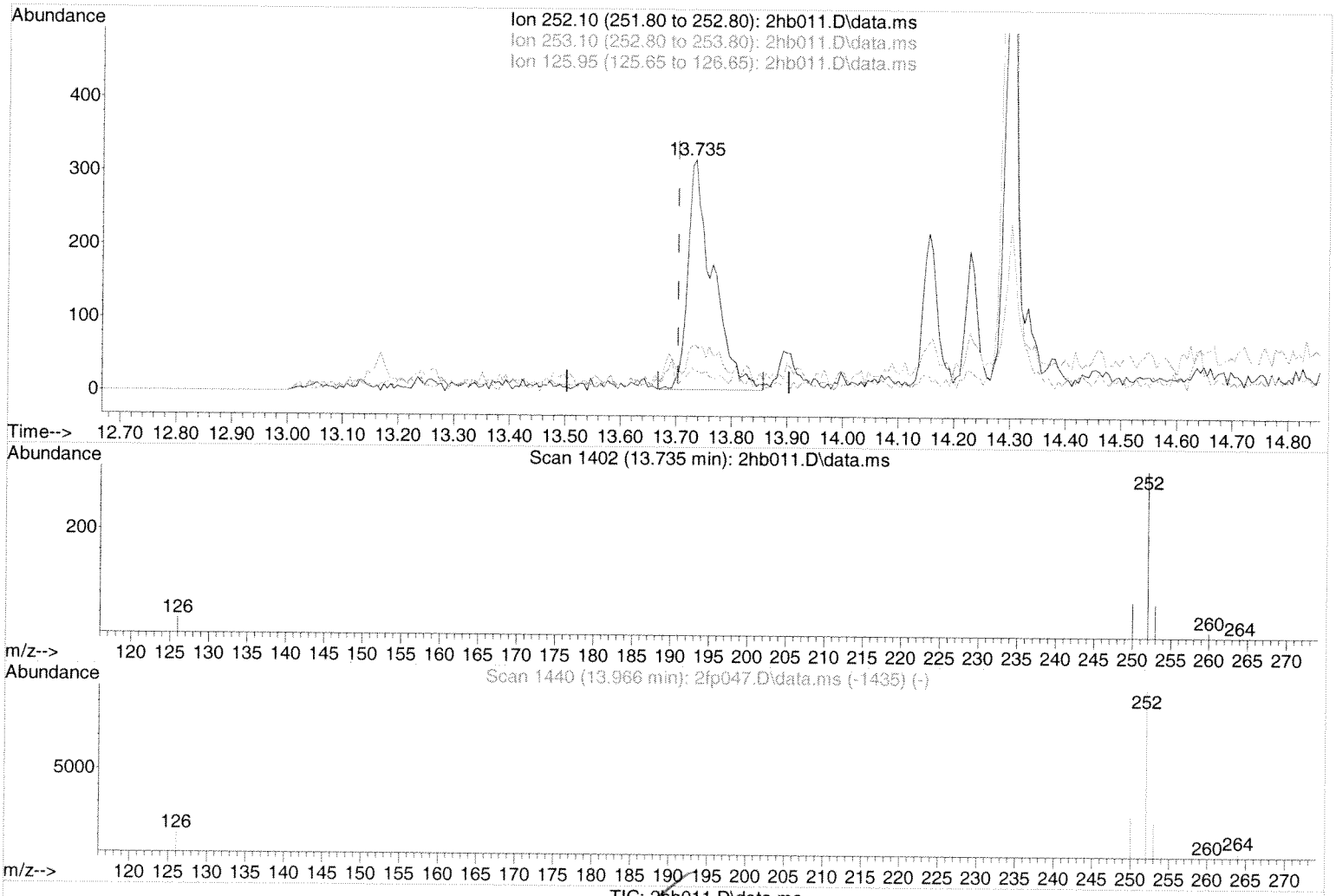
Ion	Exp%	Act%
228.15	100	100
226.15	28.00	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Comments:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8.7.14
Review by/Date: 8/07/14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



(19) Benzo(b)fluoranthene

13.735min (+0.031) 0.00 ug/mL

response 984

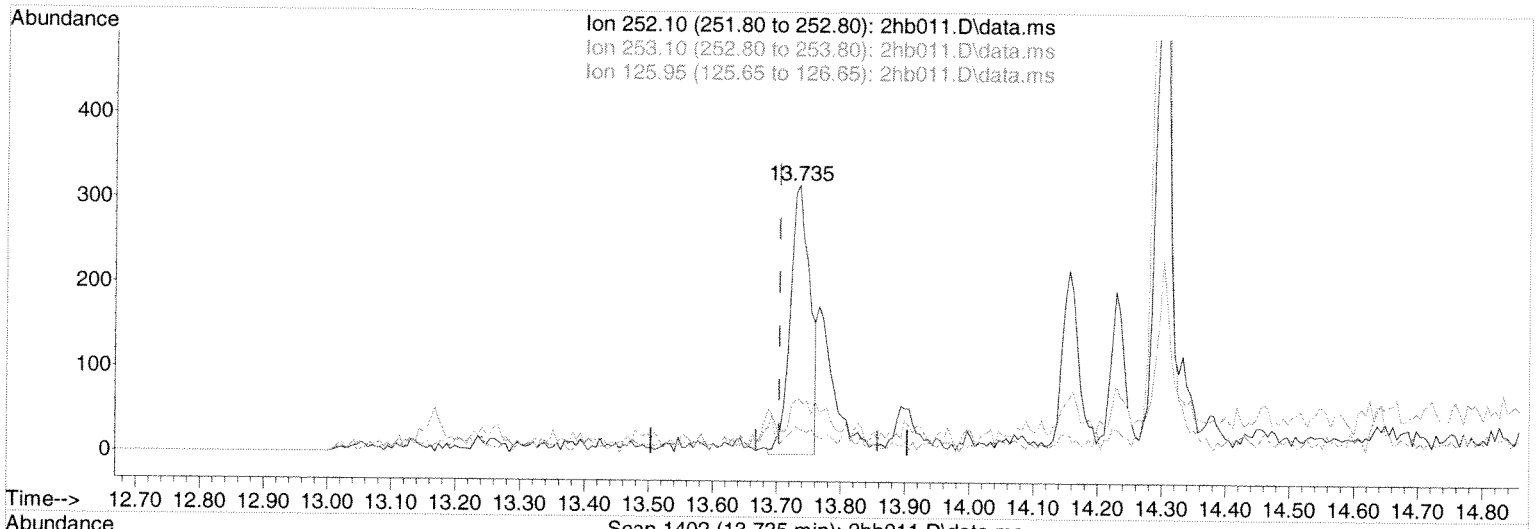
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	11.48
125.95	11.50	0.00
0.00	0.00	0.00

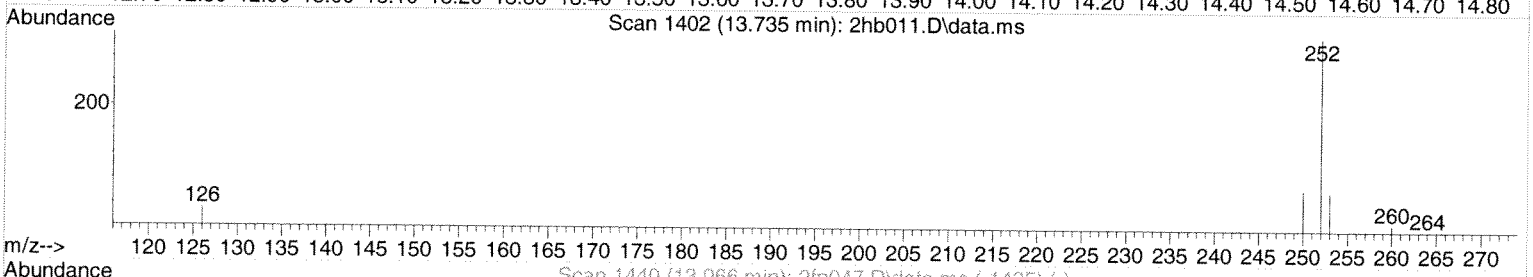
Select One:
[] Original Integration [] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8/7/14
Review by/Date: CDF 0214

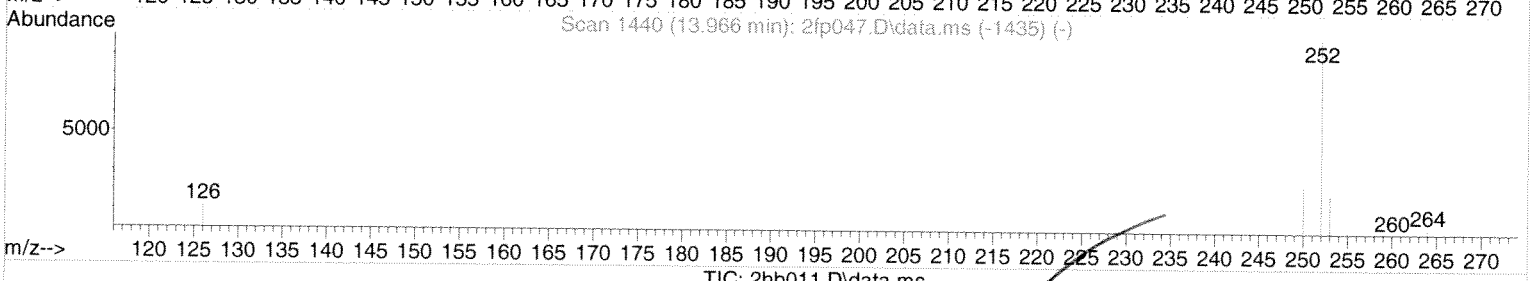
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb011.D\data.ms

(19) Benzo(b)fluoranthene

13.735min (+0.031) 0.00 ug/mL m

response 688

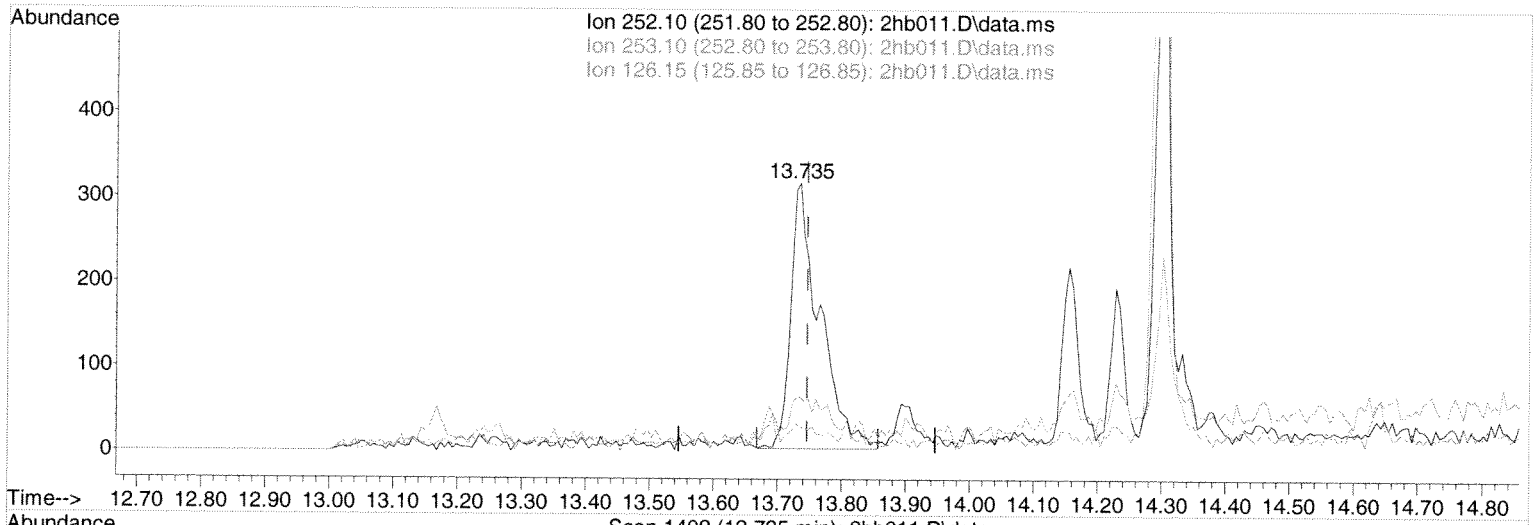
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	16.42
125.95	11.50	0.00
0.00	0.00	0.00

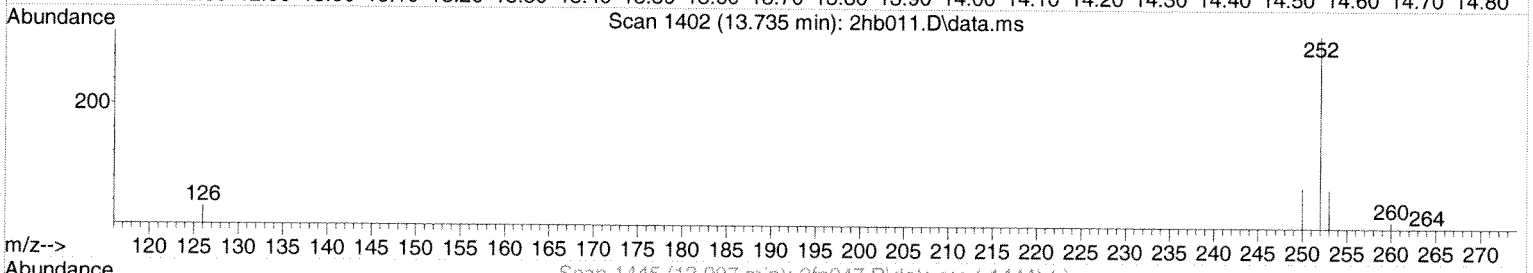
Select QFS:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8-8-7.14
Review by/Date: 080714

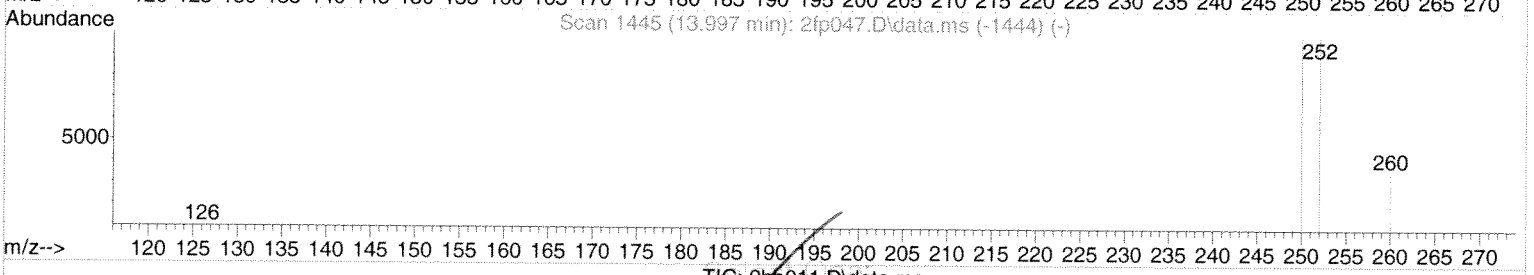
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb011.D\data.ms

(20) Benzo(k)fluoranthene

13.735min (-0.011) 0.00 ug/mL

response 984

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	11.48
126.15	11.70	0.00
0.00	0.00	0.00

[✓] Original Integration [] Manual Integration

Select reason for manual integration:

[] Poor integration (peak tailing, baseline selection)

[] Incorrect peak selection/Peak not found

[] Hump integration

[] Baseline drop for split peaks

[] ISTD reintegration

[] Other:

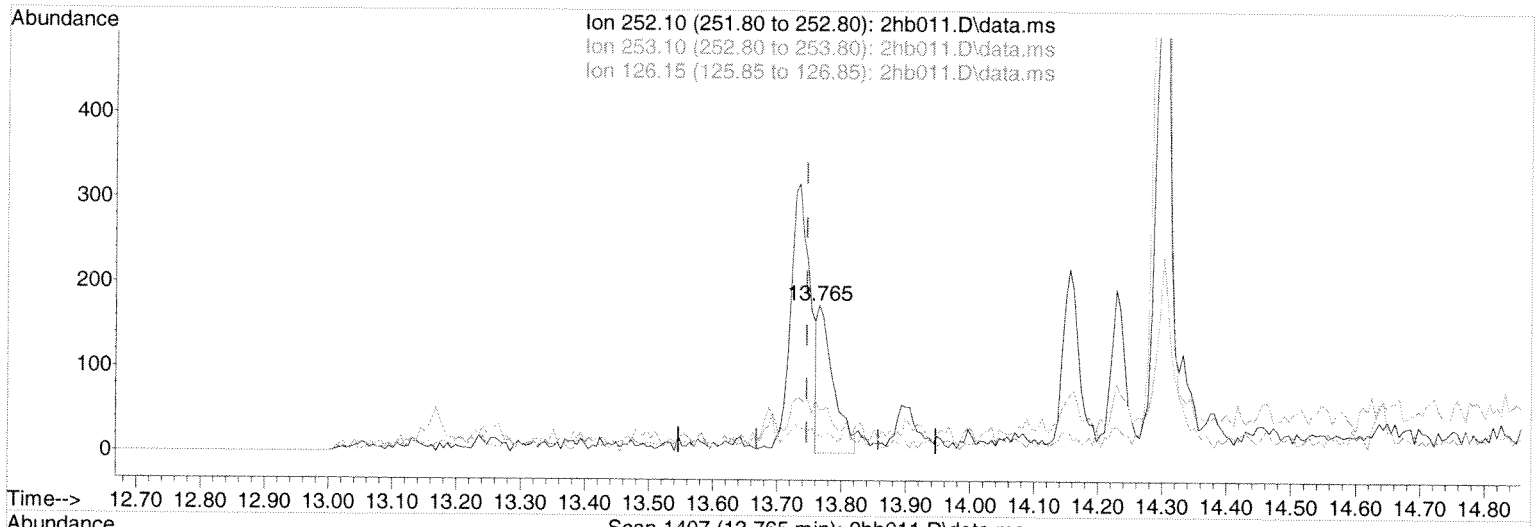
Review by/Date 8/7/14

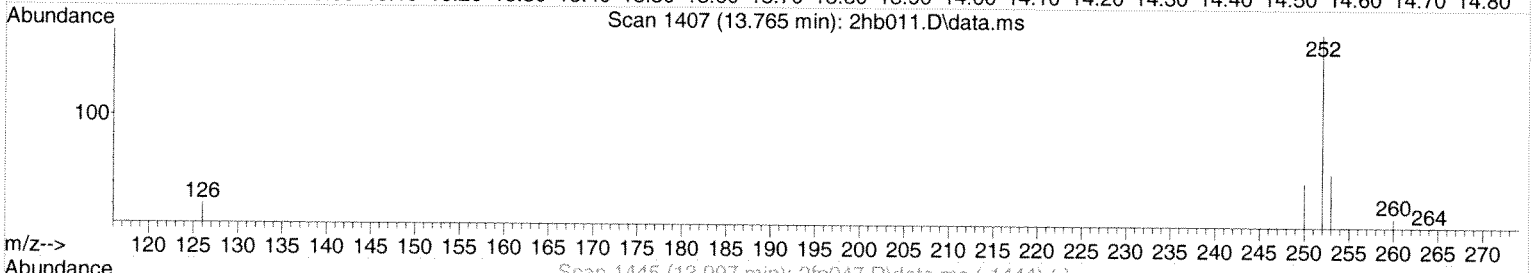
Review by/Date: 080714

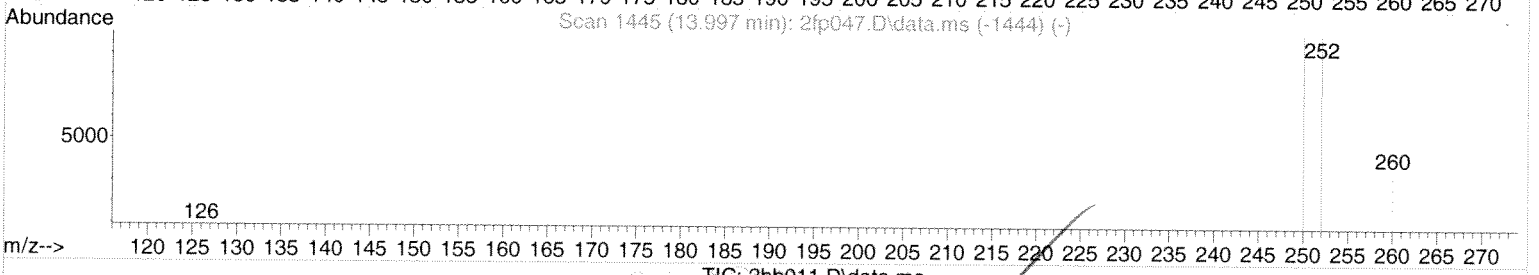
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb011.D
Acq On : 7 Aug 2014 14:08
Operator : jfi
Sample : a404270-23
Misc :
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 07 14:27:03 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb011.D\data.ms

(20) Benzo(k)fluoranthene

13.765min (+0.019) 0.00 ug/mL m

response 298

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	37.92
126.15	11.70	0.00
0.00	0.00	0.00

Select:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: JL 8/14
Review by/Date: RC 080314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb012.D
Acq On : 7 Aug 2014 14:30
Operator : jfi
Sample : a404270-24
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 07 14:50:00 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

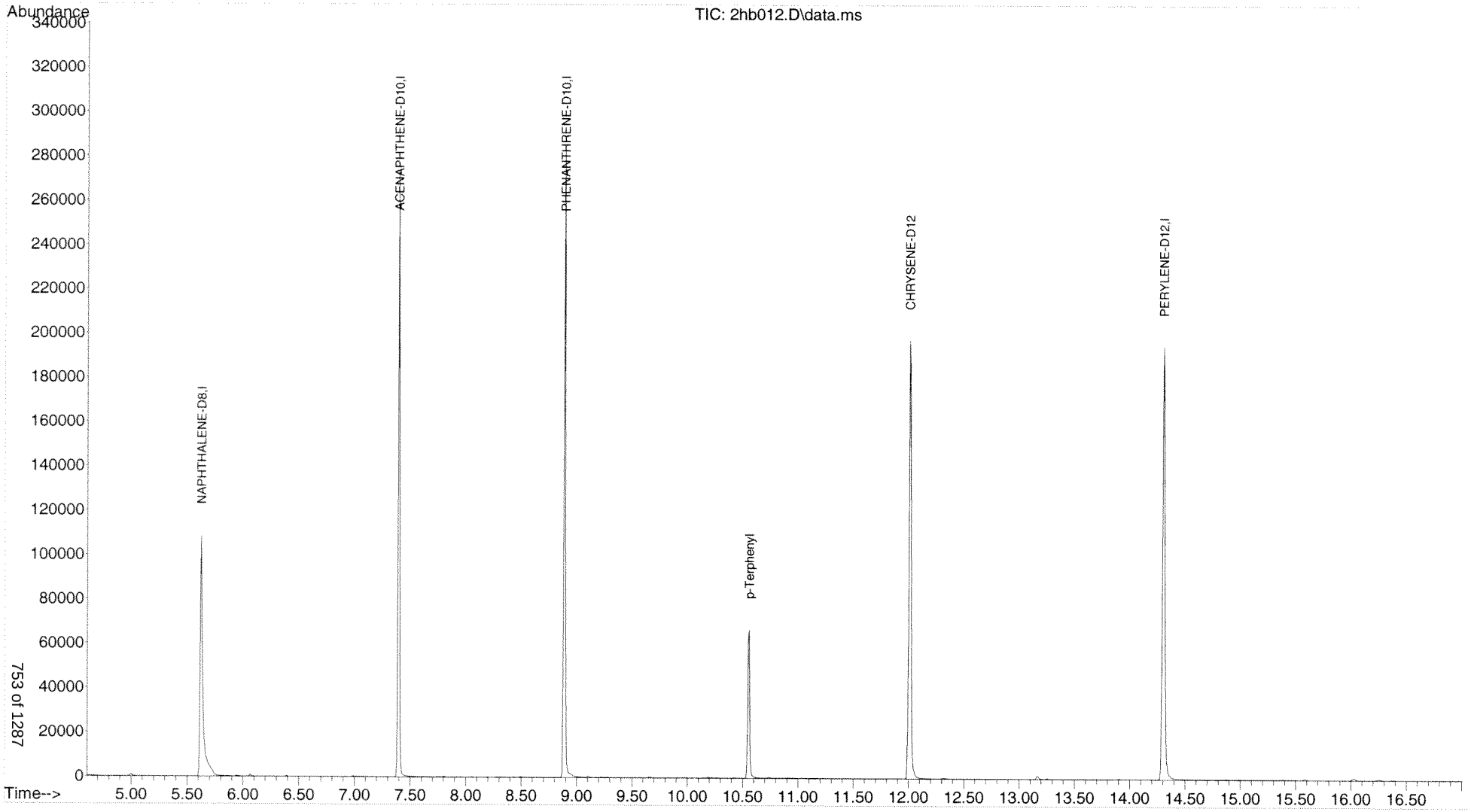
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.624	136	162256	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	119683	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	239232	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.007	240	261551	0.50 ug/mL	0.00
18) PERYLENE-D12	14.301	264	233262	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	55977	0.0910 ug/mL	99
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D.	
20) Benzo(k)fluoranthene	0.000		0	N.D.	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D. d	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb012.D
Acq On : 7 Aug 2014 14:30
Operator : jfi
Sample : a404270-24
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 07 14:50:00 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb013.D
Acq On : 7 Aug 2014 14:51
Operator : jfi
Sample : a404270-25
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 07 15:17:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

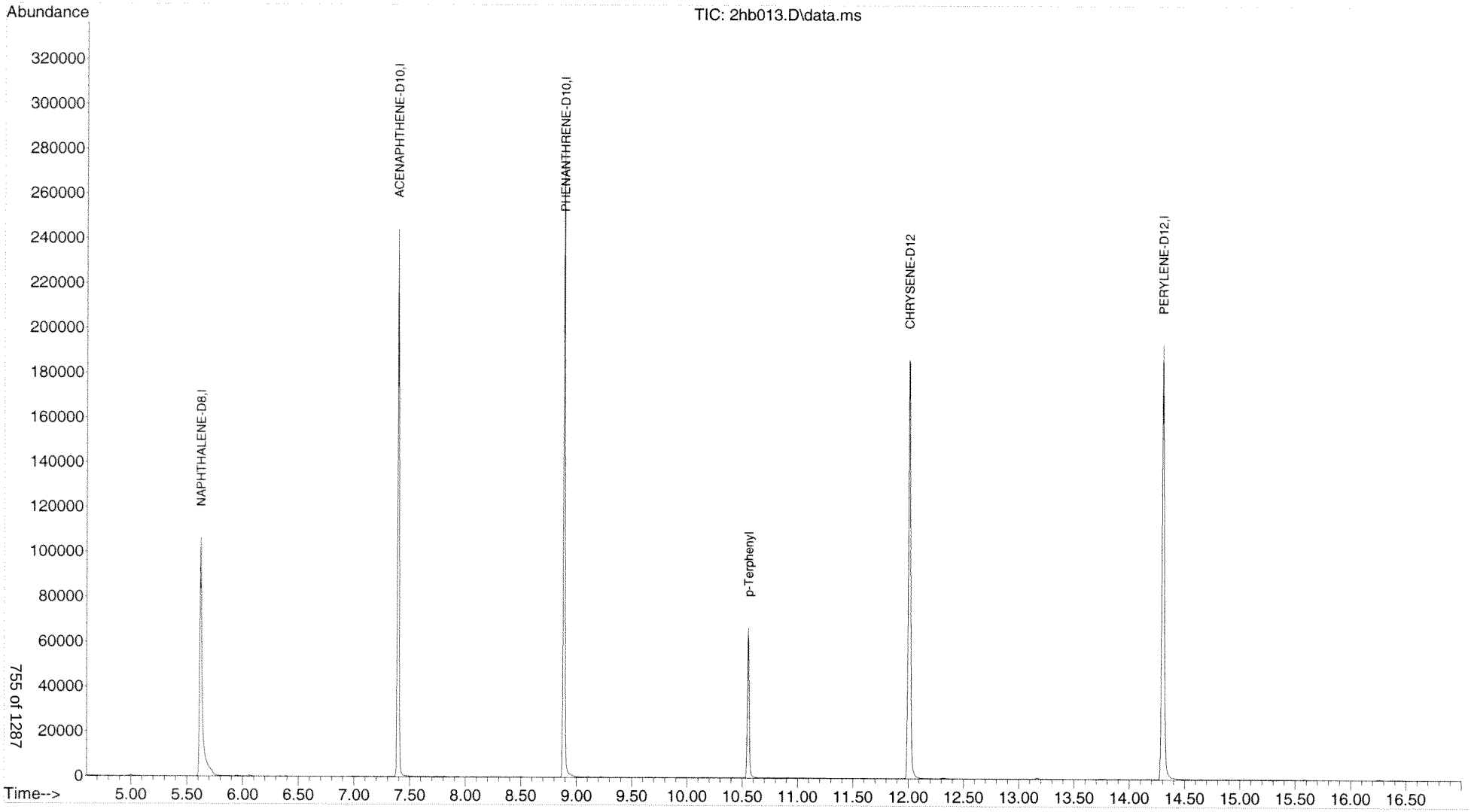
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	152747	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	113439	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	227446	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.006	240	254033	0.50 ug/mL	0.00
18) PERYLENE-D12	14.300	264	226905	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	54039	0.0924 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D. d	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb013.D
Acq On : 7 Aug 2014 14:51
Operator : jfi
Sample : a404270-25
Misc :
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 07 15:17:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb014.D
Acq On : 7 Aug 2014 15:13
Operator : jfi
Sample : a404270-26
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 07 15:31:54 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

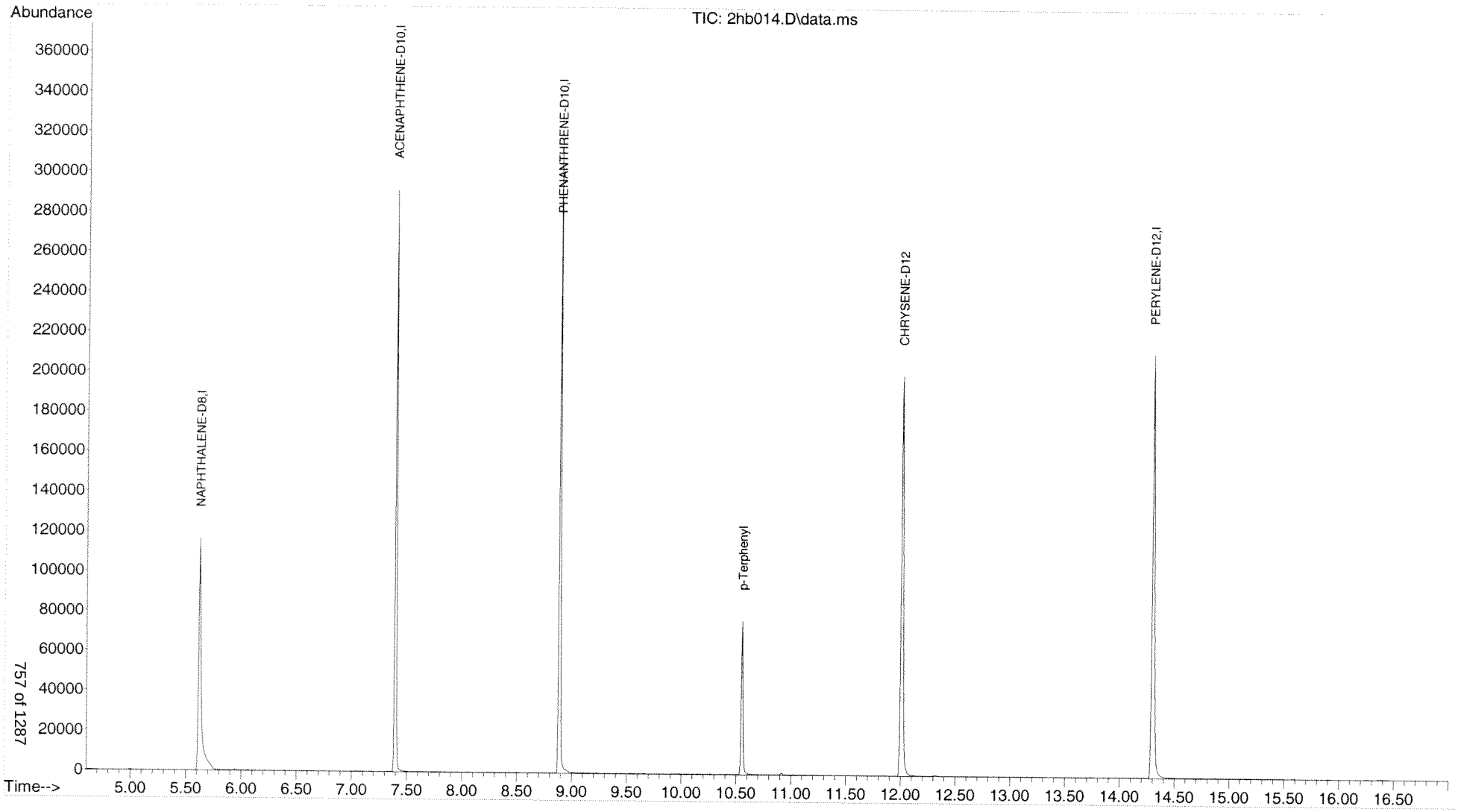
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.621	136	171714	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	128051	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.887	188	247429	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.011	240	270675	0.50 ug/mL	0.01
18) PERYLENE-D12	14.302	264	244532	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.554	230	60494	0.0950 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	0.000		0	N.D. d	
20) Benzo(k)fluoranthene	0.000		0	N.D. d	
21) Benzo(a)pyrene	0.000		0	N.D. d	
22) Indeno(1,2,3-cd)pyrene	0.000		0	N.D.	
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D. d	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb014.D
Acq On : 7 Aug 2014 15:13
Operator : jfi
Sample : a404270-26
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 07 15:31:54 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 07 16:01:47 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

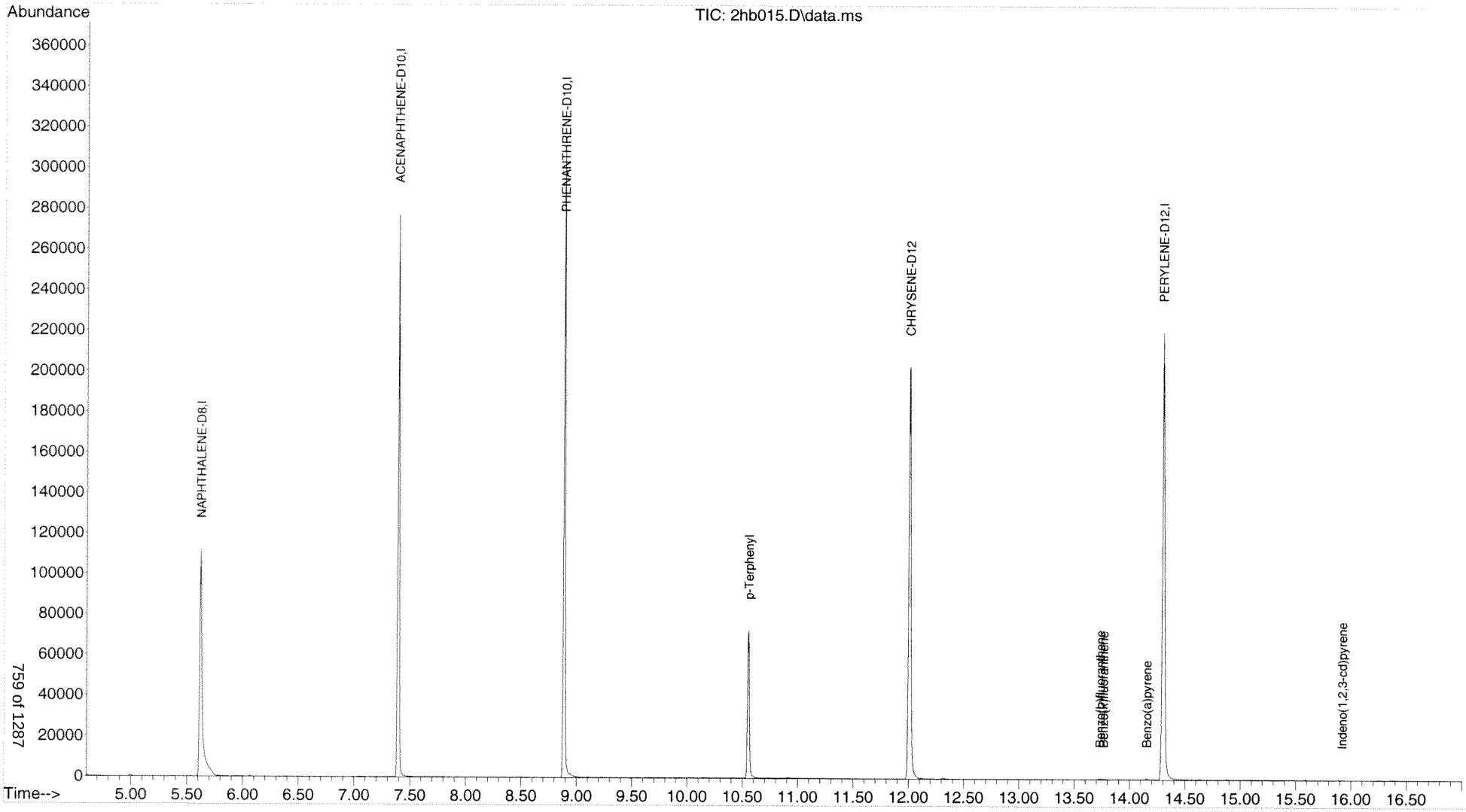
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) NAPHTHALENE-D8	5.623	136	163726	0.50 ug/mL	0.01
5) ACENAPHTHENE-D10	7.394	164	124824	0.50 ug/mL	0.00
9) PHENANTHRENE-D10	8.889	188	253941	0.50 ug/mL	0.00
15) CHRYSENE-D12	12.012	240	282404	0.50 ug/mL	0.01
18) PERYLENE-D12	14.301	264	254484	0.50 ug/mL	0.00
Target Compounds					Qvalue
2) Naphthalene	0.000		0	N.D.	
3) 2-Methylnaphthalene	0.000		0	N.D.	
4) 1-Methylnaphthalene	0.000		0	N.D.	
6) Acenaphthylene	0.000		0	N.D.	
7) Acenaphthene	0.000		0	N.D. d	
8) Fluorene	0.000		0	N.D.	
10) Phenanthrene	0.000		0	N.D.	
11) Anthracene	0.000		0	N.D.	
12) Fluoranthene	0.000		0	N.D.	
13) Pyrene	0.000		0	N.D. d	
14) p-Terphenyl	10.556	230	62815	0.0962 ug/mL	100
16) Benzo(a)anthracene	0.000		0	N.D. d	
17) Chrysene	0.000		0	N.D. d	
19) Benzo(b)fluoranthene	13.734	252	504m	0.0007 ug/mL	
20) Benzo(k)fluoranthene	13.764	252	249m	0.0003 ug/mL	
21) Benzo(a)pyrene	14.155	252	310	0.0005 ug/mL#	60
22) Indeno(1,2,3-cd)pyrene	15.919	276	267	0.0004 ug/mL#	53
23) Dibenzo(a,h)anthracene	0.000		0	N.D.	
24) Benzo(g,h,i)perylene	0.000		0	N.D.	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

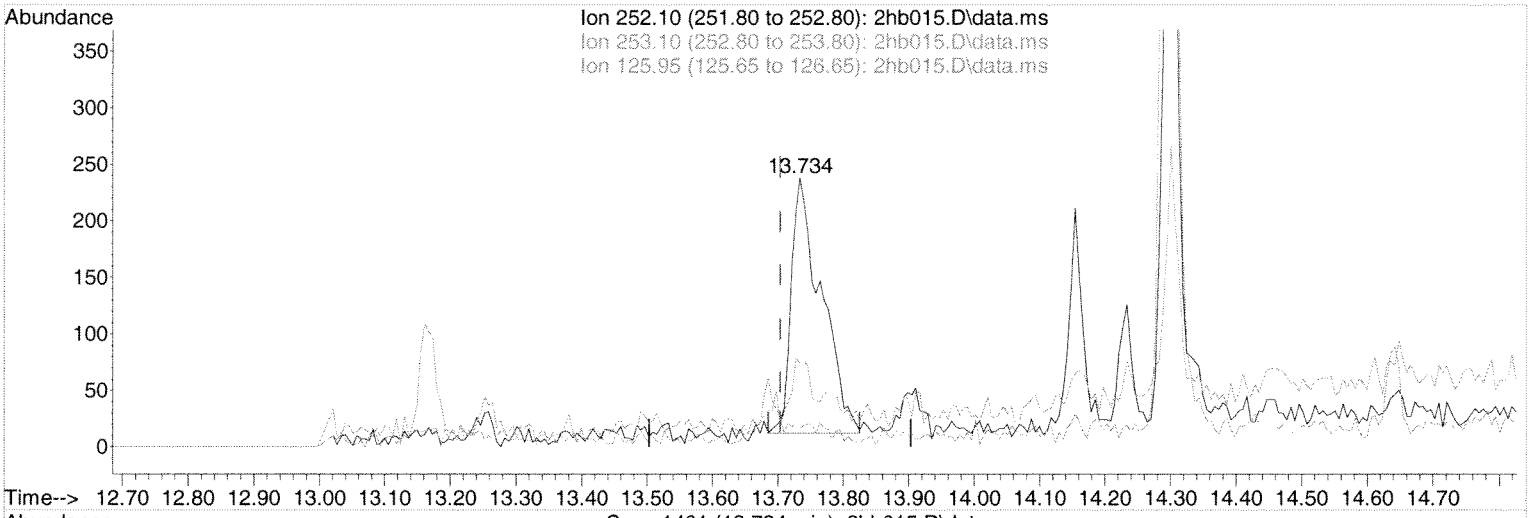
Quant Time: Aug 07 16:01:47 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration

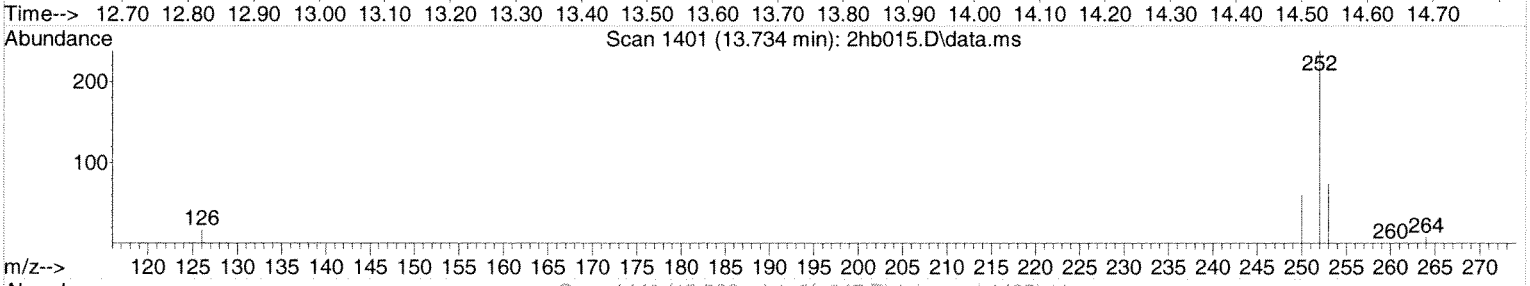


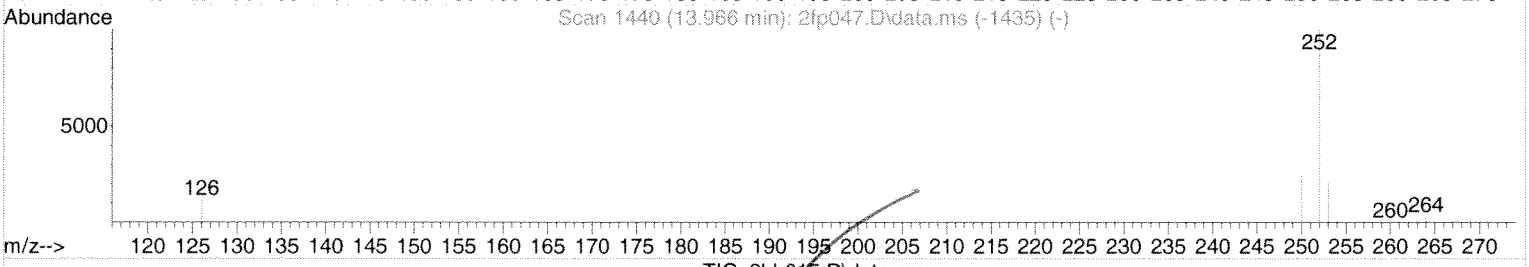
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 07 16:01:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb015.D\data.ms

(19) Benzo(b)fluoranthene

13.734min (+0.031) 0.00 ug/mL

response 723

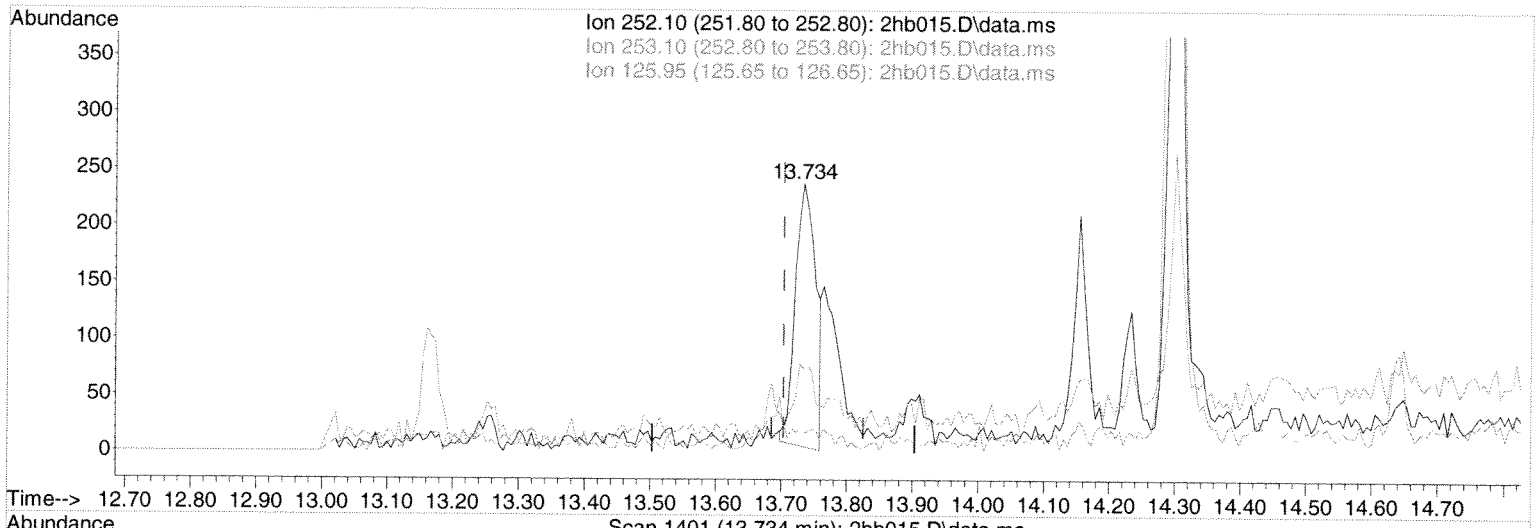
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	18.40
125.95	11.50	0.00
0.00	0.00	0.00

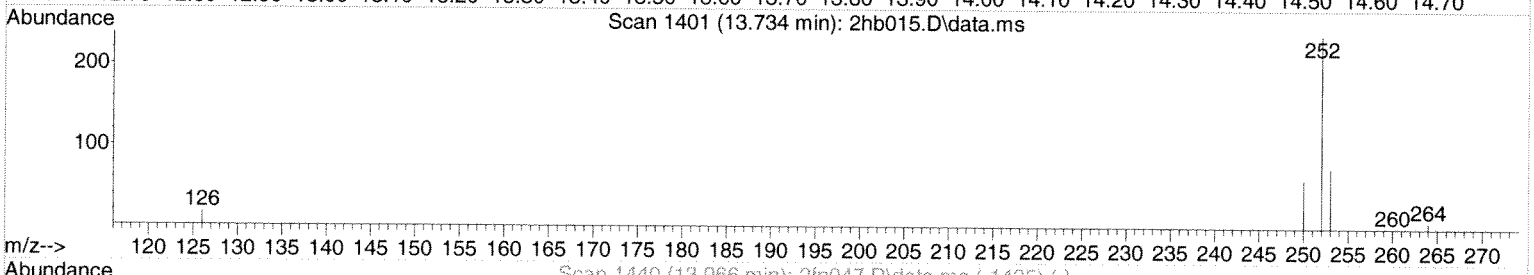
Select One:
[✓] Original Integration [ ] Manual Integration
Select reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8.7.14
Review by/Date: 08/07/14

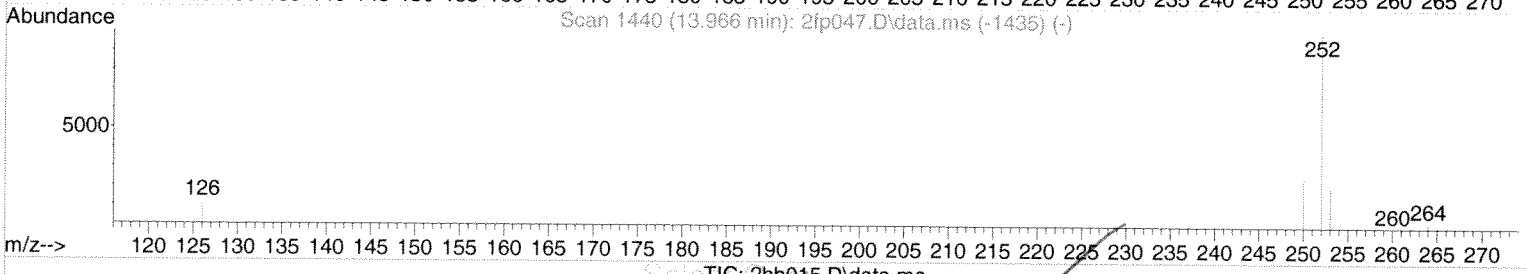
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 07 16:01:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb015.D\data.ms

(19) Benzo(b)fluoranthene

13.734min (+0.031) 0.00 ug/mL m

response 504

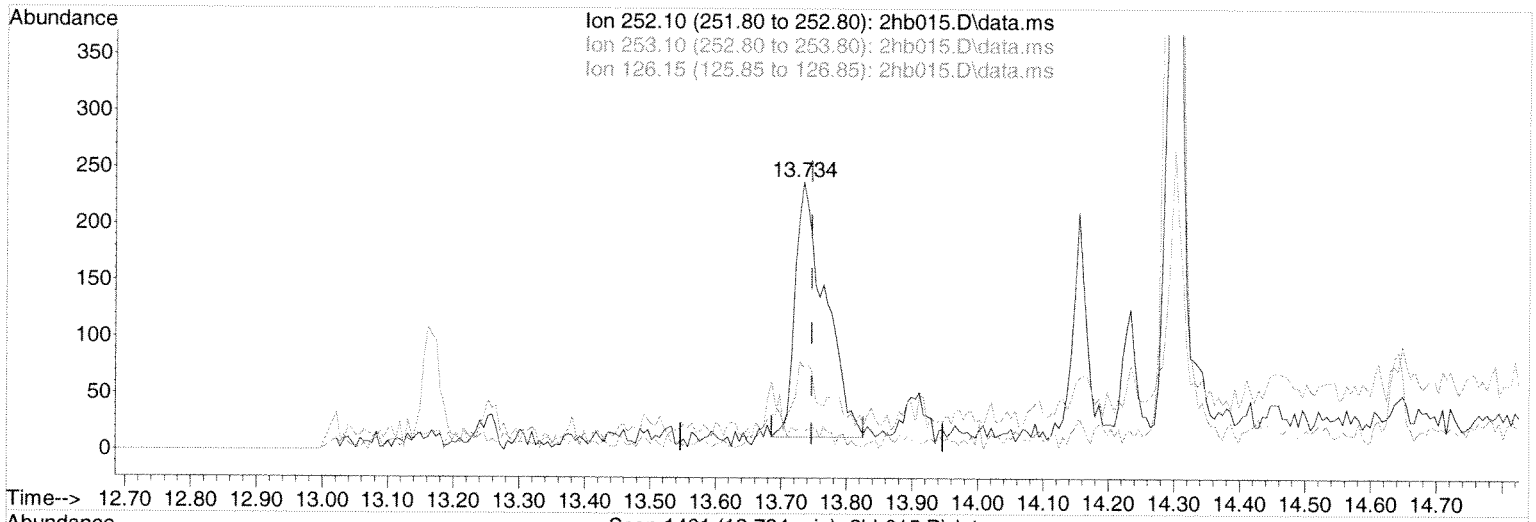
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	26.39
125.95	11.50	0.00
0.00	0.00	0.00

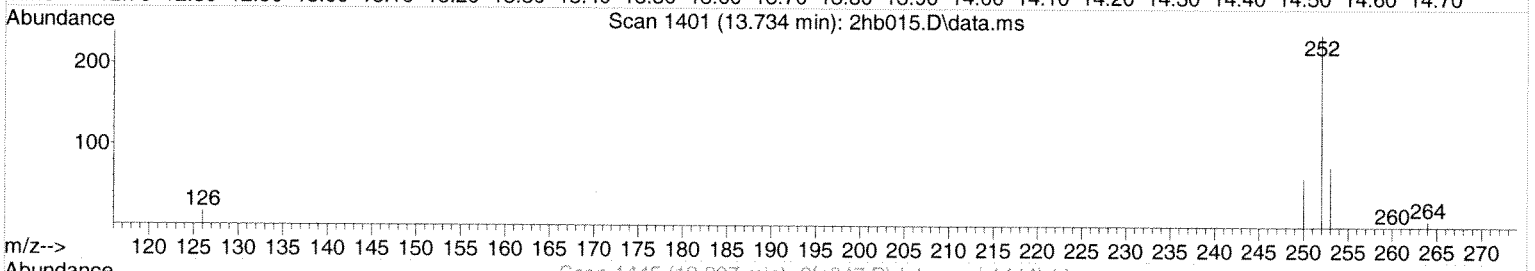
Select reason:
[] Original Integration [✓] Manual Integration
Select reason for manual integration:
[] Poor integration (peak tailing, baseline selection)
[✓] Incorrect peak selection/Peak not found
[] Hump integration
[] Baseline drop for split peaks
[] ISTD reintegration
[] Other:
Review by/Date: 8-7-14
Review by/Date: 8/8/14

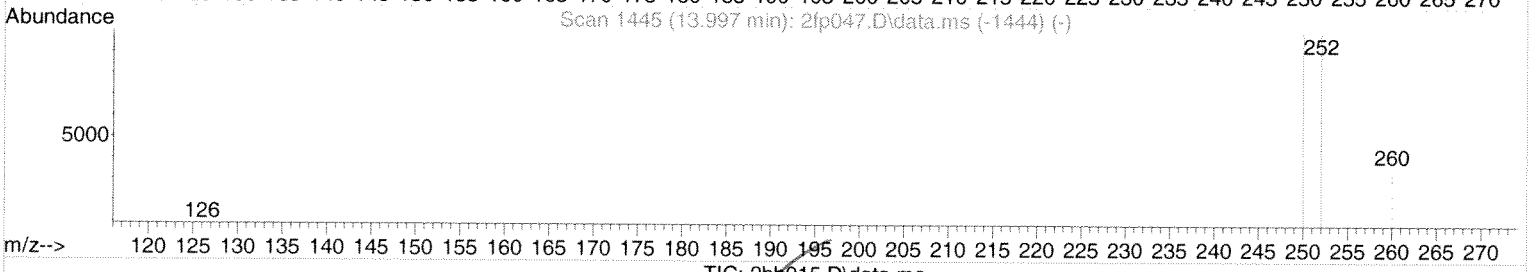
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 07 16:01:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb015.D\data.ms

(20) Benzo(k)fluoranthene

13.734min (-0.012) 0.00 ug/mL

response 723

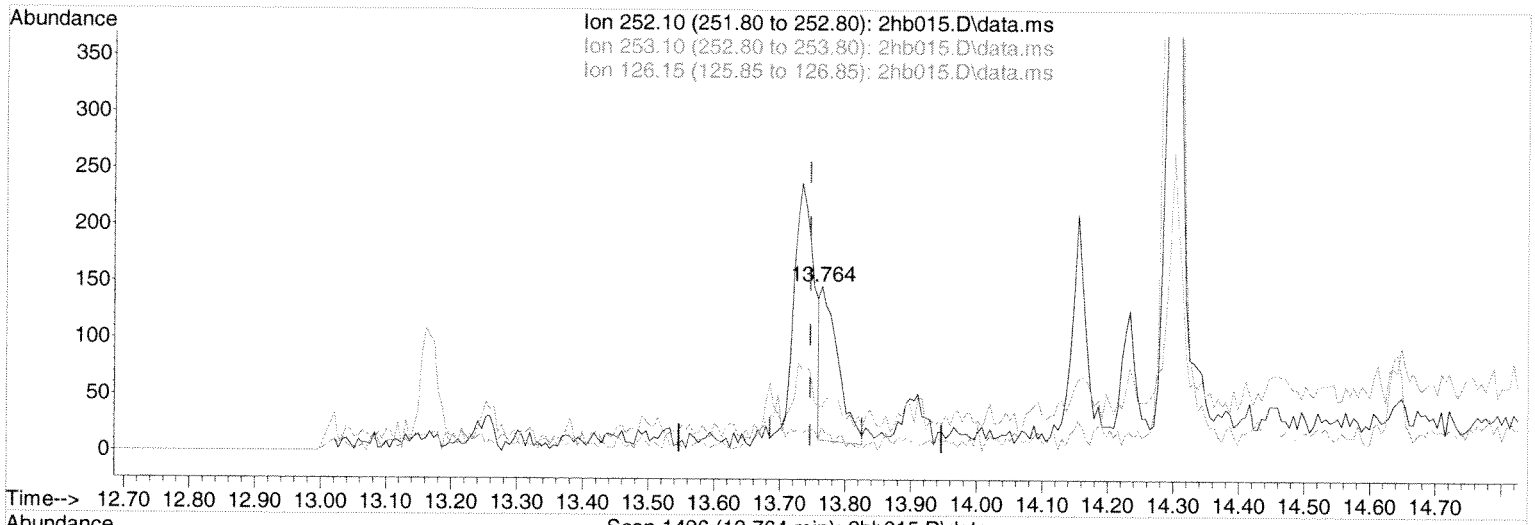
Ion	Exp%	Act%
252.10	100	100
253.10	21.60	18.40
126.15	11.70	0.00
0.00	0.00	0.00

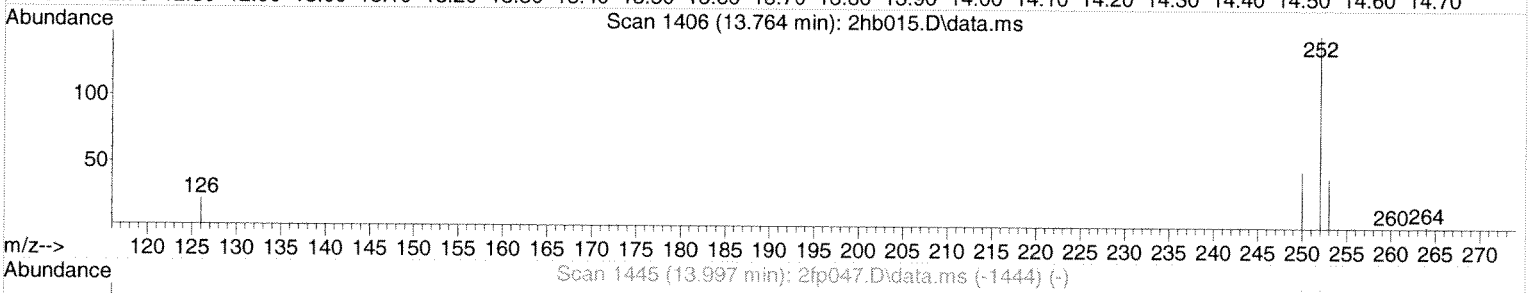
[x] Original Integration [ ] Manual Integration
[ ] Reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8-7-14
Review by/Date: R Porosix

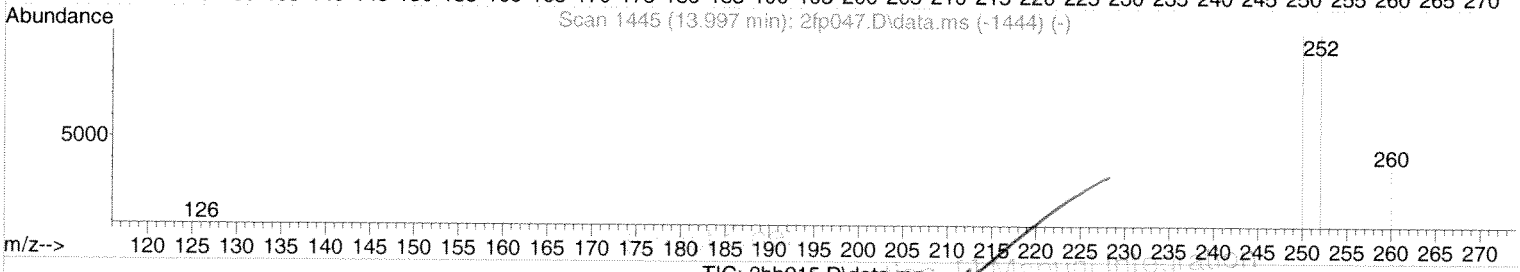
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\080714\
Data File : 2hb015.D
Acq On : 7 Aug 2014 15:35
Operator : jfi
Sample : a404270-27
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 07 16:01:11 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
QLast Update : Wed Jul 30 10:04:34 2014
Response via : Initial Calibration







TIC: 2hb015.D\data.ms

(20) Benzo(k)fluoranthene

13.764min (+0.018) 0.00 ug/mL m

response 249

Ion	Exp%	Act%
252.10	100	100
253.10	21.60	53.41#
126.15	11.70	0.00
0.00	0.00	0.00

Reason for manual integration:
[ ] Poor integration (peak tailing, baseline selection)
[ ] Incorrect peak selection/Peak not found
[ ] Hump integration
[ ] Baseline drop for split peaks
[ ] ISTD reintegration
[ ] Other:
Review by/Date: 8-7-14
Review by/Date: 8/08/14

ANALYSIS SEQUENCE

AA28739

Instrument: OSVGCMS2

Calibration ID: 1405053

Printed: 5/19/2014 11:32:36

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
AA28739-TUN1	QC		1		A4D0161			
AA28739-CAL1	QC		2		A4E0240	A4A0401		
AA28739-CAL2	QC		3		A4E0241	A4A0401		
AA28739-CAL3	QC		4		A4E0242	A4A0401		
AA28739-CAL4	QC		5		A4E0243	A4A0401		
AA28739-CAL5	QC		6		A4E0244	A4A0401		
AA28739-CAL6	QC		7		A4E0245	A4A0401		
AA28739-CAL7	QC		8		A4E0246	A4A0401		
AA28739-SCV1	QC		9		A4E0247	A4A0401		

Samples Loaded By Date

Data Processed By Date

Response Factor Report OSVGCMS2

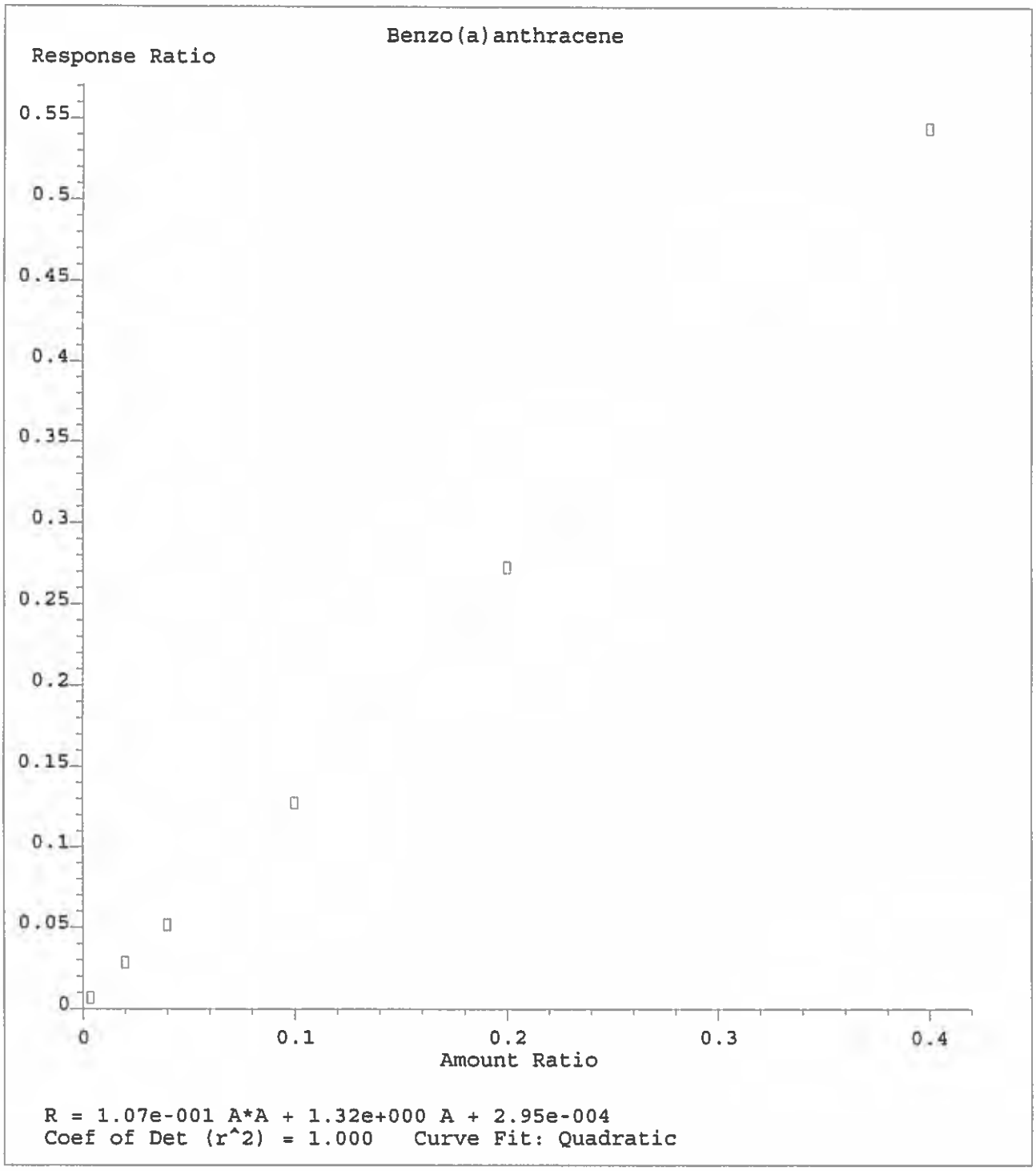
Method Path : C:\msdchem\1\METHODS\
Method File : 051314.M
Title : SOP SVGCMS-03; ELEMENT CAL 1405053; INST OSVGCMS2
Last Update : Wed May 14 08:05:09 2014
Response Via : Initial Calibration

Calibration Files
1 =2eh007.D 2 =2eh008.D 3 =2eh009.D 4 =2eh010.D 5 =2eh011.D 6 =2eh012.D 7 =2eh013.D

		Compound	1	2	3	4	5	6	7	Avg	%RSD
1)	I	NAPHTHALENE-D8	----------ISTD----------								
2)		Naphthalene	1.076	1.298	1.256	1.030	1.298	1.327	1.313	1.228	9.96
3)		2-Methylnaphth...	0.992	1.294	1.016	1.003	0.999	1.047	1.037	1.055	10.14
4)		1-Methylnaphth...	0.965	1.255	1.003	0.980	0.973	1.011	1.002	1.027	9.95
5)	I	ACENAPHTHENE-D10	----------ISTD----------								
6)		Acenaphthylene	1.864	1.951	1.925	1.933	2.171	2.245	2.262	2.050	8.24
7)		Acenaphthene	1.265	1.445	1.307	1.246	1.329	1.340	1.324	1.322	4.86
8)		Fluorene	1.571	1.621	1.565	1.549	1.684	1.707	1.700	1.628	4.20
9)	I	PHENANTHRENE-D10	----------ISTD----------								
10)		Phenanthrene	1.393	1.316	1.266	1.233	1.353	1.339	1.347	1.321	4.15
11)		Anthracene	1.137	1.161	1.125	1.133	1.263	1.284	1.286	1.198	6.28
12)		Fluoranthene	1.378	1.441	1.390	1.402	1.564	1.570	1.577	1.474	6.23
13)		Pyrene	1.396	1.459	1.415	1.418	1.589	1.589	1.601	1.495	6.23
14)		p-Terphenyl	1.219	1.253	1.221	1.229	1.350	1.361	1.371	1.286	5.49
15)		CHRYSENE-D12	----------ISTD----------								
16)		Benzo(a)anthra...	1.941	1.425	1.288	1.275	1.364	1.360		1.442	17.37 *
17)		Chrysene	1.245	1.274	1.224	1.221	1.306	1.325	1.308	1.272	3.36
18)	I	PERYLENE-D12	----------ISTD----------								
19)		Benzo(b)fluora...	1.388	1.398	1.412	1.385	1.536	1.574	1.549	1.463	5.84
20)		Benzo(k)fluora...	1.369	1.434	1.342	1.412	1.489	1.533	1.584	1.452	6.05
21)		Benzo(a)pyrene	1.266	1.293	1.253	1.297	1.410	1.467	1.485	1.353	7.27
22)		Indeno(1,2,3-c...	1.349	1.417	1.386	1.427	1.549	1.600	1.636	1.481	7.63
23)		Dibenzo(a,h)an...	1.119	1.173	1.151	1.184	1.301	1.330	1.361	1.231	7.85
24)		Benzo(g,h,i)pe...	1.138	1.197	1.154	1.177	1.287	1.305	1.327	1.226	6.36

(#) = Out of Range

* see printt
5.19.14



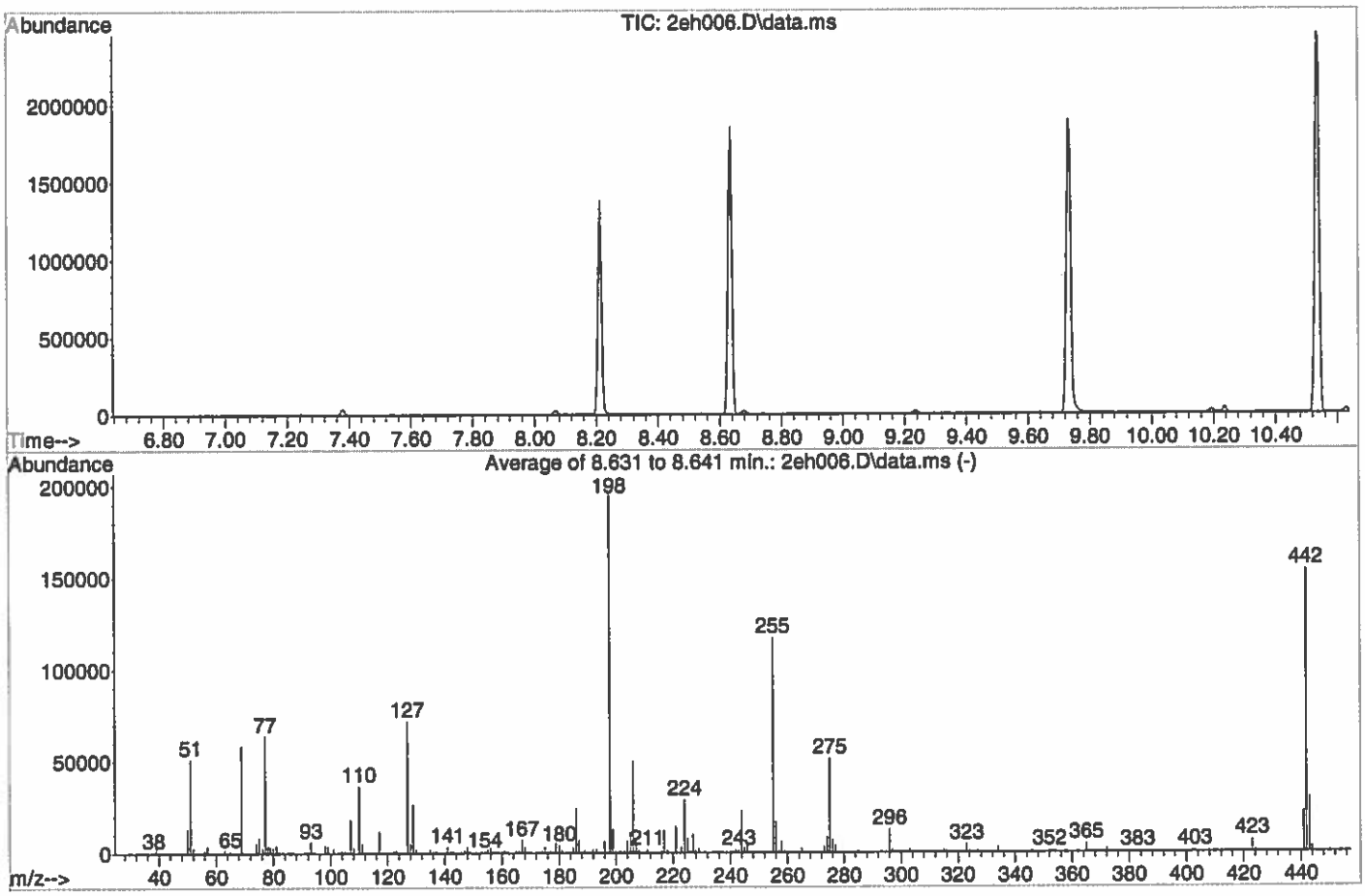
Method Name: C:\msdchem\1\METHODS\051314.M
Calibration Table Last Updated: Wed May 14 08:05:09 2014

DFTPP

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh006.D
Acq On : 13 May 2014 13:47
Operator : jfi
Sample : aa28739-tun1
Misc : a4d0161
ALS Vial : 6 Sample Multiplier: 1

Integration File: RTEINT4.P

Method : C:\msdchem\1\METHODS\DFTPPD.M
Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
Last Update : Tue May 13 14:00:36 2014



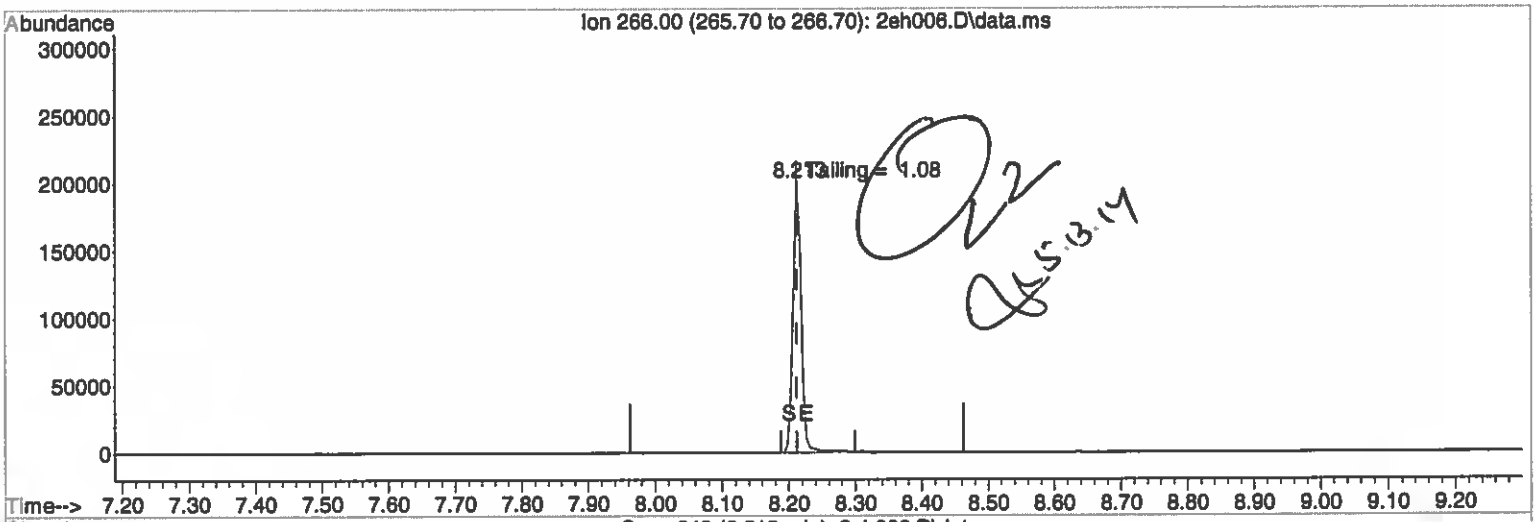
AutoFind: Scans 736, 737, 738; Background Corrected with Scan 730

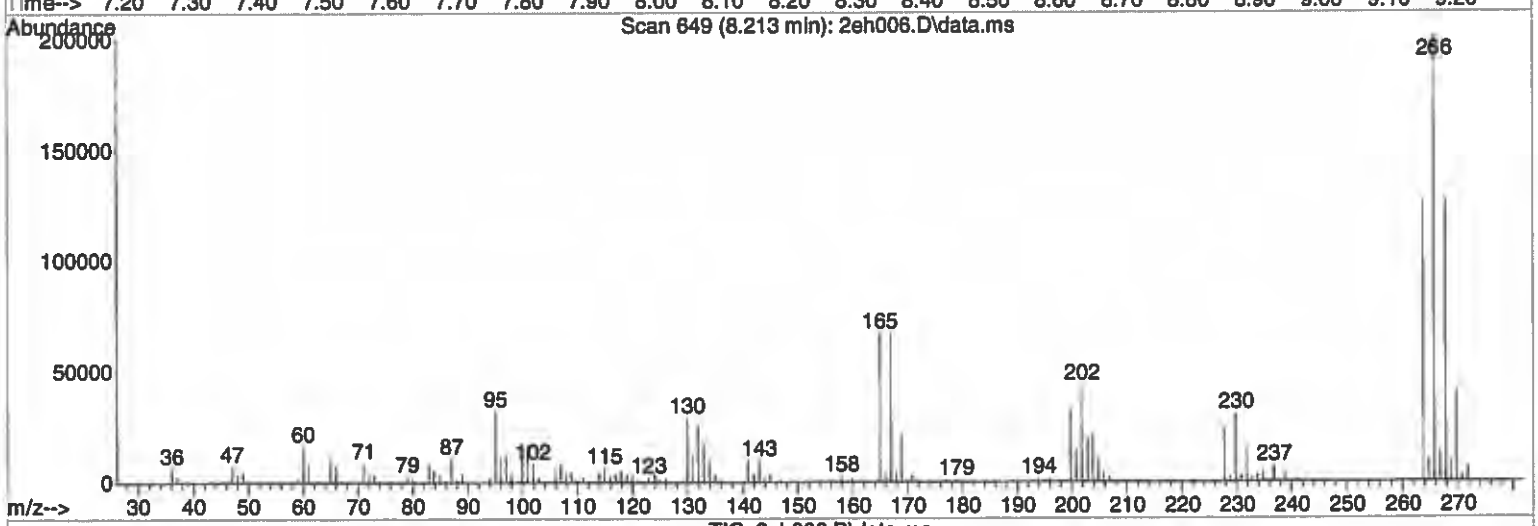
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	26.0	51202	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	29.8	58597	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	36.6	72018	PASS
197	198	0.00	2	0.0	0	PASS
198	198	50	100	100.0	196760	PASS
199	198	5	9	6.6	12953	PASS
275	198	10	60	26.1	51338	PASS
365	198	1	100	2.4	4719	PASS
441	443	0.01	100	75.8	22328	PASS
442	198	50	100	78.2	153952	PASS
443	442	15	24	19.1	29469	PASS

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh006.D
Acq On : 13 May 2014 13:47
Operator : jfi
Sample : aa28739-tun1
Misc : a4d0161
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 14:00:43 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue May 13 14:00:36 2014
Response via : Initial Calibration





TIC: 2eh006.D\data.ms

(1) Pentachlorophenol

8.213min (0.000) 90.78 ug/ml

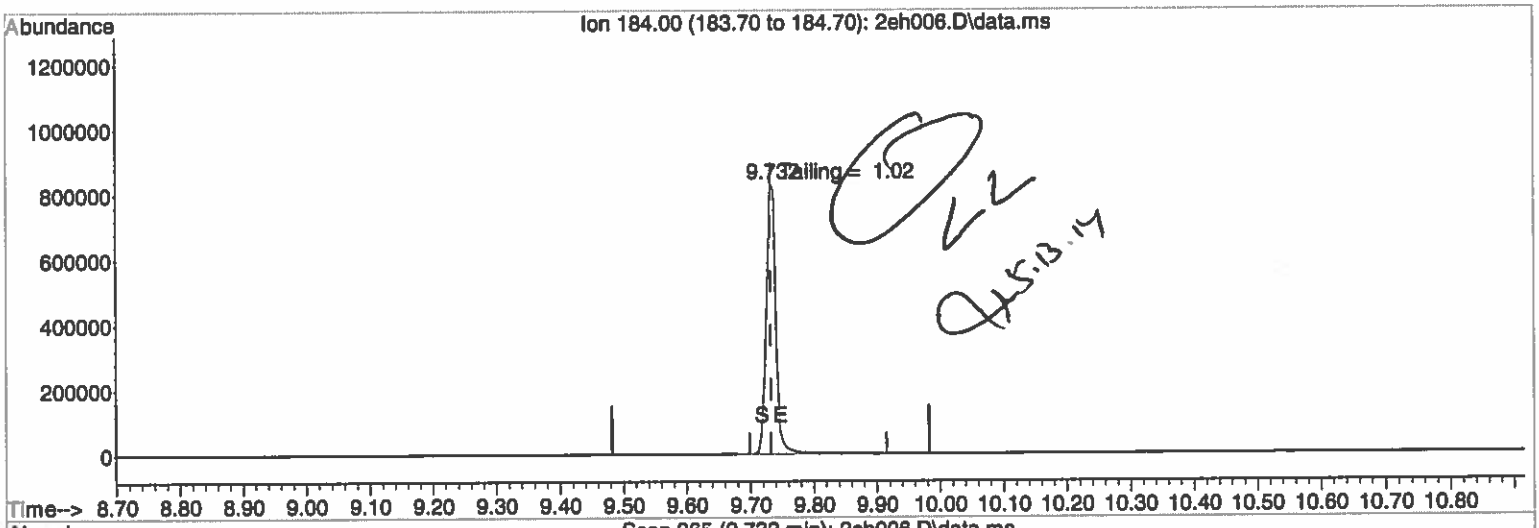
response 169948

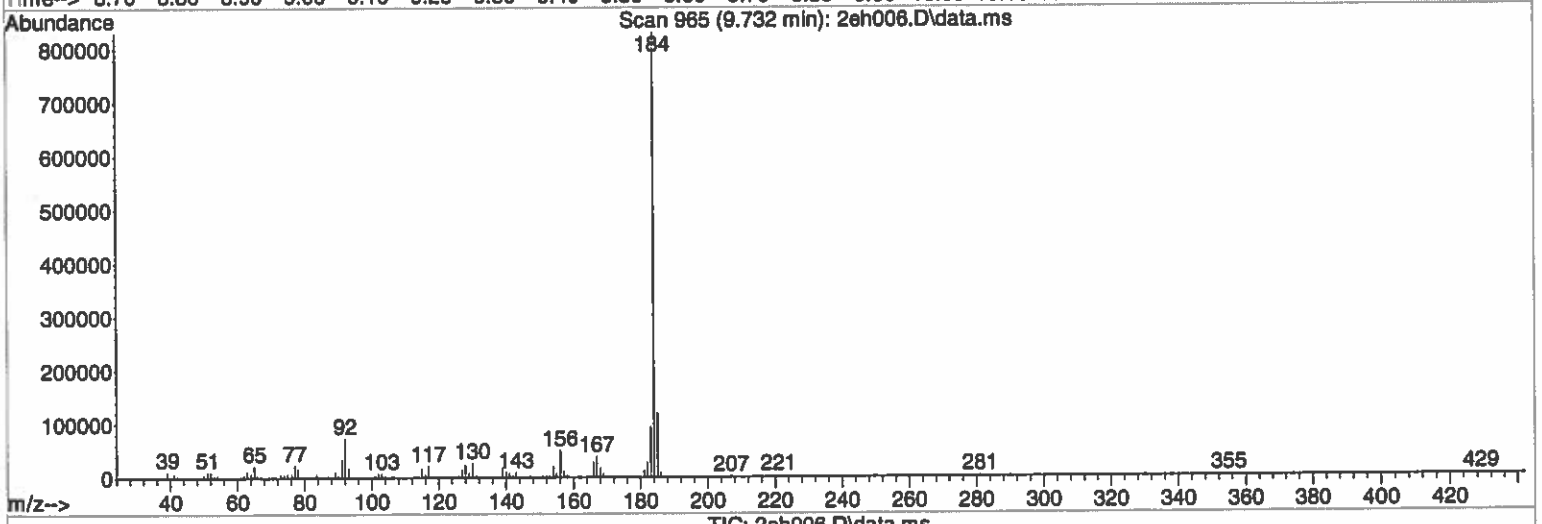
Ion	Exp%	Act%
266.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh006.D
Acq On : 13 May 2014 13:47
Operator : jfi
Sample : aa28739-tun1
Misc : a4d0161
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 14:01:00 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue May 13 14:00:36 2014
Response via : Initial Calibration





TIC: 2eh006.D\data.ms

(3) Benzidine

9.732min (0.000) 170.42 ug/ml

response 871639

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh006.D
Acq On : 13 May 2014 13:47
Operator : jfi
Sample : aa28739-tun1
Misc : a4d0161
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 14:01:00 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue May 13 14:00:36 2014
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Target Compounds					Qvalue
1) Pentachlorophenol	8.213	266	169948	90.7803 ug/ml	100
2) DFTPP	8.636	198	213986	163.4879 ug/ml	100
3) Benzidine	9.732	184	871639	170.4211 ug/ml	100
4) DDE	0.000		0	N.D. d	
5) DDD	10.237	TIC	31932	252.6666 #	79
6) DDT	10.535	TIC	2407671	180.6582 #	1

(#) = qualifier out of range (m) = manual integration (+) = signals summed

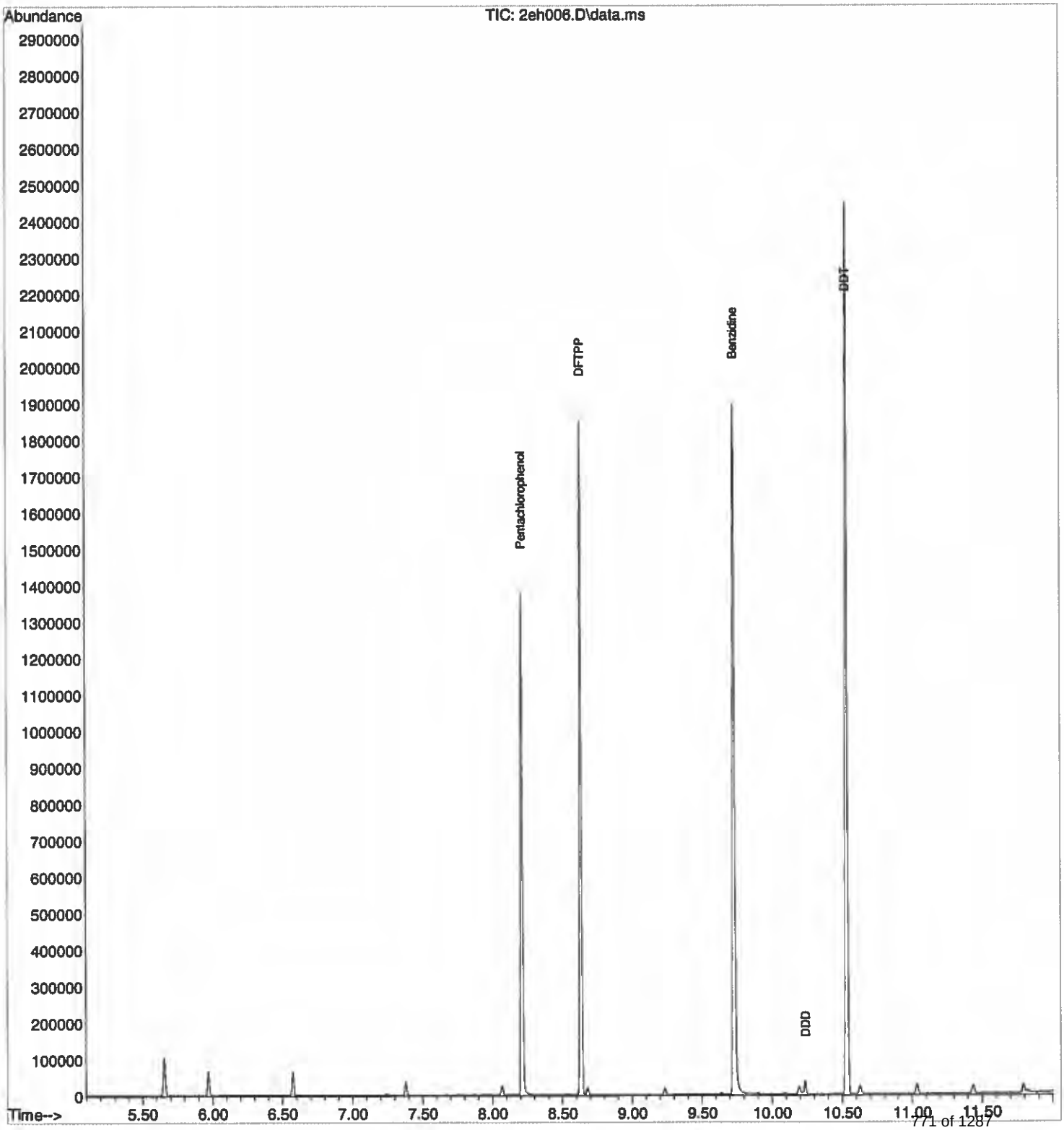
31932 / 31932+2407671 (2439603) x100= 1.3%

<20%/.005 DDD 5.13.14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh006.D
Acq On : 13 May 2014 13:47
Operator : jfi
Sample : aa28739-tun1
Misc : a4d0161
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 14:01:00 2014
Quant Method : C:\msdchem\1\METHODS\DFTPPD.M
Quant Title : SOP SVGCMS-03;DFTPP FOR 625/8270/8270PAH/SIM
QLast Update : Tue May 13 14:00:36 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh007.D
Acq On : 13 May 2014 14:06
Operator : jfi
Sample : aa28739-cal1
Misc : a4e0240
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 14:27:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:27:45 2014
Response via : Initial Calibration

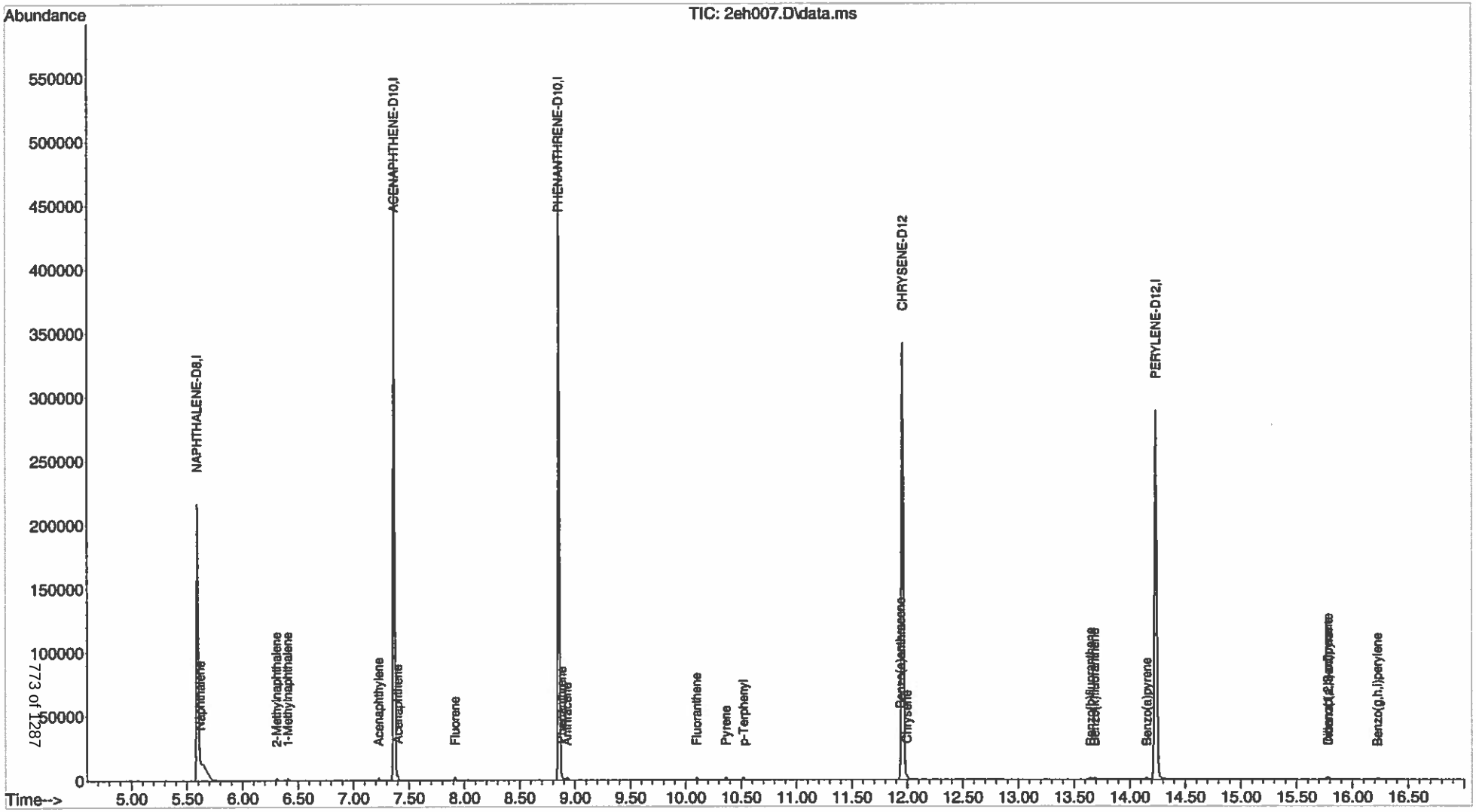
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.593	136	266000	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.370	164	207818	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.855	188	382223	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.962	240	426086	0.50	ug/mL	0.00
18) PERYLENE-D12	14.241	264	337515	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.620	128	1002	0.0017	ug/mL	98
3) 2-Methylnaphthalene	6.308	142	924	0.0022	ug/mL	96
4) 1-Methylnaphthalene	6.409	142	898	0.0022	ug/mL	94
6) Acenaphthylene	7.228	152	1356	0.0018	ug/mL	99
7) Acenaphthene	7.400	154	920	0.0020	ug/mL	88
8) Fluorene	7.916	166	1143	0.0020	ug/mL	96
10) Phenanthrene	8.881	178	1864	0.0022	ug/mL	93
11) Anthracene	8.928	178	1521	0.0020	ug/mL	100
12) Fluoranthene	10.099	202	1843	0.0018	ug/mL	88
13) Pyrene	10.363	202	1868	0.0018	ug/mL	82
14) p-Terphenyl	10.522	230	1631	0.0022	ug/mL	99
16) Benzo(a)anthracene	11.940	228	2895	0.0018	ug/mL	91
17) Chrysene	11.995	228	1856	0.0020	ug/mL	97
19) Benzo(b)fluoranthene	13.650	252	1640	0.0021	ug/mL	93
20) Benzo(k)fluoranthene	13.687	252	1617	0.0021	ug/mL	93
21) Benzo(a)pyrene	14.156	252	1496	0.0020	ug/mL	94
22) Indeno(1,2,3-cd)pyrene	15.782	276	1593	0.0019	ug/mL	82
23) Dibenzo(a,h)anthracene	15.782	278	1322	0.0020	ug/mL	88
24) Benzo(g,h,i)perylene	16.225	276	1344	0.0018	ug/mL	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh007.D
Acq On : 13 May 2014 14:06
Operator : jfi
Sample : aa28739-cal1
Misc : a4e0240
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 14:27:52 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:27:45 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh008.D
Acq On : 13 May 2014 14:27
Operator : jfi
Sample : aa28739-cal2
Misc : a4e0241
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 14:47:19 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:27:45 2014
Response via : Initial Calibration

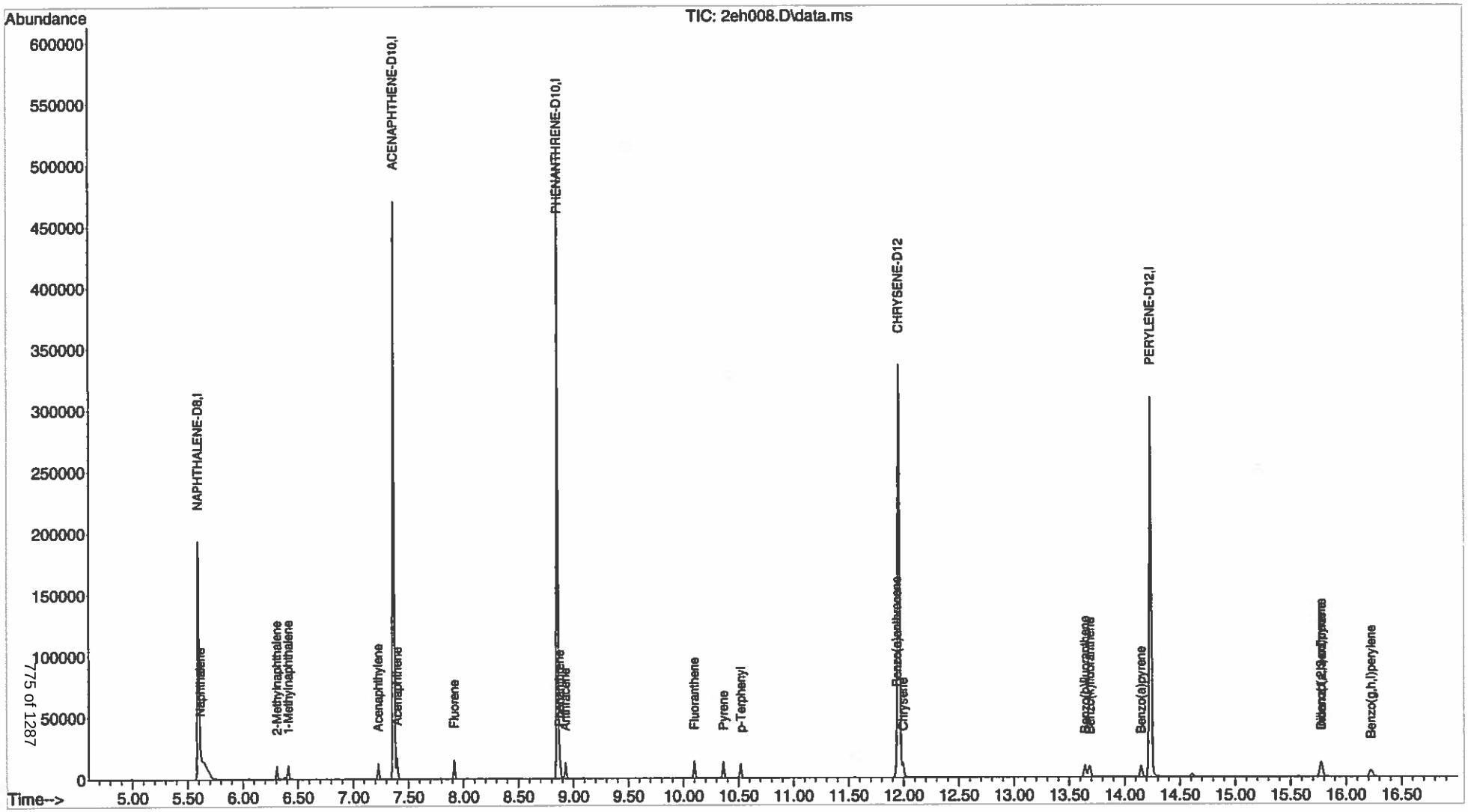
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.595	136	196783	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.370	164	198559	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.855	188	370562	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.956	240	412814	0.50	ug/mL	0.00
18) PERYLENE-D12	14.235	264	329462	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.615	128	5109	0.0119	ug/mL	99
3) 2-Methylnaphthalene	6.309	142	5092	0.0165	ug/mL	92
4) 1-Methylnaphthalene	6.411	142	4941	0.0162	ug/mL	92
6) Acenaphthylene	7.228	152	7749	0.0106	ug/mL	99
7) Acenaphthene	7.400	154	5739	0.0130	ug/mL	97
8) Fluorene	7.916	166	6436	0.0119	ug/mL	98
10) Phenanthrene	8.875	178	9751	0.0116	ug/mL	96
11) Anthracene	8.928	178	8604	0.0117	ug/mL	98
12) Fluoranthene	10.099	202	10676	0.0110	ug/mL	85
13) Pyrene	10.363	202	10815	0.0107	ug/mL	83
14) p-Terphenyl	10.522	230	9287	0.0129	ug/mL	99
16) Benzo(a)anthracene	11.940	228	11766	0.0119	ug/mL	100
17) Chrysene	11.994	228	10518	0.0115	ug/mL	97
19) Benzo(b)fluoranthene	13.644	252	9212	0.0121	ug/mL	94
20) Benzo(k)fluoranthene	13.686	252	9449	0.0126	ug/mL	92
21) Benzo(a)pyrene	14.150	252	8519	0.0119	ug/mL	93
22) Indeno(1,2,3-cd)pyrene	15.775	276	9337	0.0114	ug/mL	81
23) Dibenzo(a,h)anthracene	15.775	278	7727	0.0120	ug/mL	88
24) Benzo(g,h,i)perylene	16.225	276	7890	0.0110	ug/mL	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh008.D
Acq On : 13 May 2014 14:27
Operator : jfi
Sample : aa28739-cal2
Misc : a4e0241
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 14:47:19 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:27:45 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh009.D
Acq On : 13 May 2014 14:49
Operator : jfi
Sample : aa28739-cal3
Misc : a4e0242
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:07:13 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration

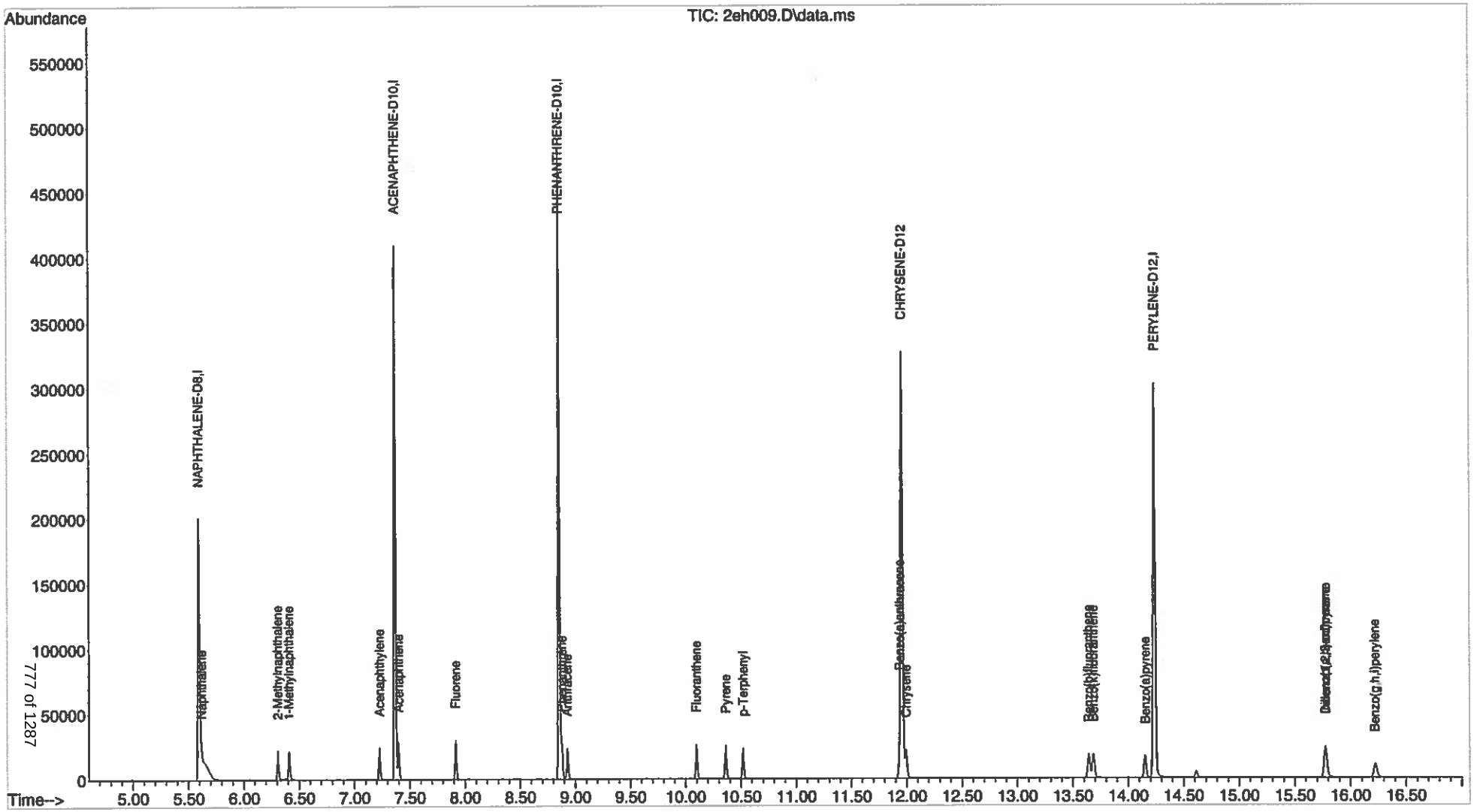
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.594	136	246290	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.372	164	201026	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.854	188	373130	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.957	240	419073	0.50	ug/mL	0.00
18) PERYLENE-D12	14.240	264	334005	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.621	128	12369	0.0231	ug/mL	95
3) 2-Methylnaphthalene	6.309	142	10008	0.0259	ug/mL	99
4) 1-Methylnaphthalene	6.410	142	9883	0.0259	ug/mL	98
6) Acenaphthylene	7.229	152	15476	0.0210	ug/mL	100
7) Acenaphthene	7.402	154	10506	0.0236	ug/mL	94
8) Fluorene	7.917	166	12581	0.0230	ug/mL	100
10) Phenanthrene	8.881	178	18896	0.0224	ug/mL	97
11) Anthracene	8.927	178	16796	0.0227	ug/mL	97
12) Fluoranthene	10.098	202	20741	0.0213	ug/mL	99
13) Pyrene	10.362	202	21124	0.0207	ug/mL	99
14) p-Terphenyl	10.521	230	18225	0.0252	ug/mL	100
16) Benzo(a)anthracene	11.940	228	21599	0.0226	ug/mL	99
17) Chrysene	11.995	228	20523	0.0221	ug/mL	100
19) Benzo(b)fluoranthene	13.643	252	18862	0.0244	ug/mL	99
20) Benzo(k)fluoranthene	13.685	252	17935	0.0236	ug/mL	99
21) Benzo(a)pyrene	14.154	252	16736	0.0230	ug/mL	100
22) Indeno(1,2,3-cd)pyrene	15.777	276	18518	0.0222	ug/mL	99
23) Dibenzo(a,h)anthracene	15.777	278	15384	0.0235	ug/mL	99
24) Benzo(g,h,i)perylene	16.220	276	15411	0.0211	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh009.D
Acq On : 13 May 2014 14:49
Operator : jfi
Sample : aa28739-cal3
Misc : a4e0242
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:07:13 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh010.D
Acq On : 13 May 2014 15:11
Operator : jfi
Sample : aa28739-cal4
Misc : a4e0243
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 13 21:04:41 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration

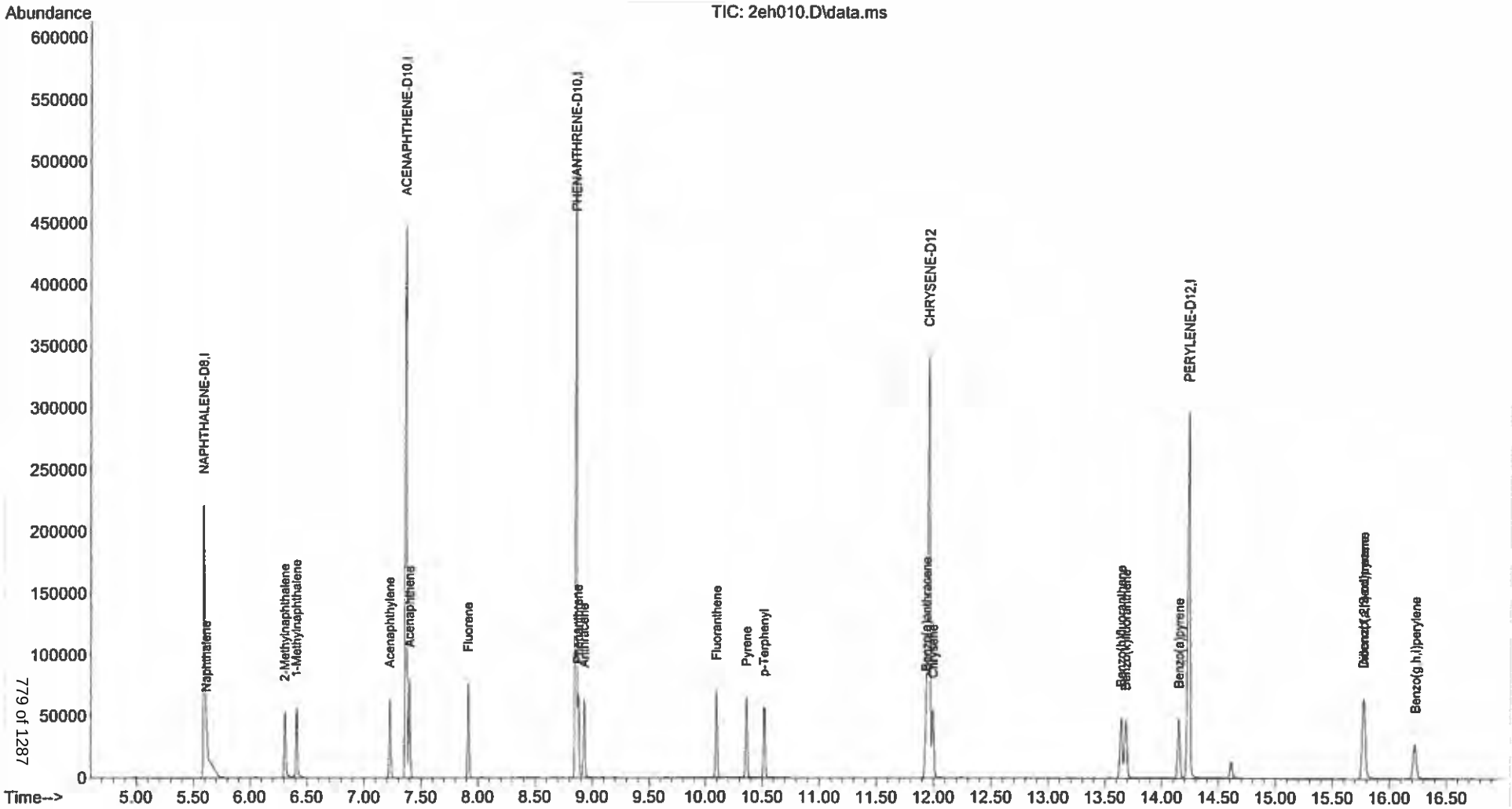
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.595	136	245554	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.371	164	200449	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.855	188	375404	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.956	240	415793	0.50	ug/mL	0.00
18) PERYLENE-D12	14.235	264	332640	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.615	128	25302	0.0474	ug/mL	100
3) 2-Methylnaphthalene	6.309	142	24626	0.0638	ug/mL	99
4) 1-Methylnaphthalene	6.411	142	24066	0.0633	ug/mL	99
6) Acenaphthylene	7.228	152	38753	0.0527	ug/mL	100
7) Acenaphthene	7.400	154	24981	0.0562	ug/mL	91
8) Fluorene	7.916	166	31050	0.0570	ug/mL	99
10) Phenanthrene	8.875	178	46278	0.0544	ug/mL	96
11) Anthracene	8.928	178	42515	0.0571	ug/mL	97
12) Fluoranthene	10.099	202	52625	0.0536	ug/mL	99
13) Pyrene	10.363	202	53221	0.0518	ug/mL	99
14) p-Terphenyl	10.515	230	46127	0.0633	ug/mL	100
16) Benzo(a)anthracene	11.934	228	53007	0.0573	ug/mL	99
17) Chrysene	11.994	228	50754	0.0550	ug/mL	100
19) Benzo(b)fluoranthene	13.644	252	46057	0.0599	ug/mL	100
20) Benzo(k)fluoranthene	13.687	252	46975	0.0621	ug/mL	99
21) Benzo(a)pyrene	14.150	252	43138	0.0596	ug/mL	100
22) Indeno(1,2,3-cd)pyrene	15.775	276	47481	0.0573	ug/mL	100
23) Dibenzo(a,h)anthracene	15.775	278	39387	0.0604	ug/mL	100
24) Benzo(g,h,i)perylene	16.224	276	39138	0.0539	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh010.D
Acq On : 13 May 2014 15:11
Operator : jfi
Sample : aa28739-cal4
Misc : a4e0243
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 13 21:04:41 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh011.D
Acq On : 13 May 2014 15:32
Operator : jfi
Sample : aa28739-cal5
Misc : a4e0244
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 13 21:05:34 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration

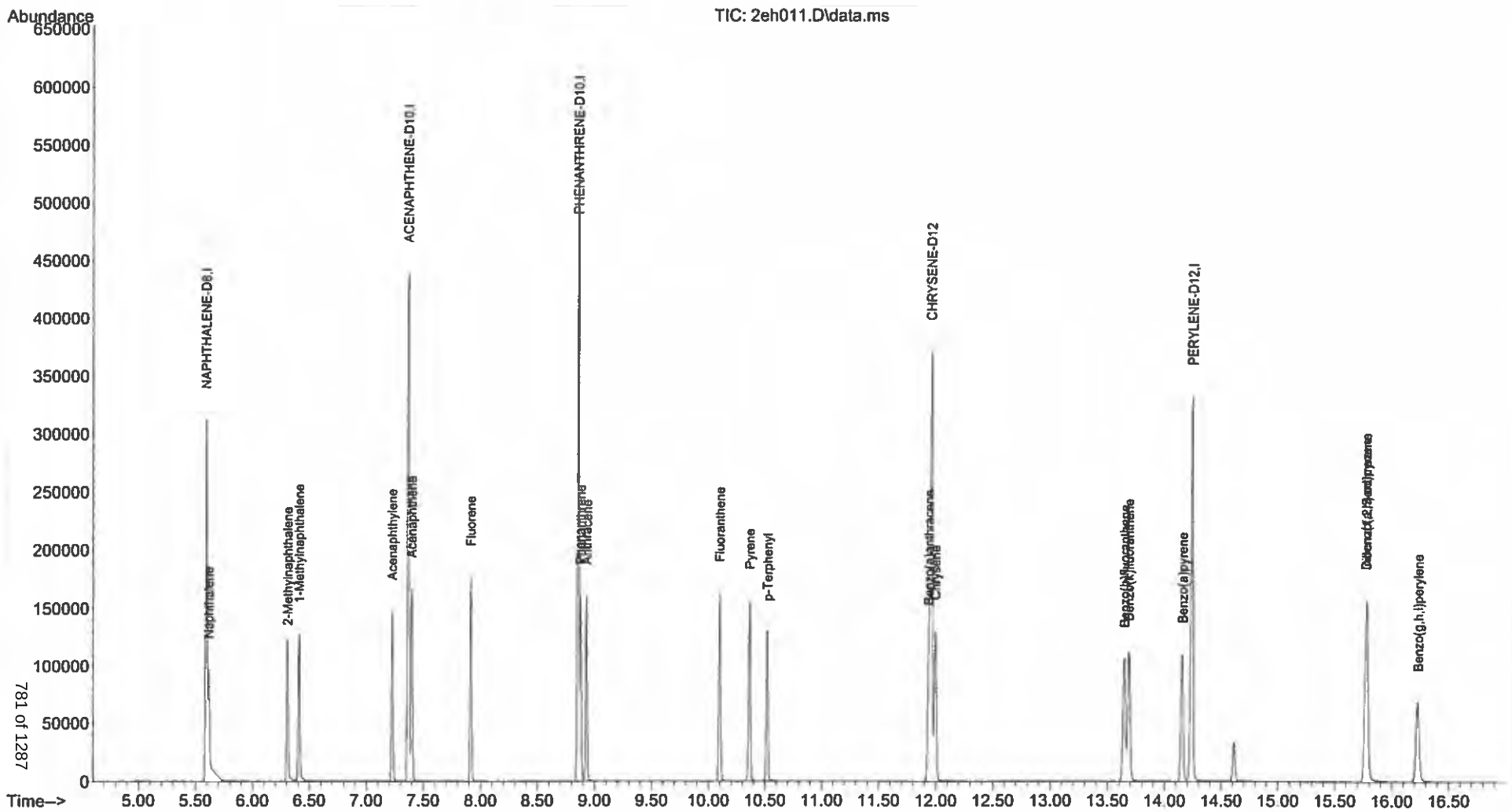
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.595	136	291841	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.371	164	212305	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.855	188	395591	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.957	240	452622	0.50	ug/mL	0.00
18) PERYLENE-D12	14.239	264	364367	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.615	128	75786	0.1195	ug/mL	97
3) 2-Methylnaphthalene	6.310	142	58285	0.1271	ug/mL	99
4) 1-Methylnaphthalene	6.411	142	56811	0.1257	ug/mL	99
6) Acenaphthylene	7.229	152	92200	0.1184	ug/mL	100
7) Acenaphthene	7.401	154	56435	0.1199	ug/mL	89
8) Fluorene	7.917	166	71498	0.1238	ug/mL	99
10) Phenanthrene	8.875	178	107044	0.1194	ug/mL	94
11) Anthracene	8.928	178	99909	0.1273	ug/mL	97
12) Fluoranthene	10.099	202	123748	0.1196	ug/mL	99
13) Pyrene	10.364	202	125686	0.1161	ug/mL	99
14) p-Terphenyl	10.522	230	106821	0.1392	ug/mL	100
16) Benzo(a)anthracene	11.935	228	123493	0.1216	ug/mL	98
17) Chrysene	11.995	228	118235	0.1178	ug/mL	99
19) Benzo(b)fluoranthene	13.648	252	111968	0.1329	ug/mL	99
20) Benzo(k)fluoranthene	13.685	252	108503	0.1310	ug/mL	99
21) Benzo(a)pyrene	14.154	252	102784	0.1295	ug/mL	100
22) Indeno(1,2,3-cd)pyrene	15.775	276	112913	0.1243	ug/mL	100
23) Dibenzo(a,h)anthracene	15.775	278	94788	0.1328	ug/mL	100
24) Benzo(g,h,i)perylene	16.225	276	93795	0.1178	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh011.D
Acq On : 13 May 2014 15:32
Operator : jfi
Sample : aa28739-cal5
Misc : a4e0244
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 13 21:05:34 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh012.D
Acq On : 13 May 2014 15:54
Operator : jfi
Sample : aa28739-cal6
Misc : a4e0245
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 13 21:03:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration

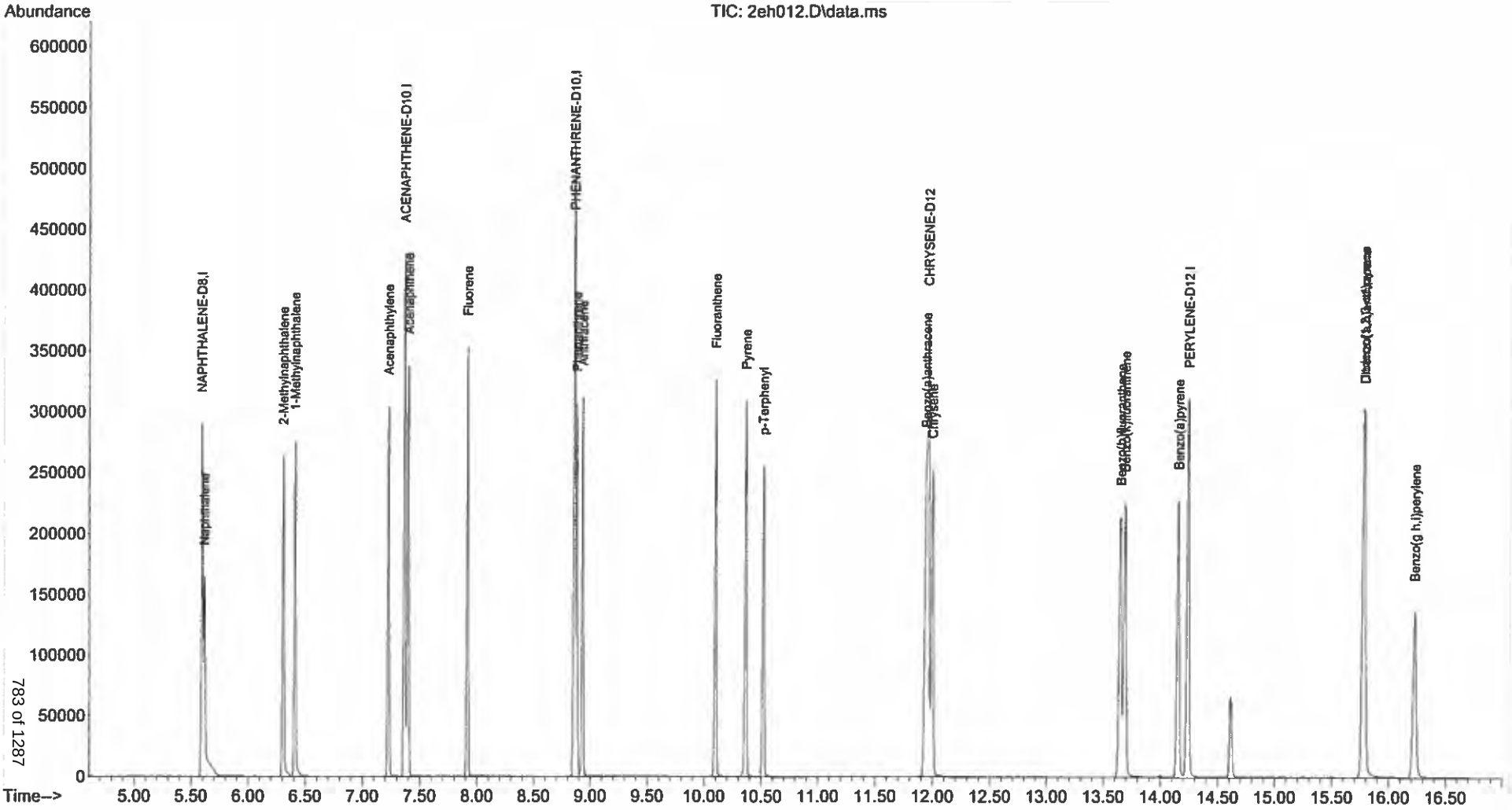
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.594	136	275371	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.371	164	205303	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.855	188	383416	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.957	240	433487	0.50	ug/mL	0.00
18) PERYLENE-D12	14.239	264	347152	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.614	128	146161	0.2443	ug/mL	100
3) 2-Methylnaphthalene	6.308	142	115338	0.2666	ug/mL	99
4) 1-Methylnaphthalene	6.409	142	111320	0.2611	ug/mL	100
6) Acenaphthylene	7.229	152	184334	0.2448	ug/mL	100
7) Acenaphthene	7.401	154	110058	0.2419	ug/mL	88
8) Fluorene	7.917	166	140174	0.2511	ug/mL	98
10) Phenanthrene	8.875	178	205355	0.2364	ug/mL	94
11) Anthracene	8.928	178	196875	0.2588	ug/mL	97
12) Fluoranthene	10.099	202	240727	0.2400	ug/mL	99
13) Pyrene	10.363	202	243717	0.2323	ug/mL	99
14) p-Terphenyl	10.516	230	208738	0.2806	ug/mL	100
16) Benzo(a)anthracene	11.941	228	235897	0.2355	ug/mL	98
17) Chrysene	11.995	228	229699	0.2389	ug/mL	100
19) Benzo(b)fluoranthene	13.648	252	218586	0.2723	ug/mL	99
20) Benzo(k)fluoranthene	13.685	252	212901	0.2697	ug/mL	99
21) Benzo(a)pyrene	14.154	252	203763	0.2696	ug/mL	100
22) Indeno(1,2,3-cd)pyrene	15.775	276	222223	0.2567	ug/mL	100
23) Dibenzo(a,h)anthracene	15.782	278	184657	0.2715	ug/mL	100
24) Benzo(g,h,i)perylene	16.225	276	181209	0.2389	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh012.D
Acq On : 13 May 2014 15:54
Operator : jfi
Sample : aa28739-cal6
Misc : a4e0245
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 13 21:03:53 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh013.D
Acq On : 13 May 2014 16:16
Operator : jfi
Sample : aa28739-cal7
Misc : a4e0246
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 21:03:55 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration

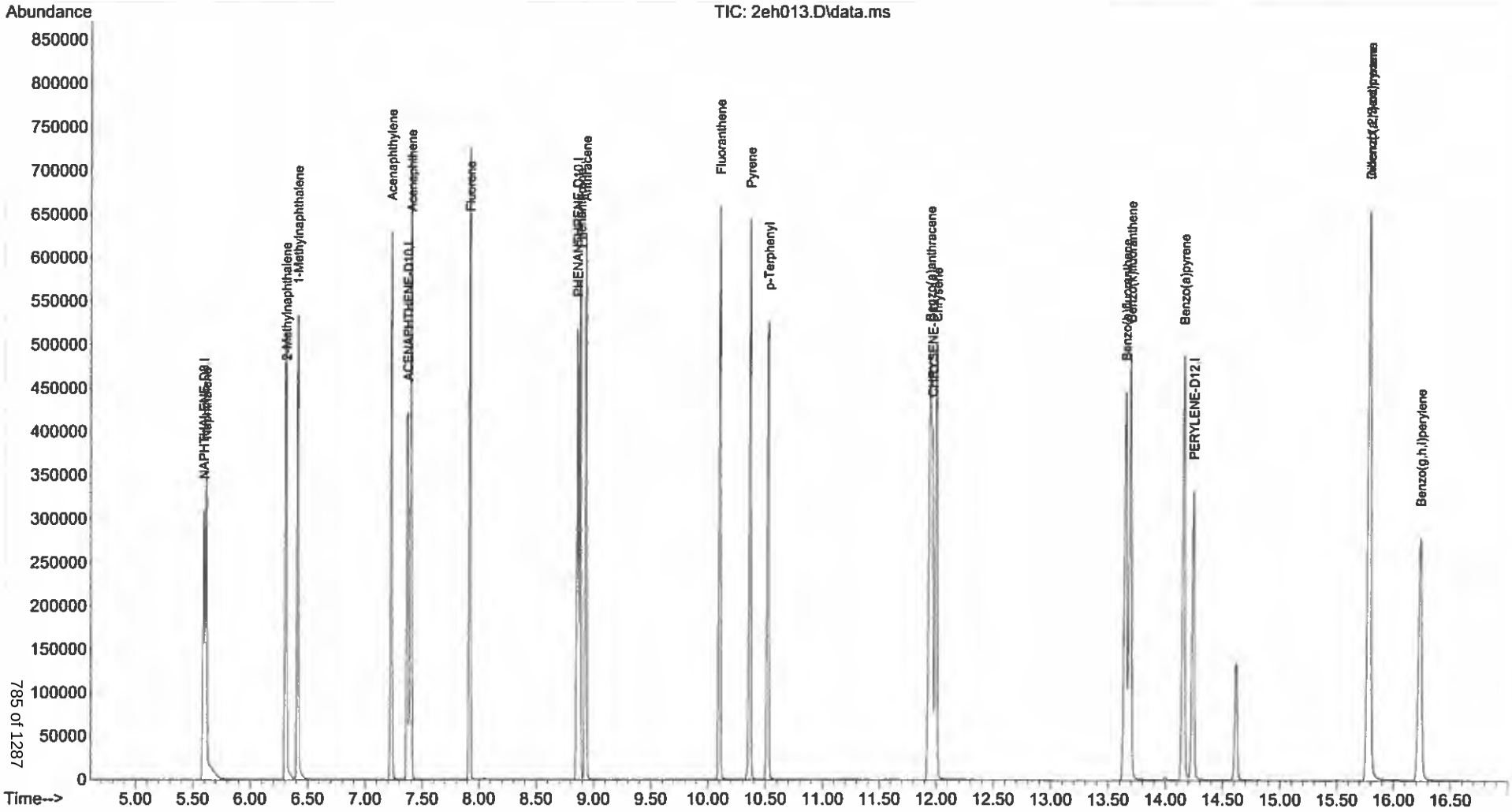
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.596	136	286458	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.372	164	211531	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.856	188	392102	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.962	240	449218	0.50	ug/mL	0.00
18) PERYLENE-D12	14.240	264	355965	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.616	128	300989	0.4835	ug/mL	100
3) 2-Methylnaphthalene	6.311	142	237642	0.5281	ug/mL	99
4) 1-Methylnaphthalene	6.412	142	229584	0.5177	ug/mL	99
6) Acenaphthylene	7.230	152	382858	0.4935	ug/mL	99
7) Acenaphthene	7.402	154	224082	0.4779	ug/mL	87
8) Fluorene	7.918	166	287634	0.5000	ug/mL	98
10) Phenanthrene	8.883	178	422392	0.4755	ug/mL	94
11) Anthracene	8.929	178	403434	0.5186	ug/mL	97
12) Fluoranthene	10.100	202	494718	0.4824	ug/mL	99
13) Pyrene	10.364	202	502089	0.4679	ug/mL	99
14) p-Terphenyl	10.523	230	429902	0.5650	ug/mL	100
16) Benzo(a)anthracene	11.940	228	485951	0.4421	ug/mL	98
17) Chrysene	12.000	228	470170	0.4718	ug/mL	99
19) Benzo(b)fluoranthene	13.649	252	441236	0.5361	ug/mL	99
20) Benzo(k)fluoranthene	13.692	252	451206	0.5575	ug/mL	100
21) Benzo(a)pyrene	14.155	252	422868	0.5456	ug/mL	99
22) Indeno(1,2,3-cd)pyrene	15.783	276	465998	0.5251	ug/mL	99
23) Dibenzo(a,h)anthracene	15.783	278	387647	0.5558	ug/mL	99
24) Benzo(g,h,i)perylene	16.232	276	377928	0.4860	ug/mL	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh013.D
Acq On : 13 May 2014 16:16
Operator : jfi
Sample : aa28739-cal7
Misc : a4e0246
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 21:03:55 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 14:48:21 2014
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh014.D
Acq On : 13 May 2014 16:38
Operator : jfi
Sample : aa28739-scv1
Misc : a4e0247
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 21:12:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M 140505> 5.19.14
Quant Title : SOP SVGCMS-03; ELEMENT CAL ~~1404115~~; INST OSVGCMS2
QLast Update : Tue May 13 21:11:50 2014
Response via : Initial Calibration

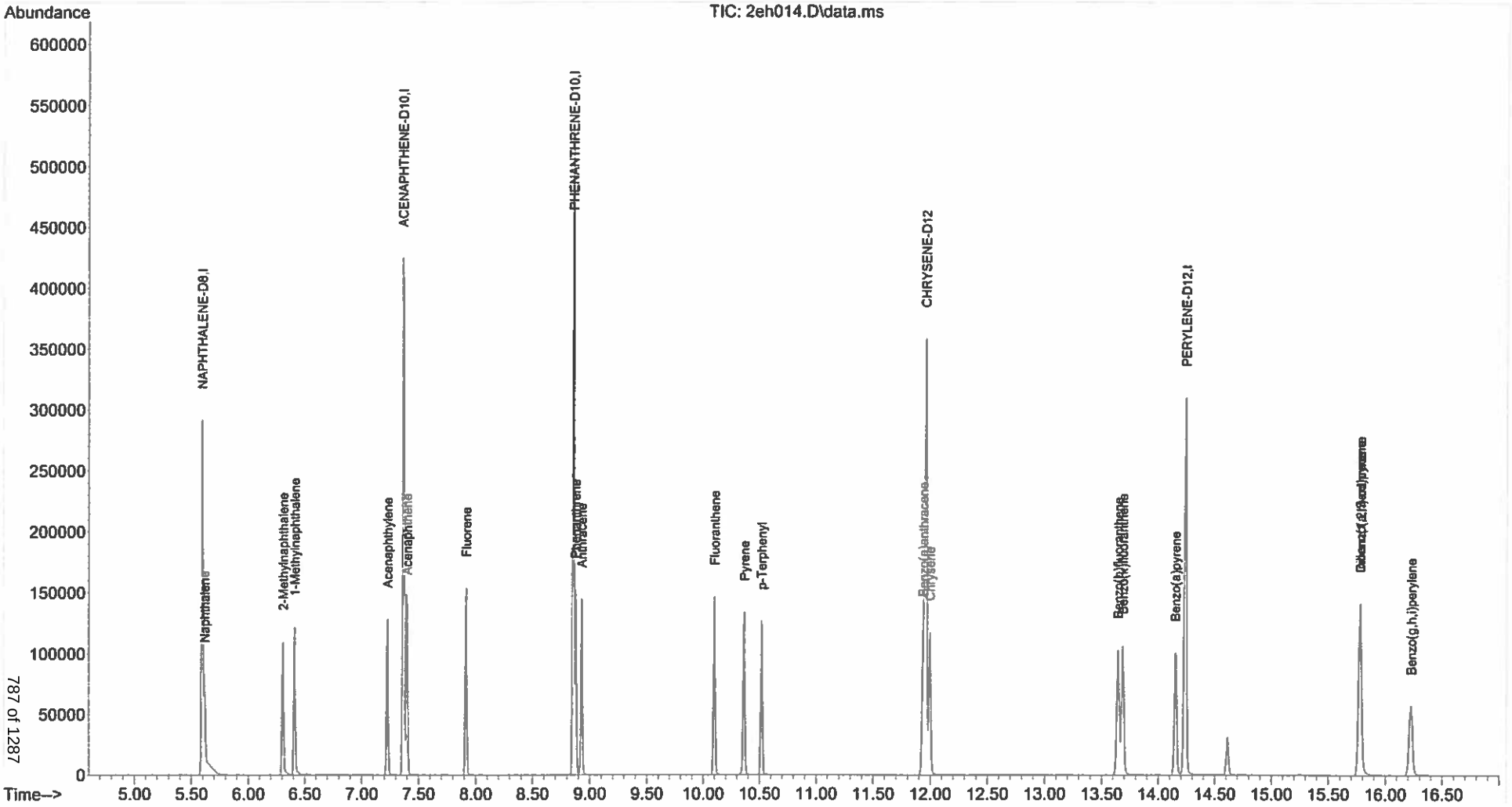
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) NAPHTHALENE-D8	5.594	136	273184	0.50	ug/mL	0.00
5) ACENAPHTHENE-D10	7.364	164	201680	0.50	ug/mL	0.00
9) PHENANTHRENE-D10	8.856	188	377785	0.50	ug/mL	0.00
15) CHRYSENE-D12	11.957	240	431594	0.50	ug/mL	0.00
18) PERYLENE-D12	14.239	264	347435	0.50	ug/mL	0.00
Target Compounds						Qvalue
2) Naphthalene	5.614	128	68135	0.1015	ug/mL	98
3) 2-Methylnaphthalene	6.308	142	52785	0.0915	ug/mL	100
4) 1-Methylnaphthalene	6.410	142	51517	0.0918	ug/mL	100
6) Acenaphthylene	7.229	152	83710	0.1012	ug/mL	100
7) Acenaphthene	7.401	154	51442	0.0964	ug/mL	89
8) Fluorene	7.917	166	65670	0.1000	ug/mL	99
10) Phenanthrene	8.875	178	96594	0.0968	ug/mL	95
11) Anthracene	8.928	178	91650	0.1012	ug/mL	97
12) Fluoranthene	10.099	202	111684	0.1003	ug/mL	99
13) Pyrene	10.364	202	113350	0.1003	ug/mL	99
14) p-Terphenyl	10.516	230	97359	0.1002	ug/mL	100
16) Benzo(a)anthracene	11.935	228	110036	0.0941	ug/mL	98
17) Chrysene	11.995	228	107734	0.0981	ug/mL	99
19) Benzo(b)fluoranthene	13.642	252	103938	0.1022	ug/mL	99
20) Benzo(k)fluoranthene	13.685	252	97627	0.0968	ug/mL	99
21) Benzo(a)pyrene	14.148	252	94490	0.1005	ug/mL	100
22) Indeno(1,2,3-cd)pyrene	15.777	276	103639	0.1007	ug/mL	100
23) Dibenzo(a,h)anthracene	15.777	278	86193	0.1007	ug/mL	100
24) Benzo(g,h,i)perylene	16.226	276	85893	0.1008	ug/mL	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\051314\
Data File : 2eh014.D
Acq On : 13 May 2014 16:38
Operator : jfi
Sample : aa28739-scv1
Misc : a4e0247
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 21:12:57 2014
Quant Method : C:\msdchem\1\METHODS\051314.M
Quant Title : SOP SVGCMS-03; ELEMENT CAL 1404115; INST OSVGCMS2
QLast Update : Tue May 13 21:11:50 2014
Response via : Initial Calibration



ENCO Orlando

SDG: A404270-CTO0017

CLASS: 15_PCB

METHOD: EPA 8082A

ANALYSES DATA PACKAGE COVER PAGE

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Client Sample Id:	Lab Sample Id:
TR-5TH-CSW01-0814	A404270-01
TR-5TH-CSW02-0814	A404270-02
TR-5TH-CSW02-0814	A404270-02RE1
TR-5TH-CSW03-0814	A404270-03
TR-5TH-CSW04-0814	A404270-04
TR-5TH-CSW05-0814	A404270-05
TR-5TH-CSW05-0814	A404270-05RE1
TR-5TH-CSW06-0814	A404270-06
TR-5TH-CSW06-0814	A404270-06RE1
TR-5TH-CSW07-0814	A404270-07
TR-5TH-CSW07D-0814	A404270-08
TR-5TH-CSW08-0814	A404270-09
TR-5TH-CSW08-0814	A404270-09RE1
TR-5TH-CSW09-0814	A404270-10
TR-5TH-CSW09-0814	A404270-10RE1
TR-5TH-CSW10-0814	A404270-11
TR-5TH-CSW10-0814	A404270-11RE1
TR-5TH-CSW11-0814	A404270-12
TR-5TH-CSW11D-0814	A404270-13
TR-5TH-CSW12-0814	A404270-14
TR-5TH-CSW12-0814	A404270-14RE1
TR-5TH-CSW13-0814	A404270-15
TR-5TH-CSW14-0814	A404270-16
TR-5TH-CSW15-0814	A404270-18
TR-5TH-CSF01-0814	A404270-19
TR-5TH-CSF01-0814	A404270-19RE1
TR-5TH-CSF02-0814	A404270-20
TR-5TH-CSF02-0814	A404270-20RE1
TR-5TH-CSF03-0814	A404270-21
TR-5TH-CSF03-0814	A404270-21RE1
TR-5TH-CSF04-0814	A404270-22
TR-5TH-CSF04-0814	A404270-22RE1
TR-5TH-CSF05-0814	A404270-23
TR-5TH-CSF05-0814	A404270-23RE1
TR-5TH-CSF05D-0814	A404270-24
TR-5TH-CSF06-0814	A404270-25
TR-5TH-CSF06-0814	A404270-25RE1
TR-5TH-CSF07-0814	A404270-26
TR-5TH-CSF08-0814	A404270-27
TR-5TH-CSF08-0814	A404270-27RE1
TR-5TH-CSF09-0814	A404270-28

ANALYSES DATA PACKAGE COVER PAGE

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Client Sample Id:	Lab Sample Id:
TR-5TH-CS-EB-080114	A404270-29

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-01	File ID:	2HB015.D
Sampled:	08/01/14 12:10	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:21
Solids:	81.79	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.024	U	0.020	0.024	0.049
11096-82-5	PCB-1260	1	<0.024	U	0.013	0.024	0.049

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0408	0.032	79	20 - 137	
2,4,5,6-TCMX [2C]	0.0408	0.037	91	20 - 137	
Decachlorobiphenyl	0.0408	0.061	151	60 - 125	*
Decachlorobiphenyl [2C]	0.0408	0.061	149	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-02	File ID:	2HB016.D
Sampled:	08/01/14 12:15	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:33
Solids:	78.60	Preparation:	EPA 3550C	Initial/Final:	29.8 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.047	JPQ	0.020	0.025	0.051
11096-82-5	PCB-1260	1	0.25		0.014	0.025	0.051

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0427	0.034	79	20 - 137	
2,4,5,6-TCMX [2C]	0.0427	0.037	86	20 - 137	
Decachlorobiphenyl	0.0427	0.058	135	60 - 125	*
Decachlorobiphenyl [2C]	0.0427	0.057	133	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-02RE1	File ID:	2HG044.D
Sampled:	08/01/14 12:15	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 06:28
Solids:	78.60	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.036	JPQ	0.020	0.025	0.051
11096-82-5	PCB-1260	1	0.19		0.014	0.025	0.051

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0426	0.020	46	20 - 137	
Decachlorobiphenyl	0.0426	0.020	48	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-03	File ID:	2HB017.D
Sampled:	08/01/14 12:20	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:45
Solids:	77.99	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.026	U	0.021	0.026	0.051
11096-82-5	PCB-1260	1	<0.026	U	0.014	0.026	0.051

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0425	0.033	77	20 - 137	
2,4,5,6-TCMX [2C]	0.0425	0.036	84	20 - 137	
Decachlorobiphenyl	0.0425	0.062	147	60 - 125	*
Decachlorobiphenyl [2C]	0.0425	0.062	145	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-04	File ID:	2HB018.D
Sampled:	08/01/14 12:30	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:57
Solids:	85.57	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.023	U	0.019	0.023	0.047
11096-82-5	PCB-1260	1	<0.023	U	0.013	0.023	0.047

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0387	0.024	63	20 - 137	
Decachlorobiphenyl	0.0387	0.047	120	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-05	File ID:	2HB019.D
Sampled:	08/01/14 12:35	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 20:09
Solids:	99.26	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.012	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0336	0.031	93	20 - 137	
2,4,5,6-TCMX [2C]	0.0336	0.034	102	20 - 137	
Decachlorobiphenyl	0.0336	0.053	158	60 - 125	*
Decachlorobiphenyl [2C]	0.0336	0.053	159	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-05RE1	File ID:	2HI007.D
Sampled:	08/01/14 12:35	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:30
Solids:	99.26	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.013	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0335	0.041	122	20 - 137	
Decachlorobiphenyl	0.0335	0.045	134	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-06	File ID:	2HB022.D
Sampled:	08/01/14 12:40	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 20:45
Solids:	94.63	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	0.021	J	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0352	0.023	66	20 - 137	
2,4,5,6-TCMX [2C]	0.0352	0.025	72	20 - 137	
Decachlorobiphenyl	0.0352	0.049	140	60 - 125	*
Decachlorobiphenyl [2C]	0.0352	0.050	143	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-06RE1	File ID:	2HG045.D
Sampled:	08/01/14 12:40	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 06:40
Solids:	94.63	Preparation:	EPA 3550C	Initial/Final:	29.5 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	0.024	J	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0358	0.035	97	20 - 137	
Decachlorobiphenyl	0.0358	0.043	119	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-07	File ID:	2HB023.D
Sampled:	08/01/14 12:50	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 20:58
Solids:	90.23	Preparation:	EPA 3550C	Initial/Final:	30.5 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.022	U	0.018	0.022	0.044
11096-82-5	PCB-1260	1	0.014	J	0.012	0.022	0.044

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0363	0.029	78	20 - 137	
2,4,5,6-TCMX [2C]	0.0363	0.031	85	20 - 137	
Decachlorobiphenyl	0.0363	0.044	121	60 - 125	
Decachlorobiphenyl [2C]	0.0363	0.044	121	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW07D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-08	File ID:	2HB024.D
Sampled:	08/01/14 12:50	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 21:10
Solids:	98.35	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.041
11096-82-5	PCB-1260	1	<0.020	U	0.011	0.020	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0339	0.031	93	20 - 137	
2,4,5,6-TCMX [2C]	0.0339	0.034	101	20 - 137	
Decachlorobiphenyl	0.0339	0.048	141	60 - 125	*
Decachlorobiphenyl [2C]	0.0339	0.048	142	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-09	File ID:	2HB025.D
Sampled:	08/01/14 12:55	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 21:22
Solids:	99.50	Preparation:	EPA 3550C	Initial/Final:	29.8 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.011	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0337	0.029	85	20 - 137	
2,4,5,6-TCMX [2C]	0.0337	0.031	91	20 - 137	
Decachlorobiphenyl	0.0337	0.043	126	60 - 125	*
Decachlorobiphenyl [2C]	0.0337	0.043	128	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-09RE1	File ID:	2HI008.D
Sampled:	08/01/14 12:55	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:42
Solids:	99.50	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.013	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.038	114	20 - 137	
Decachlorobiphenyl	0.0333	0.043	130	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-10	File ID:	2HB026.D
Sampled:	08/01/14 13:00	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 21:34
Solids:	98.90	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.025	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0337	0.032	96	20 - 137	
2,4,5,6-TCMX [2C]	0.0337	0.035	105	20 - 137	
Decachlorobiphenyl	0.0337	0.052	154	60 - 125	*
Decachlorobiphenyl [2C]	0.0337	0.053	157	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-10RE1	File ID:	2HG046.D
Sampled:	08/01/14 13:00	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 06:52
Solids:	98.90	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	UQ	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.020	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0336	0.028	84	20 - 137	
Decachlorobiphenyl	0.0336	0.036	108	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW10-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-11	File ID:	2HB014.D
Sampled:	08/01/14 11:30	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:08
Solids:	96.48	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.037	JPQ	0.017	0.021	0.041
11096-82-5	PCB-1260	1	0.15		0.011	0.021	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0347	0.036	103	20 - 137	
2,4,5,6-TCMX [2C]	0.0347	0.039	114	20 - 137	
Decachlorobiphenyl	0.0347	0.056	160	60 - 125	*
Decachlorobiphenyl [2C]	0.0347	0.056	160	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW10-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-11RE1	File ID:	2HG043.D
Sampled:	08/01/14 11:30	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 06:16
Solids:	96.48	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.019	JPQ	0.017	0.021	0.041
11096-82-5	PCB-1260	1	0.025	JQ	0.011	0.021	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0343	0.034	99	20 - 137	
Decachlorobiphenyl	0.0343	0.042	121	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW11-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-12	File ID:	2HB027.D
Sampled:	08/01/14 11:35	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 21:46
Solids:	99.47	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	<0.020	U	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0335	0.029	87	20 - 137	
2,4,5,6-TCMX [2C]	0.0335	0.033	98	20 - 137	
Decachlorobiphenyl	0.0335	0.048	143	60 - 125	*
Decachlorobiphenyl [2C]	0.0335	0.048	143	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW11D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-13	File ID:	2HB028.D
Sampled:	08/01/14 11:35	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 21:58
Solids:	98.87	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	<0.020	U	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0337	0.037	110	20 - 137	
2,4,5,6-TCMX [2C]	0.0337	0.040	120	20 - 137	
Decachlorobiphenyl	0.0337	0.049	146	60 - 125	*
Decachlorobiphenyl [2C]	0.0337	0.049	146	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW12-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-14	File ID:	2HB029.D
Sampled:	08/01/14 11:40	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 22:10
Solids:	96.57	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	UQ	0.017	0.021	0.041
11096-82-5	PCB-1260	1	0.019	J	0.011	0.021	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0345	0.021	62	20 - 137	
2,4,5,6-TCMX [2C]	0.0345	0.023	67	20 - 137	
Decachlorobiphenyl	0.0345	0.046	134	60 - 125	*
Decachlorobiphenyl [2C]	0.0345	0.046	133	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW12-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-14RE1	File ID:	2HG047.D
Sampled:	08/01/14 11:40	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 07:04
Solids:	96.57	Preparation:	EPA 3550C	Initial/Final:	29.6 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	UQ	0.017	0.021	0.041
11096-82-5	PCB-1260	1	0.020	J	0.011	0.021	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0350	0.025	72	20 - 137	
Decachlorobiphenyl	0.0350	0.042	120	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW13-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-15	File ID:	2HB030.D
Sampled:	08/01/14 11:45	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 22:23
Solids:	99.63	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	<0.020	U	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.030	91	20 - 137	
Decachlorobiphenyl [2C]	0.0333	0.044	131	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW14-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-16	File ID:	2HB031.D
Sampled:	08/01/14 11:50	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 22:35
Solids:	79.56	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.025	U	0.020	0.025	0.050
11096-82-5	PCB-1260	1	<0.025	U	0.014	0.025	0.050

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0418	0.031	75	20 - 137	
Decachlorobiphenyl [2C]	0.0418	0.059	141	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSW15-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-18	File ID:	2HB034.D
Sampled:	08/01/14 12:00	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:11
Solids:	78.92	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.025	U	0.020	0.025	0.051
11096-82-5	PCB-1260	1	<0.025	U	0.014	0.025	0.051

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0422	0.025	60	20 - 137	
Decachlorobiphenyl	0.0422	0.049	116	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19	File ID:	2HB035.D
Sampled:	08/01/14 13:10	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:23
Solids:	94.31	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	0.012	J	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0355	0.041	116	20 - 137	
Decachlorobiphenyl	0.0355	0.059	165	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF01-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19RE1	File ID:	2HI009.D
Sampled:	08/01/14 13:10	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:54
Solids:	94.31	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	<0.021	U	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0353	0.039	111	20 - 137	
Decachlorobiphenyl	0.0353	0.045	126	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-20	File ID:	2HB036.D
Sampled:	08/01/14 13:15	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:35
Solids:	99.47	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.014	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0335	0.034	101	20 - 137	
Decachlorobiphenyl	0.0335	0.047	141	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF02-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-20RE1	File ID:	2HI010.D
Sampled:	08/01/14 13:15	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 11:06
Solids:	99.47	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.015	J	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.040	119	20 - 137	
Decachlorobiphenyl	0.0333	0.046	139	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-21	File ID:	2HB037.D
Sampled:	08/01/14 13:20	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:47
Solids:	93.31	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.030	JPQ	0.017	0.021	0.043
11096-82-5	PCB-1260	1	0.13		0.012	0.021	0.043

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0357	0.037	104	20 - 137	
Decachlorobiphenyl	0.0357	0.049	138	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF03-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-21RE1	File ID:	2HG048.D
Sampled:	08/01/14 13:20	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 07:16
Solids:	93.31	Preparation:	EPA 3550C	Initial/Final:	29.5 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.060	PQ	0.017	0.021	0.043
11096-82-5	PCB-1260	1	0.23		0.012	0.021	0.043

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0363	0.037	103	20 - 137	
Decachlorobiphenyl	0.0363	0.048	131	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22	File ID:	2HC013.D
Sampled:	08/01/14 13:30	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 09:02
Solids:	80.44	Preparation:	EPA 3550C	Initial/Final:	30.4 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.025	UQ	0.020	0.025	0.050
11096-82-5	PCB-1260	1	0.029	JQ	0.014	0.025	0.050

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0409	0.013	31	20 - 137	
Decachlorobiphenyl	0.0409	0.025	60	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF04-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22RE1	File ID:	2HG051.D
Sampled:	08/01/14 13:30	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 07:52
Solids:	80.44	Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.025	UQ	0.020	0.025	0.050
11096-82-5	PCB-1260	1	0.035	J	0.014	0.025	0.050

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0416	0.017	40	20 - 137	
Decachlorobiphenyl	0.0416	0.031	76	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23	File ID:	2HC016.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 09:51
Solids:	98.80	Preparation:	EPA 3550C	Initial/Final:	29.7 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	UQ	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.047	Q	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0341	0.025	74	20 - 137	
Decachlorobiphenyl	0.0341	0.038	111	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF05-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23RE1	File ID:	2HG052.D
Sampled:	08/01/14 13:35	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 08:04
Solids:	98.80	Preparation:	EPA 3550C	Initial/Final:	29.7 g / 10 mL

Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.017	JPQ	0.016	0.020	0.040
11096-82-5	PCB-1260	1	0.047		0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0341	0.033	96	20 - 137	
Decachlorobiphenyl	0.0341	0.049	143	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF05D-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-24	File ID:	2HC017.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:03
Solids:	98.30	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.041
11096-82-5	PCB-1260	1	<0.020	UQ	0.011	0.020	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0337	0.030	89	20 - 137	
Decachlorobiphenyl	0.0337	0.038	113	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-25	File ID:	2HC018.D
Sampled:	08/01/14 13:45	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:15
Solids:	95.10	Preparation:	EPA 3550C	Initial/Final:	29.6 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	0.018	JQ	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0355	0.028	79	20 - 137	
Decachlorobiphenyl	0.0355	0.035	100	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF06-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-25RE1	File ID:	2HI012.D
Sampled:	08/01/14 13:45	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 11:30
Solids:	95.10	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.021	U	0.017	0.021	0.042
11096-82-5	PCB-1260	1	0.023	J	0.012	0.021	0.042

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0349	0.040	114	20 - 137	
Decachlorobiphenyl	0.0349	0.045	129	60 - 125	*

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF07-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-26	File ID:	2HC019.D
Sampled:	08/01/14 13:50	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:27
Solids:	98.50	Preparation:	EPA 3550C	Initial/Final:	30.3 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.041
11096-82-5	PCB-1260	1	<0.020	UQ	0.011	0.020	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0335	0.027	79	20 - 137	
Decachlorobiphenyl	0.0335	0.036	108	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-27	File ID:	2HC020.D
Sampled:	08/01/14 14:00	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:39
Solids:	98.33	Preparation:	EPA 3550C	Initial/Final:	29.8 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.023	JPQ	0.016	0.020	0.041
11096-82-5	PCB-1260	1	0.084	Q	0.011	0.020	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0341	0.029	84	20 - 137	
Decachlorobiphenyl	0.0341	0.034	99	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF08-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-27RE1	File ID:	2HI011.D
Sampled:	08/01/14 14:00	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 11:18
Solids:	98.33	Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	0.032	JPQ	0.016	0.020	0.041
11096-82-5	PCB-1260	1	0.10		0.011	0.020	0.041

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0338	0.034	100	20 - 137	
Decachlorobiphenyl	0.0338	0.041	121	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-28	File ID:	2HC012.D
Sampled:	08/01/14 14:05	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 08:50
Solids:	99.25	Preparation:	EPA 3550C	Initial/Final:	30.2 g / 10 mL

Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (mg/kg dry)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<0.020	U	0.016	0.020	0.040
11096-82-5	PCB-1260	1	<0.020	UQ	0.011	0.020	0.040

SYSTEM MONITORING COMPOUND	ADDED (mg/kg dry)	CONC (mg/kg dry)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0334	0.027	80	20 - 137	
Decachlorobiphenyl	0.0334	0.038	113	60 - 125	

* Values outside of QC limits

ORGANIC ANALYSIS DATA SHEET

EPA 8082A

TR-5TH-CS-EB-080114

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	A404270-29	File ID:	2HC007.D
Sampled:	08/01/14 21:00	Prepared:	08/06/14 13:54	Analyzed:	08/08/14 07:46
Solids:		Preparation:	EPA 3510C	Initial/Final:	100 mL / 1 mL

Batch:	4H06028	Sequence:	AA29971	Calibration:	1408030	Instrument:	OSVGCECD2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/L)	Q	DL	LOD	LOQ
11097-69-1	PCB-1254	1	<1.0	U	0.50	1.0	1.0
11096-82-5	PCB-1260	1	<1.0	U	0.48	1.0	1.0

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	1.00	0.86	86	38 - 142	
Decachlorobiphenyl	1.00	0.69	69	40 - 135	

* Values outside of QC limits

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSW01-0814	08/01/14 12:10	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 19:21	1.00	365.00	
TR-5TH-CSW02-0814	08/01/14 12:15	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 19:33	1.00	365.00	
TR-5TH-CSW02-0814	08/01/14 12:15	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 06:28	3.00	365.00	
TR-5TH-CSW03-0814	08/01/14 12:20	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 19:45	1.00	365.00	
TR-5TH-CSW04-0814	08/01/14 12:30	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 19:57	1.00	365.00	
TR-5TH-CSW05-0814	08/01/14 12:35	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 20:09	1.00	365.00	
TR-5TH-CSW05-0814	08/01/14 12:35	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 10:30	0.00	365.00	
TR-5TH-CSW06-0814	08/01/14 12:40	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 20:45	1.00	365.00	
TR-5TH-CSW06-0814	08/01/14 12:40	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 06:40	3.00	365.00	
TR-5TH-CSW07-0814	08/01/14 12:50	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 20:58	1.00	365.00	
TR-5TH-CSW07D-0814	08/01/14 12:50	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 21:10	1.00	365.00	
TR-5TH-CSW08-0814	08/01/14 12:55	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 21:22	1.00	365.00	
TR-5TH-CSW08-0814	08/01/14 12:55	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 10:42	0.00	365.00	
TR-5TH-CSW09-0814	08/01/14 13:00	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 21:34	1.00	365.00	
TR-5TH-CSW09-0814	08/01/14 13:00	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 06:52	3.00	365.00	
TR-5TH-CSW10-0814	08/01/14 11:30	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 19:08	1.00	365.00	
TR-5TH-CSW10-0814	08/01/14 11:30	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 06:16	3.00	365.00	
TR-5TH-CSW11-0814	08/01/14 11:35	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 21:46	1.00	365.00	
TR-5TH-CSW11D-0814	08/01/14 11:35	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 21:58	1.00	365.00	
TR-5TH-CSW12-0814	08/01/14 11:40	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 22:10	1.00	365.00	
TR-5TH-CSW12-0814	08/01/14 11:40	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 07:04	3.00	365.00	
TR-5TH-CSW13-0814	08/01/14 11:45	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 22:23	1.00	365.00	
TR-5TH-CSW14-0814	08/01/14 11:50	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 22:35	1.00	365.00	

HOLDING TIME SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
TR-5TH-CSW15-0814	08/01/14 12:00	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 23:11	1.00	365.00	
TR-5TH-CSF01-0814	08/01/14 13:10	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 23:23	1.00	365.00	
TR-5TH-CSF01-0814	08/01/14 13:10	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 10:54	0.00	365.00	
TR-5TH-CSF02-0814	08/01/14 13:15	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 23:35	1.00	365.00	
TR-5TH-CSF02-0814	08/01/14 13:15	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 11:06	0.00	365.00	
TR-5TH-CSF03-0814	08/01/14 13:20	08/05/14 06:45	08/06/14 06:30	5.00	365.00	08/07/14 23:47	1.00	365.00	
TR-5TH-CSF03-0814	08/01/14 13:20	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 07:16	3.00	365.00	
TR-5TH-CSF04-0814	08/01/14 13:30	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 09:02	1.00	365.00	
TR-5TH-CSF04-0814	08/01/14 13:30	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 07:52	3.00	365.00	
TR-5TH-CSF05-0814	08/01/14 13:35	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 09:51	2.00	365.00	
TR-5TH-CSF05-0814	08/01/14 13:35	08/05/14 06:45	08/09/14 08:42	8.00	365.00	08/13/14 08:04	3.00	365.00	
TR-5TH-CSF05D-0814	08/01/14 13:35	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 10:03	2.00	365.00	
TR-5TH-CSF06-0814	08/01/14 13:45	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 10:15	2.00	365.00	
TR-5TH-CSF06-0814	08/01/14 13:45	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 11:30	0.00	365.00	
TR-5TH-CSF07-0814	08/01/14 13:50	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 10:27	2.00	365.00	
TR-5TH-CSF08-0814	08/01/14 14:00	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 10:39	2.00	365.00	
TR-5TH-CSF08-0814	08/01/14 14:00	08/05/14 06:45	08/13/14 14:00	12.00	365.00	08/14/14 11:18	0.00	365.00	
TR-5TH-CSF09-0814	08/01/14 14:05	08/05/14 06:45	08/06/14 09:27	5.00	365.00	08/08/14 08:50	1.00	365.00	
TR-5TH-CS-EB-080114	08/01/14 21:00	08/05/14 06:45	08/06/14 13:54	5.00	365.00	08/08/14 07:46	1.00	365.00	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06001 Batch Matrix: Soil Preparation: EPA 3550C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06001-BLK1	2HB010.D	08/06/14 06:30	
LCS	4H06001-BS1	2HB011.D	08/06/14 06:30	
TR-5TH-CSW10-0814	4H06001-MS1	2HB012.D	08/06/14 06:30	
TR-5TH-CSW10-0814	4H06001-MSD1	2HB013.D	08/06/14 06:30	
TR-5TH-CSW01-0814	A404270-01	2HB015.D	08/06/14 06:30	
TR-5TH-CSW02-0814	A404270-02	2HB016.D	08/06/14 06:30	
TR-5TH-CSW03-0814	A404270-03	2HB017.D	08/06/14 06:30	
TR-5TH-CSW04-0814	A404270-04	2HB018.D	08/06/14 06:30	
TR-5TH-CSW05-0814	A404270-05	2HB019.D	08/06/14 06:30	
TR-5TH-CSW06-0814	A404270-06	2HB022.D	08/06/14 06:30	
TR-5TH-CSW07-0814	A404270-07	2HB023.D	08/06/14 06:30	
TR-5TH-CSW07D-0814	A404270-08	2HB024.D	08/06/14 06:30	
TR-5TH-CSW08-0814	A404270-09	2HB025.D	08/06/14 06:30	
TR-5TH-CSW09-0814	A404270-10	2HB026.D	08/06/14 06:30	
TR-5TH-CSW10-0814	A404270-11	2HB014.D	08/06/14 06:30	
TR-5TH-CSW11-0814	A404270-12	2HB027.D	08/06/14 06:30	
TR-5TH-CSW11D-0814	A404270-13	2HB028.D	08/06/14 06:30	
TR-5TH-CSW12-0814	A404270-14	2HB029.D	08/06/14 06:30	
TR-5TH-CSW13-0814	A404270-15	2HB030.D	08/06/14 06:30	
TR-5TH-CSW14-0814	A404270-16	2HB031.D	08/06/14 06:30	
TR-5TH-CSW15-0814	A404270-18	2HB034.D	08/06/14 06:30	
TR-5TH-CSF01-0814	A404270-19	2HB035.D	08/06/14 06:30	
TR-5TH-CSF02-0814	A404270-20	2HB036.D	08/06/14 06:30	
TR-5TH-CSF03-0814	A404270-21	2HB037.D	08/06/14 06:30	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06006 Batch Matrix: Soil Preparation: EPA 3550C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06006-BLK1	2HC008.D	08/06/14 09:27	
LCS	4H06006-BS1	2HC009.D	08/06/14 09:27	
TR-5TH-CSF09-0814	4H06006-MS1	2HC010.D	08/06/14 09:27	
TR-5TH-CSF09-0814	4H06006-MSD1	2HC011.D	08/06/14 09:27	
TR-5TH-CSF04-0814	A404270-22	2HC013.D	08/06/14 09:27	
TR-5TH-CSF05-0814	A404270-23	2HC016.D	08/06/14 09:27	
TR-5TH-CSF05D-0814	A404270-24	2HC017.D	08/06/14 09:27	
TR-5TH-CSF06-0814	A404270-25	2HC018.D	08/06/14 09:27	
TR-5TH-CSF07-0814	A404270-26	2HC019.D	08/06/14 09:27	
TR-5TH-CSF08-0814	A404270-27	2HC020.D	08/06/14 09:27	
TR-5TH-CSF09-0814	A404270-28	2HC012.D	08/06/14 09:27	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06028 Batch Matrix: Water Preparation: EPA 3510C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06028-BLK1	2HC004.D	08/06/14 13:54	
LCS	4H06028-BS1	2HC005.D	08/06/14 13:54	
LCS Dup	4H06028-BSD1	2HC006.D	08/06/14 13:54	
TR-5TH-CS-EB-080114	A404270-29	2HC007.D	08/06/14 13:54	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H08042 Batch Matrix: Soil Preparation: EPA 3550C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H08042-BLK1	2HG039.D	08/09/14 08:42	
LCS	4H08042-BS1	2HG040.D	08/09/14 08:42	
TR-5TH-CSW10-0814	4H08042-MS1	2HG041.D	08/09/14 08:42	
TR-5TH-CSW10-0814	4H08042-MSD1	2HG042.D	08/09/14 08:42	
TR-5TH-CSW02-0814	A404270-02RE1	2HG044.D	08/09/14 08:42	
TR-5TH-CSW06-0814	A404270-06RE1	2HG045.D	08/09/14 08:42	
TR-5TH-CSW09-0814	A404270-10RE1	2HG046.D	08/09/14 08:42	
TR-5TH-CSW10-0814	A404270-11RE1	2HG043.D	08/09/14 08:42	
TR-5TH-CSW12-0814	A404270-14RE1	2HG047.D	08/09/14 08:42	
TR-5TH-CSF03-0814	A404270-21RE1	2HG048.D	08/09/14 08:42	
TR-5TH-CSF04-0814	A404270-22RE1	2HG051.D	08/09/14 08:42	
TR-5TH-CSF05-0814	A404270-23RE1	2HG052.D	08/09/14 08:42	

PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: ENCO Orlando SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025) Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H13024 Batch Matrix: Soil Preparation: EPA 3550C

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H13024-BLK1	2HI004.D	08/13/14 14:00	
LCS	4H13024-BS1	2HI005.D	08/13/14 14:00	
LCS Dup	4H13024-BSD1	2HI006.D	08/13/14 14:00	
TR-5TH-CSW05-0814	A404270-05RE1	2HI007.D	08/13/14 14:00	
TR-5TH-CSW08-0814	A404270-09RE1	2HI008.D	08/13/14 14:00	
TR-5TH-CSF01-0814	A404270-19RE1	2HI009.D	08/13/14 14:00	
TR-5TH-CSF02-0814	A404270-20RE1	2HI010.D	08/13/14 14:00	
TR-5TH-CSF06-0814	A404270-25RE1	2HI012.D	08/13/14 14:00	
TR-5TH-CSF08-0814	A404270-27RE1	2HI011.D	08/13/14 14:00	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06001-BLK1	File ID:	2HB010.D
Prepared:	08/06/14 06:30	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL
Analyzed:	08/07/14 18:20	Instrument:	OSVGCECD2		
Batch:	4H06001	Sequence:	AA29933	Calibration:	1408030

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
11097-69-1	PCB-1254	<0.020	U
11096-82-5	PCB-1260	<0.020	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.022	66	20 - 137	
Decachlorobiphenyl	0.0333	0.039	116	60 - 125	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06006-BLK1	File ID:	2HC008.D
Prepared:	08/06/14 09:27	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL
Analyzed:	08/08/14 08:02	Instrument:	OSVGCECD2		
Batch:	4H06006	Sequence:	AA29971	Calibration:	1408030

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
11097-69-1	PCB-1254	<0.020	U
11096-82-5	PCB-1260	<0.020	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.028	85	20 - 137	
Decachlorobiphenyl	0.0333	0.041	123	60 - 125	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	4H06028-BLK1	File ID:	2HC004.D
Prepared:	08/06/14 13:54	Preparation:	EPA 3510C	Initial/Final:	100 mL / 1 mL
Analyzed:	08/08/14 07:10	Instrument:	OSVGCECD2		
Batch:	4H06028	Sequence:	AA29971	Calibration:	1408030

CAS NO.	COMPOUND	CONC. (ug/L)	Q
11097-69-1	PCB-1254	<1.0	U
11096-82-5	PCB-1260	<1.0	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	1.00	0.76	76	38 - 142	
Decachlorobiphenyl	1.00	0.88	88	40 - 135	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H08042-BLK1	File ID:	2HG039.D
Prepared:	08/09/14 08:42	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL
Analyzed:	08/13/14 05:27	Instrument:	OSVGCECD2		
Batch:	4H08042	Sequence:	AA30013	Calibration:	1408030

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
11097-69-1	PCB-1254	<0.020	U
11096-82-5	PCB-1260	<0.020	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.026	78	20 - 137	
Decachlorobiphenyl	0.0333	0.032	96	60 - 125	

METHOD BLANK DATA SHEET
EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H13024-BLK1	File ID:	2HI004.D
Prepared:	08/13/14 14:00	Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL
Analyzed:	08/14/14 09:54	Instrument:	OSVGCECD2		
Batch:	4H13024	Sequence:	AA30071	Calibration:	1408030

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
11097-69-1	PCB-1254	<0.020	U
11096-82-5	PCB-1260	<0.020	U

SYSTEM MONITORING COMPOUND	ADDED (mg/kg wet)	CONC (mg/kg wet)	% REC	QC LIMITS	Q
2,4,5,6-TCMX	0.0333	0.029	86	20 - 137	
Decachlorobiphenyl	0.0333	0.032	97	60 - 125	

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06001	Laboratory ID:	4H06001-BS1
Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
PCB-1254		ND		29 - 185
PCB-1260	0.333	0.36	109	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06006	Laboratory ID:	4H06006-BS1
Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
PCB-1254		ND		29 - 185
PCB-1260	0.333	0.44	132 *	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Water		
Batch:	4H06028	Laboratory ID:	4H06028-BS1
Preparation:	EPA 3510C	Initial/Final:	100 mL / 1 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
PCB-1254		ND		29 - 185
PCB-1260	10.0	11	112	30 - 145

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PCB-1254		ND			30	29 - 185
PCB-1260	10.0	11	110	1	30	30 - 145

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H08042	Laboratory ID:	4H08042-BS1
Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
PCB-1254		ND		29 - 185
PCB-1260	0.333	0.34	102	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H13024	Laboratory ID:	4H13024-BS1
Preparation:	EPA 3550C	Initial/Final:	30 g / 10 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
PCB-1254		ND		29 - 185
PCB-1260	0.333	0.37	112	60 - 130

COMPOUND	SPIKE ADDED (mg/kg wet)	LCSD CONCENTRATION (mg/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PCB-1254		ND			30	29 - 185
PCB-1260	0.333	0.36	109	3	30	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8082A

TR-5TH-CSW10-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06001	Laboratory ID:	4H06001-MS1
Preparation:	EPA 3550C	Initial/Final:	30.1 g / 10 mL

Source Sample Name: TR-5TH-CSW10-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
PCB-1254		0.037	ND		29 - 185
PCB-1260	0.344	0.15	0.57	121	60 - 130

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PCB-1254		ND			30	29 - 185
PCB-1260	0.342	0.59	128	4	30	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8082A

TR-5TH-CSF09-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06006	Laboratory ID:	4H06006-MS1
Preparation:	EPA 3550C	Initial/Final:	29.9 g / 10 mL

Source Sample Name: TR-5TH-CSF09-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
PCB-1254		ND	ND		29 - 185
PCB-1260	0.337	ND	0.37	109	60 - 130

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS	
					RPD	REC.
PCB-1254		ND			30	29 - 185
PCB-1260	0.342	0.38	111	4	30	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 8082A

TR-5TH-CSW10-0814

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H08042	Laboratory ID:	4H08042-MS1
Preparation:	EPA 3550C	Initial/Final:	29.6 g / 10 mL

Source Sample Name: TR-5TH-CSW10-0814

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
PCB-1254		0.019	ND		29 - 185
PCB-1260	0.350	0.025	0.49	132 *	60 - 130

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PCB-1254		ND			30	29 - 185
PCB-1260	0.349	0.53	144 *	8	30	60 - 130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

TR-5TH-CSW01-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-01	File ID:	2HB015.D
Sampled:	08/01/14 12:10	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:21
Solids:	81.79	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.032	14.5
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.037	14.5
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.061	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.061	0

* Column used for quantitation

TR-5TH-CSW02-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-02
File ID: 2HB016.D
Sampled: 08/01/14 12:15
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 19:33
Solids: 78.60
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.847	4.847667	0.000667		0.047	182
PCB-1254	2	5.064	5.067	0.003		1.0	182
PCB-1260	* 1	5.642	5.642	0		0.25	7.69
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.034	8.45
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.037	8.45
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.058	1.74
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.057	1.74

* Column used for quantitation

TR-5TH-CSW03-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-03
File ID: 2HB017.D
Sampled: 08/01/14 12:20
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 19:45
Solids: 77.99
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.033	8.7
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.036	8.7
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.062	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.062	0

* Column used for quantitation

TR-5TH-CSW04-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-04	File ID:	2HB018.D
Sampled:	08/01/14 12:30	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 19:57
Solids:	85.57	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.024	11.8
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.047	2.15

* Column used for quantitation

TR-5TH-CSW05-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-05
File ID: 2HB019.D
Sampled: 08/01/14 12:35
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 20:09
Solids: 99.26
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.646	5.642	0.004		0.012	8
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.031	9.23
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.034	9.23
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.053	0
Decachlorobiphenyl	* 2	6.739	6.738833	0.000167		0.053	0

* Column used for quantitation

TR-5TH-CSW06-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-06	File ID:	2HB022.D
Sampled:	08/01/14 12:40	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 20:45
Solids:	94.63	Preparation:	EPA 3550C	Instrument:	OSVGCECD2

Batch: 4H06001 Sequence: AA29933

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.643	5.642	0.001		0.021	9.09
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.023	8.33
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.025	8.33
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.049	2.02
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.050	2.02

* Column used for quantitation

TR-5TH-CSW07-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-07
File ID: 2HB023.D
Sampled: 08/01/14 12:50
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 20:58
Solids: 90.23
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.645	5.642	0.003		0.014	6.9
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.029	6.67
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.031	6.67
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.044	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.044	0

* Column used for quantitation

TR-5TH-CSW07D-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-08
File ID: 2HB024.D
Sampled: 08/01/14 12:50
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 21:10
Solids: 98.35
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.031	9.23
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.034	9.23
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.048	0
Decachlorobiphenyl	* 2	6.739	6.738833	0.000167		0.048	0

* Column used for quantitation

TR-5TH-CSW08-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-09
File ID: 2HB025.D
Sampled: 08/01/14 12:55
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 21:22
Solids: 99.50
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.646	5.642	0.004		0.011	8.7
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.029	6.67
2,4,5,6-TCMX	2	2.417	2.420167	0.00317		0.031	6.67
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.043	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.043	0

* Column used for quantitation

TR-5TH-CSW09-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-10
File ID: 2HB026.D
Sampled: 08/01/14 13:00
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 21:34
Solids: 98.90
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.644	5.642	0.002		0.025	11.3
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.032	8.96
2,4,5,6-TCMX	2	2.416	2.420167	0.00417		0.035	8.96
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.052	1.9
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.053	1.9

* Column used for quantitation

TR-5TH-CSW10-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-11
File ID: 2HB014.D
Sampled: 08/01/14 11:30
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 19:08
Solids: 96.48
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.845	4.847667	0.00267		0.037	132
PCB-1254	2	5.064	5.067	0.003		0.18	132
PCB-1260	* 1	5.642	5.642	0		0.15	12.5
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.036	8
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.039	8
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.056	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.056	0

* Column used for quantitation

TR-5TH-CSW11-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-12
File ID: 2HB027.D
Sampled: 08/01/14 11:35
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 21:46
Solids: 99.47
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.029	12.9
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.033	12.9
Decachlorobiphenyl	1	6.538	6.5405	0.0025		0.048	0
Decachlorobiphenyl	* 2	6.737	6.738833	0.00183		0.048	0

* Column used for quantitation

TR-5TH-CSW11D-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-13
File ID: 2HB028.D
Sampled: 08/01/14 11:35
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 21:58
Solids: 98.87
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.037	7.79
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.040	7.79
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.049	0
Decachlorobiphenyl	* 2	6.739	6.738833	0.000167		0.049	0

* Column used for quantitation

TR-5TH-CSW12-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-14
File ID: 2HB029.D
Sampled: 08/01/14 11:40
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 22:10
Solids: 96.57
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.644	5.642	0.002		0.019	5.13
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.021	9.09
2,4,5,6-TCMX	2	2.415	2.420167	0.00517		0.023	9.09
Decachlorobiphenyl	1	6.539	6.5405	0.0015		0.046	0
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.046	0

* Column used for quantitation

TR-5TH-CSW13-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-15	File ID:	2HB030.D
Sampled:	08/01/14 11:45	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 22:23
Solids:	99.63	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.030	9.52
Decachlorobiphenyl	* 2	6.739	6.738833	0.000167		0.044	0

* Column used for quantitation

TR-5TH-CSW14-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-16	File ID:	2HB031.D
Sampled:	08/01/14 11:50	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 22:35
Solids:	79.56	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.031	9.23
Decachlorobiphenyl	* 2	6.738	6.738833	0.000833		0.059	0

* Column used for quantitation

TR-5TH-CSW15-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-18	File ID:	2HB034.D
Sampled:	08/01/14 12:00	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:11
Solids:	78.92	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.025	7.69
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.049	0

* Column used for quantitation

TR-5TH-CSF01-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19	File ID:	2HB035.D
Sampled:	08/01/14 13:10	Prepared:	08/06/14 06:30	Analyzed:	08/07/14 23:23
Solids:	94.31	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06001	Sequence:	AA29933		

GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.647	5.642	0.005		0.012	0
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.041	9.3
Decachlorobiphenyl	* 1	6.539	6.5405	0.0015		0.059	1.71

* Column used for quantitation

TR-5TH-CSF02-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-20
File ID: 2HB036.D
Sampled: 08/01/14 13:15
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 23:35
Solids: 99.47
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.646	5.642	0.004		0.014	7.41
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.034	8.45
Decachlorobiphenyl	* 1	6.539	6.5405	0.0015		0.047	0

* Column used for quantitation

TR-5TH-CSF03-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-21
File ID: 2HB037.D
Sampled: 08/01/14 13:20
Prepared: 08/06/14 06:30
Analyzed: 08/07/14 23:47
Solids: 93.31
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06001
Sequence: AA29933
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.85	4.847667	0.00233		0.030	114
PCB-1254	2	5.064	5.067	0.003		0.11	114
PCB-1260	* 1	5.642	5.642	0		0.13	7.41
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.037	7.79
Decachlorobiphenyl	* 1	6.537	6.5405	0.0035		0.049	0

* Column used for quantitation

TR-5TH-CSF04-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22	File ID:	2HC013.D
Sampled:	08/01/14 13:30	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 09:02
Solids:	80.44	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.642	5.642	0		0.029	3.39
2,4,5,6-TCMX	* 1	2.443	2.4505	0.0075		0.013	14.3
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.025	3.92

* Column used for quantitation

TR-5TH-CSF05-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23	File ID:	2HC016.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 09:51
Solids:	98.80	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.642	5.642	0		0.047	27.5
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.025	14.8
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.038	5.13

* Column used for quantitation

TR-5TH-CSF05D-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-24	File ID:	2HC017.D
Sampled:	08/01/14 13:35	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:03
Solids:	98.30	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		

GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.030	9.52
Decachlorobiphenyl	* 1	6.539	6.5405	0.0015		0.038	5.13

* Column used for quantitation

TR-5TH-CSF06-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-25	File ID:	2HC018.D
Sampled:	08/01/14 13:45	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:15
Solids:	95.10	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.642	5.642	0		0.018	15.4
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.028	10.2
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.035	5.56

* Column used for quantitation

TR-5TH-CSF07-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-26	File ID:	2HC019.D
Sampled:	08/01/14 13:50	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 10:27
Solids:	98.50	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.027	7.14
Decachlorobiphenyl	* 1	6.539	6.5405	0.0015		0.036	2.74

* Column used for quantitation

TR-5TH-CSF08-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-27
File ID: 2HC020.D
Sampled: 08/01/14 14:00
Prepared: 08/06/14 09:27
Analyzed: 08/08/14 10:39
Solids: 98.33
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H06006
Sequence: AA29971
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.845	4.847667	0.00267		0.023	110
PCB-1254	2	5.064	5.067	0.003		0.079	110
PCB-1260	* 1	5.642	5.642	0		0.084	10.2
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.029	15.9
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.034	2.9

* Column used for quantitation

TR-5TH-CSF09-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-28	File ID:	2HC012.D
Sampled:	08/01/14 14:05	Prepared:	08/06/14 09:27	Analyzed:	08/08/14 08:50
Solids:	99.25	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H06006	Sequence:	AA29971		
GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.444	2.4505	0.0065		0.027	13.8
Decachlorobiphenyl	* 1	6.537	6.5405	0.0035		0.038	2.6

* Column used for quantitation

TR-5TH-CS-EB-080114

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	A404270-29	File ID:	2HC007.D
Sampled:	08/01/14 21:00	Prepared:	08/06/14 13:54	Analyzed:	08/08/14 07:46
Solids:		Preparation:	EPA 3510C	Instrument:	OSVGCECD2

Batch: 4H06028 Sequence: AA29971

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.445	2.4505	0.0055		0.86	7.82
Decachlorobiphenyl	* 1	6.538	6.5405	0.0025		0.69	8.33

* Column used for quantitation

TR-5TH-CSW02-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-02RE1
File ID: 2HG044.D
Sampled: 08/01/14 12:15
Prepared: 08/09/14 08:42
Analyzed: 08/13/14 06:28
Solids: 78.60
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H08042
Sequence: AA30013
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.823	4.847667	0.0247		0.036	158
PCB-1254	2	5.04	5.067	0.027		0.31	158
PCB-1260	* 1	5.622	5.642	0.02		0.19	19
2,4,5,6-TCMX	* 1	2.425	2.4505	0.0255		0.020	22.2
Decachlorobiphenyl	* 1	6.518	6.5405	0.0225		0.020	18.2

* Column used for quantitation

TR-5TH-CSW06-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-06RE1
File ID: 2HG045.D
Sampled: 08/01/14 12:40
Prepared: 08/09/14 08:42
Analyzed: 08/13/14 06:40
Solids: 94.63
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H08042
Sequence: AA30013
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.622	5.642	0.02		0.024	15.4
2,4,5,6-TCMX	* 1	2.425	2.4505	0.0255		0.035	18.2
Decachlorobiphenyl	* 1	6.517	6.5405	0.0235		0.043	11

* Column used for quantitation

TR-5TH-CSW09-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-10RE1	File ID:	2HG046.D
Sampled:	08/01/14 13:00	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 06:52
Solids:	98.90	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H08042	Sequence:	AA30013		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.624	5.642	0.018		0.020	18.2
2,4,5,6-TCMX	* 1	2.426	2.4505	0.0245		0.028	13.3
Decachlorobiphenyl	* 1	6.519	6.5405	0.0215		0.036	15.4

* Column used for quantitation

TR-5TH-CSW10-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-11RE1
File ID: 2HG043.D
Sampled: 08/01/14 11:30
Prepared: 08/09/14 08:42
Analyzed: 08/13/14 06:16
Solids: 96.48
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H08042
Sequence: AA30013
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.823	4.847667	0.0247		0.019	79.4
PCB-1254	2	5.04	5.067	0.027		0.044	79.4
PCB-1260	* 1	5.622	5.642	0.02		0.025	14.8
2,4,5,6-TCMX	* 1	2.424	2.4505	0.0265		0.034	18.7
Decachlorobiphenyl	* 1	6.518	6.5405	0.0225		0.042	11.2

* Column used for quantitation

TR-5TH-CSW12-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-14RE1	File ID:	2HG047.D
Sampled:	08/01/14 11:40	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 07:04
Solids:	96.57	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H08042	Sequence:	AA30013		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.623	5.642	0.019		0.020	14
2,4,5,6-TCMX	* 1	2.425	2.4505	0.0255		0.025	21.4
Decachlorobiphenyl	* 1	6.518	6.5405	0.0225		0.042	11.2

* Column used for quantitation

TR-5TH-CSF03-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-21RE1
File ID: 2HG048.D
Sampled: 08/01/14 13:20
Prepared: 08/09/14 08:42
Analyzed: 08/13/14 07:16
Solids: 93.31
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H08042
Sequence: AA30013
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.823	4.847667	0.0247		0.060	140
PCB-1254	2	5.04	5.067	0.027		0.34	140
PCB-1260	* 1	5.62	5.642	0.022		0.23	16
2,4,5,6-TCMX	* 1	2.424	2.4505	0.0265		0.037	19.5
Decachlorobiphenyl	* 1	6.518	6.5405	0.0225		0.048	11.8

* Column used for quantitation

TR-5TH-CSF04-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-22RE1	File ID:	2HG051.D
Sampled:	08/01/14 13:30	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 07:52
Solids:	80.44	Preparation:	EPA 3550C	Instrument:	OSVGCECD2

Batch: 4H08042 Sequence: AA30013

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.622	5.642	0.02		0.035	18.2
2,4,5,6-TCMX	* 1	2.425	2.4505	0.0255		0.017	21.1
Decachlorobiphenyl	* 1	6.518	6.5405	0.0225		0.031	17.6

* Column used for quantitation

TR-5TH-CSF05-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-23RE1	File ID:	2HG052.D
Sampled:	08/01/14 13:35	Prepared:	08/09/14 08:42	Analyzed:	08/13/14 08:04
Solids:	98.80	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H08042	Sequence:	AA30013		

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.823	4.847667	0.0247		0.017	134
PCB-1254	2	5.041	5.067	0.026		0.086	134
PCB-1260	* 1	5.622	5.642	0.02		0.047	19.2
2,4,5,6-TCMX	* 1	2.426	2.4505	0.0245		0.033	16.7
Decachlorobiphenyl	* 1	6.519	6.5405	0.0215		0.049	9.71

* Column used for quantitation

TR-5TH-CSW05-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-05RE1	File ID:	2HI007.D
Sampled:	08/01/14 12:35	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:30
Solids:	99.26	Preparation:	EPA 3550C	Instrument:	OSVGCECD2

Batch: 4H13024 Sequence: AA30071

GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.614	5.642	0.028		0.013	0
2,4,5,6-TCMX	* 1	2.413	2.4505	0.0375		0.041	17.8
Decachlorobiphenyl	* 1	6.509	6.5405	0.0315		0.045	16.3

* Column used for quantitation

TR-5TH-CSW08-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-09RE1	File ID:	2HI008.D
Sampled:	08/01/14 12:55	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:42
Solids:	99.50	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H13024	Sequence:	AA30071		
GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.614	5.642	0.028		0.013	7.41
2,4,5,6-TCMX	* 1	2.414	2.4505	0.0365		0.038	21.2
Decachlorobiphenyl	* 1	6.51	6.5405	0.0305		0.043	17

* Column used for quantitation

TR-5TH-CSF01-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	A404270-19RE1	File ID:	2HI009.D
Sampled:	08/01/14 13:10	Prepared:	08/13/14 14:00	Analyzed:	08/14/14 10:54
Solids:	94.31	Preparation:	EPA 3550C	Instrument:	OSVGCECD2
Batch:	4H13024	Sequence:	AA30071		
GC Column(1):	Stx-CLP Pesticides, Diam:0.32mm, Le	GC Column(2):	Stx-CLP Pesticides2, Diam:0.32mm, Len:30m		

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
2,4,5,6-TCMX	* 1	2.413	2.4505	0.0375		0.039	20.7
Decachlorobiphenyl	* 1	6.509	6.5405	0.0315		0.045	14.4

* Column used for quantitation

TR-5TH-CSF02-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-20RE1
File ID: 2HI010.D
Sampled: 08/01/14 13:15
Prepared: 08/13/14 14:00
Analyzed: 08/14/14 11:06
Solids: 99.47
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H13024
Sequence: AA30071
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.613	5.642	0.029		0.015	6.45
2,4,5,6-TCMX	* 1	2.413	2.4505	0.0375		0.040	18.2
Decachlorobiphenyl	* 1	6.508	6.5405	0.0325		0.046	17.8

* Column used for quantitation

TR-5TH-CSF06-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-25RE1
File ID: 2HI012.D
Sampled: 08/01/14 13:45
Prepared: 08/13/14 14:00
Analyzed: 08/14/14 11:30
Solids: 95.10
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H13024
Sequence: AA30071
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1260	* 1	5.614	5.642	0.028		0.023	16
2,4,5,6-TCMX	* 1	2.414	2.4505	0.0365		0.040	20.2
Decachlorobiphenyl	* 1	6.51	6.5405	0.0305		0.045	18.2

* Column used for quantitation

TR-5TH-CSF08-0814

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: A404270-27RE1
File ID: 2HI011.D
Sampled: 08/01/14 14:00
Prepared: 08/13/14 14:00
Analyzed: 08/14/14 11:18
Solids: 98.33
Preparation: EPA 3550C
Instrument: OSVGCECD2
Batch: 4H13024
Sequence: AA30071
GC Column(1): Stx-CLP Pesticides, Diam:0.32mm, Le
GC Column(2): Stx-CLP Pesticides2, Diam:0.32mm, Len:30m

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
PCB-1254	* 1	4.812	4.847667	0.0357		0.032	110
PCB-1254	2	5.026	5.067	0.041		0.11	110
PCB-1260	* 1	5.61	5.642	0.032		0.10	26.1
2,4,5,6-TCMX	* 1	2.413	2.4505	0.0375		0.034	21.1
Decachlorobiphenyl	* 1	6.508	6.5405	0.0325		0.041	15.7

* Column used for quantitation

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29933
Instrument: OSVGCECD2
Matrix: Soil
Calibration: 1408030

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29933-CCV1)			Lab File ID: 2HB008.D		Analyzed: 08/07/14 17:32			
2,4,5,6-TCMX	0.200	106	80 - 120	2.451	2.4505	0.0005	+/-1.0	
2,4,5,6-TCMX	0.200	106	80 - 120	2.451	2.4505	0.0005	+/-1.0	
Decachlorobiphenyl	0.200	105	80 - 120	6.541	6.5405	0.0005	+/-1.0	
Decachlorobiphenyl	0.200	105	80 - 120	6.541	6.5405	0.0005	+/-1.0	
Blank (4H06001-BLK1)			Lab File ID: 2HB010.D		Analyzed: 08/07/14 18:20			
2,4,5,6-TCMX	0.0333	66	20 - 137	2.451	2.4505	0.0005	+/-1.0	
2,4,5,6-TCMX	0.0333	66	20 - 137	2.451	2.4505	0.0005	+/-1.0	
Decachlorobiphenyl	0.0333	116	60 - 125	6.551	6.5405	0.0105	+/-1.0	
Decachlorobiphenyl	0.0333	116	60 - 125	6.551	6.5405	0.0105	+/-1.0	
LCS (4H06001-BS1)			Lab File ID: 2HB011.D		Analyzed: 08/07/14 18:32			
2,4,5,6-TCMX	0.0333	49	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX	0.0333	49	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0333	107	60 - 125	6.543	6.5405	0.0025	+/-1.0	
Decachlorobiphenyl	0.0333	107	60 - 125	6.543	6.5405	0.0025	+/-1.0	
Matrix Spike (4H06001-MS1)			Lab File ID: 2HB012.D		Analyzed: 08/07/14 18:44			
2,4,5,6-TCMX	0.0344	86	20 - 137	2.443	2.4505	-0.0075	+/-1.0	
2,4,5,6-TCMX	0.0344	86	20 - 137	2.443	2.4505	-0.0075	+/-1.0	
Decachlorobiphenyl	0.0344	135	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl	0.0344	135	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Matrix Spike Dup (4H06001-MSD1)			Lab File ID: 2HB013.D		Analyzed: 08/07/14 18:56			
2,4,5,6-TCMX	0.0342	88	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX	0.0342	88	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0342	126	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl	0.0342	126	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
TR-5TH-CSW10-0814 (A404270-11)			Lab File ID: 2HB014.D		Analyzed: 08/07/14 19:08			
2,4,5,6-TCMX	0.0347	103	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0347	114	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0347	160	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0347	160	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW01-0814 (A404270-01)			Lab File ID: 2HB015.D		Analyzed: 08/07/14 19:21			
2,4,5,6-TCMX	0.0408	79	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0408	91	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0408	151	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
Decachlorobiphenyl [2C]	0.0408	149	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29933
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW02-0814 (A404270-02)			Lab File ID: 2HB016.D		Analyzed: 08/07/14 19:33			
2,4,5,6-TCMX	0.0427	79	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0427	86	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0427	135	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0427	133	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW03-0814 (A404270-03)			Lab File ID: 2HB017.D		Analyzed: 08/07/14 19:45			
2,4,5,6-TCMX	0.0425	77	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0425	84	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0425	147	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0425	145	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW04-0814 (A404270-04)			Lab File ID: 2HB018.D		Analyzed: 08/07/14 19:57			
2,4,5,6-TCMX	0.0387	63	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0387	120	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
TR-5TH-CSW05-0814 (A404270-05)			Lab File ID: 2HB019.D		Analyzed: 08/07/14 20:09			
2,4,5,6-TCMX	0.0336	93	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX [2C]	0.0336	102	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0336	158	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
Decachlorobiphenyl [2C]	0.0336	159	60 - 125	6.739	6.738833	0.0002	+/-1.0	*
Calibration Check (AA29933-CCV2)			Lab File ID: 2HB020.D		Analyzed: 08/07/14 20:21			
2,4,5,6-TCMX	0.100	85	80 - 120	2.453	2.4505	0.0025	+/-1.0	
2,4,5,6-TCMX	0.100	85	80 - 120	2.453	2.4505	0.0025	+/-1.0	
Decachlorobiphenyl	0.100	125	80 - 120	6.54	6.5405	-0.0005	+/-1.0	*
Decachlorobiphenyl	0.100	125	80 - 120	6.54	6.5405	-0.0005	+/-1.0	*
TR-5TH-CSW06-0814 (A404270-06)			Lab File ID: 2HB022.D		Analyzed: 08/07/14 20:45			
2,4,5,6-TCMX	0.0352	66	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX [2C]	0.0352	72	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0352	140	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0352	143	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW07-0814 (A404270-07)			Lab File ID: 2HB023.D		Analyzed: 08/07/14 20:58			
2,4,5,6-TCMX	0.0363	78	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX [2C]	0.0363	85	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0363	121	60 - 125	6.539	6.5405	-0.0015	+/-1.0	
Decachlorobiphenyl [2C]	0.0363	121	60 - 125	6.738	6.738833	-0.0008	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29933
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW07D-0814 (A404270-08)			Lab File ID: 2HB024.D		Analyzed: 08/07/14 21:10			
2,4,5,6-TCMX	0.0339	93	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX [2C]	0.0339	101	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0339	141	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
Decachlorobiphenyl [2C]	0.0339	142	60 - 125	6.739	6.738833	0.0002	+/-1.0	*
TR-5TH-CSW08-0814 (A404270-09)			Lab File ID: 2HB025.D		Analyzed: 08/07/14 21:22			
2,4,5,6-TCMX	0.0337	85	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX [2C]	0.0337	91	20 - 137	2.417	2.420167	-0.0032	+/-1.0	
Decachlorobiphenyl	0.0337	126	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0337	128	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW09-0814 (A404270-10)			Lab File ID: 2HB026.D		Analyzed: 08/07/14 21:34			
2,4,5,6-TCMX	0.0337	96	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0337	105	20 - 137	2.416	2.420167	-0.0042	+/-1.0	
Decachlorobiphenyl	0.0337	154	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0337	157	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW11-0814 (A404270-12)			Lab File ID: 2HB027.D		Analyzed: 08/07/14 21:46			
2,4,5,6-TCMX	0.0335	87	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0335	98	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0335	143	60 - 125	6.538	6.5405	-0.0025	+/-1.0	*
Decachlorobiphenyl [2C]	0.0335	143	60 - 125	6.737	6.738833	-0.0018	+/-1.0	*
TR-5TH-CSW11D-0814 (A404270-13)			Lab File ID: 2HB028.D		Analyzed: 08/07/14 21:58			
2,4,5,6-TCMX	0.0337	110	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0337	120	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0337	146	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
Decachlorobiphenyl [2C]	0.0337	146	60 - 125	6.739	6.738833	0.0002	+/-1.0	*
TR-5TH-CSW12-0814 (A404270-14)			Lab File ID: 2HB029.D		Analyzed: 08/07/14 22:10			
2,4,5,6-TCMX	0.0345	62	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX [2C]	0.0345	67	20 - 137	2.415	2.420167	-0.0052	+/-1.0	
Decachlorobiphenyl	0.0345	134	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
Decachlorobiphenyl [2C]	0.0345	133	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
TR-5TH-CSW13-0814 (A404270-15)			Lab File ID: 2HB030.D		Analyzed: 08/07/14 22:23			
2,4,5,6-TCMX	0.0333	91	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl [2C]	0.0333	131	60 - 125	6.739	6.738833	0.0002	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29933	Instrument:	OSVGCECD2
Matrix:	Water	Calibration:	1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW14-0814 (A404270-16)			Lab File ID: 2HB031.D		Analyzed: 08/07/14 22:35			
2,4,5,6-TCMX	0.0418	75	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl [2C]	0.0418	141	60 - 125	6.738	6.738833	-0.0008	+/-1.0	*
Calibration Check (AA29933-CCV3)			Lab File ID: 2HB032.D		Analyzed: 08/07/14 22:47			
2,4,5,6-TCMX	0.100	117	80 - 120	2.452	2.4505	0.0015	+/-1.0	
2,4,5,6-TCMX	0.100	117	80 - 120	2.452	2.4505	0.0015	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.539	6.5405	-0.0015	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.539	6.5405	-0.0015	+/-1.0	
TR-5TH-CSW15-0814 (A404270-18)			Lab File ID: 2HB034.D		Analyzed: 08/07/14 23:11			
2,4,5,6-TCMX	0.0422	60	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0422	116	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
TR-5TH-CSF01-0814 (A404270-19)			Lab File ID: 2HB035.D		Analyzed: 08/07/14 23:23			
2,4,5,6-TCMX	0.0355	116	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0355	165	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
TR-5TH-CSF02-0814 (A404270-20)			Lab File ID: 2HB036.D		Analyzed: 08/07/14 23:35			
2,4,5,6-TCMX	0.0335	101	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0335	141	60 - 125	6.539	6.5405	-0.0015	+/-1.0	*
TR-5TH-CSF03-0814 (A404270-21)			Lab File ID: 2HB037.D		Analyzed: 08/07/14 23:47			
2,4,5,6-TCMX	0.0357	104	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0357	138	60 - 125	6.537	6.5405	-0.0035	+/-1.0	*
Calibration Check (AA29933-CCV4)			Lab File ID: 2HB038.D		Analyzed: 08/08/14 00:00			
2,4,5,6-TCMX	0.100	118	80 - 120	2.452	2.4505	0.0015	+/-1.0	
2,4,5,6-TCMX	0.100	118	80 - 120	2.452	2.4505	0.0015	+/-1.0	
Decachlorobiphenyl	0.100	105	80 - 120	6.54	6.5405	-0.0005	+/-1.0	
Decachlorobiphenyl	0.100	105	80 - 120	6.54	6.5405	-0.0005	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

Laboratory: SDG:

Client: Project:

Sequence: Instrument:

Matrix: Calibration:

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29971
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA29971-CCV1)			Lab File ID: 2HC002.D		Analyzed: 08/08/14 06:46			
2,4,5,6-TCMX	0.100	105	80 - 120	2.448	2.4505	-0.0025	+/-1.0	
2,4,5,6-TCMX	0.100	105	80 - 120	2.448	2.4505	-0.0025	+/-1.0	
Decachlorobiphenyl	0.100	106	80 - 120	6.541	6.5405	0.0005	+/-1.0	
Decachlorobiphenyl	0.100	106	80 - 120	6.541	6.5405	0.0005	+/-1.0	
Blank (4H06028-BLK1)			Lab File ID: 2HC004.D		Analyzed: 08/08/14 07:10			
2,4,5,6-TCMX	1.00	76	38 - 142	2.445	2.4505	-0.0055	+/-1.0	
2,4,5,6-TCMX	1.00	76	38 - 142	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	1.00	88	40 - 135	6.538	6.5405	-0.0025	+/-1.0	
Decachlorobiphenyl	1.00	88	40 - 135	6.538	6.5405	-0.0025	+/-1.0	
LCS (4H06028-BS1)			Lab File ID: 2HC005.D		Analyzed: 08/08/14 07:22			
2,4,5,6-TCMX	1.00	83	38 - 142	2.443	2.4505	-0.0075	+/-1.0	
2,4,5,6-TCMX	1.00	83	38 - 142	2.443	2.4505	-0.0075	+/-1.0	
Decachlorobiphenyl	1.00	113	40 - 135	6.537	6.5405	-0.0035	+/-1.0	
Decachlorobiphenyl	1.00	113	40 - 135	6.537	6.5405	-0.0035	+/-1.0	
LCS Dup (4H06028-BSD1)			Lab File ID: 2HC006.D		Analyzed: 08/08/14 07:34			
2,4,5,6-TCMX	1.00	71	38 - 142	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX	1.00	71	38 - 142	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	1.00	105	40 - 135	6.536	6.5405	-0.0045	+/-1.0	
Decachlorobiphenyl	1.00	105	40 - 135	6.536	6.5405	-0.0045	+/-1.0	
TR-5TH-CS-EB-080114 (A404270-29)			Lab File ID: 2HC007.D		Analyzed: 08/08/14 07:46			
2,4,5,6-TCMX	1.00	86	38 - 142	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	1.00	69	40 - 135	6.538	6.5405	-0.0025	+/-1.0	
Blank (4H06006-BLK1)			Lab File ID: 2HC008.D		Analyzed: 08/08/14 08:02			
2,4,5,6-TCMX	0.0333	85	20 - 137	2.448	2.4505	-0.0025	+/-1.0	
2,4,5,6-TCMX	0.0333	85	20 - 137	2.448	2.4505	-0.0025	+/-1.0	
Decachlorobiphenyl	0.0333	123	60 - 125	6.541	6.5405	0.0005	+/-1.0	
Decachlorobiphenyl	0.0333	123	60 - 125	6.541	6.5405	0.0005	+/-1.0	
LCS (4H06006-BS1)			Lab File ID: 2HC009.D		Analyzed: 08/08/14 08:14			
2,4,5,6-TCMX	0.0333	93	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX	0.0333	93	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0333	130	60 - 125	6.54	6.5405	-0.0005	+/-1.0	*
Decachlorobiphenyl	0.0333	130	60 - 125	6.54	6.5405	-0.0005	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29971
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Matrix Spike (4H06006-MS1)			Lab File ID: 2HC010.D		Analyzed: 08/08/14 08:26			
2,4,5,6-TCMX	0.0337	74	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX	0.0337	74	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0337	112	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
Decachlorobiphenyl	0.0337	112	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
Matrix Spike Dup (4H06006-MSD1)			Lab File ID: 2HC011.D		Analyzed: 08/08/14 08:38			
2,4,5,6-TCMX	0.0342	78	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
2,4,5,6-TCMX	0.0342	78	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0342	108	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
Decachlorobiphenyl	0.0342	108	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
TR-5TH-CSF09-0814 (A404270-28)			Lab File ID: 2HC012.D		Analyzed: 08/08/14 08:50			
2,4,5,6-TCMX	0.0334	80	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0334	113	60 - 125	6.537	6.5405	-0.0035	+/-1.0	
TR-5TH-CSF04-0814 (A404270-22)			Lab File ID: 2HC013.D		Analyzed: 08/08/14 09:02			
2,4,5,6-TCMX	0.0409	31	20 - 137	2.443	2.4505	-0.0075	+/-1.0	
Decachlorobiphenyl	0.0409	60	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
Calibration Check (AA29971-CCV2)			Lab File ID: 2HC014.D		Analyzed: 08/08/14 09:27			
2,4,5,6-TCMX	0.100	99	80 - 120	2.453	2.4505	0.0025	+/-1.0	
2,4,5,6-TCMX	0.100	99	80 - 120	2.453	2.4505	0.0025	+/-1.0	
Decachlorobiphenyl	0.100	109	80 - 120	6.539	6.5405	-0.0015	+/-1.0	
Decachlorobiphenyl	0.100	109	80 - 120	6.539	6.5405	-0.0015	+/-1.0	
TR-5TH-CSF05-0814 (A404270-23)			Lab File ID: 2HC016.D		Analyzed: 08/08/14 09:51			
2,4,5,6-TCMX	0.0341	74	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0341	111	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
TR-5TH-CSF05D-0814 (A404270-24)			Lab File ID: 2HC017.D		Analyzed: 08/08/14 10:03			
2,4,5,6-TCMX	0.0337	89	20 - 137	2.444	2.4505	-0.0065	+/-1.0	
Decachlorobiphenyl	0.0337	113	60 - 125	6.539	6.5405	-0.0015	+/-1.0	
TR-5TH-CSF06-0814 (A404270-25)			Lab File ID: 2HC018.D		Analyzed: 08/08/14 10:15			
2,4,5,6-TCMX	0.0355	79	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0355	100	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
TR-5TH-CSF07-0814 (A404270-26)			Lab File ID: 2HC019.D		Analyzed: 08/08/14 10:27			
2,4,5,6-TCMX	0.0335	79	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0335	108	60 - 125	6.539	6.5405	-0.0015	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA29971	Instrument:	OSVGCECD2
Matrix:	Water	Calibration:	1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSF08-0814 (A404270-27)			Lab File ID: 2HC020.D		Analyzed: 08/08/14 10:39			
2,4,5,6-TCMX	0.0341	84	20 - 137	2.445	2.4505	-0.0055	+/-1.0	
Decachlorobiphenyl	0.0341	99	60 - 125	6.538	6.5405	-0.0025	+/-1.0	
Calibration Check (AA29971-CCV3)			Lab File ID: 2HC021.D		Analyzed: 08/08/14 10:52			
2,4,5,6-TCMX	0.100	95	80 - 120	2.452	2.4505	0.0015	+/-1.0	
2,4,5,6-TCMX	0.100	95	80 - 120	2.452	2.4505	0.0015	+/-1.0	
Decachlorobiphenyl	0.100	104	80 - 120	6.538	6.5405	-0.0025	+/-1.0	
Decachlorobiphenyl	0.100	104	80 - 120	6.538	6.5405	-0.0025	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA30013
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA30013-CCV1)			Lab File ID: 2HG037.D		Analyzed: 08/13/14 05:03			
2,4,5,6-TCMX	0.100	108	80 - 120	2.431	2.4505	-0.0195	+/-1.0	
2,4,5,6-TCMX	0.100	108	80 - 120	2.431	2.4505	-0.0195	+/-1.0	
Decachlorobiphenyl	0.100	110	80 - 120	6.523	6.5405	-0.0175	+/-1.0	
Decachlorobiphenyl	0.100	110	80 - 120	6.523	6.5405	-0.0175	+/-1.0	
Blank (4H08042-BLK1)			Lab File ID: 2HG039.D		Analyzed: 08/13/14 05:27			
2,4,5,6-TCMX	0.0333	78	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
2,4,5,6-TCMX	0.0333	78	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
Decachlorobiphenyl	0.0333	96	60 - 125	6.518	6.5405	-0.0225	+/-1.0	
Decachlorobiphenyl	0.0333	96	60 - 125	6.518	6.5405	-0.0225	+/-1.0	
LCS (4H08042-BS1)			Lab File ID: 2HG040.D		Analyzed: 08/13/14 05:39			
2,4,5,6-TCMX	0.0333	73	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
2,4,5,6-TCMX	0.0333	73	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
Decachlorobiphenyl	0.0333	102	60 - 125	6.519	6.5405	-0.0215	+/-1.0	
Decachlorobiphenyl	0.0333	102	60 - 125	6.519	6.5405	-0.0215	+/-1.0	
Matrix Spike (4H08042-MS1)			Lab File ID: 2HG041.D		Analyzed: 08/13/14 05:51			
2,4,5,6-TCMX	0.0350	86	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
2,4,5,6-TCMX	0.0350	86	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
Decachlorobiphenyl	0.0350	127	60 - 125	6.518	6.5405	-0.0225	+/-1.0	*
Decachlorobiphenyl	0.0350	127	60 - 125	6.518	6.5405	-0.0225	+/-1.0	*
Matrix Spike Dup (4H08042-MSD1)			Lab File ID: 2HG042.D		Analyzed: 08/13/14 06:03			
2,4,5,6-TCMX	0.0349	106	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
2,4,5,6-TCMX	0.0349	106	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
Decachlorobiphenyl	0.0349	136	60 - 125	6.517	6.5405	-0.0235	+/-1.0	*
Decachlorobiphenyl	0.0349	136	60 - 125	6.517	6.5405	-0.0235	+/-1.0	*
TR-5TH-CSW10-0814 (A404270-11RE1)			Lab File ID: 2HG043.D		Analyzed: 08/13/14 06:16			
2,4,5,6-TCMX	0.0343	99	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
Decachlorobiphenyl	0.0343	121	60 - 125	6.518	6.5405	-0.0225	+/-1.0	
TR-5TH-CSW02-0814 (A404270-02RE1)			Lab File ID: 2HG044.D		Analyzed: 08/13/14 06:28			
2,4,5,6-TCMX	0.0426	46	20 - 137	2.425	2.4505	-0.0255	+/-1.0	
Decachlorobiphenyl	0.0426	48	60 - 125	6.518	6.5405	-0.0225	+/-1.0	*
TR-5TH-CSW06-0814 (A404270-06RE1)			Lab File ID: 2HG045.D		Analyzed: 08/13/14 06:40			
2,4,5,6-TCMX	0.0358	97	20 - 137	2.425	2.4505	-0.0255	+/-1.0	
Decachlorobiphenyl	0.0358	119	60 - 125	6.517	6.5405	-0.0235	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA30013	Instrument:	OSVGCECD2
Matrix:	Water	Calibration:	1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSW09-0814 (A404270-10RE1)			Lab File ID: 2HG046.D		Analyzed: 08/13/14 06:52			
2,4,5,6-TCMX	0.0336	84	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
Decachlorobiphenyl	0.0336	108	60 - 125	6.519	6.5405	-0.0215	+/-1.0	
TR-5TH-CSW12-0814 (A404270-14RE1)			Lab File ID: 2HG047.D		Analyzed: 08/13/14 07:04			
2,4,5,6-TCMX	0.0350	72	20 - 137	2.425	2.4505	-0.0255	+/-1.0	
Decachlorobiphenyl	0.0350	120	60 - 125	6.518	6.5405	-0.0225	+/-1.0	
TR-5TH-CSF03-0814 (A404270-21RE1)			Lab File ID: 2HG048.D		Analyzed: 08/13/14 07:16			
2,4,5,6-TCMX	0.0363	103	20 - 137	2.424	2.4505	-0.0265	+/-1.0	
Decachlorobiphenyl	0.0363	131	60 - 125	6.518	6.5405	-0.0225	+/-1.0	*
Calibration Check (AA30013-CCV2)			Lab File ID: 2HG049.D		Analyzed: 08/13/14 07:28			
2,4,5,6-TCMX	0.100	105	80 - 120	2.432	2.4505	-0.0185	+/-1.0	
2,4,5,6-TCMX	0.100	105	80 - 120	2.432	2.4505	-0.0185	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.519	6.5405	-0.0215	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.519	6.5405	-0.0215	+/-1.0	
TR-5TH-CSF04-0814 (A404270-22RE1)			Lab File ID: 2HG051.D		Analyzed: 08/13/14 07:52			
2,4,5,6-TCMX	0.0416	40	20 - 137	2.425	2.4505	-0.0255	+/-1.0	
Decachlorobiphenyl	0.0416	76	60 - 125	6.518	6.5405	-0.0225	+/-1.0	
TR-5TH-CSF05-0814 (A404270-23RE1)			Lab File ID: 2HG052.D		Analyzed: 08/13/14 08:04			
2,4,5,6-TCMX	0.0341	96	20 - 137	2.426	2.4505	-0.0245	+/-1.0	
Decachlorobiphenyl	0.0341	143	60 - 125	6.519	6.5405	-0.0215	+/-1.0	*
Calibration Check (AA30013-CCV3)			Lab File ID: 2HG053.D		Analyzed: 08/13/14 08:16			
2,4,5,6-TCMX	0.100	106	80 - 120	2.432	2.4505	-0.0185	+/-1.0	
2,4,5,6-TCMX	0.100	106	80 - 120	2.432	2.4505	-0.0185	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.518	6.5405	-0.0225	+/-1.0	
Decachlorobiphenyl	0.100	111	80 - 120	6.518	6.5405	-0.0225	+/-1.0	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA30071
Instrument: OSVGCECD2
Matrix: Water
Calibration: 1408030

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
Calibration Check (AA30071-CCV1)			Lab File ID: 2HI002.D		Analyzed: 08/14/14 08:59			
2,4,5,6-TCMX	0.100	111	80 - 120	2.42	2.4505	-0.0305	+/-1.0	
2,4,5,6-TCMX	0.100	111	80 - 120	2.42	2.4505	-0.0305	+/-1.0	
Decachlorobiphenyl	0.100	87	80 - 120	6.513	6.5405	-0.0275	+/-1.0	
Decachlorobiphenyl	0.100	87	80 - 120	6.513	6.5405	-0.0275	+/-1.0	
Blank (4H13024-BLK1)			Lab File ID: 2HI004.D		Analyzed: 08/14/14 09:54			
2,4,5,6-TCMX	0.0333	86	20 - 137	2.418	2.4505	-0.0325	+/-1.0	
2,4,5,6-TCMX	0.0333	86	20 - 137	2.418	2.4505	-0.0325	+/-1.0	
Decachlorobiphenyl	0.0333	97	60 - 125	6.517	6.5405	-0.0235	+/-1.0	
Decachlorobiphenyl	0.0333	97	60 - 125	6.517	6.5405	-0.0235	+/-1.0	
LCS (4H13024-BS1)			Lab File ID: 2HI005.D		Analyzed: 08/14/14 10:06			
2,4,5,6-TCMX	0.0333	92	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
2,4,5,6-TCMX	0.0333	92	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
Decachlorobiphenyl	0.0333	107	60 - 125	6.509	6.5405	-0.0315	+/-1.0	
Decachlorobiphenyl	0.0333	107	60 - 125	6.509	6.5405	-0.0315	+/-1.0	
LCS Dup (4H13024-BSD1)			Lab File ID: 2HI006.D		Analyzed: 08/14/14 10:18			
2,4,5,6-TCMX	0.0333	86	20 - 137	2.412	2.4505	-0.0385	+/-1.0	
2,4,5,6-TCMX	0.0333	86	20 - 137	2.412	2.4505	-0.0385	+/-1.0	
Decachlorobiphenyl	0.0333	101	60 - 125	6.509	6.5405	-0.0315	+/-1.0	
Decachlorobiphenyl	0.0333	101	60 - 125	6.509	6.5405	-0.0315	+/-1.0	
TR-5TH-CSW05-0814 (A404270-05RE1)			Lab File ID: 2HI007.D		Analyzed: 08/14/14 10:30			
2,4,5,6-TCMX	0.0335	122	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
Decachlorobiphenyl	0.0335	134	60 - 125	6.509	6.5405	-0.0315	+/-1.0	*
TR-5TH-CSW08-0814 (A404270-09RE1)			Lab File ID: 2HI008.D		Analyzed: 08/14/14 10:42			
2,4,5,6-TCMX	0.0333	114	20 - 137	2.414	2.4505	-0.0365	+/-1.0	
Decachlorobiphenyl	0.0333	130	60 - 125	6.51	6.5405	-0.0305	+/-1.0	*
TR-5TH-CSF01-0814 (A404270-19RE1)			Lab File ID: 2HI009.D		Analyzed: 08/14/14 10:54			
2,4,5,6-TCMX	0.0353	111	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
Decachlorobiphenyl	0.0353	126	60 - 125	6.509	6.5405	-0.0315	+/-1.0	*
TR-5TH-CSF02-0814 (A404270-20RE1)			Lab File ID: 2HI010.D		Analyzed: 08/14/14 11:06			
2,4,5,6-TCMX	0.0333	119	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
Decachlorobiphenyl	0.0333	139	60 - 125	6.508	6.5405	-0.0325	+/-1.0	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Sequence:	AA30071	Instrument:	OSVGCECD2
Matrix:	Water	Calibration:	1408030

Surrogate Compound	Spike Level mg/kg dry	% Recovery	Recovery Limits	RT	Calibration RT	RT Diff	RT Diff Limit	Q
TR-5TH-CSF08-0814 (A404270-27RE1)			Lab File ID: 2HI011.D		Analyzed: 08/14/14 11:18			
2,4,5,6-TCMX	0.0338	100	20 - 137	2.413	2.4505	-0.0375	+/-1.0	
Decachlorobiphenyl	0.0338	121	60 - 125	6.508	6.5405	-0.0325	+/-1.0	
TR-5TH-CSF06-0814 (A404270-25RE1)			Lab File ID: 2HI012.D		Analyzed: 08/14/14 11:30			
2,4,5,6-TCMX	0.0349	114	20 - 137	2.414	2.4505	-0.0365	+/-1.0	
Decachlorobiphenyl	0.0349	129	60 - 125	6.51	6.5405	-0.0305	+/-1.0	*
Calibration Check (AA30071-CCV2)			Lab File ID: 2HI013.D		Analyzed: 08/14/14 11:42			
2,4,5,6-TCMX	0.100	109	80 - 120	2.42	2.4505	-0.0305	+/-1.0	
2,4,5,6-TCMX	0.100	109	80 - 120	2.42	2.4505	-0.0305	+/-1.0	
Decachlorobiphenyl	0.100	106	80 - 120	6.509	6.5405	-0.0315	+/-1.0	
Decachlorobiphenyl	0.100	106	80 - 120	6.509	6.5405	-0.0315	+/-1.0	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA29933
Instrument: OSVGCECD2
Calibration: 1408030

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA29933-CCV1	2HB008.D	08/07/14 17:32
Aroclor Reference	AA29933-ARC1	2HB009.D	08/07/14 17:53
Blank	4H06001-BLK1	2HB010.D	08/07/14 18:20
LCS	4H06001-BS1	2HB011.D	08/07/14 18:32
TR-5TH-CSW10-0814	4H06001-MS1	2HB012.D	08/07/14 18:44
TR-5TH-CSW10-0814	4H06001-MSD1	2HB013.D	08/07/14 18:56
TR-5TH-CSW10-0814	A404270-11	2HB014.D	08/07/14 19:08
TR-5TH-CSW01-0814	A404270-01	2HB015.D	08/07/14 19:21
TR-5TH-CSW02-0814	A404270-02	2HB016.D	08/07/14 19:33
TR-5TH-CSW03-0814	A404270-03	2HB017.D	08/07/14 19:45
TR-5TH-CSW04-0814	A404270-04	2HB018.D	08/07/14 19:57
TR-5TH-CSW05-0814	A404270-05	2HB019.D	08/07/14 20:09
Calibration Check	AA29933-CCV2	2HB020.D	08/07/14 20:21
Aroclor Reference	AA29933-ARC2	2HB021.D	08/07/14 20:33
TR-5TH-CSW06-0814	A404270-06	2HB022.D	08/07/14 20:45
TR-5TH-CSW07-0814	A404270-07	2HB023.D	08/07/14 20:58
TR-5TH-CSW07D-0814	A404270-08	2HB024.D	08/07/14 21:10
TR-5TH-CSW08-0814	A404270-09	2HB025.D	08/07/14 21:22
TR-5TH-CSW09-0814	A404270-10	2HB026.D	08/07/14 21:34
TR-5TH-CSW11-0814	A404270-12	2HB027.D	08/07/14 21:46
TR-5TH-CSW11D-0814	A404270-13	2HB028.D	08/07/14 21:58
TR-5TH-CSW12-0814	A404270-14	2HB029.D	08/07/14 22:10
TR-5TH-CSW13-0814	A404270-15	2HB030.D	08/07/14 22:23
TR-5TH-CSW14-0814	A404270-16	2HB031.D	08/07/14 22:35
Calibration Check	AA29933-CCV3	2HB032.D	08/07/14 22:47
Aroclor Reference	AA29933-ARC3	2HB033.D	08/07/14 22:59
TR-5TH-CSW15-0814	A404270-18	2HB034.D	08/07/14 23:11
TR-5TH-CSF01-0814	A404270-19	2HB035.D	08/07/14 23:23
TR-5TH-CSF02-0814	A404270-20	2HB036.D	08/07/14 23:35
TR-5TH-CSF03-0814	A404270-21	2HB037.D	08/07/14 23:47
Calibration Check	AA29933-CCV4	2HB038.D	08/08/14 00:00
Aroclor Reference	AA29933-ARC4	2HB039.D	08/08/14 00:12

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29960

Instrument: OSVGCECD2

Calibration: 1408030

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	AA29960-CAL1	2HB002.D	08/07/14 14:58
Cal Standard	AA29960-CAL2	2HB003.D	08/07/14 15:10
Cal Standard	AA29960-CAL3	2HB004.D	08/07/14 15:22
Cal Standard	AA29960-CAL4	2HB005.D	08/07/14 15:35
Cal Standard	AA29960-CAL5	2HB006.D	08/07/14 15:47
Cal Standard	AA29960-CAL6	2HB007.D	08/07/14 15:59

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA29971

Instrument: OSVGCECD2

Calibration: 1408030

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA29971-CCV1	2HC002.D	08/08/14 06:46
Aroclor Reference	AA29971-ARC1	2HC003.D	08/08/14 06:58
Blank	4H06028-BLK1	2HC004.D	08/08/14 07:10
LCS	4H06028-BS1	2HC005.D	08/08/14 07:22
LCS Dup	4H06028-BSD1	2HC006.D	08/08/14 07:34
TR-5TH-CS-EB-080114	A404270-29	2HC007.D	08/08/14 07:46
Blank	4H06006-BLK1	2HC008.D	08/08/14 08:02
LCS	4H06006-BS1	2HC009.D	08/08/14 08:14
TR-5TH-CSF09-0814	4H06006-MS1	2HC010.D	08/08/14 08:26
TR-5TH-CSF09-0814	4H06006-MSD1	2HC011.D	08/08/14 08:38
TR-5TH-CSF09-0814	A404270-28	2HC012.D	08/08/14 08:50
TR-5TH-CSF04-0814	A404270-22	2HC013.D	08/08/14 09:02
Calibration Check	AA29971-CCV2	2HC014.D	08/08/14 09:27
Aroclor Reference	AA29971-ARC2	2HC015.D	08/08/14 09:39
TR-5TH-CSF05-0814	A404270-23	2HC016.D	08/08/14 09:51
TR-5TH-CSF05D-0814	A404270-24	2HC017.D	08/08/14 10:03
TR-5TH-CSF06-0814	A404270-25	2HC018.D	08/08/14 10:15
TR-5TH-CSF07-0814	A404270-26	2HC019.D	08/08/14 10:27
TR-5TH-CSF08-0814	A404270-27	2HC020.D	08/08/14 10:39
Calibration Check	AA29971-CCV3	2HC021.D	08/08/14 10:52
Aroclor Reference	AA29971-ARC3	2HC022.D	08/08/14 11:04

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA30013

Instrument: OSVGCECD2

Calibration: 1408030

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA30013-CCV1	2HG037.D	08/13/14 05:03
Aroclor Reference	AA30013-ARC1	2HG038.D	08/13/14 05:15
Blank	4H08042-BLK1	2HG039.D	08/13/14 05:27
LCS	4H08042-BS1	2HG040.D	08/13/14 05:39
TR-5TH-CSW10-0814	4H08042-MS1	2HG041.D	08/13/14 05:51
TR-5TH-CSW10-0814	4H08042-MSD1	2HG042.D	08/13/14 06:03
TR-5TH-CSW10-0814	A404270-11RE1	2HG043.D	08/13/14 06:16
TR-5TH-CSW02-0814	A404270-02RE1	2HG044.D	08/13/14 06:28
TR-5TH-CSW06-0814	A404270-06RE1	2HG045.D	08/13/14 06:40
TR-5TH-CSW09-0814	A404270-10RE1	2HG046.D	08/13/14 06:52
TR-5TH-CSW12-0814	A404270-14RE1	2HG047.D	08/13/14 07:04
TR-5TH-CSF03-0814	A404270-21RE1	2HG048.D	08/13/14 07:16
Calibration Check	AA30013-CCV2	2HG049.D	08/13/14 07:28
Aroclor Reference	AA30013-ARC2	2HG050.D	08/13/14 07:40
TR-5TH-CSF04-0814	A404270-22RE1	2HG051.D	08/13/14 07:52
TR-5TH-CSF05-0814	A404270-23RE1	2HG052.D	08/13/14 08:04
Calibration Check	AA30013-CCV3	2HG053.D	08/13/14 08:16
Aroclor Reference	AA30013-ARC3	2HG054.D	08/13/14 08:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Sequence: AA30071

Instrument: OSVGCECD2

Calibration: 1408030

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	AA30071-CCV1	2HI002.D	08/14/14 08:59
Aroclor Reference	AA30071-ARC1	2HI003.D	08/14/14 09:11
Blank	4H13024-BLK1	2HI004.D	08/14/14 09:54
LCS	4H13024-BS1	2HI005.D	08/14/14 10:06
LCS Dup	4H13024-BSD1	2HI006.D	08/14/14 10:18
TR-5TH-CSW05-0814	A404270-05RE1	2HI007.D	08/14/14 10:30
TR-5TH-CSW08-0814	A404270-09RE1	2HI008.D	08/14/14 10:42
TR-5TH-CSF01-0814	A404270-19RE1	2HI009.D	08/14/14 10:54
TR-5TH-CSF02-0814	A404270-20RE1	2HI010.D	08/14/14 11:06
TR-5TH-CSF08-0814	A404270-27RE1	2HI011.D	08/14/14 11:18
TR-5TH-CSF06-0814	A404270-25RE1	2HI012.D	08/14/14 11:30
Calibration Check	AA30071-CCV2	2HI013.D	08/14/14 11:42
Aroclor Reference	AA30071-ARC2	2HI014.D	08/14/14 11:54

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HB008.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29933	Injection Date:	08/07/14
Lab Sample ID:	AA29933-CCV1	Injection Time:	17:32

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	2.00	2.1	8.802521E+08	9.4281E+08		7.1	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HB020.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29933	Injection Date:	08/07/14
Lab Sample ID:	AA29933-CCV2	Injection Time:	20:21

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	0.99	8.802521E+08	9.3338E+08		6.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HB032.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29933	Injection Date:	08/07/14
Lab Sample ID:	AA29933-CCV3	Injection Time:	22:47

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	1.02468E+09		16.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HB038.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29933	Injection Date:	08/08/14
Lab Sample ID:	AA29933-CCV4	Injection Time:	00:00

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	9.982E+08		13.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HC002.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29971	Injection Date:	08/08/14
Lab Sample ID:	AA29971-CCV1	Injection Time:	06:46

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	0.96	8.802521E+08	8.9314E+08		1.5	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HC014.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29971	Injection Date:	08/08/14
Lab Sample ID:	AA29971-CCV2	Injection Time:	09:27

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.0	8.802521E+08	9.2566E+08		5.2	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HC021.D	Calibration Date:	08/07/14 17:29
Sequence:	AA29971	Injection Date:	08/08/14
Lab Sample ID:	AA29971-CCV3	Injection Time:	10:52

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	0.97	8.802521E+08	8.9654E+08		1.9	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HG037.D	Calibration Date:	08/07/14 17:29
Sequence:	AA30013	Injection Date:	08/13/14
Lab Sample ID:	AA30013-CCV1	Injection Time:	05:03

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	1.01544E+09		15.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HG049.D	Calibration Date:	08/07/14 17:29
Sequence:	AA30013	Injection Date:	08/13/14
Lab Sample ID:	AA30013-CCV2	Injection Time:	07:28

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	9.9328E+08		12.8	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HG053.D	Calibration Date:	08/07/14 17:29
Sequence:	AA30013	Injection Date:	08/13/14
Lab Sample ID:	AA30013-CCV3	Injection Time:	08:16

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	1.01572E+09		15.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HI002.D	Calibration Date:	08/07/14 17:29
Sequence:	AA30071	Injection Date:	08/14/14
Lab Sample ID:	AA30071-CCV1	Injection Time:	08:59

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	1.00724E+09		14.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Instrument ID:	OSVGCECD2	Calibration:	1408030
Lab File ID:	2HI013.D	Calibration Date:	08/07/14 17:29
Sequence:	AA30071	Injection Date:	08/14/14
Lab Sample ID:	AA30071-CCV2	Injection Time:	11:42

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
PCB-1260	A	1.00	1.1	8.802521E+08	1.02952E+09		17.0	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA27516
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4A0434	PCB1221 working Curve Cal-1	AA27516-CAL1		
A4A0433	PCB1221 working Curve Cal-2	AA27516-CAL2		
A4A0432	PCB1221 working Curve Cal-3	AA27516-CAL3		
A4A0431	PCB1221 working Curve Cal-4	AA27516-CAL4		
A4A0430	PCB1221 working Curve Cal-5	AA27516-CAL5		
A4A0429	PCB1221 working Curve Cal-6	AA27516-CAL6		
A4A0428	PCB1221 working SCV1	AA27516-SCV1	2BH111.D	02/14/14 11:28

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA27519
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0254	PCB1262 working Curve Cal-1	AA27519-CAL1		
A4B0253	PCB1262 working Curve Cal-2	AA27519-CAL2		
A4B0252	PCB1262 working Curve Cal-3	AA27519-CAL3		
A4B0251	PCB1262 working Curve Cal-4	AA27519-CAL4		
A4B0250	PCB1262 working Curve Cal-5	AA27519-CAL5		
A4B0249	PCB1262 working Curve Cal-6	AA27519-CAL6		
A4B0255	PCB1262 working SCV1	AA27519-SCV1	2BH029.D	02/13/14 19:07

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA27520
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0265	PCB1268 working Curve Cal-1	AA27520-CAL1		
A4B0264	PCB1268 working Curve Cal-2	AA27520-CAL2		

A4B0263	PCB1268 working Curve Cal-3	AA27520-CAL3		
A4B0261	PCB1268 working Curve Cal-4	AA27520-CAL4		
A4B0258	PCB1268 working Curve Cal-5	AA27520-CAL5		
A4B0256	PCB1268 working Curve Cal-6	AA27520-CAL6		
A4B0266	PCB1268 working SCV1	AA27520-SCV1	2BH036.D	02/13/14 20:31

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA28395
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4C0198	PCB1232 working Curve Cal-1	AA28395-CAL1		
A4C0197	PCB1232 working Curve Cal-2	AA28395-CAL2		
A4C0196	PCB1232 working Curve Cal-3	AA28395-CAL3		
A4C0195	PCB1232 working Curve Cal-4	AA28395-CAL4		
A4C0194	PCB1232 working Curve Cal-5	AA28395-CAL5		
A4C0193	PCB1232 working Curve Cal-6	AA28395-CAL6		

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA28396
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0085	PCB1242 working Curve Cal-1	AA28396-CAL1		
A4B0084	PCB1242 working Curve Cal-2	AA28396-CAL2		
A4B0083	PCB1242 working Curve Cal-3	AA28396-CAL3		
A4B0082	PCB1242 working Curve Cal-4	AA28396-CAL4		
A4B0081	PCB1242 working Curve Cal-5	AA28396-CAL5		
A4B0080	PCB1242 working Curve Cal-6	AA28396-CAL6		

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA28397
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4C0214	PCB1248 working Curve Cal-1	AA28397-CAL1		
A4C0212	PCB1248 working Curve Cal-2	AA28397-CAL2		
A4C0211	PCB1248 working Curve Cal-3	AA28397-CAL3		
A4C0209	PCB1248 working Curve Cal-4	AA28397-CAL4		
A4C0206	PCB1248 working Curve Cal-5	AA28397-CAL5		
A4C0203	PCB1248 working Curve Cal-6	AA28397-CAL6		

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA29932
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4B0246	PCB1254 Working Curve Cal-1	AA29932-CAL1		
A4B0243	PCB1254 Working Curve Cal-2	AA29932-CAL2		
A4B0242	PCB1254 Working Curve Cal-3	AA29932-CAL3		
A4B0240	PCB1254 Working Curve Cal-4	AA29932-CAL4		
A4B0239	PCB1254 Working Curve Cal-5	AA29932-CAL5		
A4B0238	PCB1254 working Curve Cal-6	AA29932-CAL6		
A4B0246	PCB1254 Working Curve Cal-1	AA29932-CAL1	2HA040.D	08/06/14 17:29
A4B0243	PCB1254 Working Curve Cal-2	AA29932-CAL2	2HA041.D	08/06/14 17:41
A4B0242	PCB1254 Working Curve Cal-3	AA29932-CAL3	2HA042.D	08/06/14 17:53
A4B0240	PCB1254 Working Curve Cal-4	AA29932-CAL4	2HA043.D	08/06/14 18:06
A4B0239	PCB1254 Working Curve Cal-5	AA29932-CAL5	2HA044.D	08/06/14 18:18
A4B0238	PCB1254 working Curve Cal-6	AA29932-CAL6	2HA045.D	08/06/14 18:30
A4B0248	PCB1254 Working SCV1	AA29932-SCV1	2HA046.D	08/06/14 18:42

INITIAL CALIBRATION STANDARDS

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: AA29960
Calibration: 1408030
Instrument: OSVGCECD2

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
A4H0075	PCB working Curve Cal-1	AA29960-CAL1	2HB002.D	08/07/14 14:58
A4H0074	PCB working Curve Cal-2	AA29960-CAL2	2HB003.D	08/07/14 15:10
A4H0073	PCB working Curve Cal-3	AA29960-CAL3	2HB004.D	08/07/14 15:22
A4H0072	PCB working Curve Cal-4	AA29960-CAL4	2HB005.D	08/07/14 15:35

A4H0071	PCB working Curve Cal-5	AA29960-CAL5	2HB006.D	08/07/14 15:47
A4H0070	PCB working Curve Cal-6	AA29960-CAL6	2HB007.D	08/07/14 15:59

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	ENCO Orlando	SDG:	A404270-CTO0017
Client:	CH2M Hill, Inc. (CH025)	Project:	CTO-0017 Towers Road Disposal-5th St.
Calibration:	1408030	Instrument:	OSVGCECD2
Matrix:	Water	Calibration Date:	08/07/14 17:29

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254												
PCB-1260	0.05	7.82274E+08	0.1	8.164637E+08	0.5	8.5344E+08	1	8.9706E+08	2	9.892E+08	4	9.43075E+08
2,4,5,6-TCMX	0.005	1.52161E+10	0.01	1.534E+10	0.05	1.6514E+10	0.1	1.7673E+10	0.2	1.90585E+10	0.4	1.8528E+10
Decachlorobiphenyl	0.005	9.81064E+09	0.01	9.727223E+09	0.05	9.258E+09	0.1	1.0627E+10	0.2	1.10185E+10	0.4	1.0556E+10

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: ENCO Orlando

SDG: A404270-CTO0017

Client: CH2M Hill, Inc. (CH025)

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030

Instrument: OSVGCECD2

Matrix: Water

Calibration Date: 08/07/14 17:29

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254												
PCB-1260												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 08/07/14 17:29

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254												
PCB-1260												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 08/07/14 17:29

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254												
PCB-1260												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 08/07/14 17:29

Compound	Level 25		Level 26		Level 27		Level 28		Level 29		Level 30	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254												
PCB-1260												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 08/07/14 17:29

Compound	Level 31		Level 32		Level 33		Level 34		Level 35		Level 36	
	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF	ug/mL	RF
PCB-1254	0.05	6.617368E+08	0.1	6.717053E+08	0.5	6.1756E+08	1	6.563E+08	2	6.848E+08	4	7.44505E+08
PCB-1260												
2,4,5,6-TCMX												
Decachlorobiphenyl												

INITIAL CALIBRATION DATA (Continued)

EPA 8082A

Laboratory: ENCO Orlando
SDG: A404270-CTO0017
Client: CH2M Hill, Inc. (CH025)
Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408030
Instrument: OSVGCECD2
Matrix: Water
Calibration Date: 08/07/14 17:29

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
PCB-1254	6.727679E+08	6.211966	4.847667	1.826138E-02			20	
PCB-1260	8.802521E+08	8.870767	5.642	1.617939E-02			20	
2,4,5,6-TCMX	1.705493E+10	9.520096	2.4505	4.214598E-02			20	
Decachlorobiphenyl	1.016623E+10	6.575966	6.5405	3.802966E-02			20	

ANALYSIS SEQUENCE

AA29933

Instrument: OSVGCECD2

Calibration ID: 1408030

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29933-CCV1	QC		1		A4H0076		
AA29933-ARC1	QC		2		A4F0548		
4H06001-BLK1	QC		3				
4H06001-BS1	QC		4				
4H06001-MS1	QC		5				
4H06001-MSD1	QC		6				
A404270-11	8082A DOD	O	7				CH2M Hill, Inc. (CH025)
A404270-01	8082A DOD	D	8				CH2M Hill, Inc. (CH025)
A404270-02	8082A DOD	D	9				CH2M Hill, Inc. (CH025)
A404270-03	8082A DOD	D	10				CH2M Hill, Inc. (CH025)
A404270-04	8082A DOD	D	11				CH2M Hill, Inc. (CH025)
A404270-05	8082A DOD	D	12				CH2M Hill, Inc. (CH025)
AA29933-CCV2	QC		13		A4F0547		
AA29933-ARC2	QC		14		A4F0548		
A404270-06	8082A DOD	D	15				CH2M Hill, Inc. (CH025)
A404270-07	8082A DOD	D	16				CH2M Hill, Inc. (CH025)
A404270-08	8082A DOD	D	17				CH2M Hill, Inc. (CH025)
A404270-09	8082A DOD	D	18				CH2M Hill, Inc. (CH025)
A404270-10	8082A DOD	D	19				CH2M Hill, Inc. (CH025)
A404270-12	8082A DOD	D	20				CH2M Hill, Inc. (CH025)
A404270-13	8082A DOD	D	21				CH2M Hill, Inc. (CH025)
A404270-14	8082A DOD	D	22				CH2M Hill, Inc. (CH025)
A404270-15	8082A DOD	D	23				CH2M Hill, Inc. (CH025)
A404270-16	8082A DOD	D	24				CH2M Hill, Inc. (CH025)
AA29933-CCV3	QC		25		A4F0547		
AA29933-ARC3	QC		26		A4F0548		
A404270-18	8082A DOD	D	27				CH2M Hill, Inc. (CH025)
A404270-19	8082A DOD	D	28				CH2M Hill, Inc. (CH025)
A404270-20	8082A DOD	D	29				CH2M Hill, Inc. (CH025)
A404270-21	8082A DOD	D	30				CH2M Hill, Inc. (CH025)
AA29933-CCV4	QC		31		A4F0547		
AA29933-ARC4	QC		32		A4F0548		

Samples Loaded By _____ Date _____

Data Processed By _____ Date _____

PREPARATION BENCH SHEET

Printed: 8/6/2014 5:39:47AM

Analysis
8082A DOD [EPA 8082A]

4H06001

ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

933 of 1287

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H06001-BLK1		Blank		QC	-	-	30.0	10.0			1000		
4H06001-BS1		LCS		QC	-	-	30.0	10.0	A4E0189	1000	1000		
4H06001-MS1		Matrix Spike [A404270-11]		QC	-	-	30.1	10.0	A4E0189	1000	1000		
4H06001-MSD1		Matrix Spike Dup [A404270-11]		QC	-	-	30.3	10.0	A4E0189	1000	1000		
A404270-01	1 D	TR-5TH-CSW01-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-02	2 D	TR-5TH-CSW02-0814 D[C10]	08-Aug-14	8082A DOD	-	-	29.8	10.0			1000		1254 & 1260 only
A404270-03	3 D	TR-5TH-CSW03-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.2	10.0			1000		1254 & 1260 only
A404270-04	4 D	TR-5TH-CSW04-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.2	10.0			1000		1254 & 1260 only
A404270-05	5 D	TR-5TH-CSW05-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-06	6 D	TR-5TH-CSW06-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-07	7 D	TR-5TH-CSW07-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.5	10.0			1000		1254 & 1260 only
A404270-08	8 D	TR-5TH-CSW07D-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-09	9 D	TR-5TH-CSW08-0814 D[C10]	08-Aug-14	8082A DOD	-	-	29.8	10.0			1000		1254 & 1260 only
A404270-10	10 D	TR-5TH-CSW09-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-11	11 D	TR-5TH-CSW010-0814 O[C10]	08-Aug-14	8082A DOD	-	-	29.9	10.0			1000		1254 & 1260 only. USE for MS/M
A404270-12	12 D	TR-5TH-CSW11-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-13	13 D	TR-5TH-CSW11D-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-14	14 D	TR-5TH-CSW12-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-15	15 D	TR-5TH-CSW13-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.1	10.0			1000		1254 & 1260 only
A404270-16	16 D	TR-5TH-CSW14-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.1	10.0			1000		1254 & 1260 only
A404270-18	17 D	TR-5TH-CSW15-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only

PREPARATION BENCH SHEET

4H06001

ENCO Orlando

Printed: 8/6/2014 5:39:47AM

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

934 of 1287

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
A404270-19 18	D	TR-5TH-CSF01-0814 D[C10]	08-Aug-14	8082A DOD	-	-	29.9	10.0			1000		1254 & 1260 only
A404270-20 19	D	TR-5TH-CSF02-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only
A404270-21 20	D	TR-5TH-CSF03-0814 D[C10]	08-Aug-14	8082A DOD	-	-	30.0	10.0			1000		1254 & 1260 only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 soil

Start Date/Time 8-6-14 6:30

StopDate/Time 8-6-14 11:15

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4E0358	Solvent Hexane	141350
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

Equipment Used

Sonicator OSON 1, 2, 3 — Tuned per manufacturer instructions? [ ] Yes [ ] No [ ] NA

Turbovap OTVAP 1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 — (final): 12

Turbovap OTVAP 2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 — (final): 12

Turbovap OTVAP 3 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 — (final): 12

Balance OEXTBAL 7 — Daily calibration complete? [ ] Yes [ ] No [ ] NA

Thermometer ORL-T-4L

Other

Samples Prepared By	Date	Samples Prepared By	Date	Samples Prepared By	Date
YGM	8-6-14				

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 17:32
Operator : RC
Sample : AA29960-SCV1
Misc : AA29933-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 17:45:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

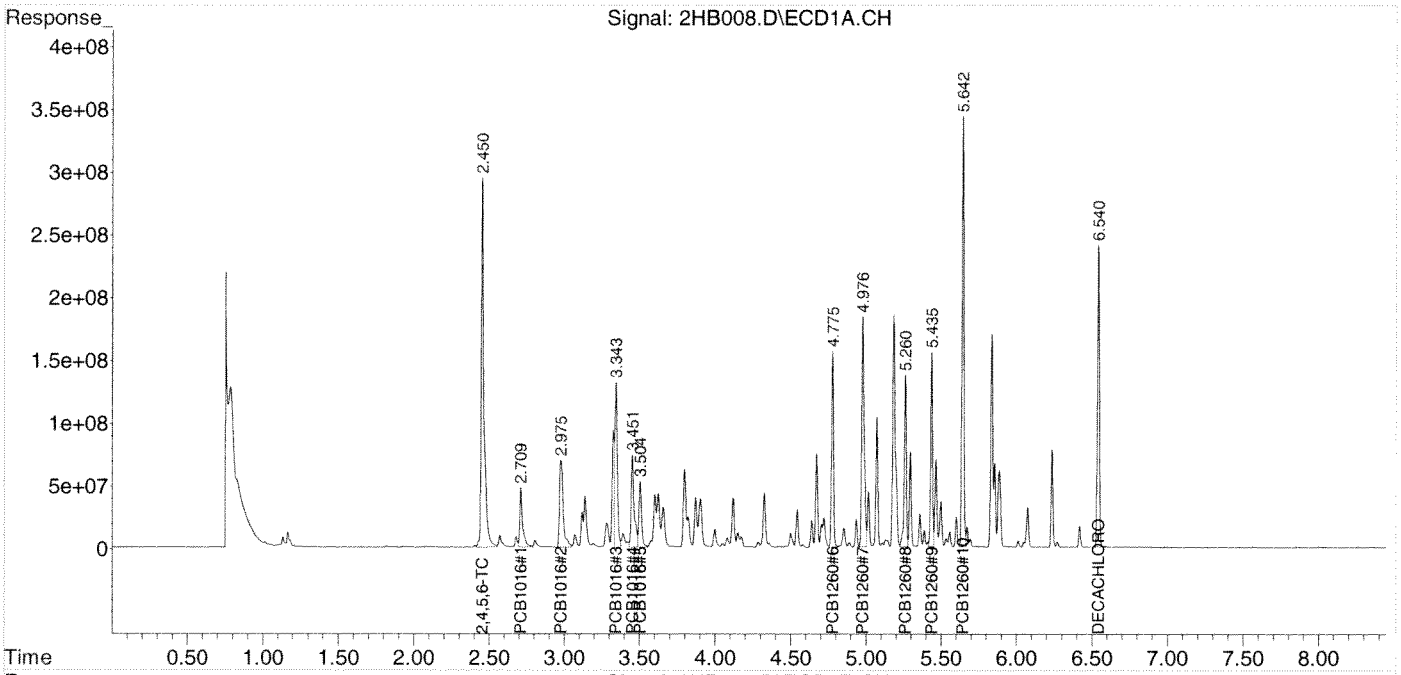
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.451	2.421	3633.1E6	1592.8E6	0.2130	0.2137
2)	PCB1016#1	2.709	2.763	628.6E6	272.9E6	1.9476	1.9097
3)	PCB1016#2	2.975	3.061	1222.6E6	532.5E6	1.9861	1.8620
4)	PCB1016#3	3.343	3.694	1642.1E6	238.4E6	2.0098	1.9117
5)	PCB1016#4	3.452	3.732	1017.0E6	248.0E6	2.0319	1.9338
6)	PCB1016#5	3.504	3.770	647.5E6	243.5E6	2.1309	1.8508
7)	PCB1260#6	4.775	4.918	1475.2E6	711.3E6	1.9683	1.9838
8)	PCB1260#7	4.976	5.064	2138.9E6	797.3E6	2.1156	2.0289
9)	PCB1260#8	5.261	5.381	1344.1E6	598.1E6	2.1051	2.0018
10)	PCB1260#9	5.435	5.585	1379.3E6	662.5E6	2.1009	2.0330
11)	PCB1260#10	5.642	5.747	3090.6E6	1336.1E6	2.0230	2.0952
12)	DECACHLOR...	6.541	6.740	2131.6E6	991.6E6	0.2097	0.2019

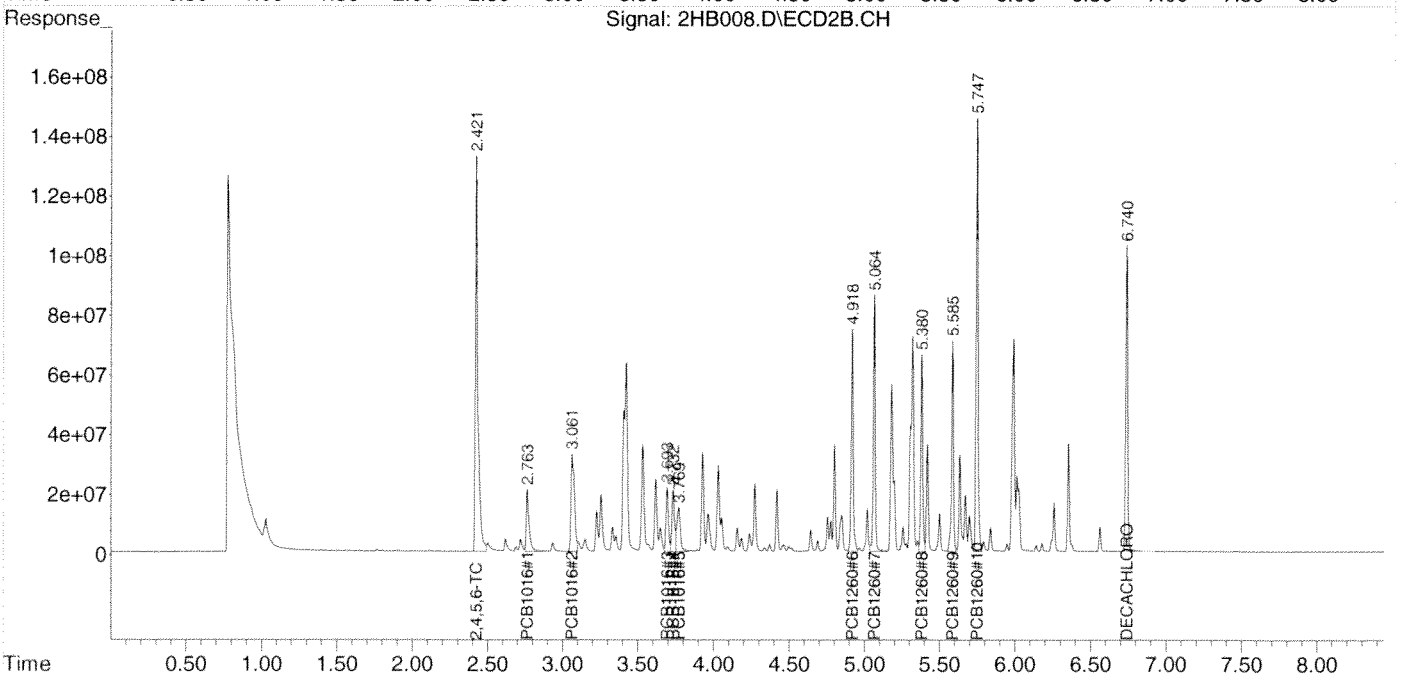
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 17:32
Operator : RC
Sample : AA29960-SCV1
Misc : AA29933-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 17:45:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 17:53
Operator : RC
Sample : AA29933-ARC1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 18:18:52 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

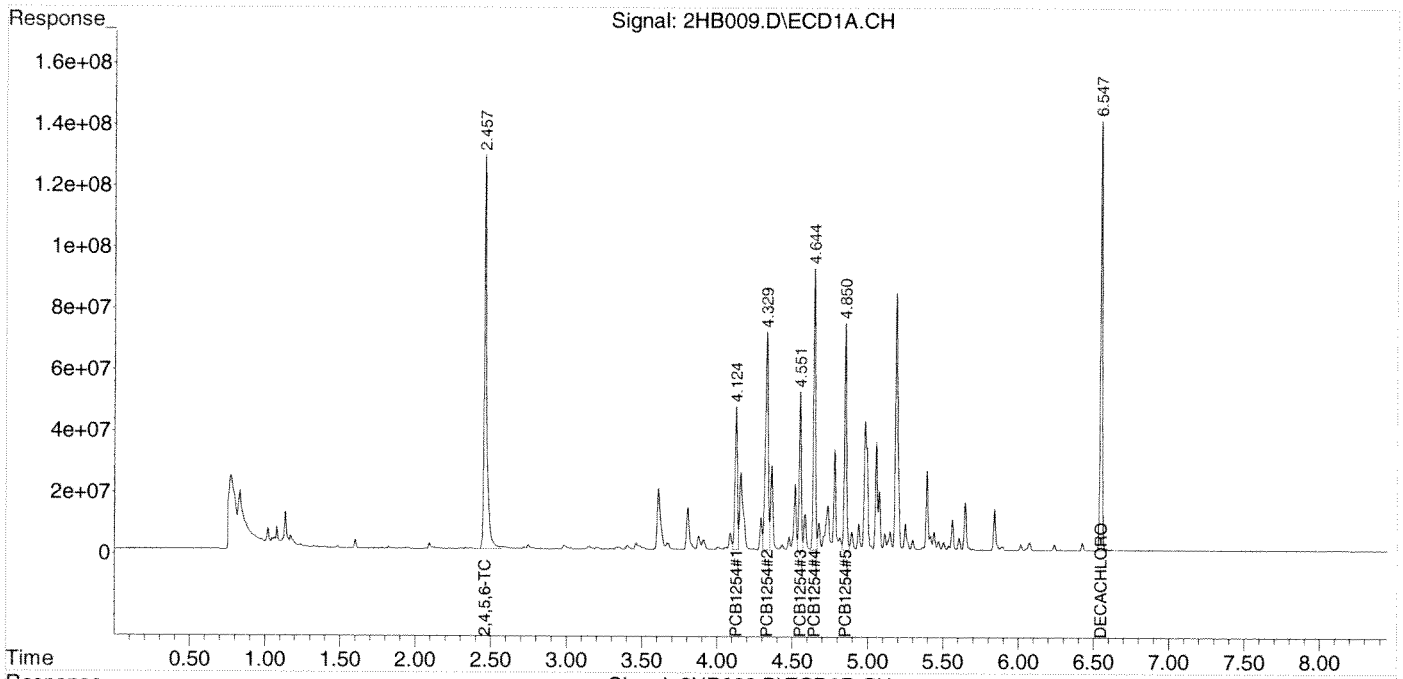
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.457	2.422	1471.9E6	807.4E6	0.0879	0.1017
2)	PCB1254#1	4.124	4.272	508.3E6	292.1E6	1.0386	1.1076
3)	PCB1254#2	4.330	4.417	940.2E6	301.5E6	1.0994	1.0556
4)	PCB1254#3	4.551	4.688	493.4E6	225.0E6	0.9850	0.9600
5)	PCB1254#4	4.644	4.775	864.3E6	460.4E6	1.0138	1.1613
6)	PCB1254#5	4.850	5.064	724.1E6	199.0E6	1.0877	1.0980
7)	DECACHLOR...	6.547	6.743	1259.8E6	556.2E6	0.1188	0.1061

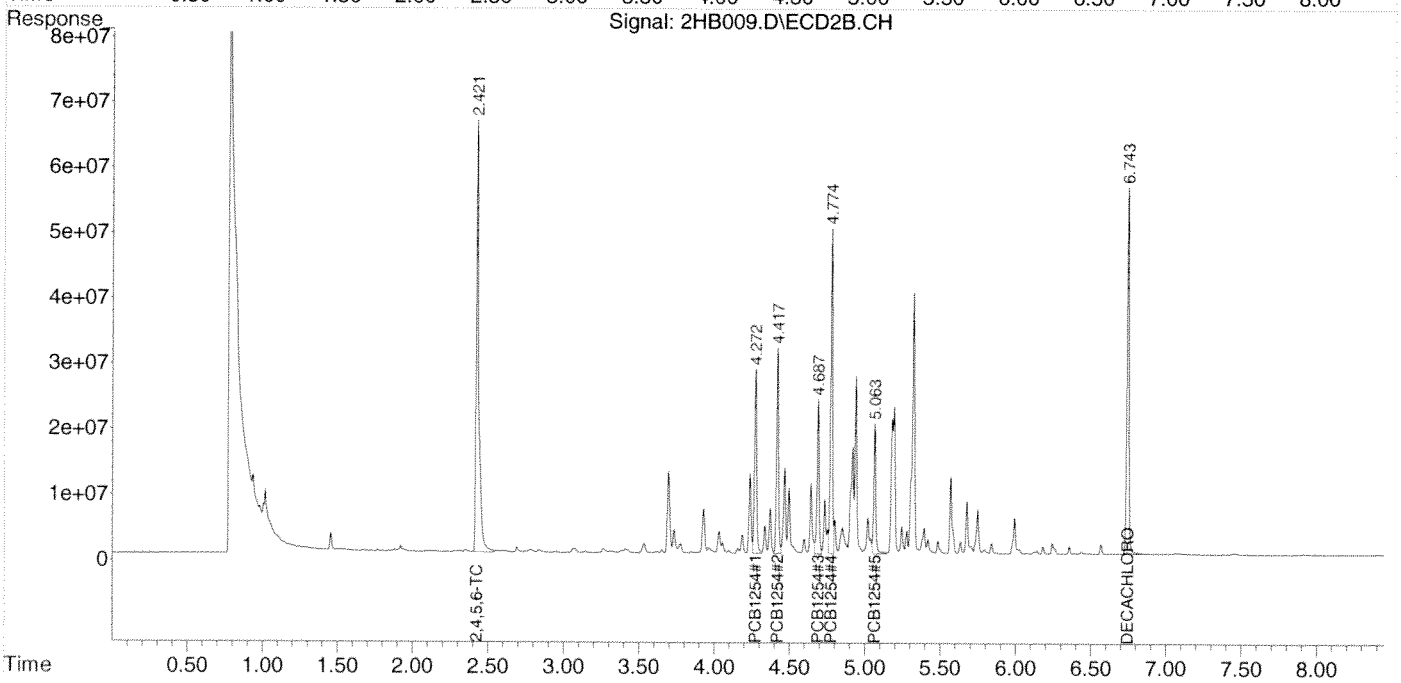
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 17:53
Operator : RC
Sample : AA29933-ARC1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 18:18:52 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:20
Operator : RC
Sample : 4H06001-BLK1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:55:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

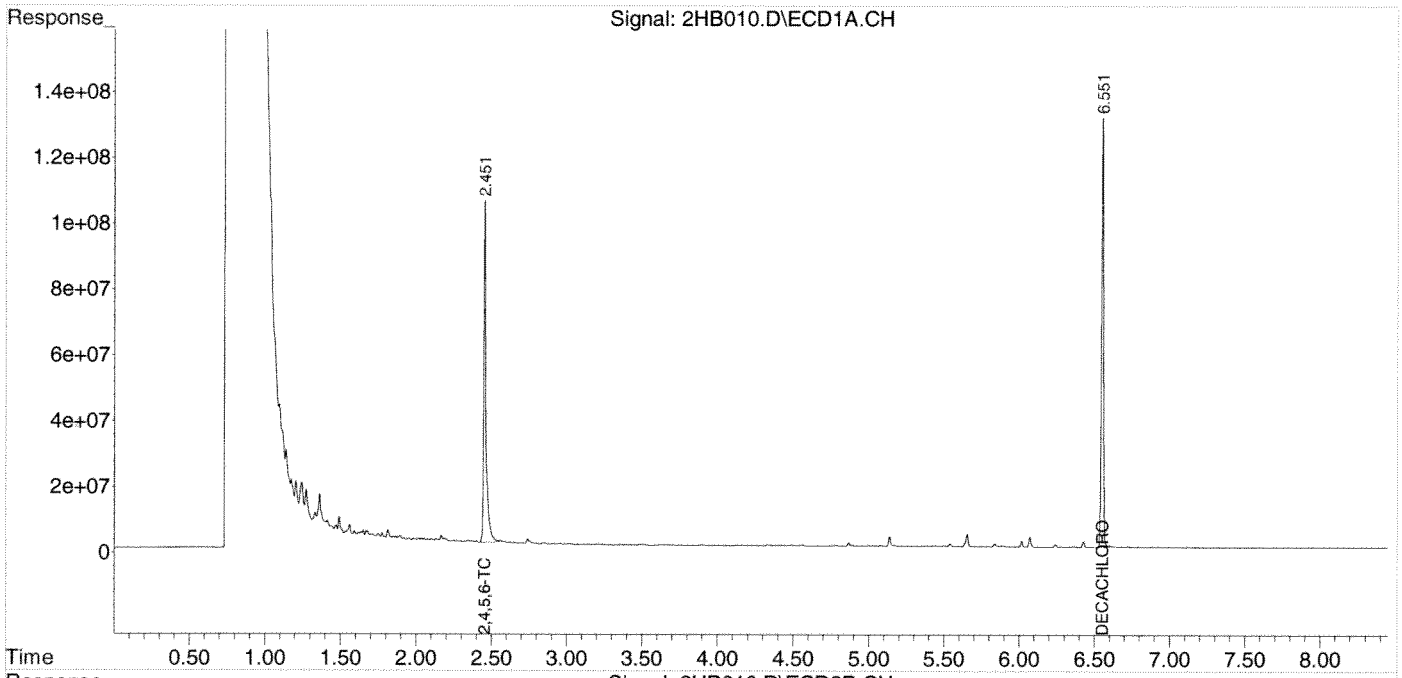
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.451	2.416	1122.8E6	536.0E6	0.0658	0.0719
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.551	6.745	1178.7E6	569.8E6	0.1159	0.1160

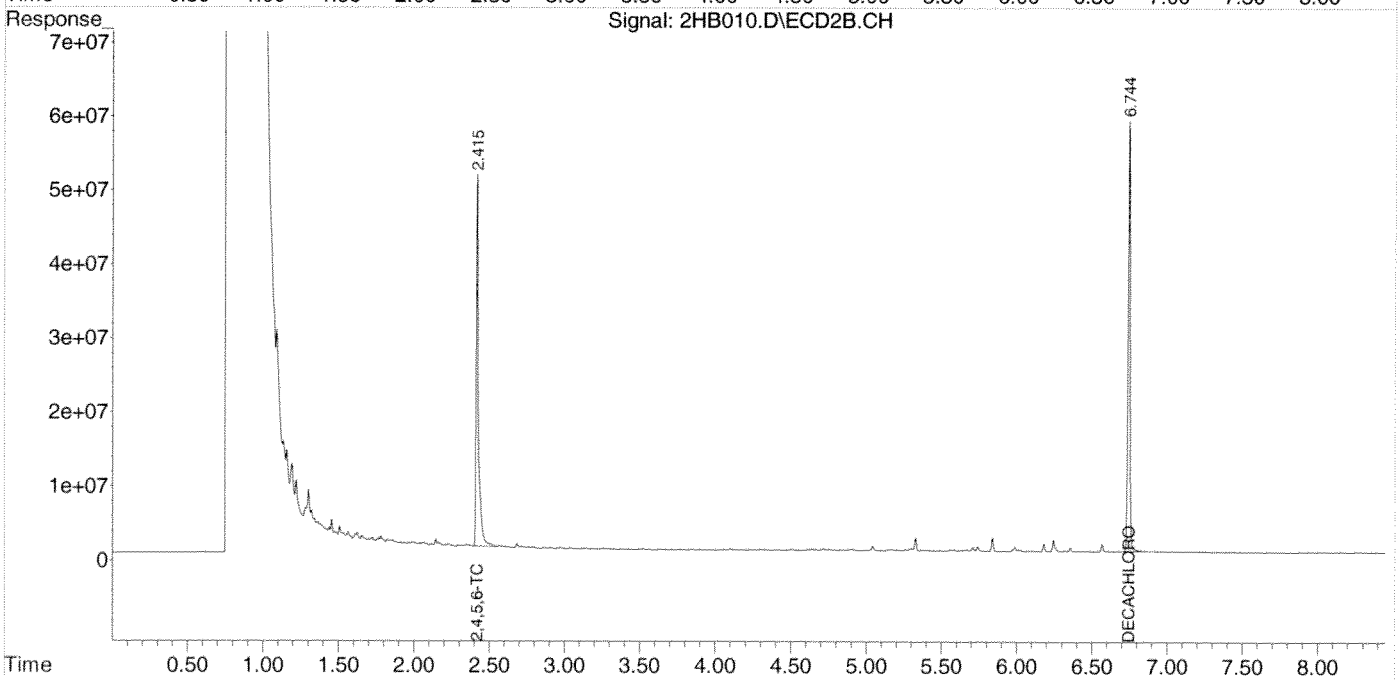
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:20
Operator : RC
Sample : 4H06001-BLK1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:55:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:32
Operator : RC
Sample : 4H06001-BS1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.414	835.2E6	381.9E6	0.0490	0.0512
2)	PCB1016#1	2.703	2.758	197.9E6	86702336	0.6131	0.6067
3)	PCB1016#2	2.971	3.057	431.0E6	200.3E6	0.7001	0.7006
4)	PCB1016#3	3.340	3.691	657.6E6	115.2E6	0.8048	0.9235
5)	PCB1016#4	3.448	3.729	424.6E6	117.4E6	0.8483	0.9155
6)	PCB1016#5	3.501	3.767	279.8E6	118.9E6	0.9207	0.9039
7)	PCB1260#6	4.776	4.917	836.1E6	430.3E6	1.1156	1.1999
8)	PCB1260#7	4.977	5.064	1240.3E6	473.7E6	1.2269	1.2055
9)	PCB1260#8	5.261	5.380	657.4E6	305.1E6	1.0296	1.0212
10)	PCB1260#9	5.436	5.585	687.5E6	357.4E6	1.0473	1.0968
11)	PCB1260#10	5.643	5.746	1577.6E6	707.5E6	1.0327	1.1095
12)	DECACHLOR...	6.543	6.740	1086.9E6	539.7E6	0.1069	0.1099

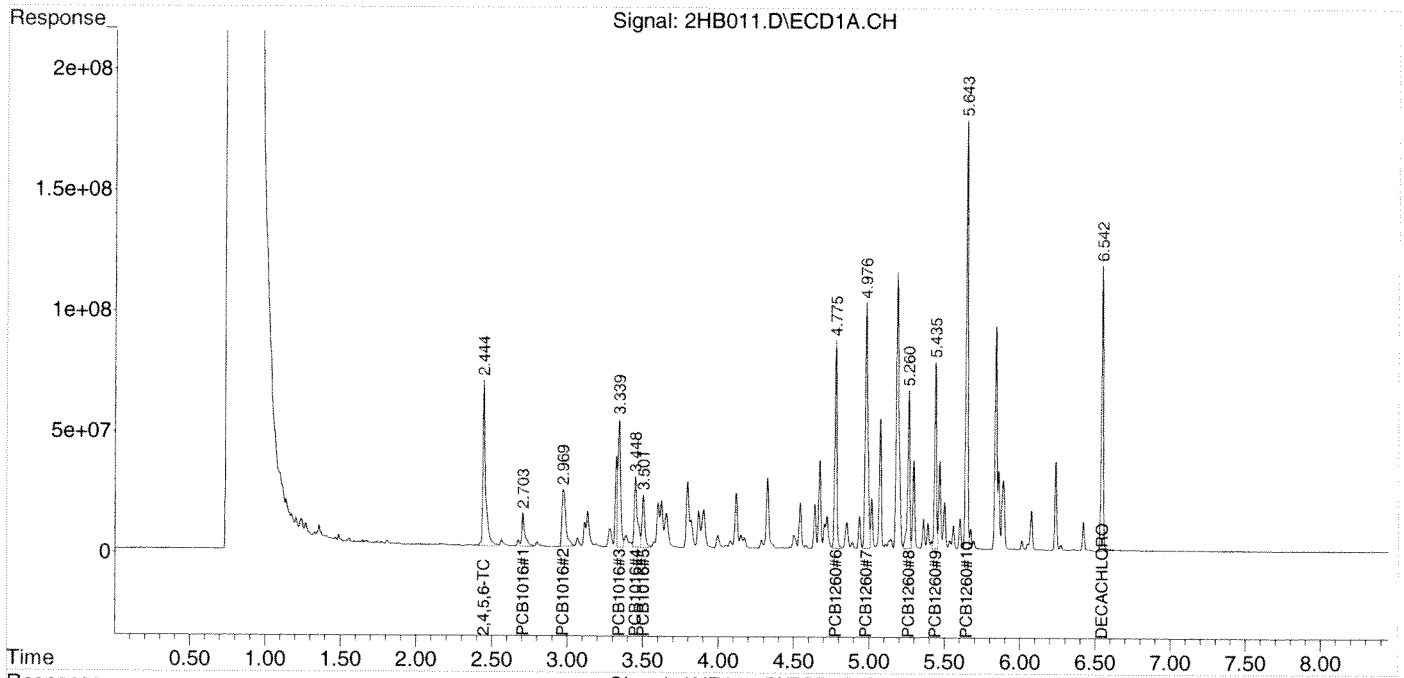
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

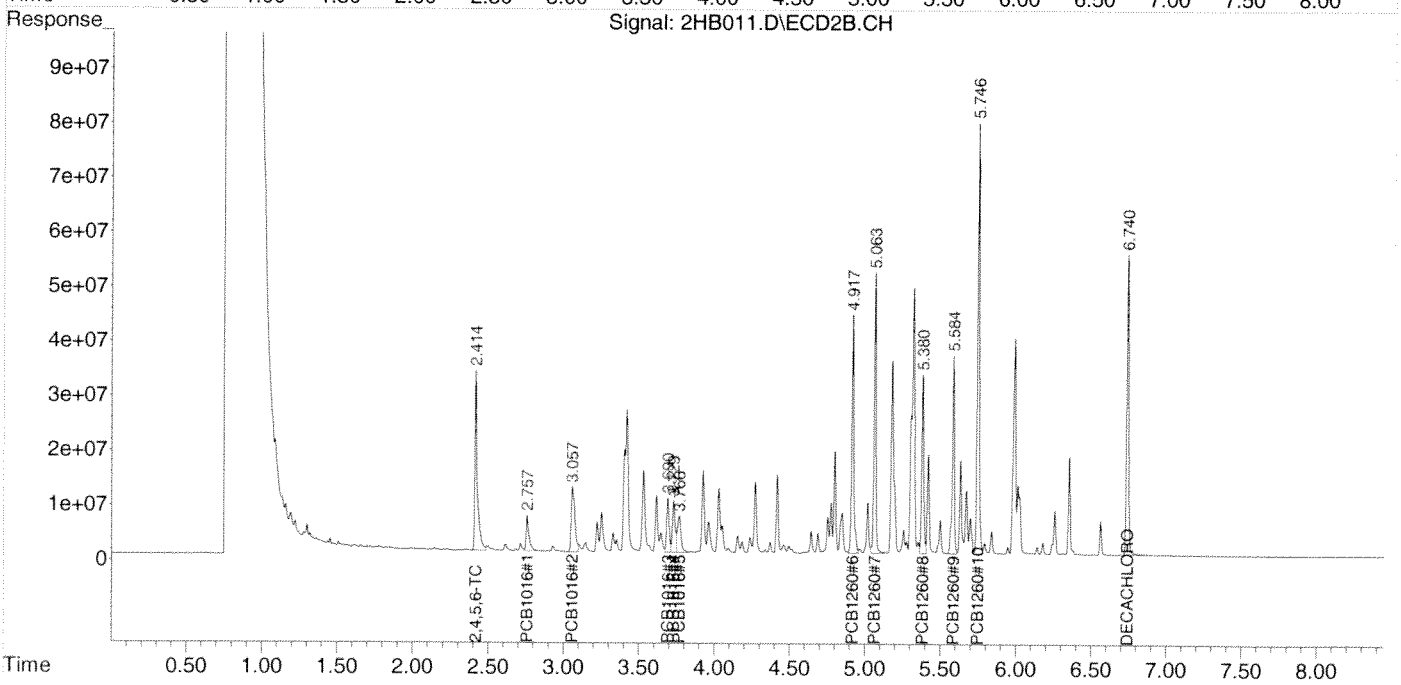
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:32
Operator : RC
Sample : 4H06001-BS1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:44
Operator : RC
Sample : 4H06001-MS1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:09 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

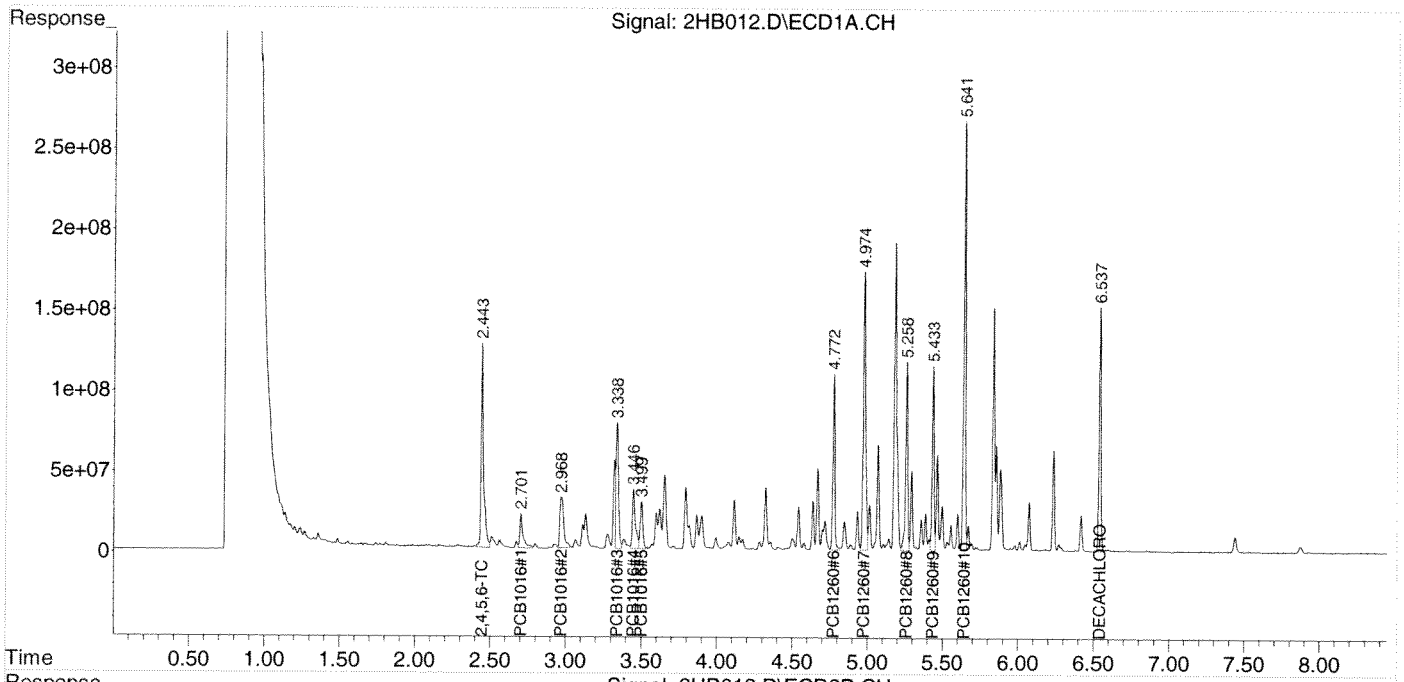
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.443	2.414	1470.6E6	702.1E6	0.0862	0.0942
2)	PCB1016#1	2.702	2.758	314.2E6	144.1E6	0.9735	1.0085
3)	PCB1016#2	2.970	3.057	577.0E6	291.9E6	0.9374	1.0208
4)	PCB1016#3	3.338	3.690	960.2E6	159.4E6	1.1751	1.2779
5)	PCB1016#4	3.447	3.729	515.9E6	160.6E6	1.0306	1.2527
6)	PCB1016#5	3.500	3.766	352.2E6	150.9E6	1.1592	1.1466
7)	PCB1260#6	4.773	4.916	1036.4E6	547.8E6	1.3828	1.5279
8)	PCB1260#7	4.974	5.062	1994.4E6	811.6E6	1.9727	2.0653
9)	PCB1260#8	5.259	5.379	1129.1E6	567.0E6	1.7684	1.8977
10)	PCB1260#9	5.433	5.583	1040.0E6	578.1E6	1.5842	1.7741
11)	PCB1260#10	5.641	5.746	2370.9E6	1126.3E6	1.5520	1.7662
12)	DECACHLOR...	6.538	6.737	1371.7E6	708.1E6	0.1349	0.1442

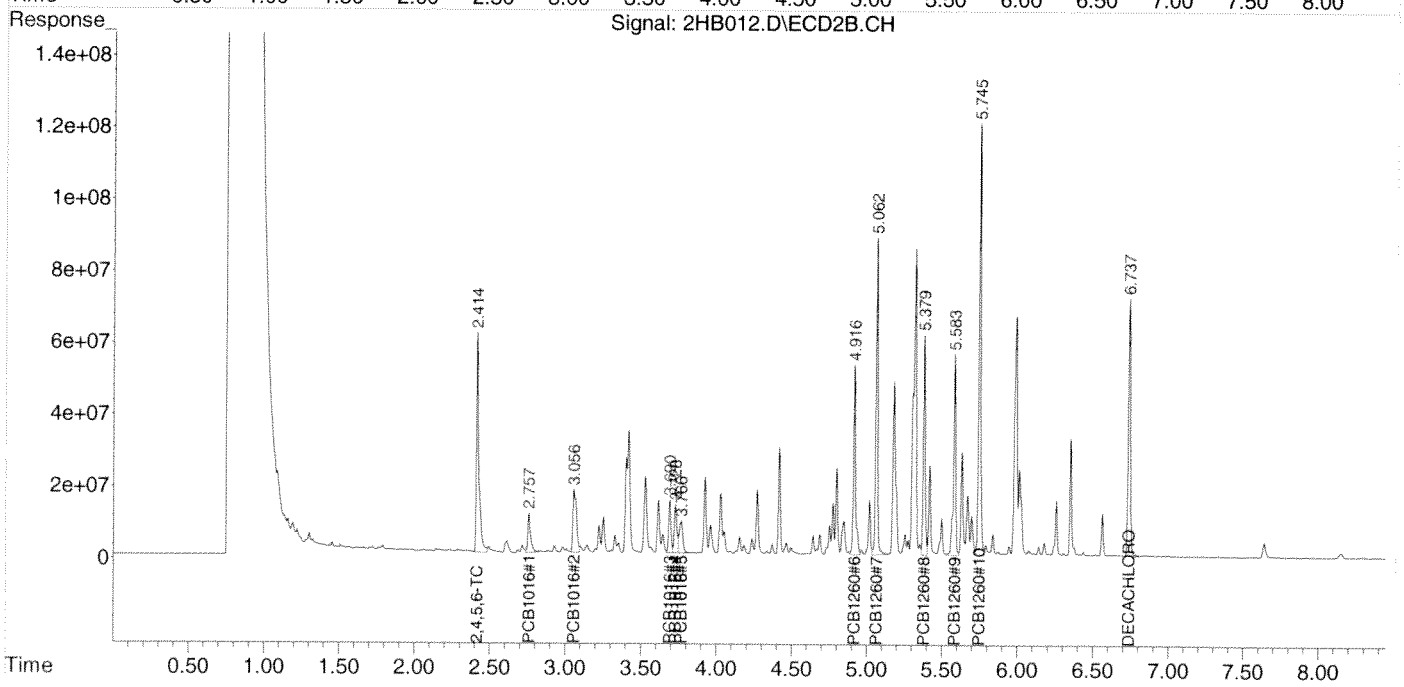
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:44
Operator : RC
Sample : 4H06001-MS1
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:09 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:56
Operator : RC
Sample : 4H06001-MSD1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:12 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

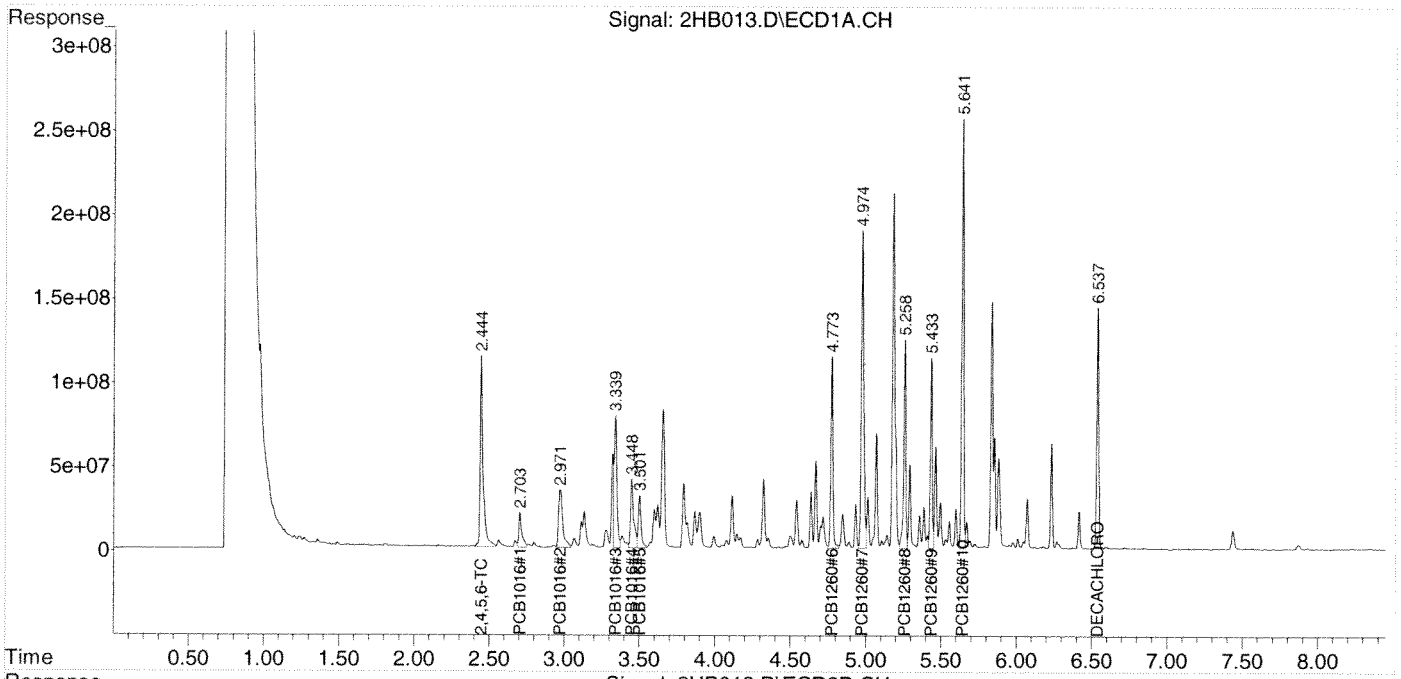
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.415	1496.0E6	691.9E6	0.0877	0.0928	
2)	PCB1016#1	2.704	2.759	303.7E6	138.2E6	0.9408	0.9672	
3)	PCB1016#2	2.972	3.068	680.6E6	143.1E6	1.1056	0.5003	#
4)	PCB1016#3	3.339	3.692	1013.7E6	161.0E6	1.2406	1.2912	
5)	PCB1016#4	3.449	3.730	604.4E6	164.7E6	1.2076	1.2841	
6)	PCB1016#5	3.501	3.768	411.8E6	156.2E6	1.3551	1.1870	
7)	PCB1260#6	4.774	4.917	1119.5E6	568.3E6	1.4936	1.5849	
8)	PCB1260#7	4.974	5.063	2154.1E6	839.4E6	2.1307	2.1359	
9)	PCB1260#8	5.259	5.380	1219.6E6	579.2E6	1.9101	1.9385	
10)	PCB1260#9	5.434	5.584	1037.7E6	582.7E6	1.5806	1.7880	
11)	PCB1260#10	5.641	5.746	2302.2E6	1111.3E6	1.5070	1.7426	
12)	DECACHLOR...	6.538	6.737	1283.6E6	643.3E6	0.1263	0.1310	

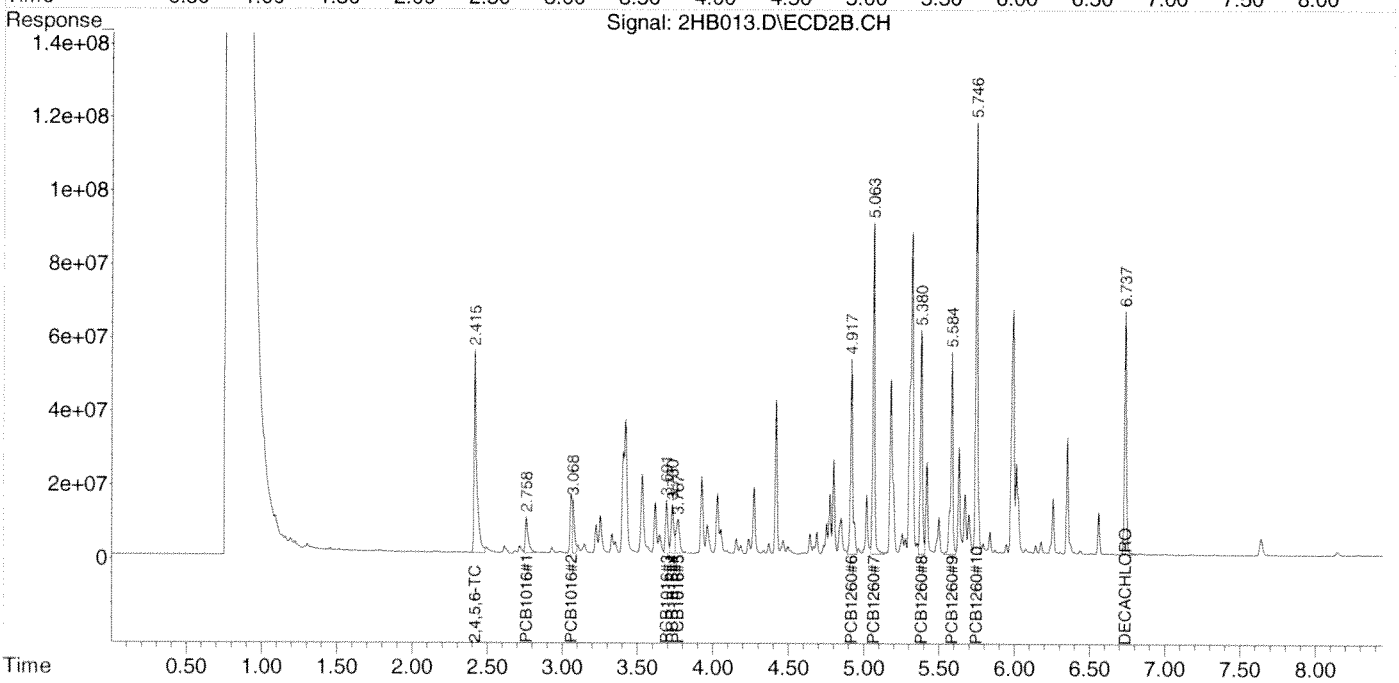
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 18:56
Operator : RC
Sample : 4H06001-MSD1
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:12 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:08
Operator : RC
Sample : A404270-11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:58:08 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

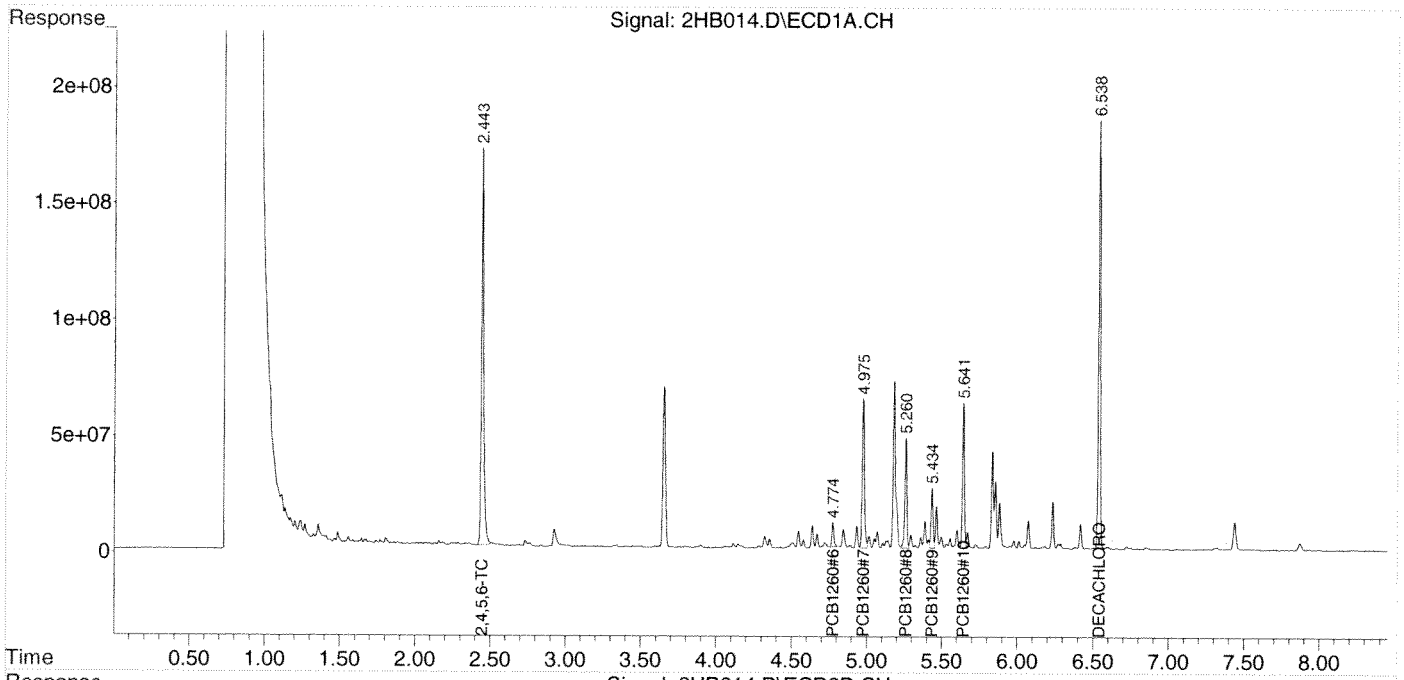
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1751.8E6	847.3E6	0.1027	0.1137
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.775	4.918	100.4E6	54869090	0.1339	0.1530
8)	PCB1260#7	4.975	5.064	629.1E6	288.7E6	0.6222	0.7348
9)	PCB1260#8	5.260	5.381	438.6E6	216.2E6	0.6870	0.7236
10)	PCB1260#9	5.434	5.585	238.6E6	114.6E6	0.3635	0.3516
11)	PCB1260#10	5.642	5.747	575.4E6	284.9E6	0.3767	0.4467
12)	DECACHLOR...	6.538	6.738	1631.1E6	786.1E6	0.1604	0.1601

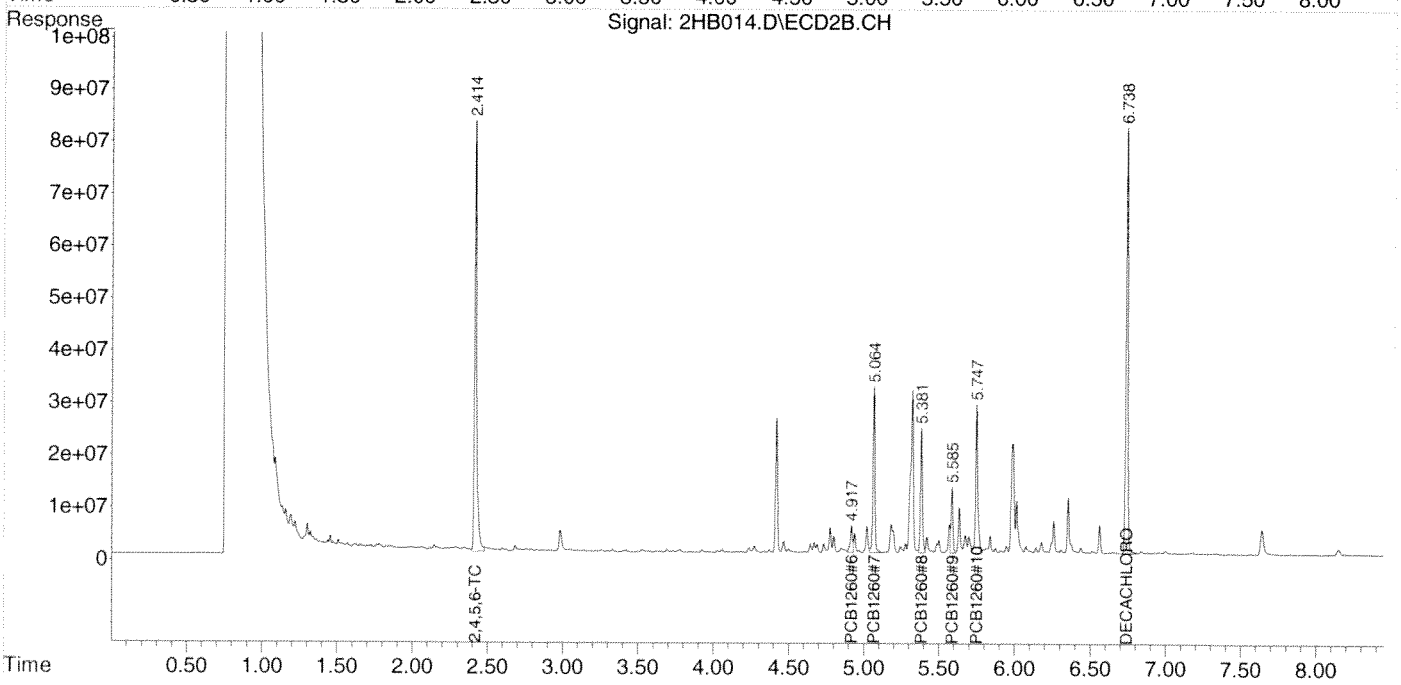
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:08
Operator : RC
Sample : A404270-11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:58:08 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:08
Operator : RC
Sample : A404270-11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:03 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

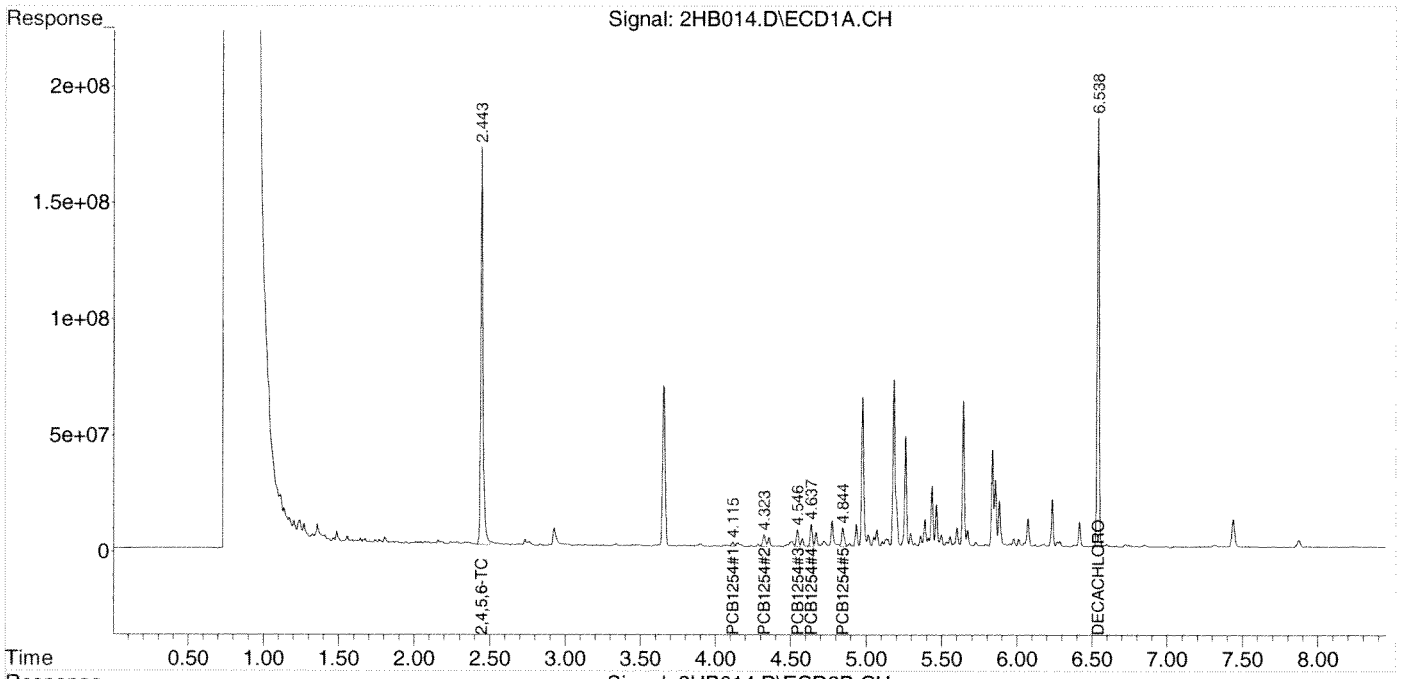
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1771.1E6	847.3E6	0.1058	0.1067	
2)	PCB1254#1	4.116	4.271	21214217	17503728	0.0433	0.0664	#
3)	PCB1254#2	4.323	4.418	63017936	236.6E6	0.0737	0.8285	#
4)	PCB1254#3	4.546	4.687	76715718	15282170	0.1531	0.0652	#
5)	PCB1254#4	4.637	4.775	96245131	44877426	0.1129	0.1132	
6)	PCB1254#5	4.845	5.064	96931967	288.7E6	0.1456	1.5934	#
7)	DECACHLOR...	6.538	6.738	1633.6E6	786.1E6	0.1540	0.1500	

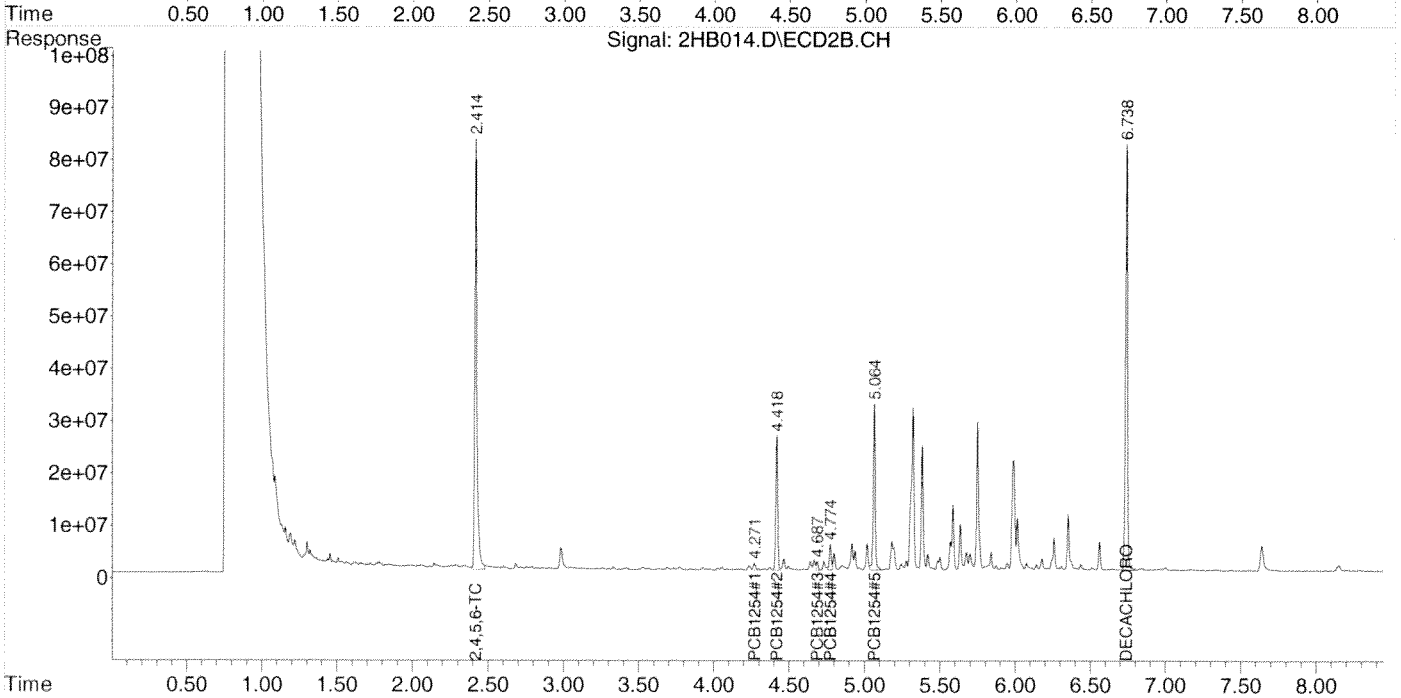
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:08
Operator : RC
Sample : A404270-11
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:03 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:21
Operator : RC
Sample : A404270-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:21:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

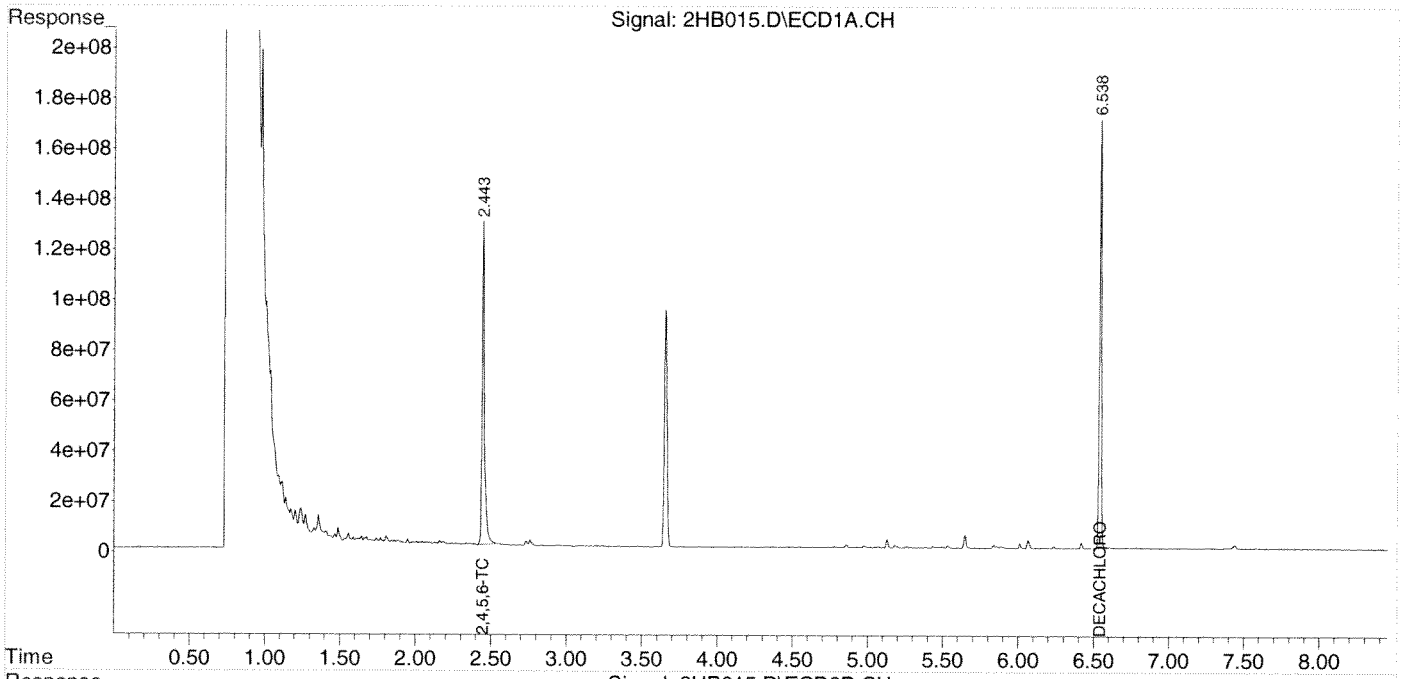
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1355.7E6	680.9E6	0.0795	0.0913
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.539	6.738	1533.2E6	732.7E6	0.1508	0.1492

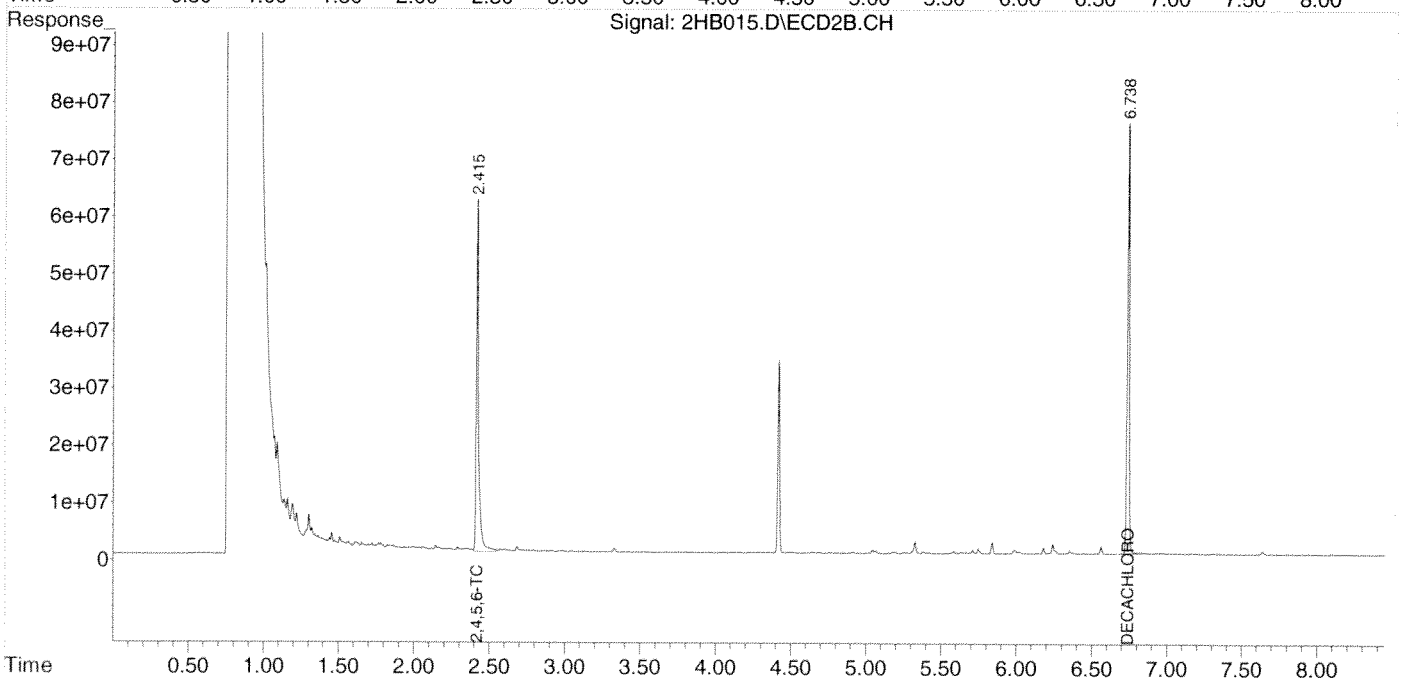
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:21
Operator : RC
Sample : A404270-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:21:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:33
Operator : RC
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:59:19 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

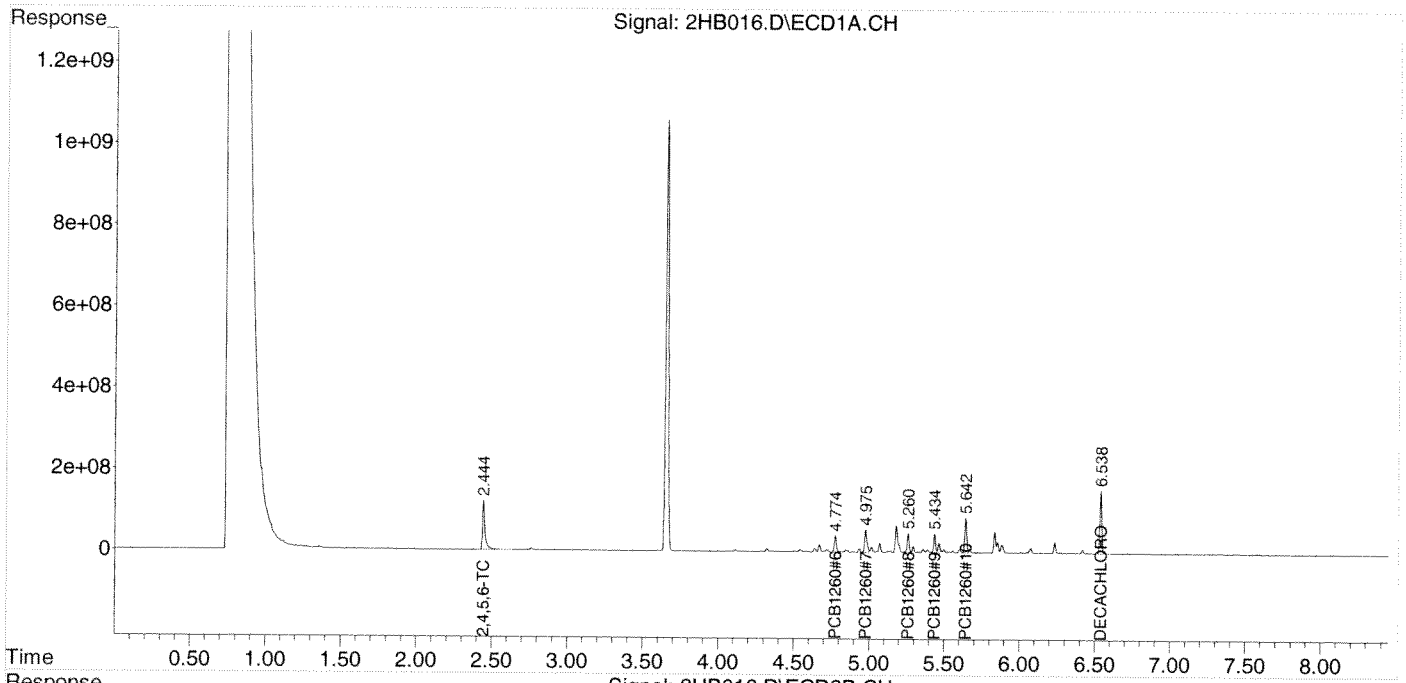
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.416	1351.7E6	642.6E6	0.0793	0.0862
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.775	4.918	395.1E6	211.1E6	0.5271	0.5887
8)	PCB1260#7	4.975	5.064	610.6E6	238.6E6	0.6040	0.6072
9)	PCB1260#8	5.260	5.381	445.2E6	210.2E6	0.6972	0.7036
10)	PCB1260#9	5.435	5.585	416.4E6	225.6E6	0.6342	0.6924
11)	PCB1260#10	5.642	5.747	777.9E6	362.3E6	0.5092	0.5682
12)	DECACHLOR...	6.538	6.738	1376.1E6	652.9E6	0.1354	0.1330

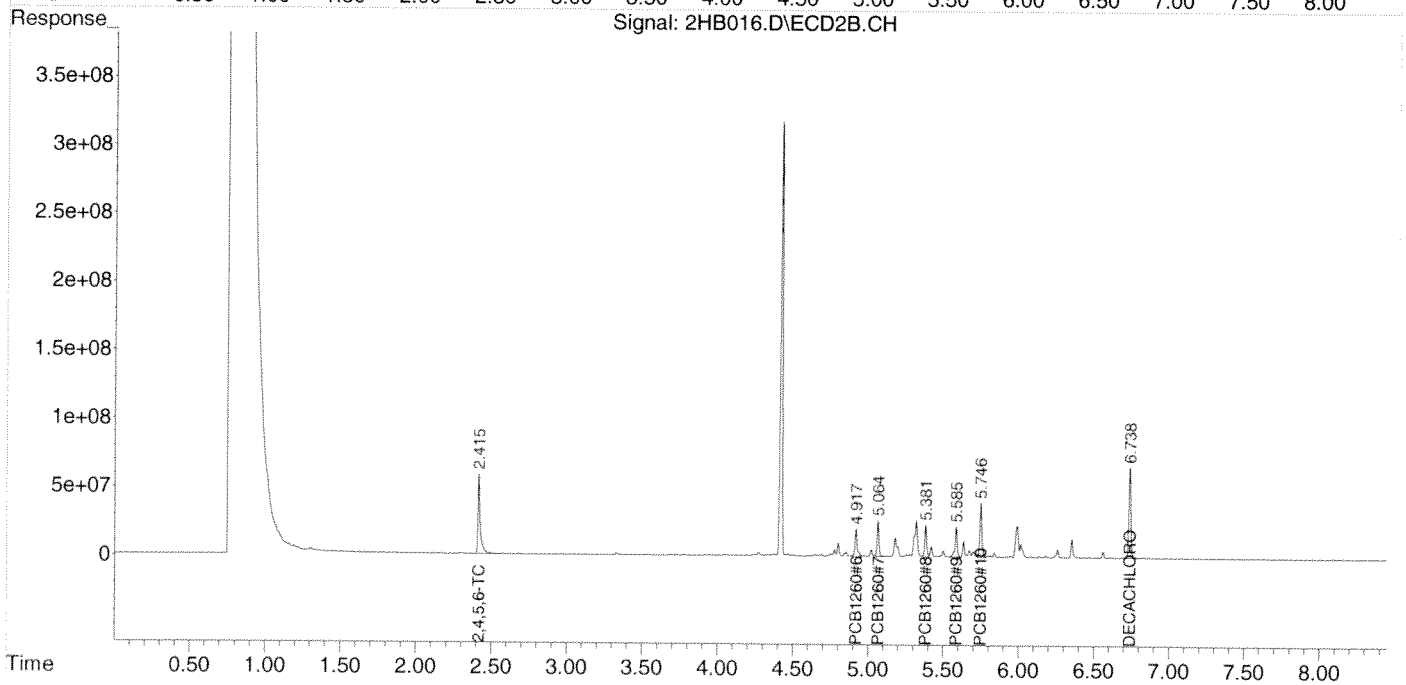
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:33
Operator : RC
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:59:19 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:33
Operator : RC
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:06 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

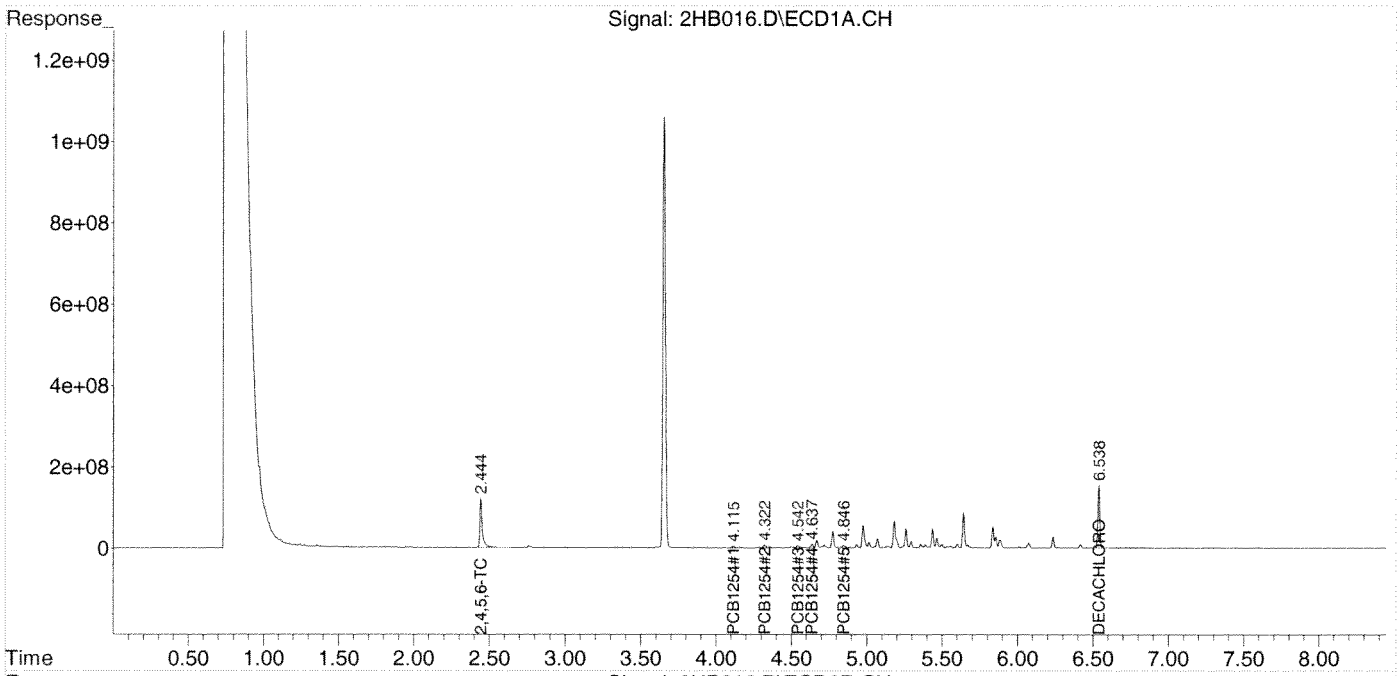
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.416	1353.6E6	642.6E6	0.0808	0.0809	
2)	PCB1254#1	4.115	4.271	45346535	28290104	0.0926	0.1073	
3)	PCB1254#2	4.322	4.418	82490560	3029.3E6	0.0965	10.6061	#
4)	PCB1254#3	4.543	4.687	66898552	13029238	0.1335	0.0556	#
5)	PCB1254#4	4.637	4.775	88976643	42081018	0.1044	0.1061	
6)	PCB1254#5	4.847	5.064	82029637	238.6E6	0.1232	1.3168	#
7)	DECACHLOR...	6.538	6.738	1390.4E6	652.9E6	0.1311	0.1246	

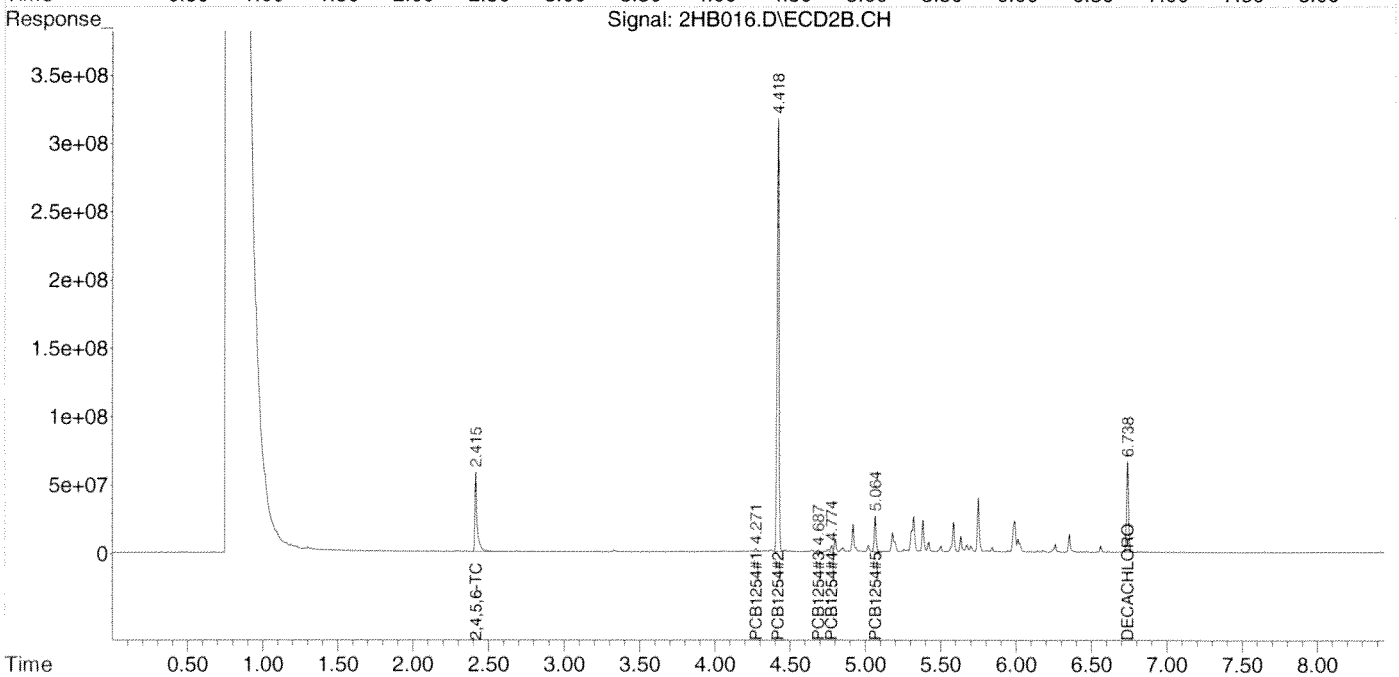
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:33
Operator : RC
Sample : A404270-02
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:06 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:45
Operator : RC
Sample : A404270-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:59:50 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

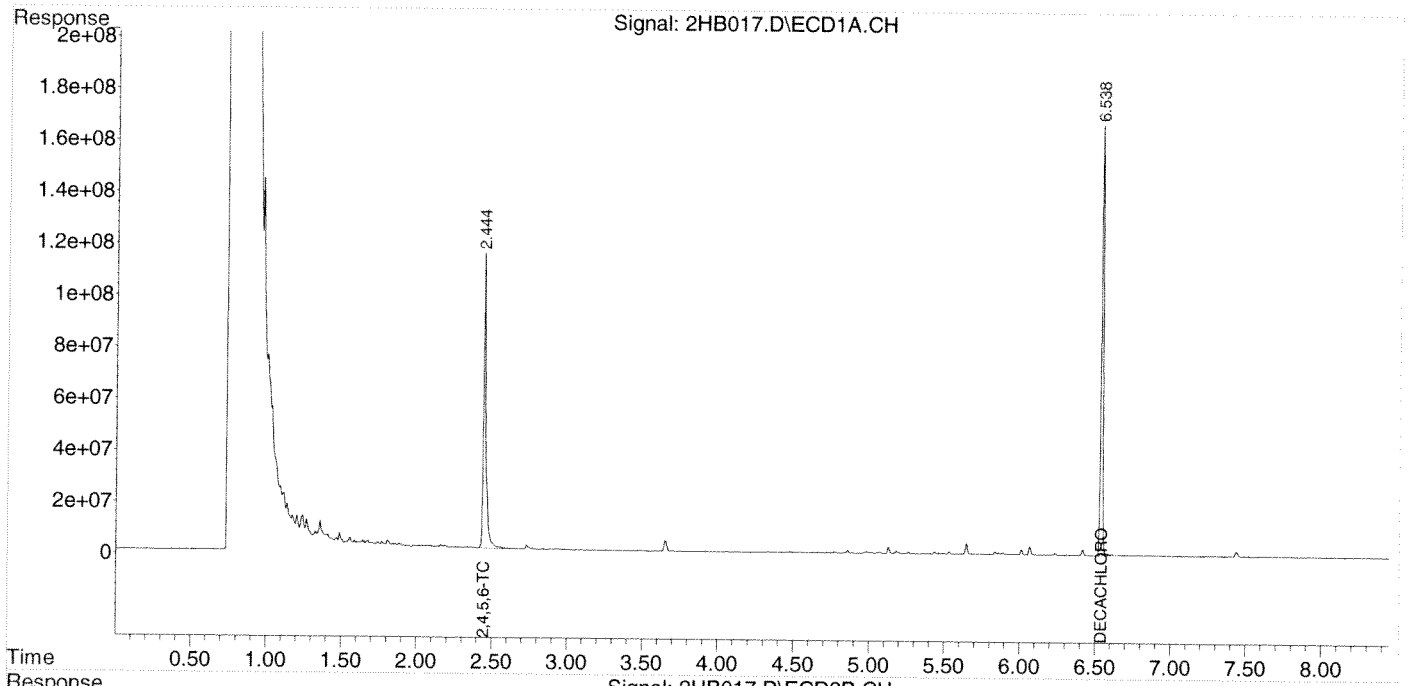
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1320.5E6	624.5E6	0.0774	0.0838
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.538	6.738	1496.2E6	712.8E6	0.1472	0.1452

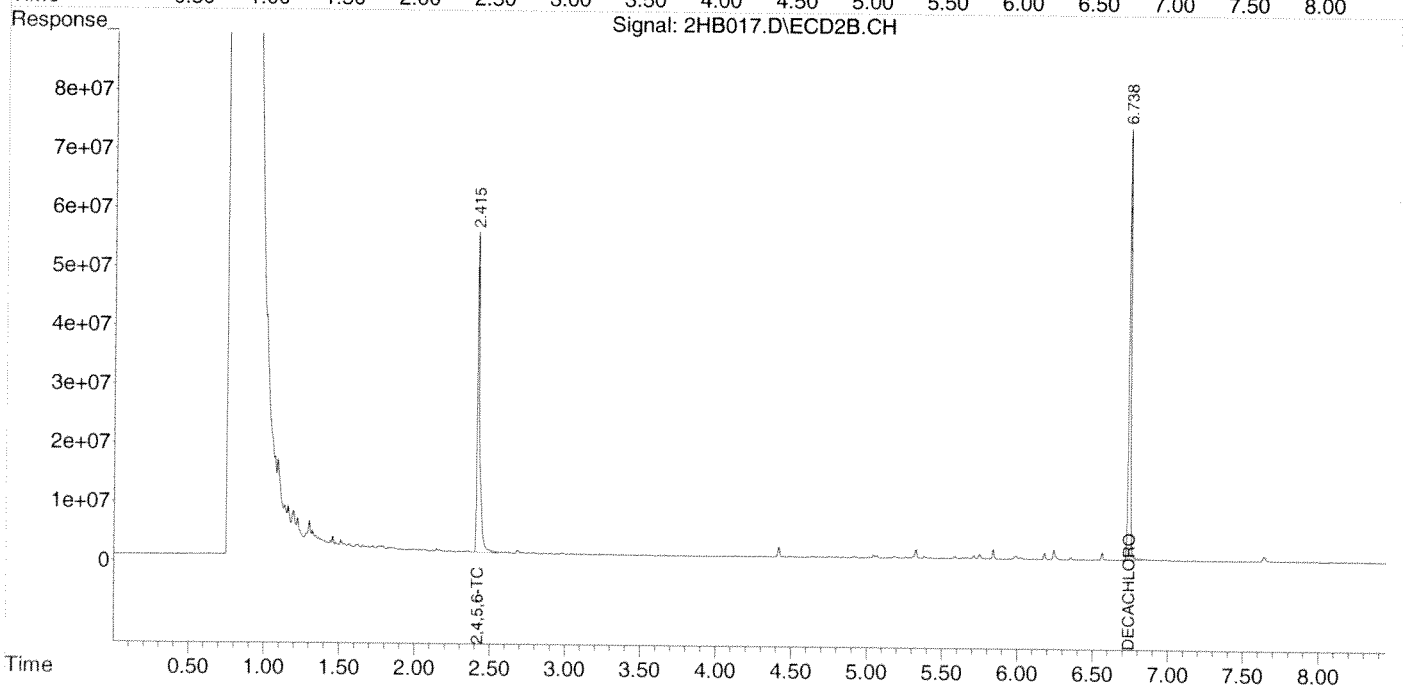
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:45
Operator : RC
Sample : A404270-03
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:59:50 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:57
Operator : RC
Sample : A404270-04
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:00:14 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

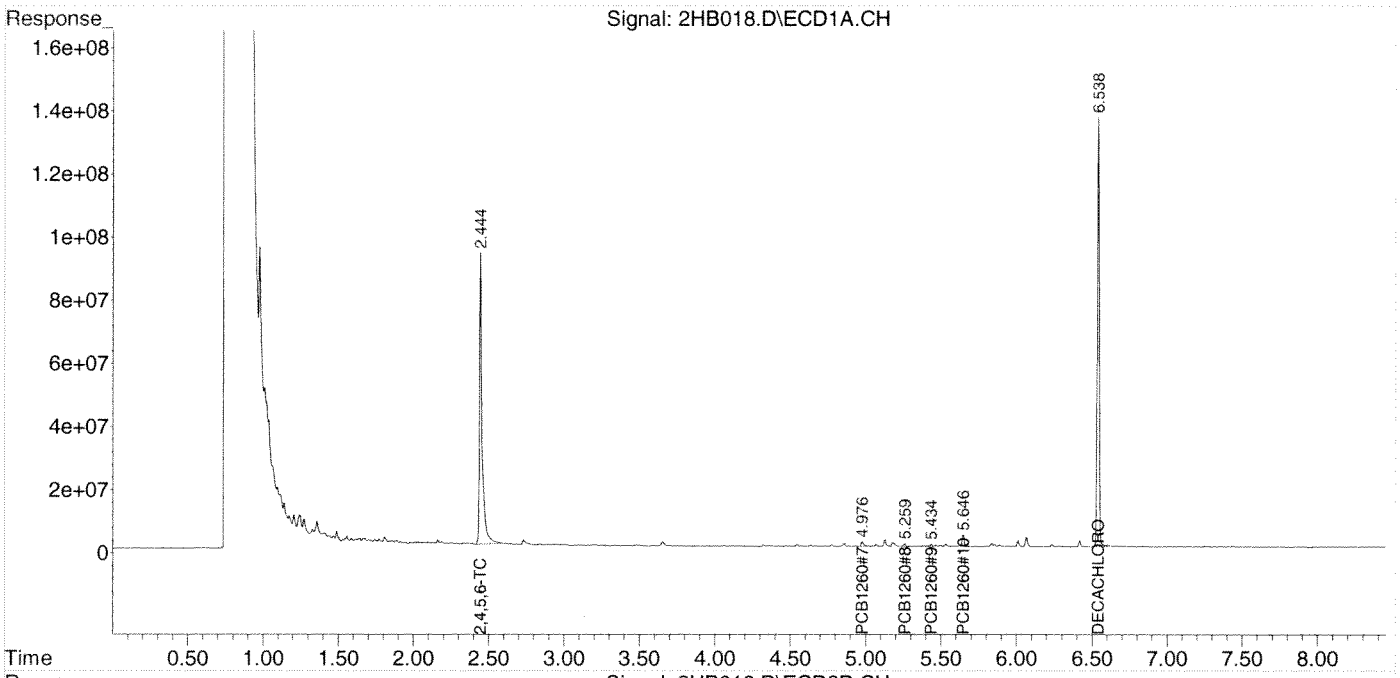
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.416	1078.5E6	521.4E6	0.0632	0.0699
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	4.917	0	1864627	N.D.	0.0052 #
8)	PCB1260#7	4.976	5.064	17239475	8627277	0.0171	0.0220 #
9)	PCB1260#8	5.260	5.382	8670608	4738822	0.0136	0.0159
10)	PCB1260#9	5.435	5.585	5910517	3724215	0.0090	0.0114 #
11)	PCB1260#10	5.647	5.747	38286118	7941458	0.0251	0.0125 #
12)	DECACHLOR...	6.538	6.739	1223.0E6	587.4E6	0.1203	0.1196

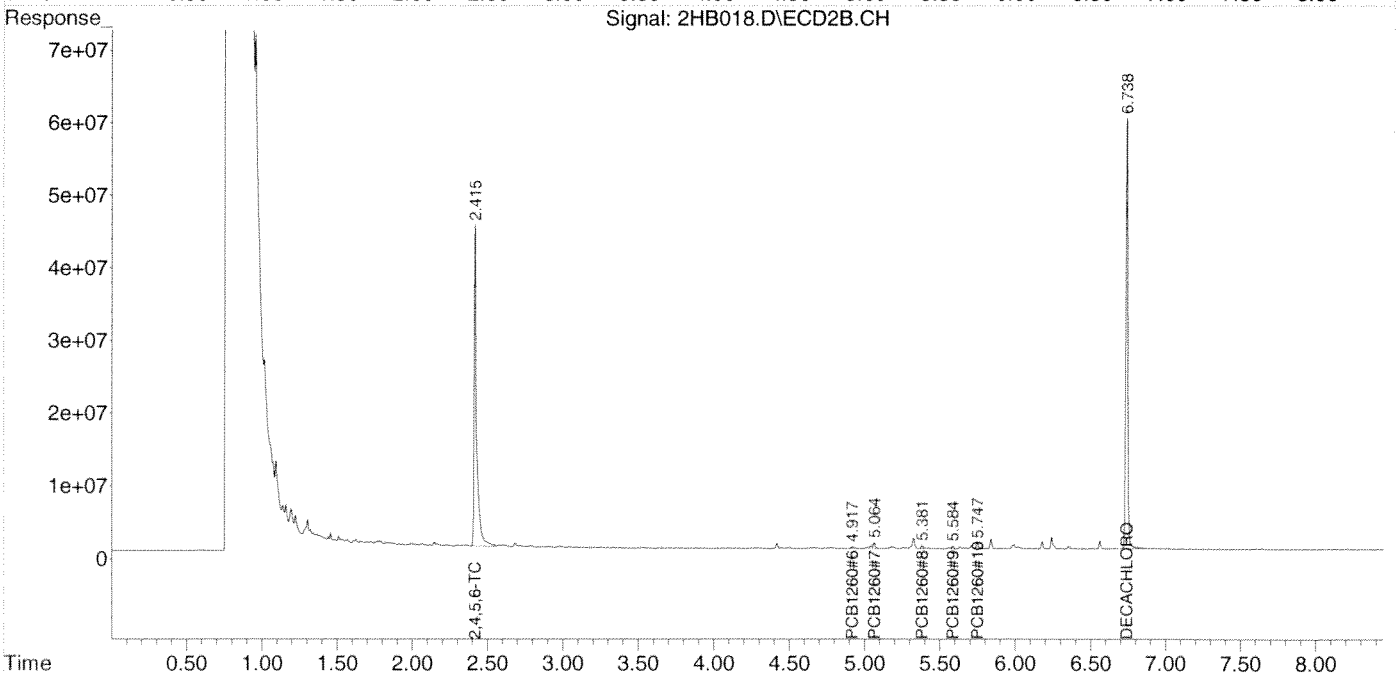
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 19:57
Operator : RC
Sample : A404270-04
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:00:14 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:09
Operator : RC
Sample : A404270-05
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:00:31 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

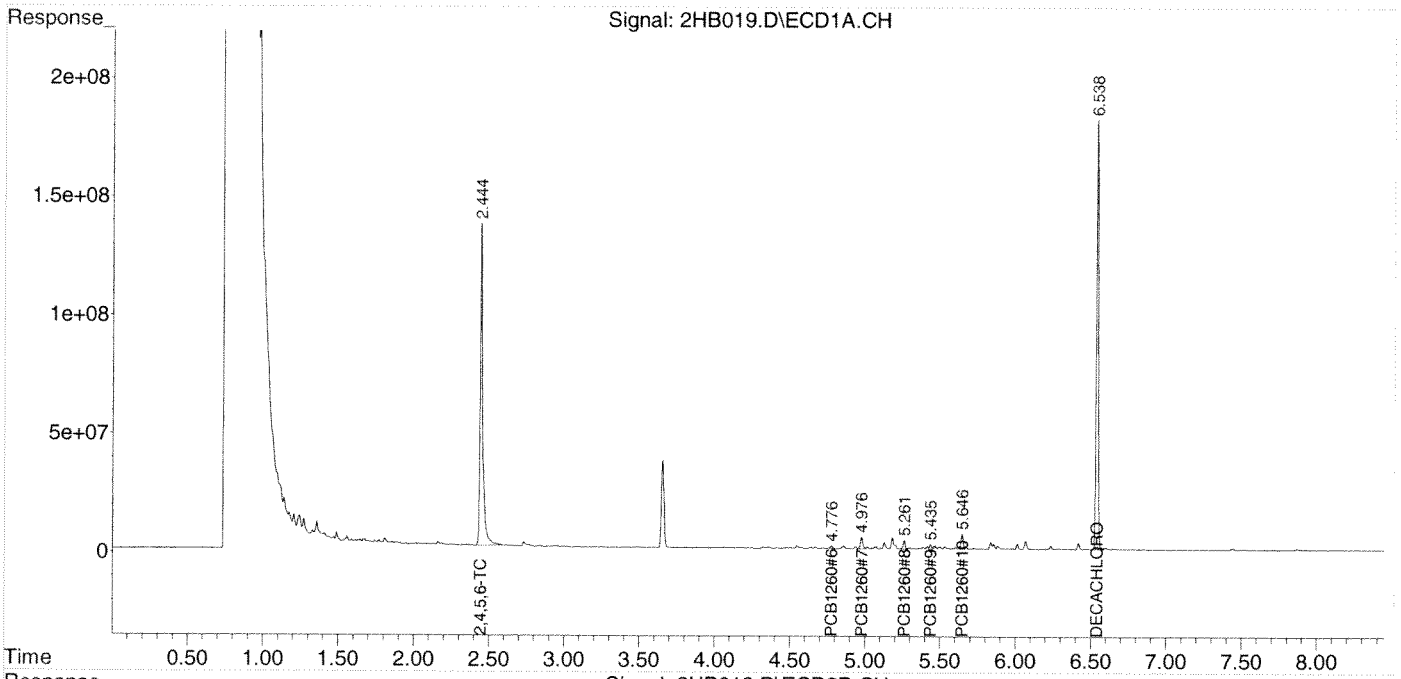
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1589.7E6	760.2E6	0.0932	0.1020	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	10792262	7228275	0.0144	0.0202	#
8)	PCB1260#7	4.977	5.065	51690187	24579518	0.0511	0.0625	
9)	PCB1260#8	5.261	5.382	33155253	16975822	0.0519	0.0568	
10)	PCB1260#9	5.436	5.587	17250213	9362579	0.0263	0.0287	
11)	PCB1260#10	5.646	5.748	64739600	20033120	0.0424	0.0314	#
12)	DECACHLOR...	6.539	6.739	1608.2E6	780.2E6	0.1582	0.1589	

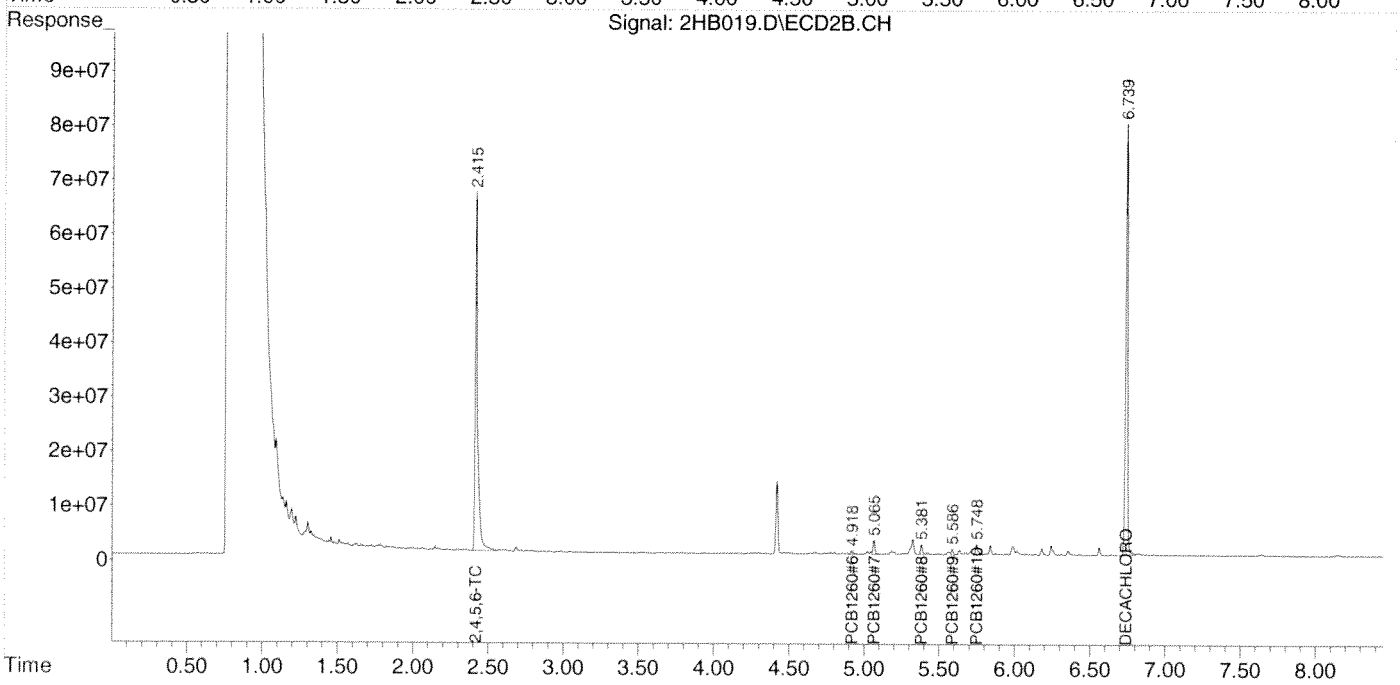
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:09
Operator : RC
Sample : A404270-05
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:00:31 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:21
Operator : RC
Sample : AA29933-CCV2
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

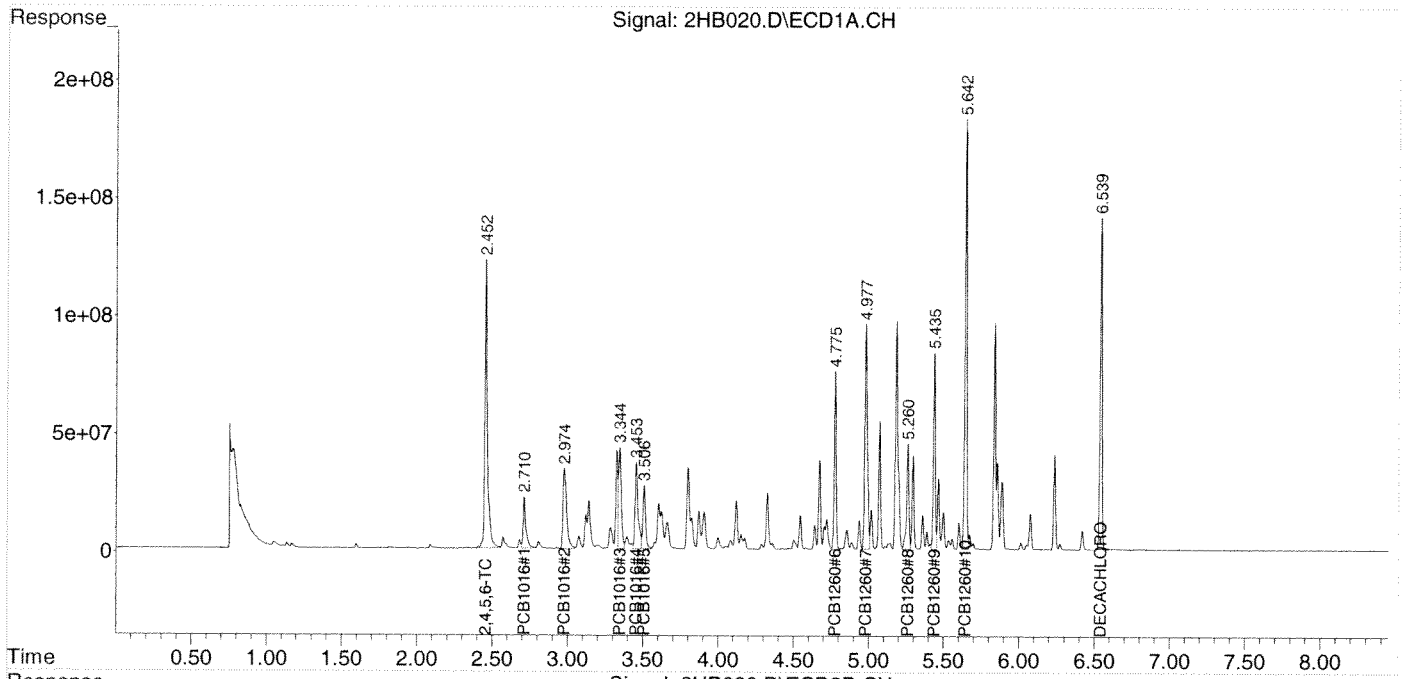
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.453	2.423	1454.6E6	824.6E6	0.0853	0.1106	#
2)	PCB1016#1	2.710	2.764	282.6E6	126.3E6	0.8757	0.8837	
3)	PCB1016#2	2.975	3.064	571.9E6	97334584	0.9291	0.3404	#
4)	PCB1016#3	3.344	3.695	550.2E6	135.7E6	0.6733	1.0879	#
5)	PCB1016#4	3.453	3.734	516.7E6	139.8E6	1.0322	1.0900	
6)	PCB1016#5	3.506	3.771	336.0E6	131.4E6	1.1057	0.9988	
7)	PCB1260#6	4.775	4.918	668.5E6	338.5E6	0.8919	0.9440	
8)	PCB1260#7	4.977	5.065	1129.2E6	414.2E6	1.1169	1.0540	
9)	PCB1260#8	5.261	5.382	468.7E6	324.4E6	0.7340	1.0857	#
10)	PCB1260#9	5.436	5.585	753.9E6	377.8E6	1.1484	1.1593	
11)	PCB1260#10	5.643	5.748	1646.6E6	724.9E6	1.0779	1.1368	
12)	DECACHLOR...	6.540	6.739	1270.9E6	559.2E6	0.1250	0.1139	

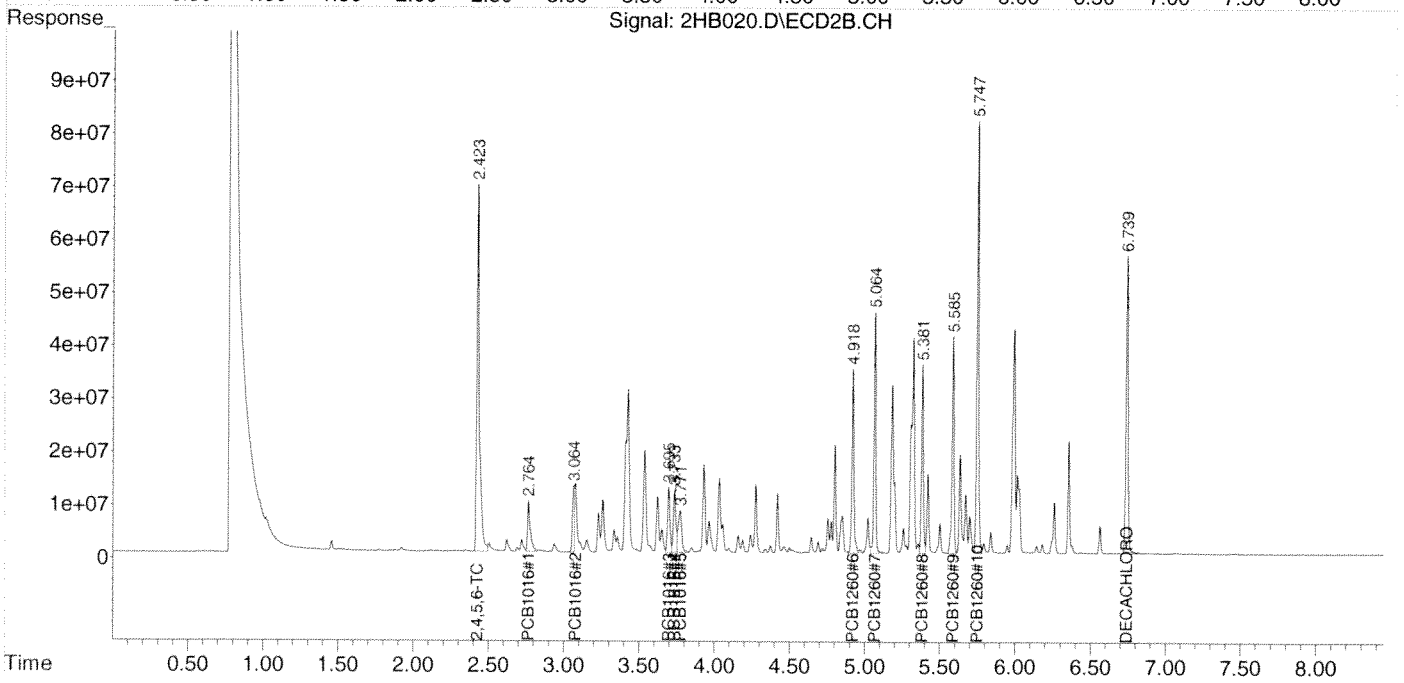
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:21
Operator : RC
Sample : AA29933-CCV2
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:09:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:33
Operator : RC
Sample : AA29933-ARC2
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:01:32 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

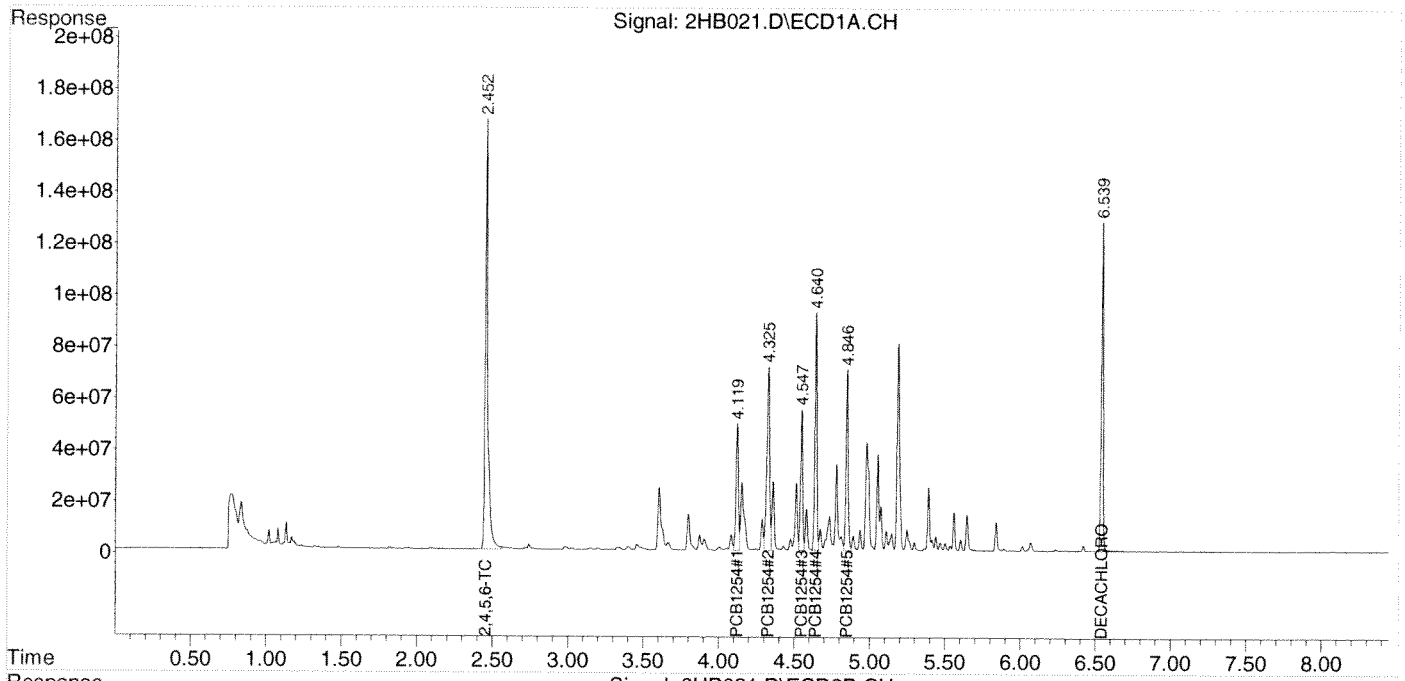
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.453	2.423	1908.2E6	885.6E6	0.1140	0.1115
2)	PCB1254#1	4.120	4.274	531.9E6	295.3E6	1.0867	1.1197
3)	PCB1254#2	4.325	4.420	926.7E6	324.2E6	1.0835	1.1352
4)	PCB1254#3	4.547	4.690	535.4E6	244.3E6	1.0687	1.0426
5)	PCB1254#4	4.640	4.777	873.9E6	465.5E6	1.0252	1.1743
6)	PCB1254#5	4.847	5.066	693.8E6	207.4E6	1.0422	1.1445
7)	DECACHLOR...	6.540	6.740	1146.3E6	550.7E6	0.1081	0.1051

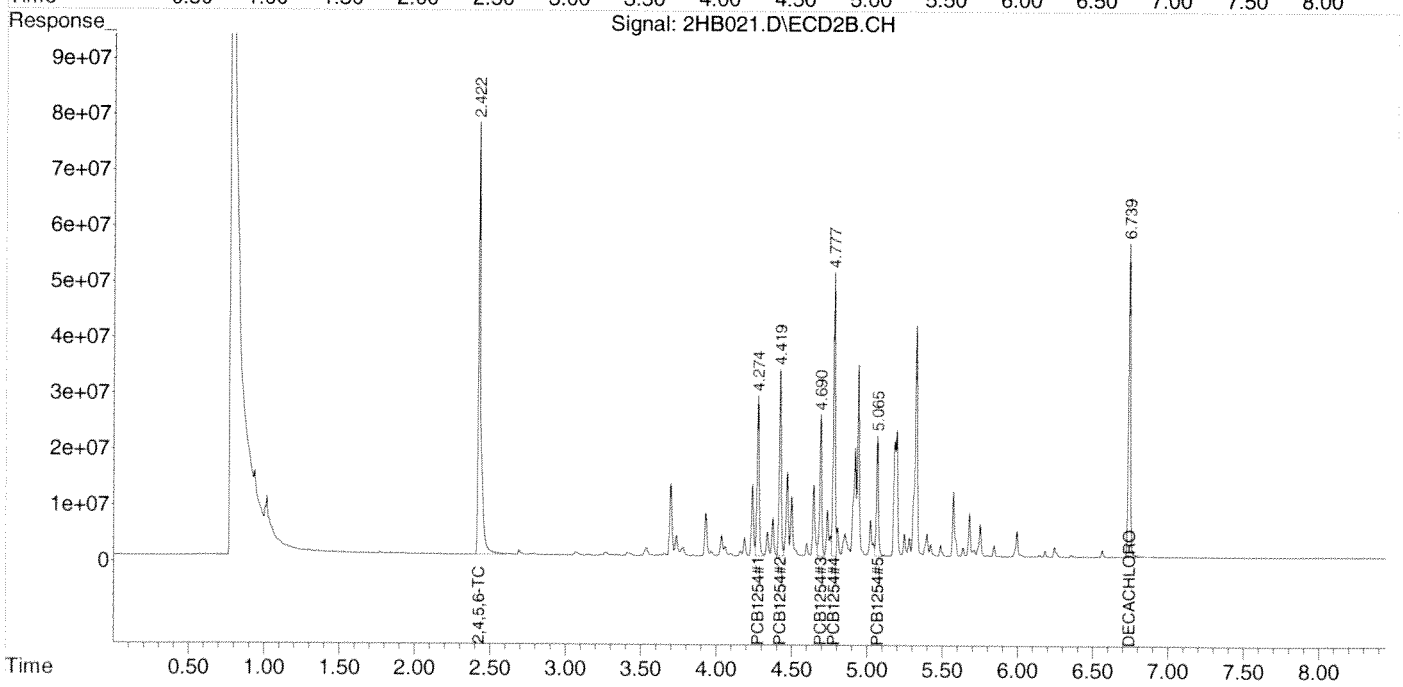
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:33
Operator : RC
Sample : AA29933-ARC2
Misc :
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:01:32 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:45
Operator : RC
Sample : A404270-06
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1131.1E6	537.5E6	0.0663	0.0721	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.775	4.918	23525012	15598568	0.0314	0.0435	#
8)	PCB1260#7	4.976	5.064	85979749	36501492	0.0850	0.0929	
9)	PCB1260#8	5.261	5.381	48063762	24776282	0.0753	0.0829	
10)	PCB1260#9	5.435	5.585	30370369	15676007	0.0463	0.0481	
11)	PCB1260#10	5.643	5.747	91584630	39638067	0.0599	0.0622	
12)	DECACHLOR...	6.538	6.738	1423.7E6	700.2E6	0.1400	0.1426	

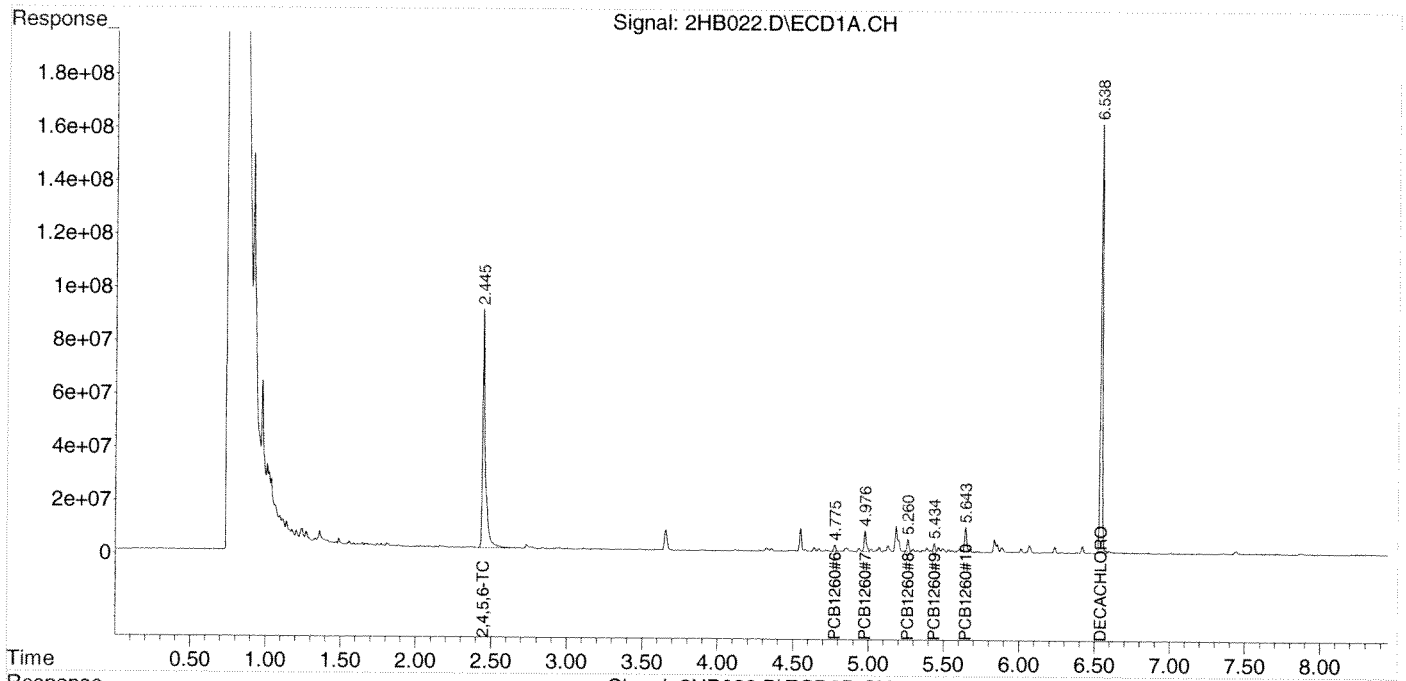
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

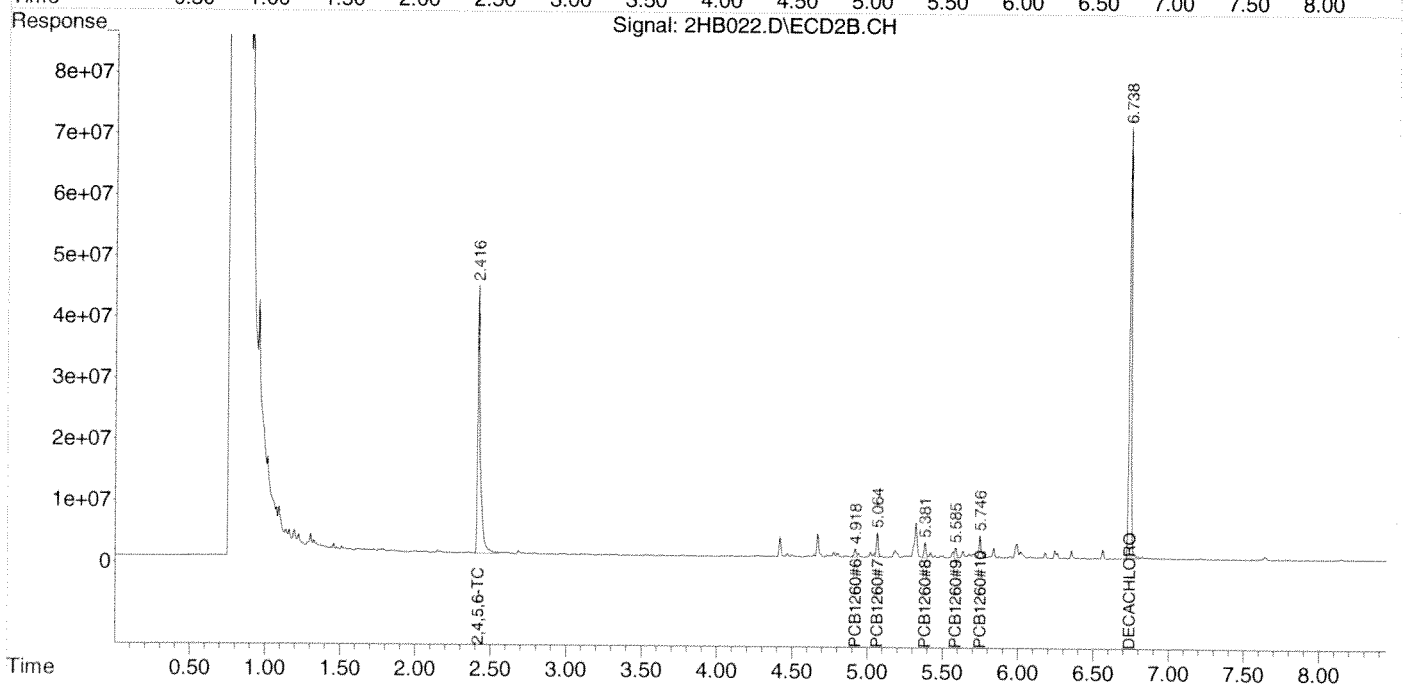
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:45
Operator : RC
Sample : A404270-06
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:58
Operator : RC
Sample : A404270-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1338.5E6	635.0E6	0.0785	0.0852	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	13027705	8133291	0.0174	0.0227	#
8)	PCB1260#7	4.976	5.065	52277365	23361864	0.0517	0.0594	
9)	PCB1260#8	5.261	5.382	30308377	15981297	0.0475	0.0535	
10)	PCB1260#9	5.436	5.586	17810928	9073257	0.0271	0.0278	
11)	PCB1260#10	5.645	5.748	68925770	23227368	0.0451	0.0364	
12)	DECACHLOR...	6.539	6.738	1233.8E6	593.9E6	0.1214	0.1209	

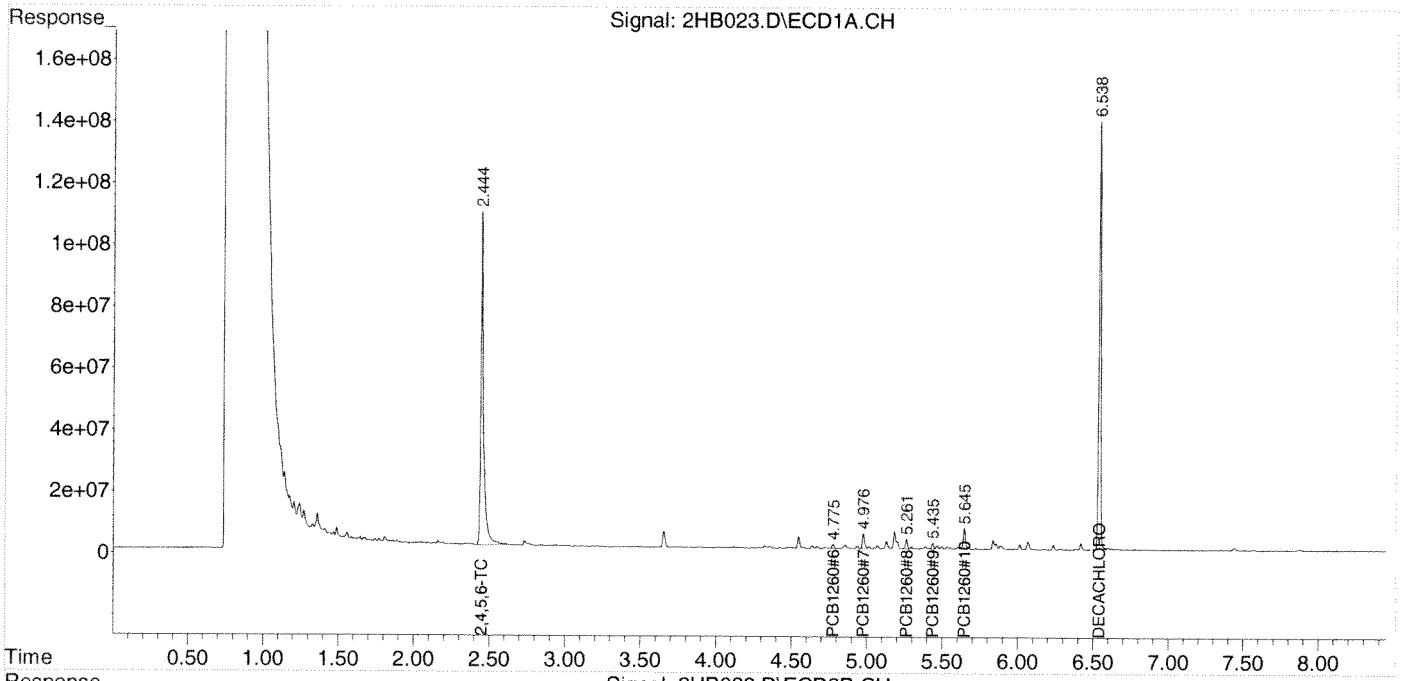
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

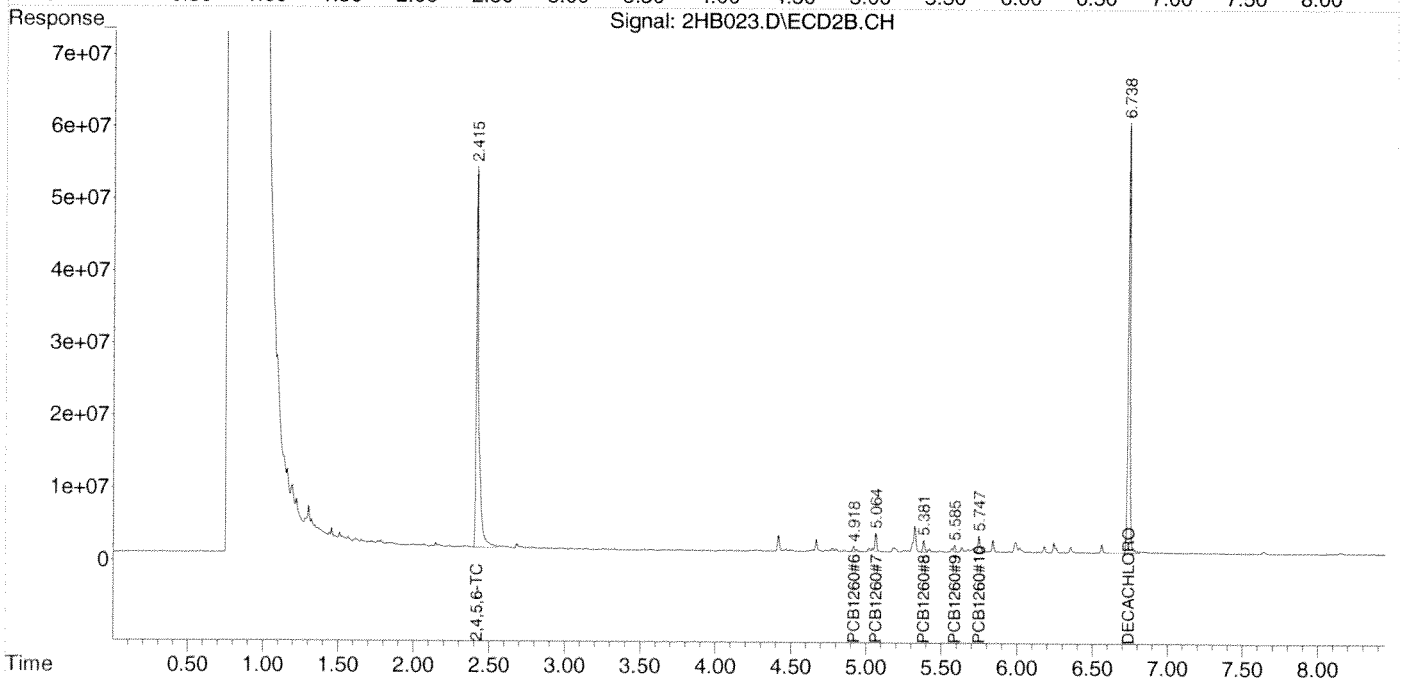
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB023.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 20:58
Operator : RC
Sample : A404270-07
Misc :
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:10
Operator : RC
Sample : A404270-08
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

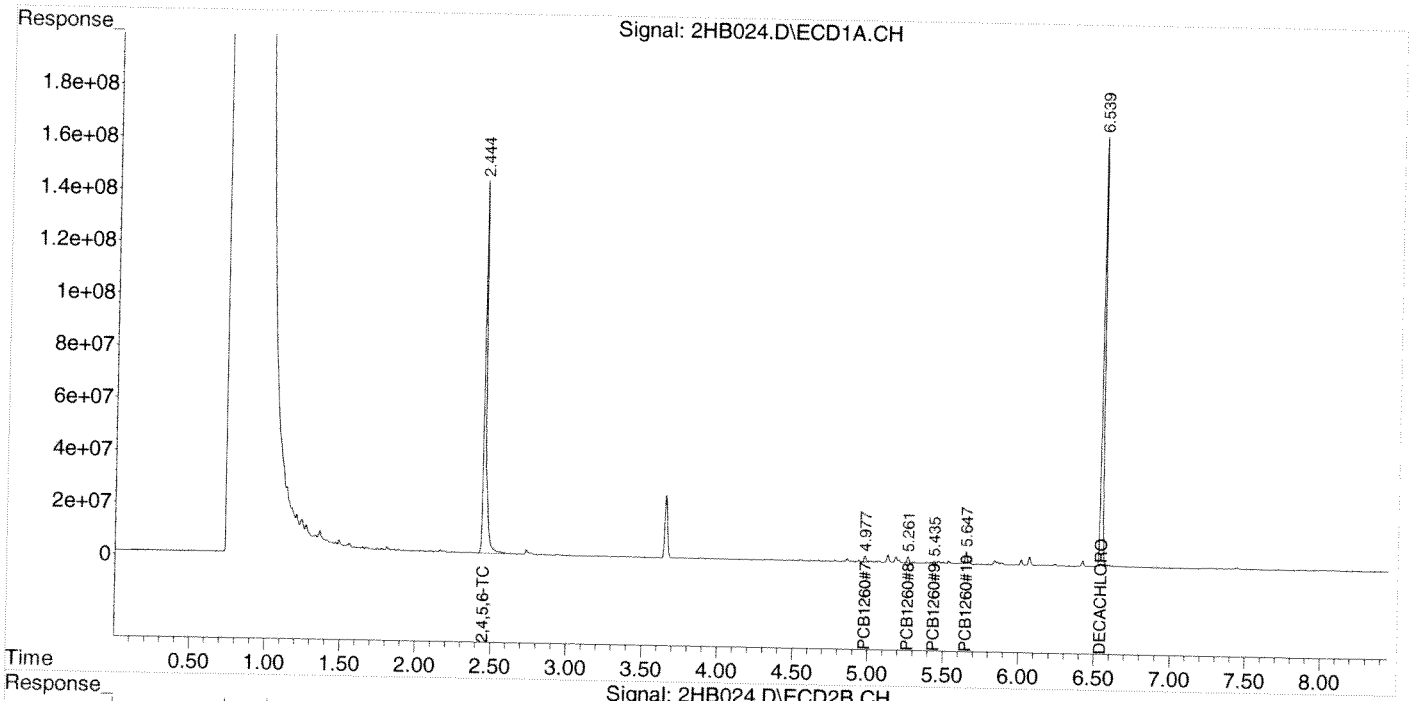
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1580.5E6	753.1E6	0.0927	0.1010
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	4.918	0	1957845	N.D.	0.0055 #
8)	PCB1260#7	4.977	5.065	24676564	12553034	0.0244	0.0319 #
9)	PCB1260#8	5.261	5.382	21591991	11058330	0.0338	0.0370
10)	PCB1260#9	5.435	5.587	7308600	4613654	0.0111	0.0142 #
11)	PCB1260#10	5.647	5.748	40252104	9760200	0.0263	0.0153 #
12)	DECACHLOR...	6.539	6.739	1435.6E6	697.4E6	0.1412	0.1420

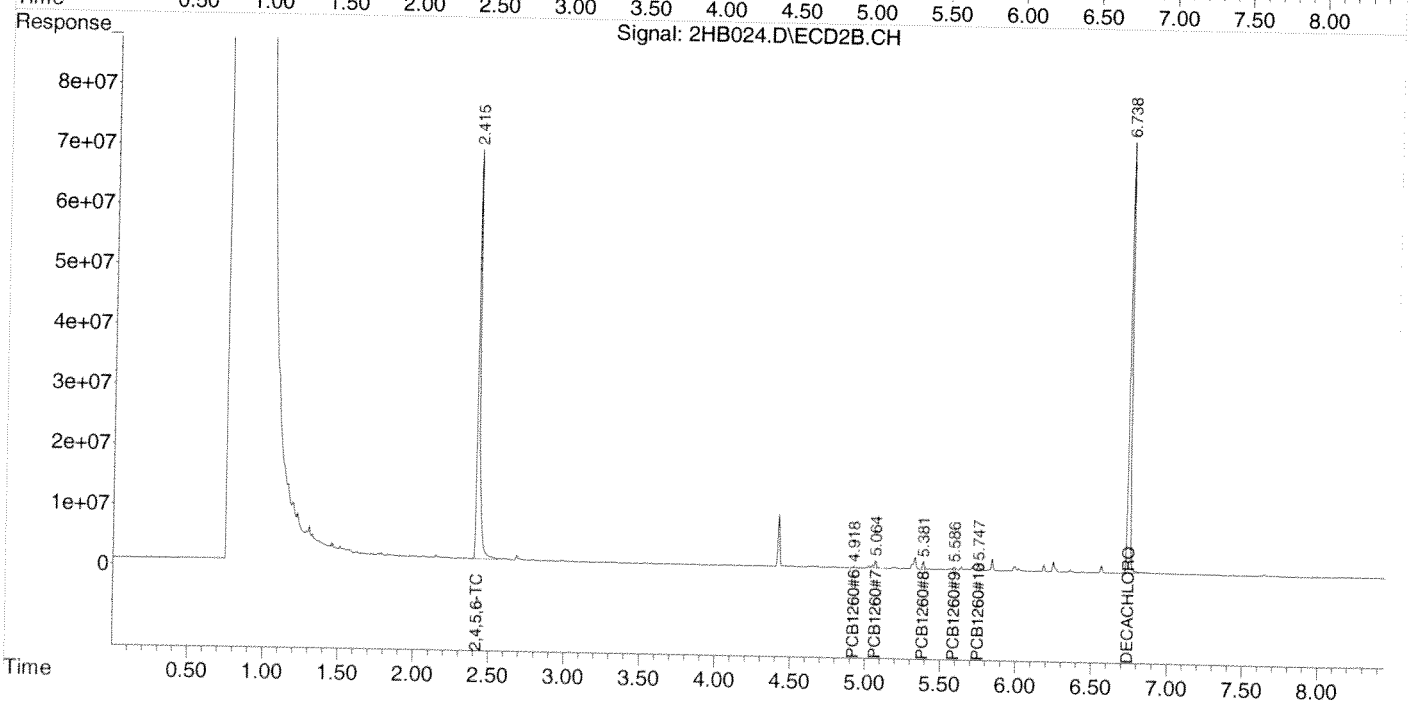
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB024.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:10
Operator : RC
Sample : A404270-08
Misc :
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:02:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:22
Operator : RC
Sample : A404270-09
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:03:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

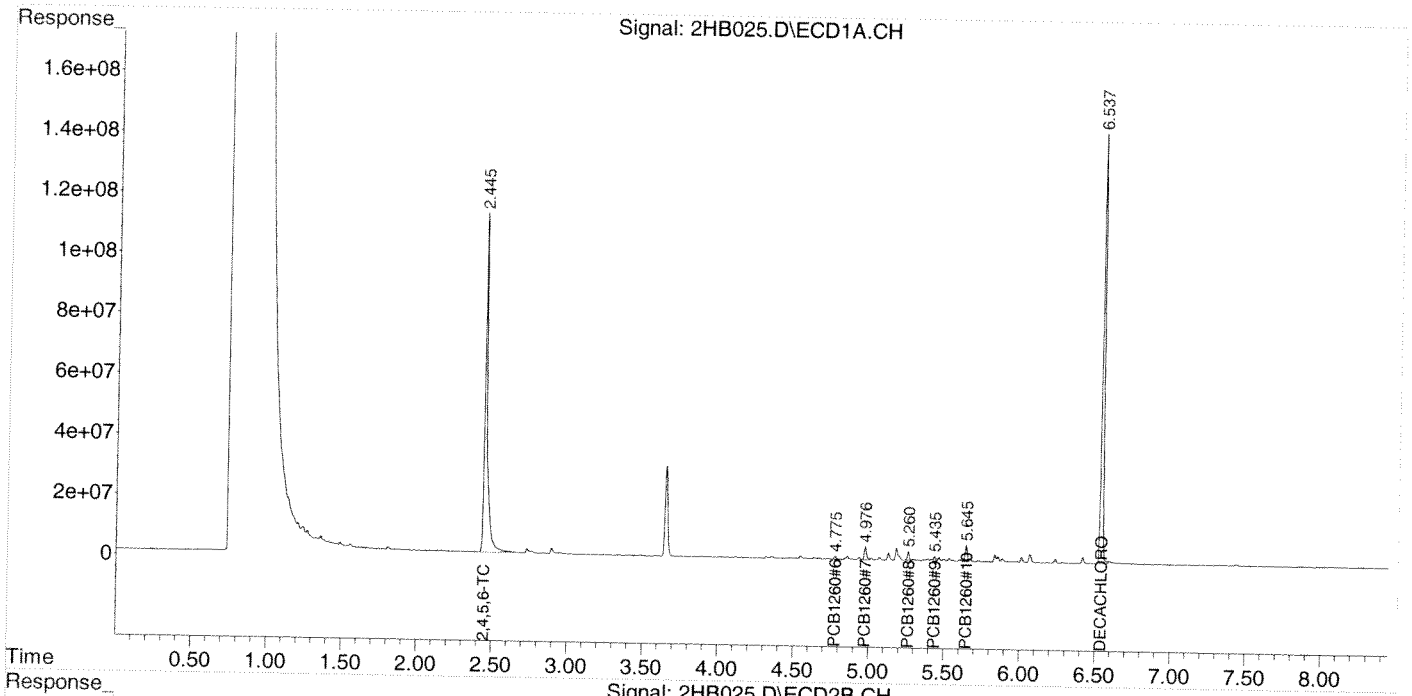
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.417	1450.7E6	678.5E6	0.0851	0.0910
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.776	4.918	8826066	6126382	0.0118	0.0171 #
8)	PCB1260#7	4.976	5.064	45134405	21720597	0.0446	0.0553
9)	PCB1260#8	5.261	5.382	27317478	14327943	0.0428	0.0480
10)	PCB1260#9	5.435	5.586	13842214	7654167	0.0211	0.0235
11)	PCB1260#10	5.646	5.747	55079722	17764479	0.0361	0.0279
12)	DECACHLOR...	6.538	6.738	1281.5E6	631.0E6	0.1261	0.1285

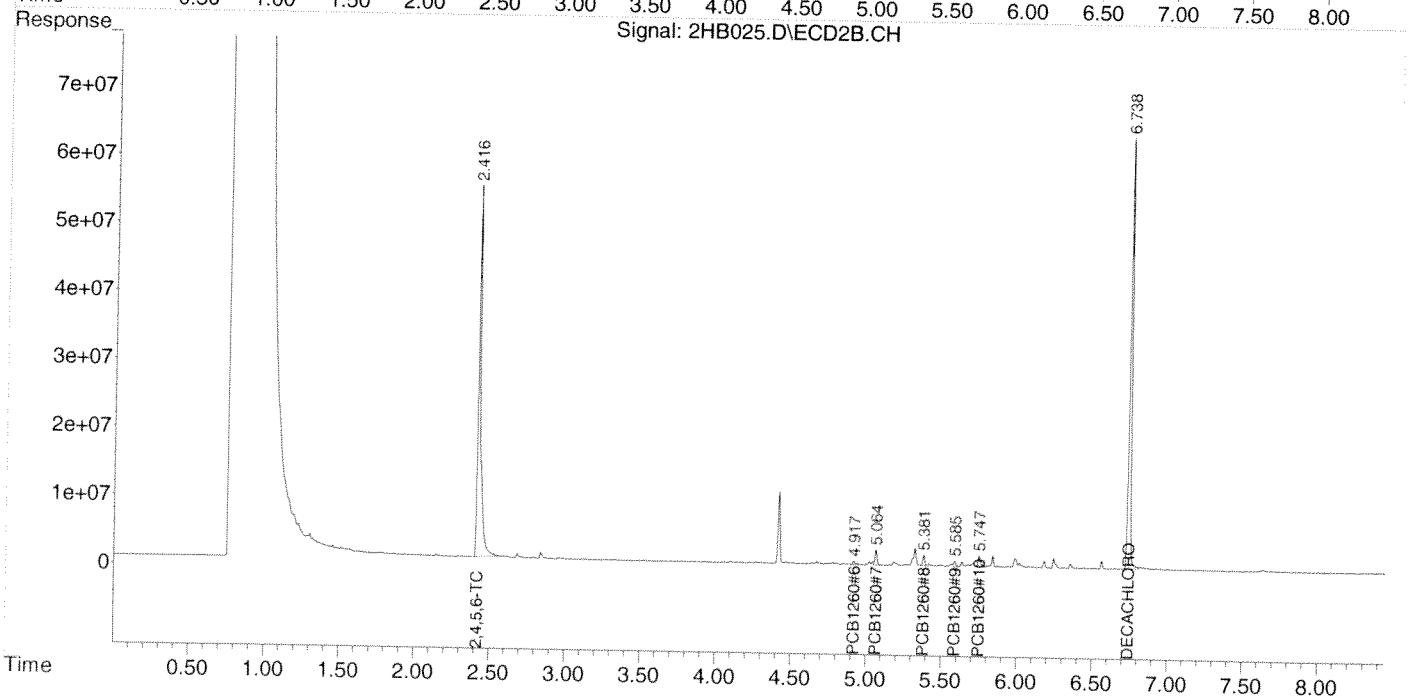
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB025.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:22
Operator : RC
Sample : A404270-09
Misc :
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:03:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:34
Operator : RC
Sample : A404270-10
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:04:58 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

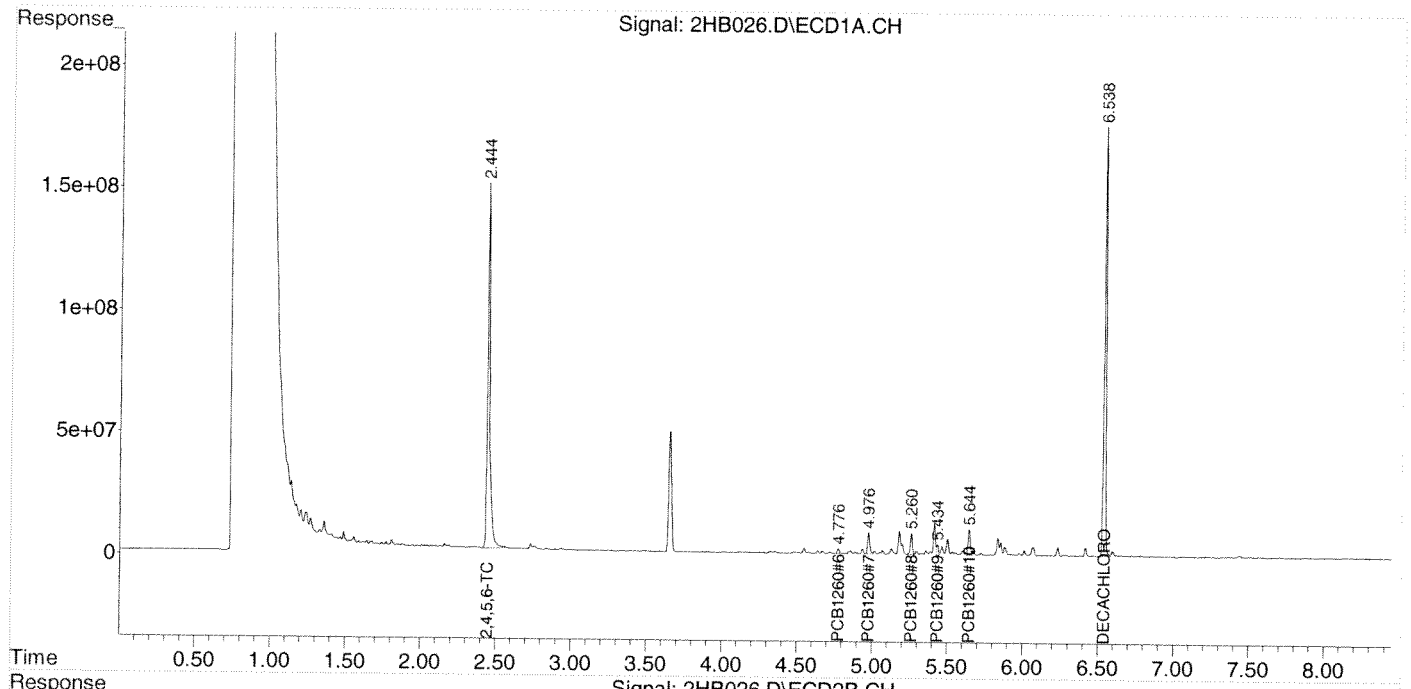
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.416	1642.6E6	782.7E6	0.0963	0.1050	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	18075945	11134446	0.0241	0.0311	#
8)	PCB1260#7	4.976	5.065	91433273	41005009	0.0904	0.1043	
9)	PCB1260#8	5.261	5.381	84292441	41815607	0.1320	0.1400	
10)	PCB1260#9	5.435	5.587	34802321	22317778	0.0530	0.0685	#
11)	PCB1260#10	5.644	5.747	105.6E6	42614436	0.0691	0.0668	
12)	DECACHLOR...	6.538	6.738	1565.0E6	772.6E6	0.1539	0.1573	

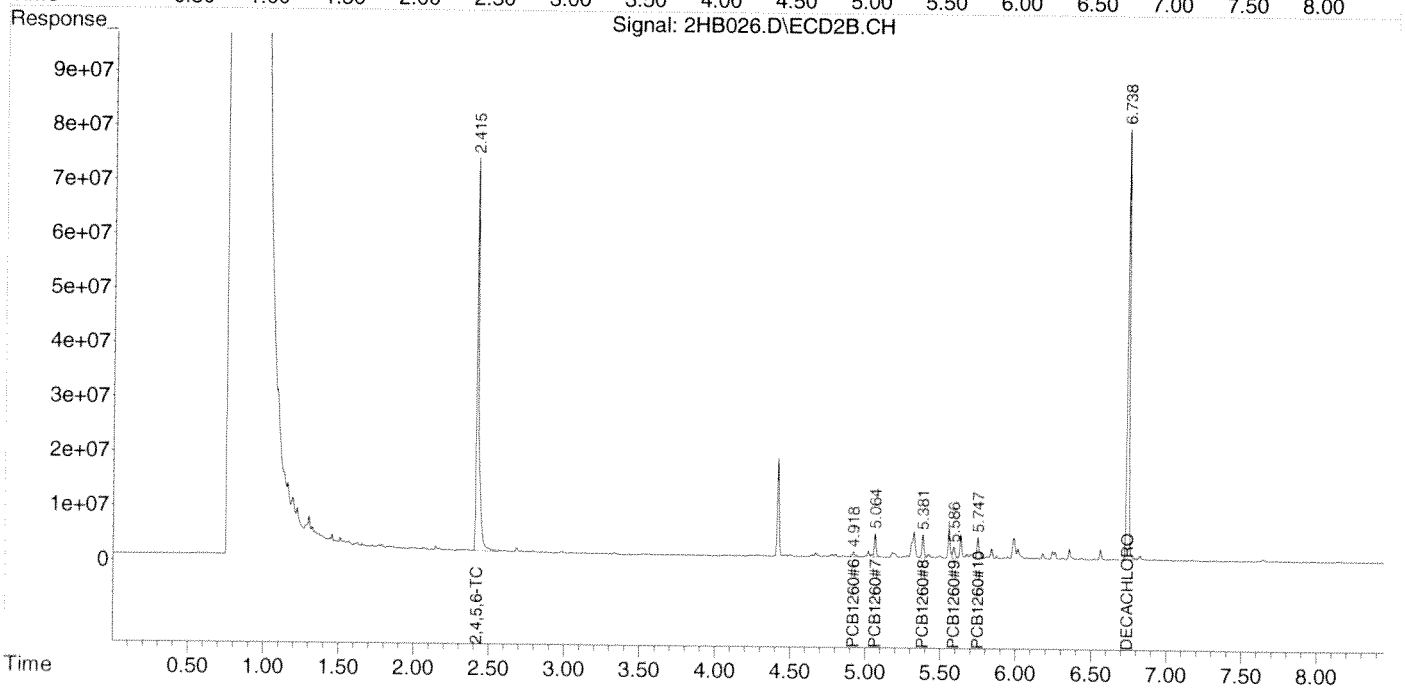
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB026.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:34
Operator : RC
Sample : A404270-10
Misc :
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:04:58 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:46
Operator : RC
Sample : A404270-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:14 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

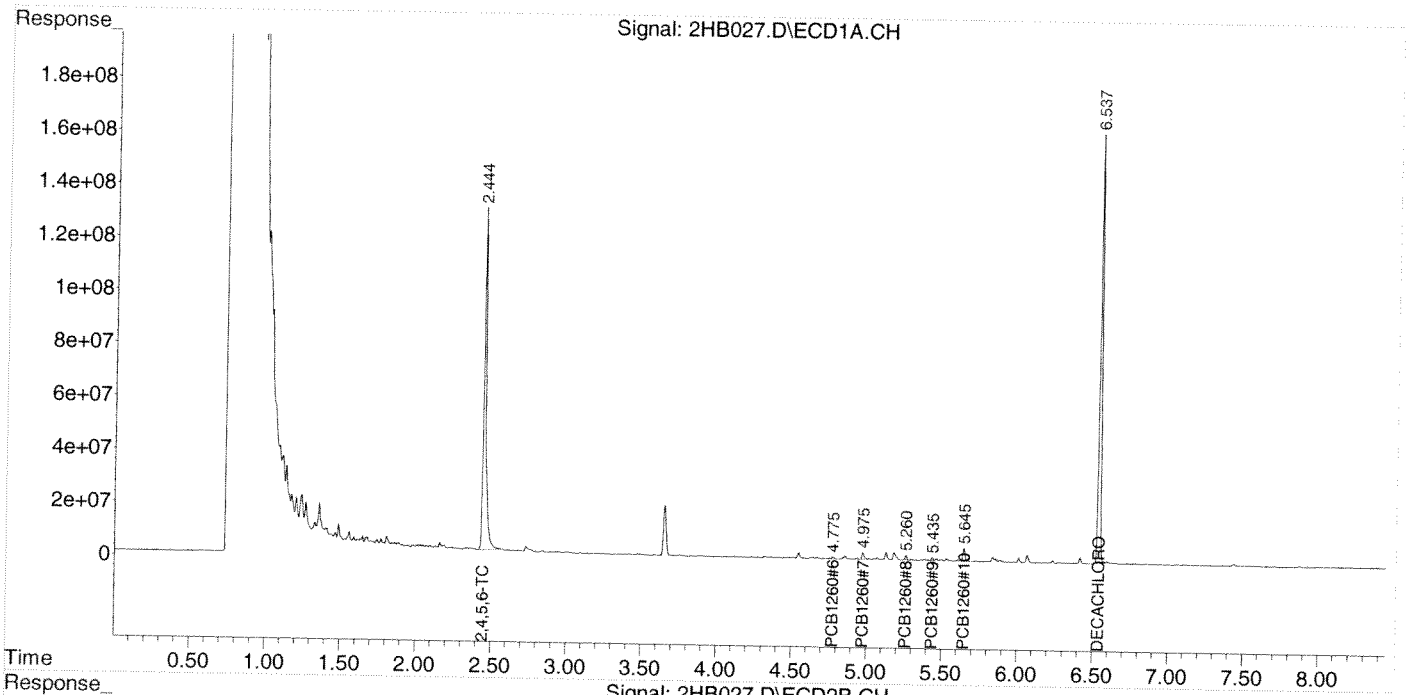
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1479.3E6	733.9E6	0.0867	0.0984	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.917	7379900	4917652	0.0098	0.0137	#
8)	PCB1260#7	4.976	5.064	29621549	11364623	0.0293	0.0289	
9)	PCB1260#8	5.261	5.381	16703860	8565925	0.0262	0.0287	
10)	PCB1260#9	5.435	5.585	9783507	5356115	0.0149	0.0164	
11)	PCB1260#10	5.646	5.747	53594798	12213413	0.0351	0.0192	#
12)	DECACHLOR...	6.538	6.737	1458.1E6	702.3E6	0.1434	0.1430	

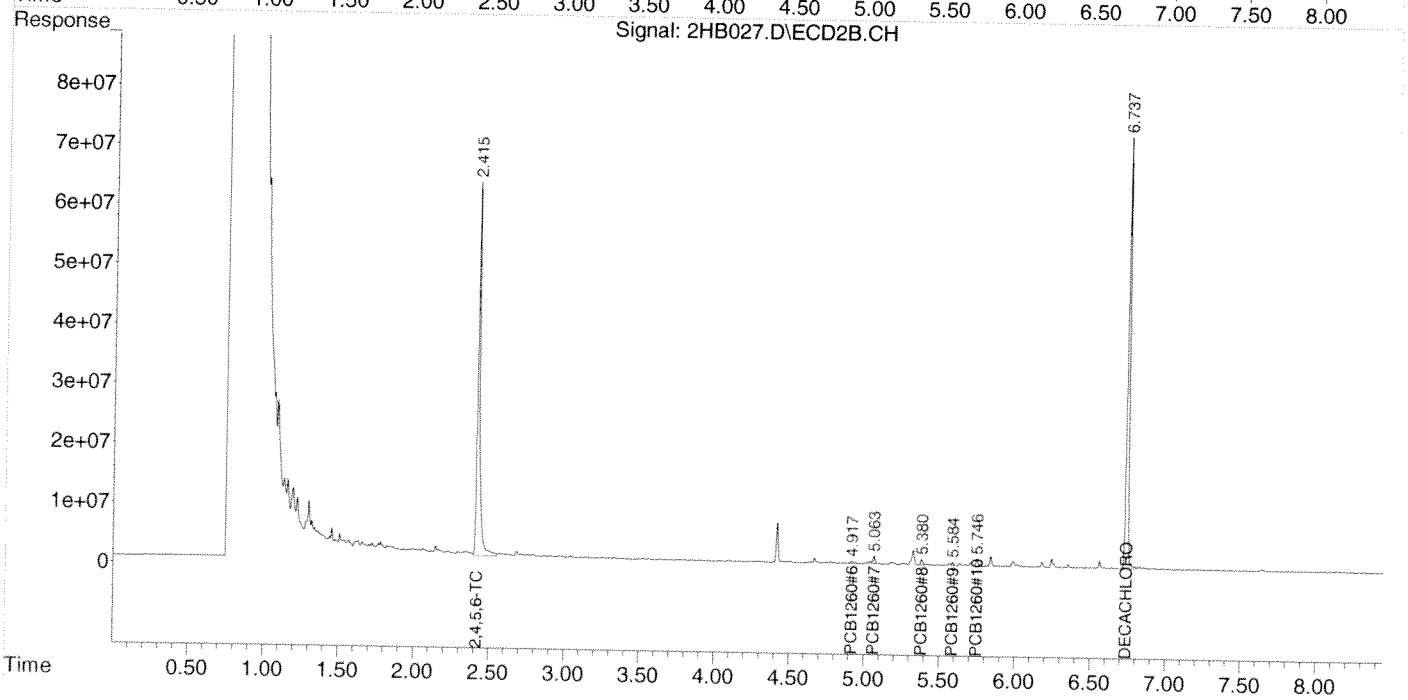
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB027.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:46
Operator : RC
Sample : A404270-12
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:14 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB028.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:58
Operator : RC
Sample : A404270-13
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:30 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

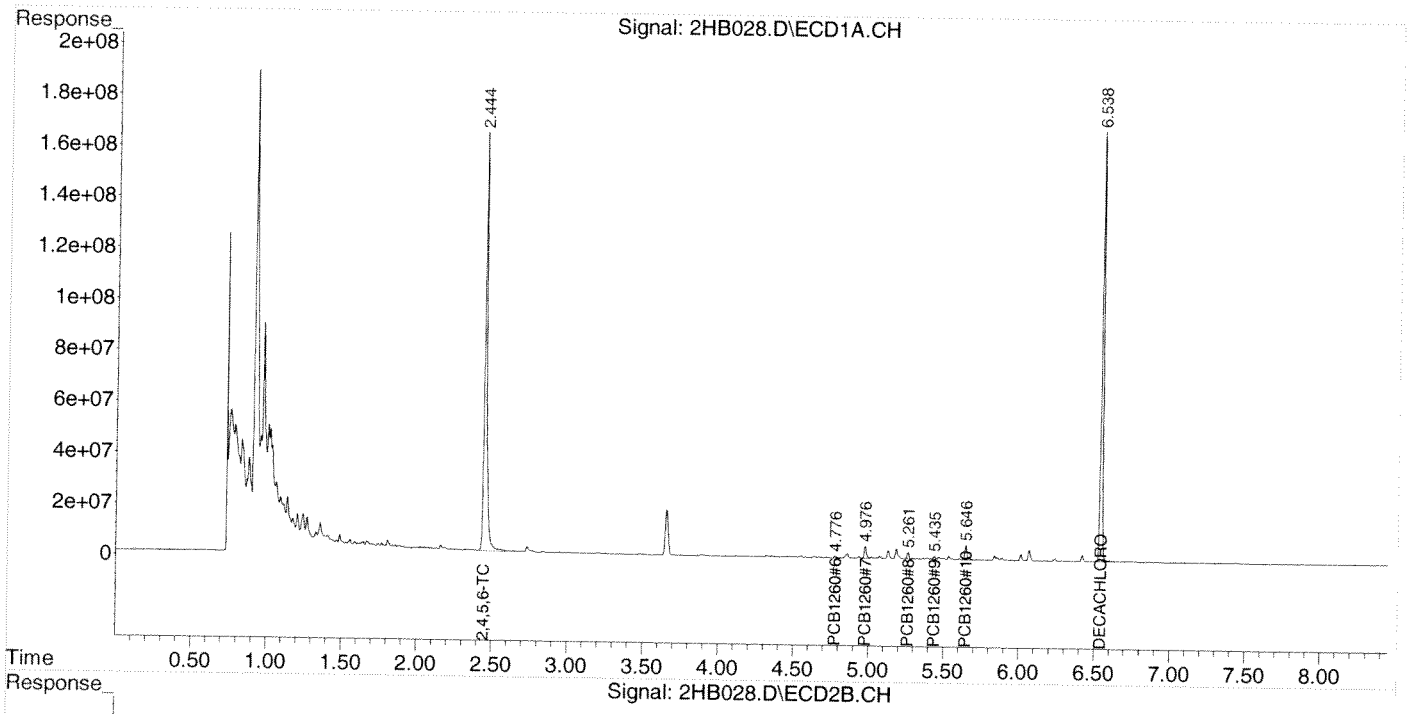
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1867.1E6	895.1E6	0.1095	0.1201	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	7094993	4641573	0.0095	0.0129	#
8)	PCB1260#7	4.977	5.064	49269177	24014603	0.0487	0.0611	#
9)	PCB1260#8	5.261	5.382	23868598	12715341	0.0374	0.0426	
10)	PCB1260#9	5.436	5.586	10497248	6095733	0.0160	0.0187	
11)	PCB1260#10	5.646	5.748	62241281	14544052	0.0407	0.0228	#
12)	DECACHLOR...	6.539	6.739	1487.2E6	717.0E6	0.1463	0.1460	

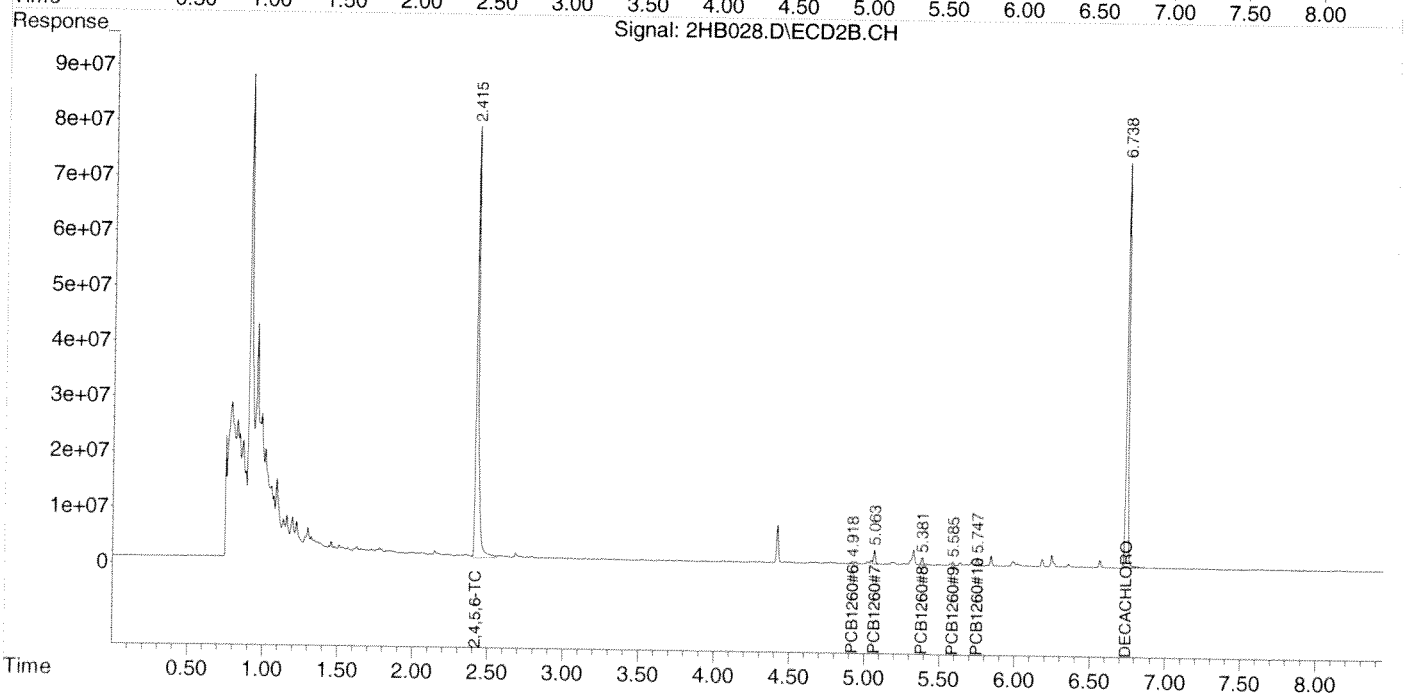
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB028.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 21:58
Operator : RC
Sample : A404270-13
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:30 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:10
Operator : RC
Sample : A404270-14
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:46 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

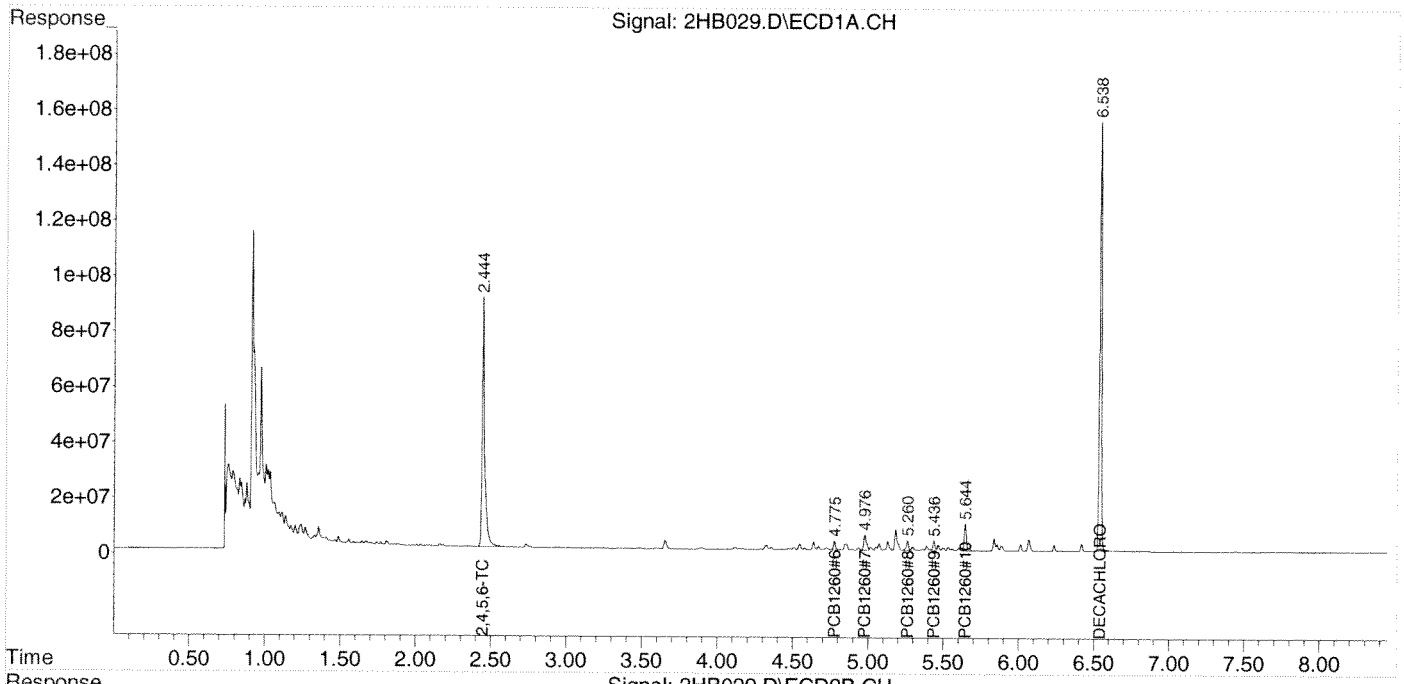
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1061.6E6	500.2E6	0.0622	0.0671
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.776	4.918	31901361	18515215	0.0426	0.0516
8)	PCB1260#7	4.977	5.064	67982131	27703757	0.0672	0.0705
9)	PCB1260#8	5.261	5.381	34766970	18967354	0.0544	0.0635
10)	PCB1260#9	5.436	5.586	32605393	16846188	0.0497	0.0517
11)	PCB1260#10	5.644	5.747	103.4E6	34497694	0.0677	0.0541
12)	DECACHLOR...	6.539	6.738	1367.5E6	655.2E6	0.1345	0.1334

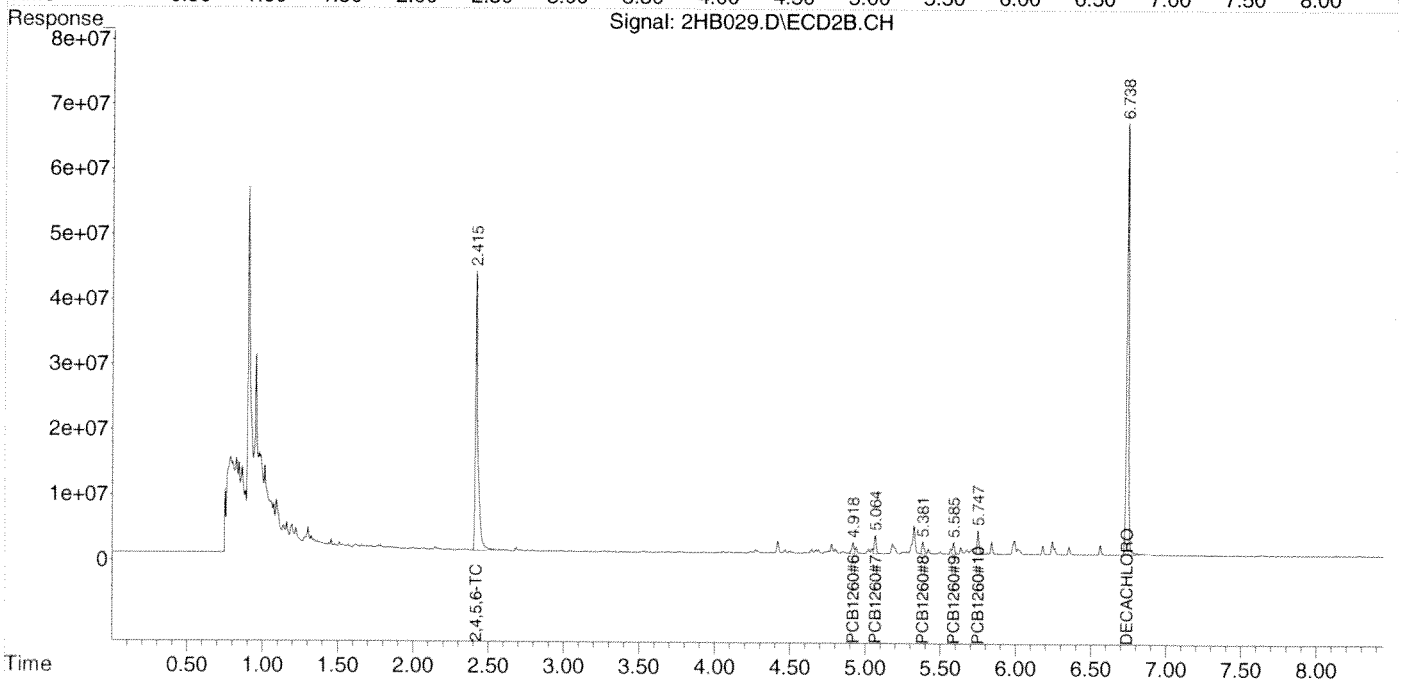
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:10
Operator : RC
Sample : A404270-14
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:05:46 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:10
Operator : RC
Sample : A404270-14
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:09 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

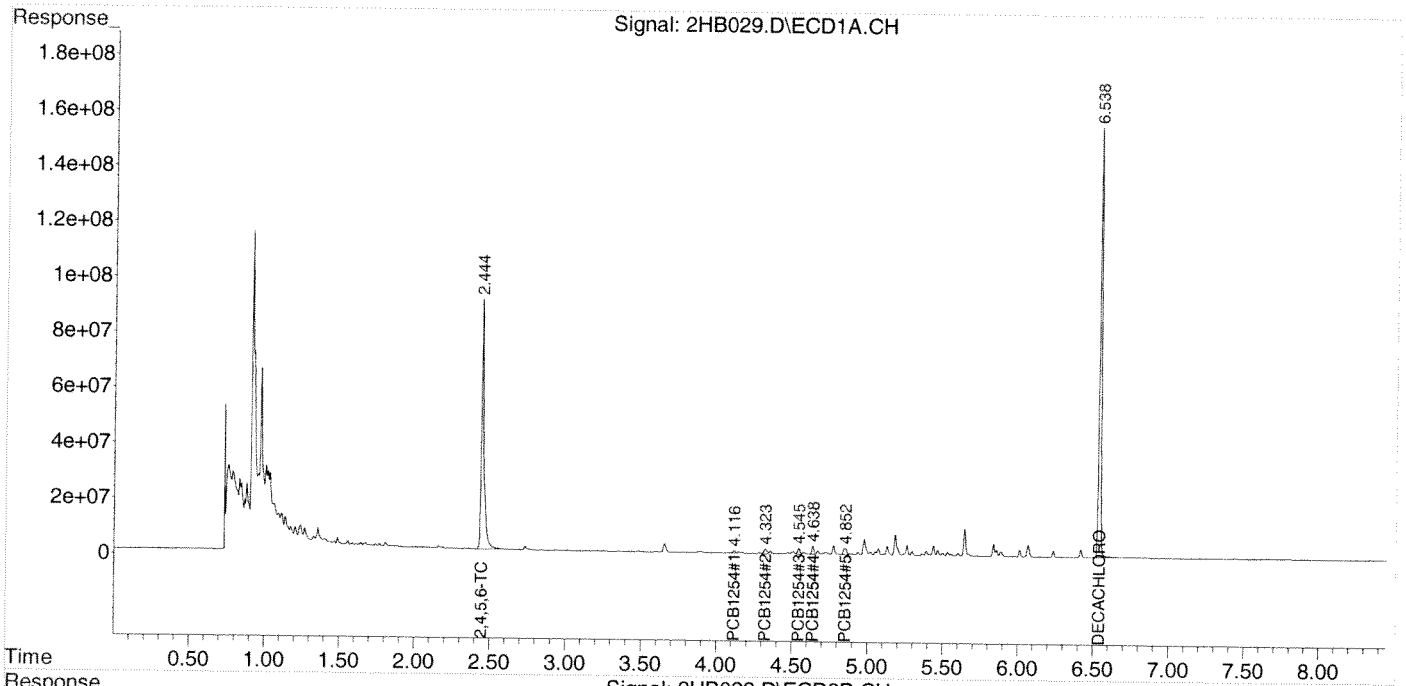
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1061.7E6	500.2E6	0.0634	0.0630	
2)	PCB1254#1	4.117	4.272	12955338	5602324	0.0265	0.0212	
3)	PCB1254#2	4.323	4.418	23324605	16930621	0.0273	0.0593	#
4)	PCB1254#3	4.546	4.688	22735093	5257832	0.0454	0.0224	#
5)	PCB1254#4	4.638	4.775	29066527	13707742	0.0341	0.0346	
6)	PCB1254#5	4.853	5.064	35190590	27703757	0.0529	0.1529	#
7)	DECACHLOR...	6.539	6.738	1374.8E6	655.2E6	0.1296	0.1250	

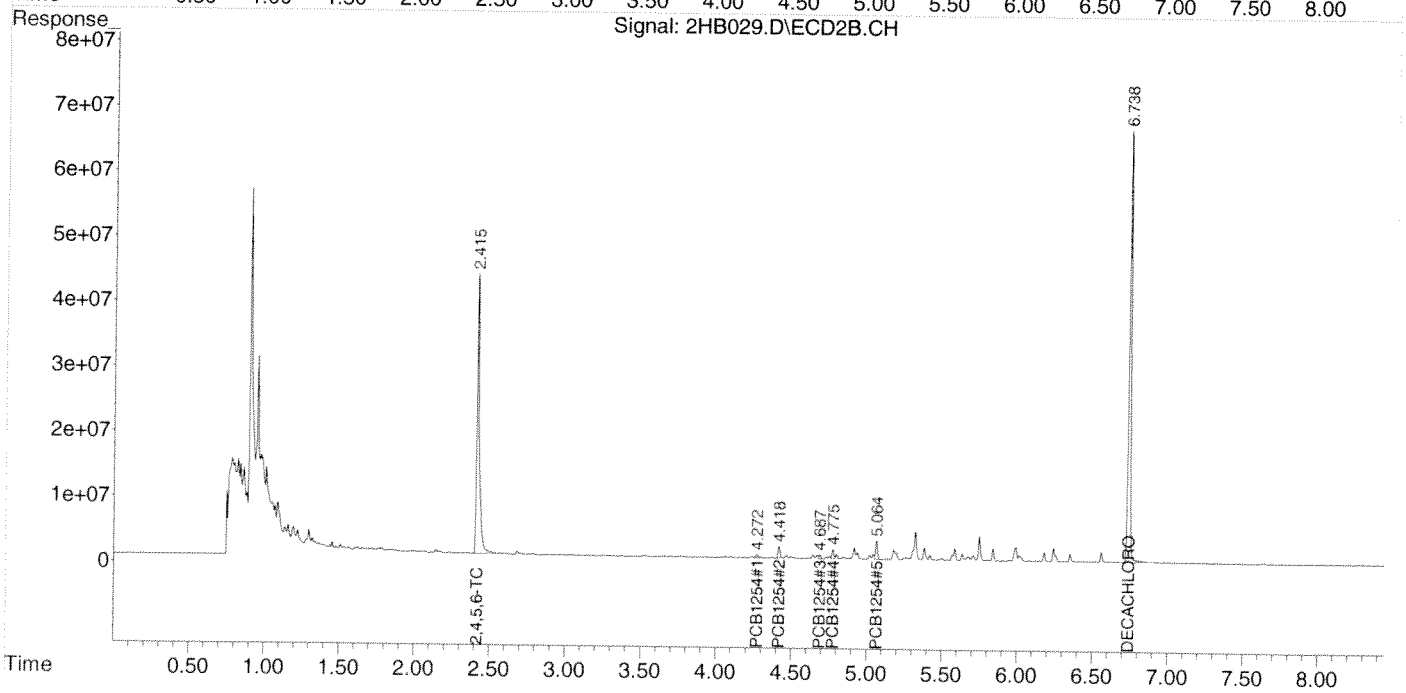
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB029.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:10
Operator : RC
Sample : A404270-14
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:09 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:23
Operator : RC
Sample : A404270-15
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:19 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.417	1549.4E6	738.9E6	0.0909	0.0991	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.919	7826040	4914674	0.0104	0.0137	#
8)	PCB1260#7	4.977	5.065	47242440	22760321	0.0467	0.0579	
9)	PCB1260#8	5.261	5.382	24995920	13587353	0.0391	0.0455	
10)	PCB1260#9	5.435	5.586	10618466	5811272	0.0162	0.0178	
11)	PCB1260#10	5.646	5.748	63915853	14260131	0.0418	0.0224	#
12)	DECACHLOR...	6.539	6.739	1333.7E6	644.9E6	0.1312	0.1313	

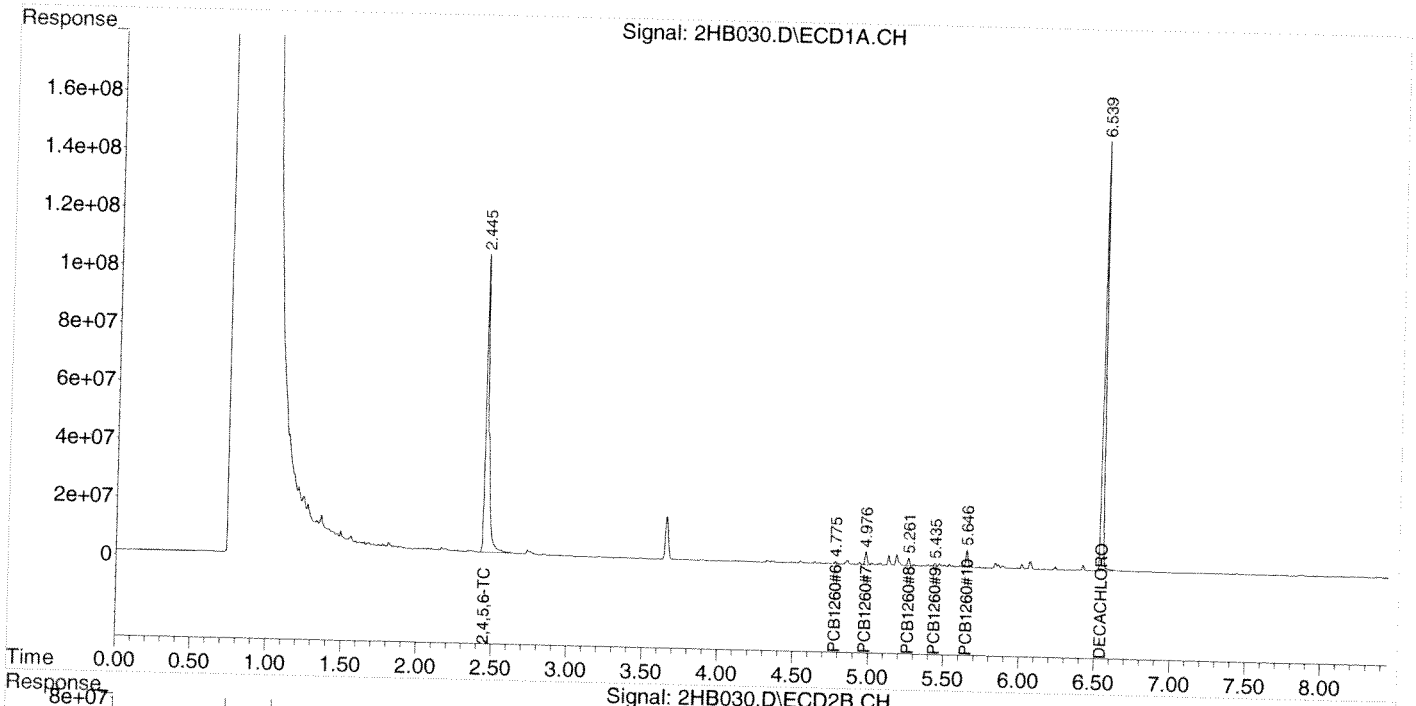
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

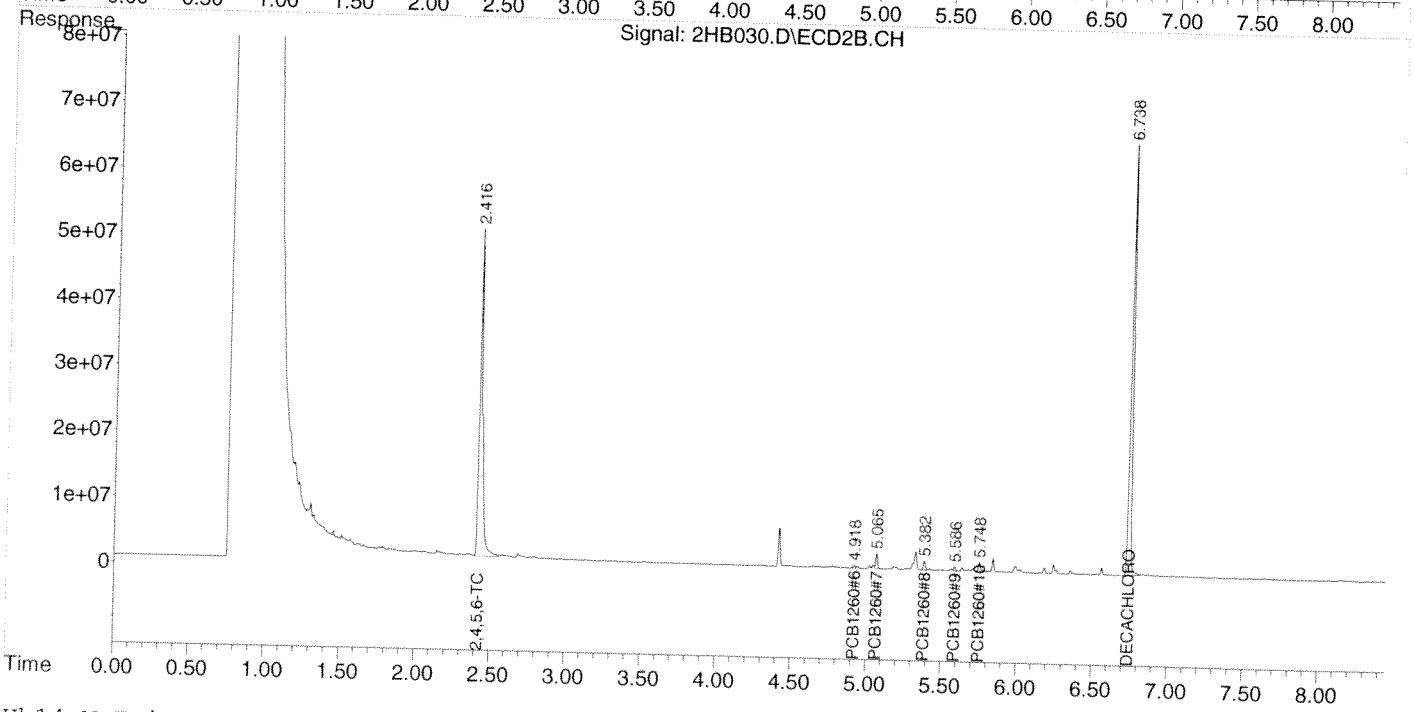
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB030.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:23
Operator : RC
Sample : A404270-15
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:19 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:35
Operator : RC
Sample : A404270-16
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:37 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1273.9E6	611.5E6	0.0747	0.0820	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	8661402	4239411	0.0116	0.0118	
8)	PCB1260#7	4.976	5.064	16757326	7386878	0.0166	0.0188	
9)	PCB1260#8	5.261	5.381	10742669	4658391	0.0168	0.0156	
10)	PCB1260#9	5.436	5.585	8363799	6921750	0.0127	0.0212	#
11)	PCB1260#10	5.646	5.747	50492183	8962692	0.0331	0.0141	#
12)	DECACHLOR...	6.539	6.738	1441.1E6	690.3E6	0.1418	0.1406	

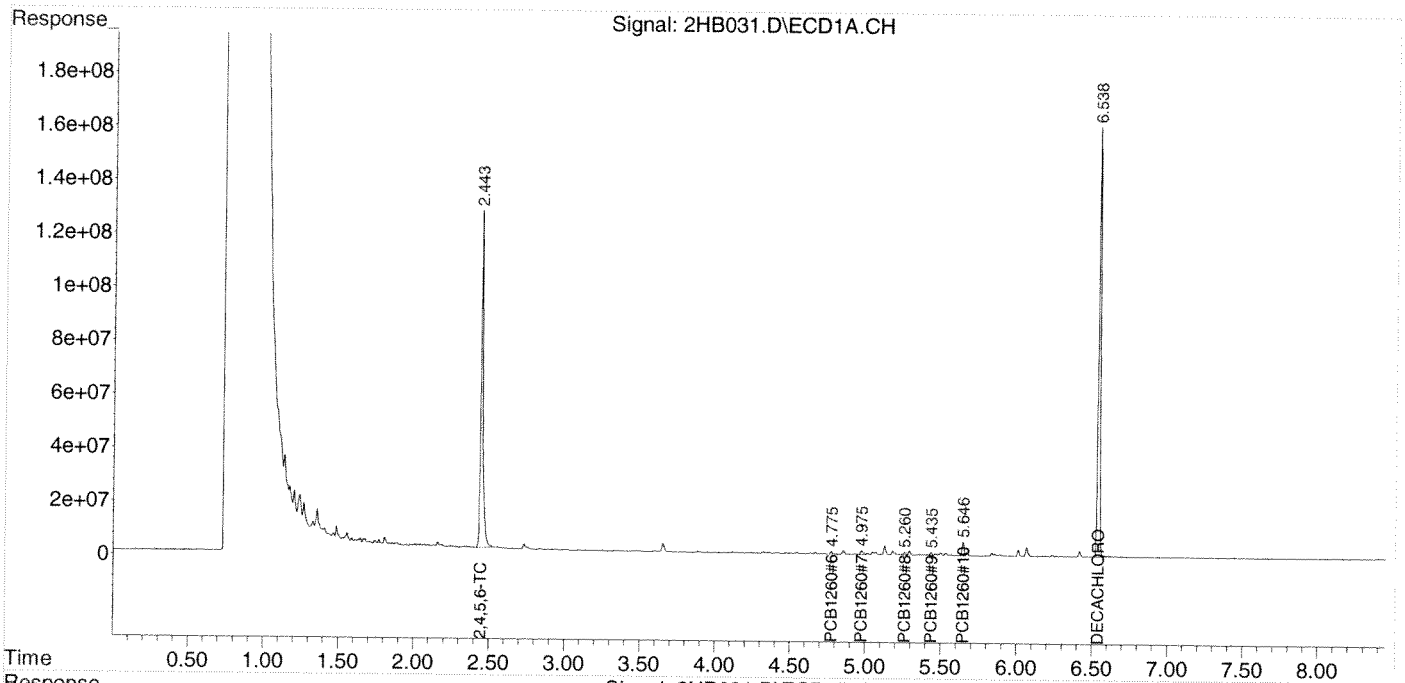
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

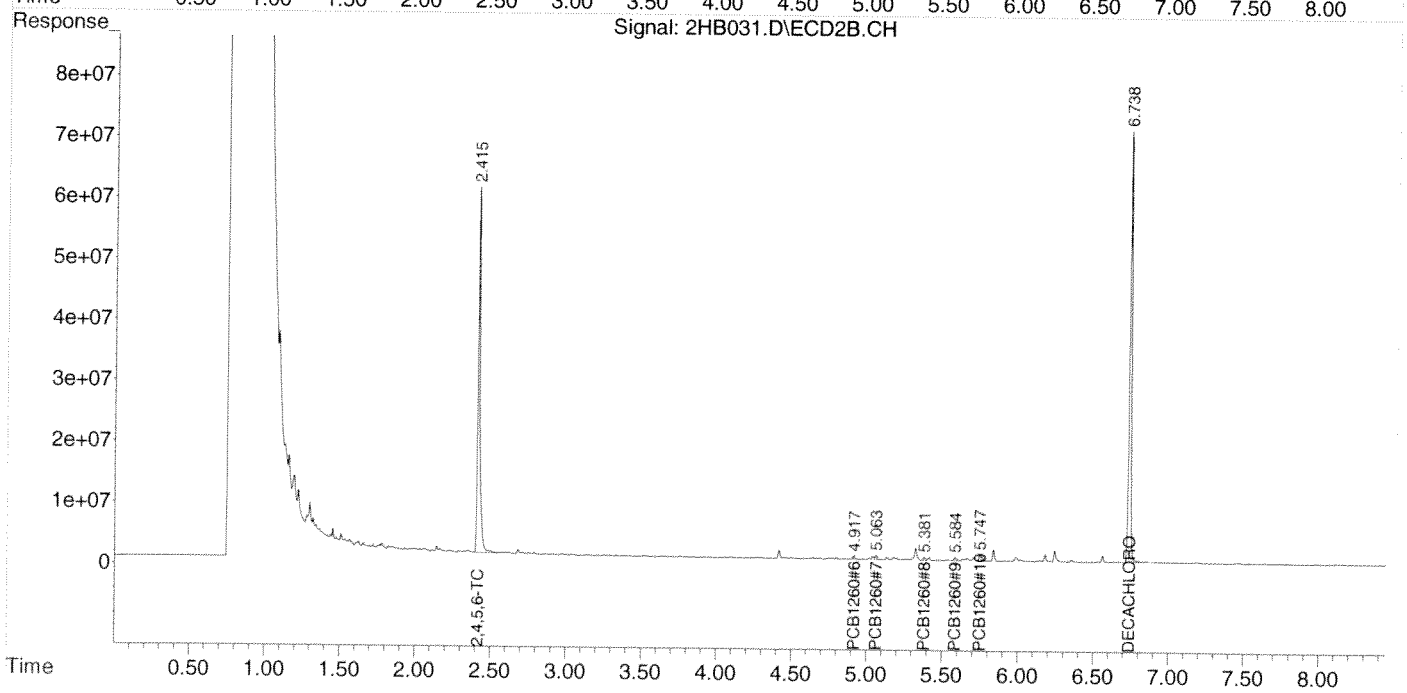
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB031.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:35
Operator : RC
Sample : A404270-16
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:37 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:47
Operator : RC
Sample : AA29933-CCV3
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

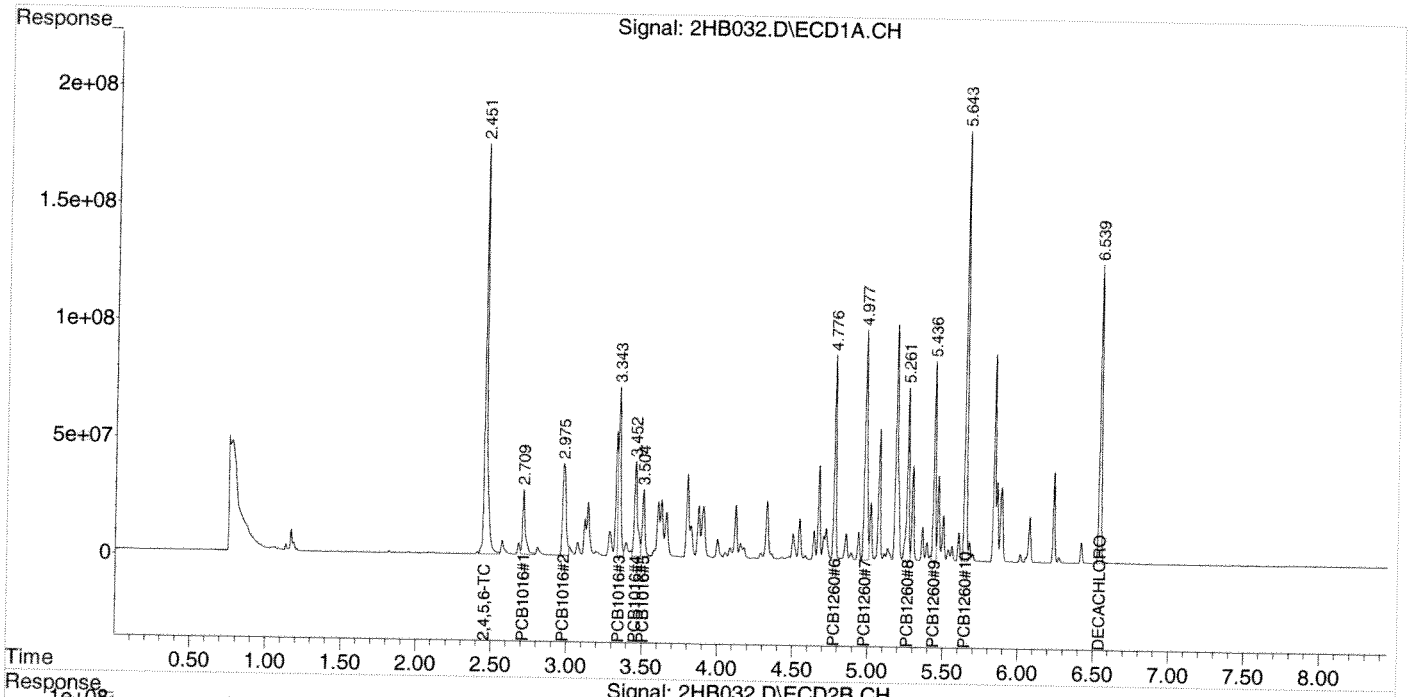
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.452	2.422	1989.2E6	883.3E6	0.1166	0.1185
2)	PCB1016#1	2.710	2.764	347.1E6	158.2E6	1.0754	1.1073
3)	PCB1016#2	2.976	3.062	638.2E6	301.5E6	1.0368	1.0543
4)	PCB1016#3	3.343	3.695	851.7E6	132.0E6	1.0424	1.0586
5)	PCB1016#4	3.452	3.733	559.4E6	136.6E6	1.1175	1.0654
6)	PCB1016#5	3.505	3.772	339.6E6	141.0E6	1.1177	1.0719
7)	PCB1260#6	4.776	4.919	816.2E6	410.0E6	1.0890	1.1434
8)	PCB1260#7	4.978	5.065	1158.4E6	435.7E6	1.1458	1.1088
9)	PCB1260#8	5.261	5.382	739.6E6	336.4E6	1.1584	1.1258
10)	PCB1260#9	5.436	5.586	752.6E6	370.8E6	1.1463	1.1380
11)	PCB1260#10	5.644	5.748	1656.6E6	728.1E6	1.0844	1.1417
12)	DECACHLOR...	6.539	6.739	1130.9E6	539.3E6	0.1112	0.1098

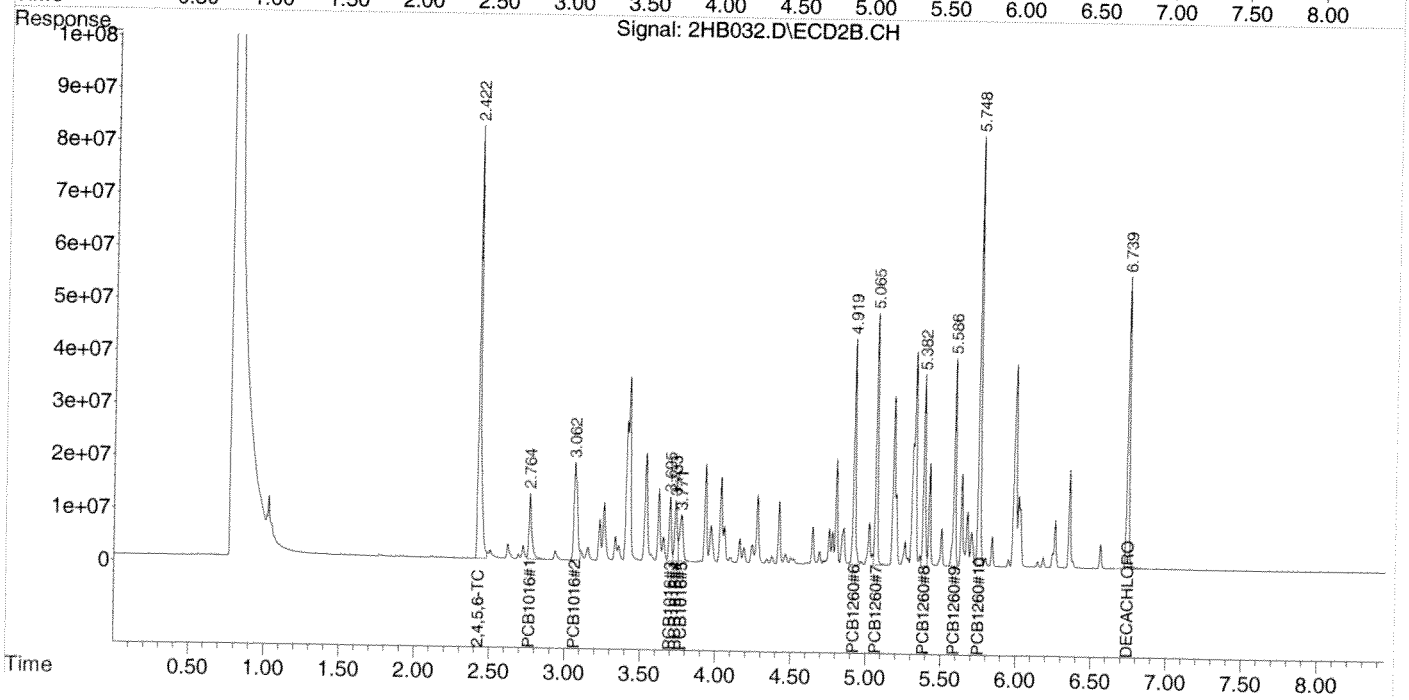
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB032.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:47
Operator : RC
Sample : AA29933-CCV3
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:06:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:59
Operator : RC
Sample : AA29933-ARC3
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:07:21 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

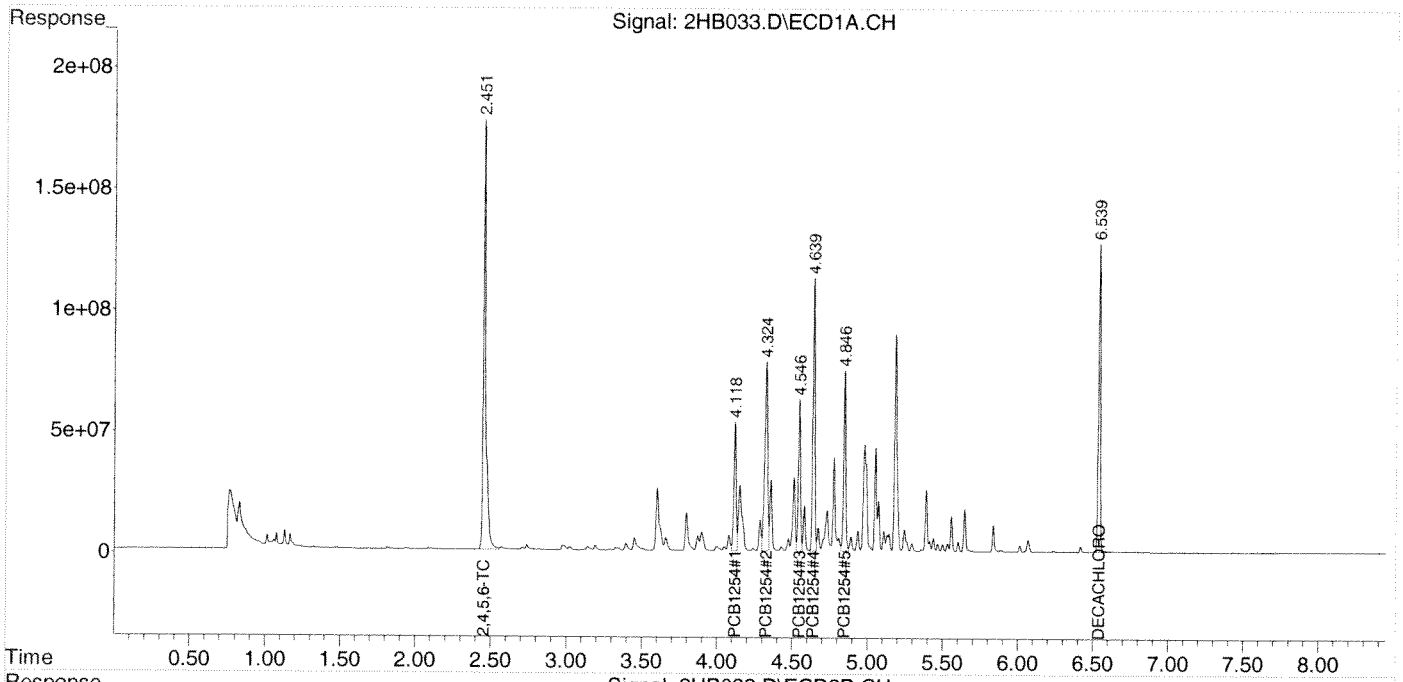
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.451	2.422	2019.7E6	938.5E6	0.1206	0.1182
2)	PCB1254#1	4.118	4.273	579.3E6	316.5E6	1.1835	1.2000
3)	PCB1254#2	4.324	4.419	1039.7E6	340.7E6	1.2157	1.1930
4)	PCB1254#3	4.546	4.689	609.7E6	255.7E6	1.2170	1.0912
5)	PCB1254#4	4.639	4.776	1056.0E6	487.9E6	1.2388	1.2306
6)	PCB1254#5	4.846	5.065	748.1E6	213.1E6	1.1237	1.1758
7)	DECACHLOR...	6.539	6.738	1137.2E6	548.2E6	0.1072	0.1046

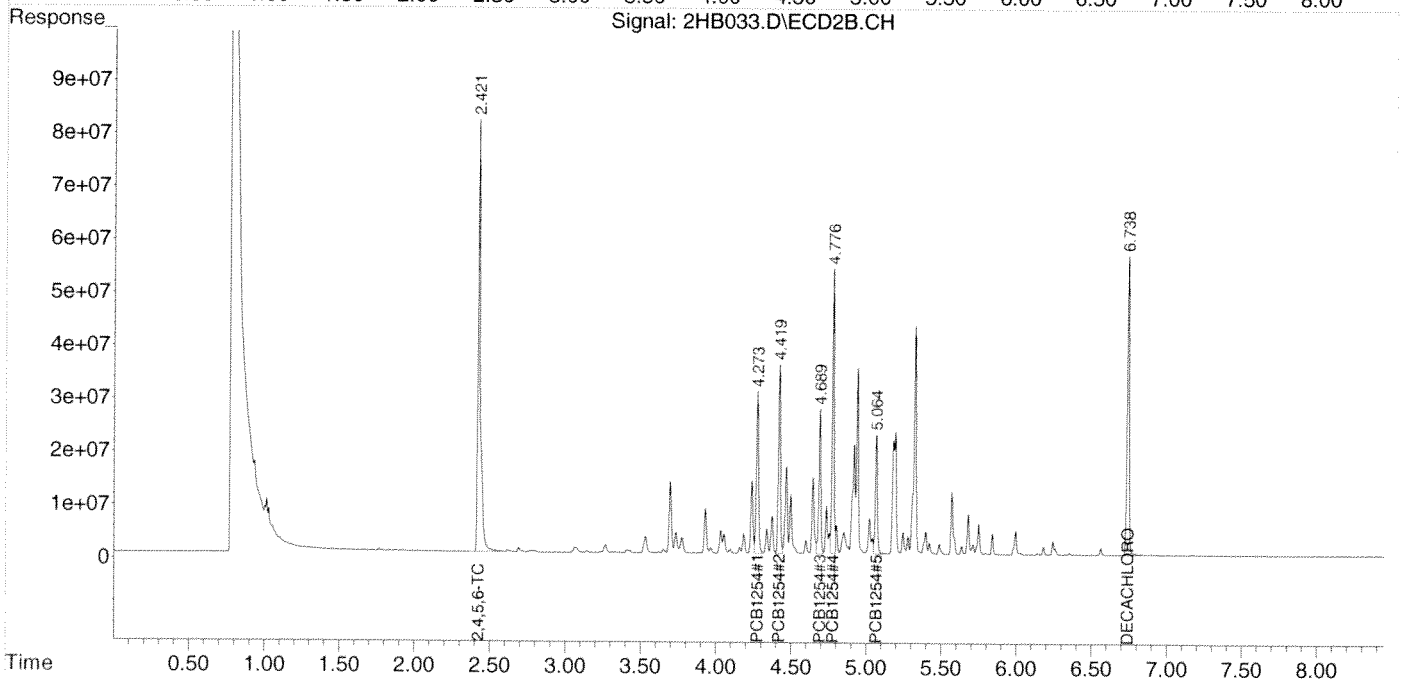
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 22:59
Operator : RC
Sample : AA29933-ARC3
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:07:21 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:11
Operator : RC
Sample : A404270-18
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:12 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

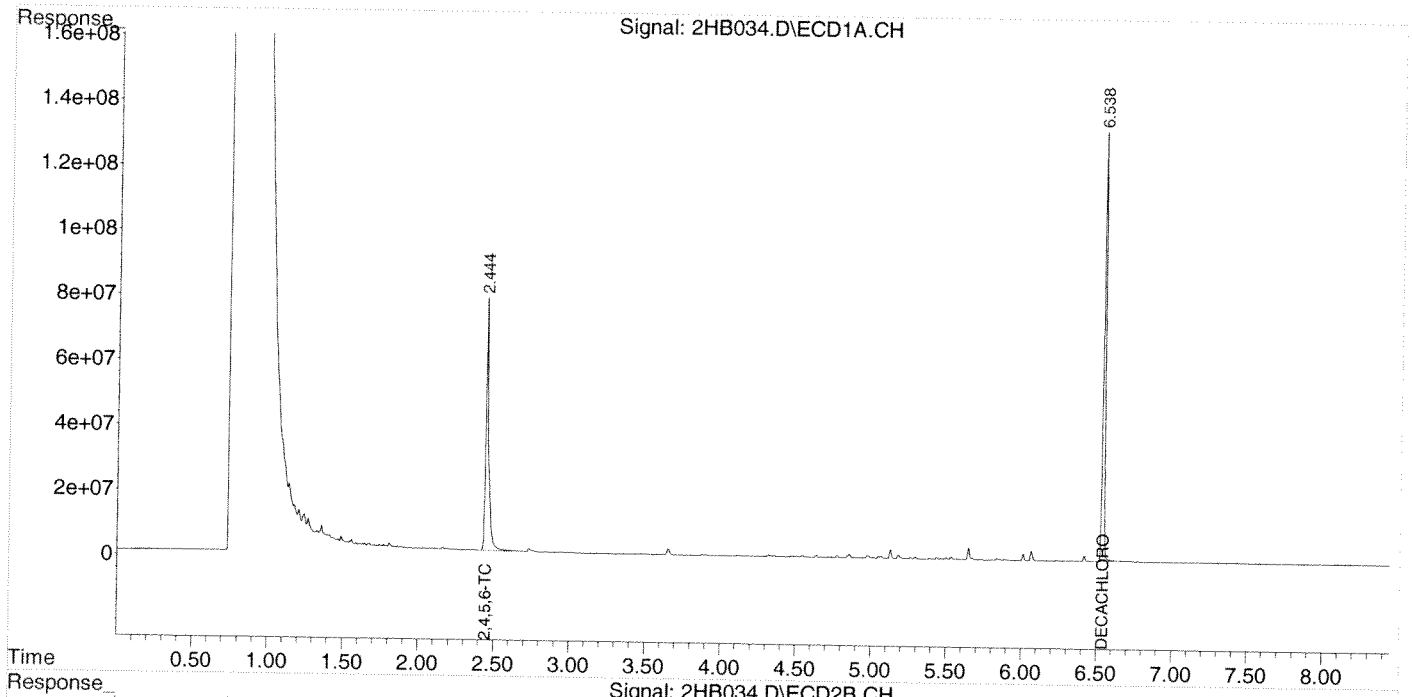
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1018.3E6	482.0E6	0.0597	0.0647
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.538	6.737	1180.7E6	572.7E6	0.1161	0.1166

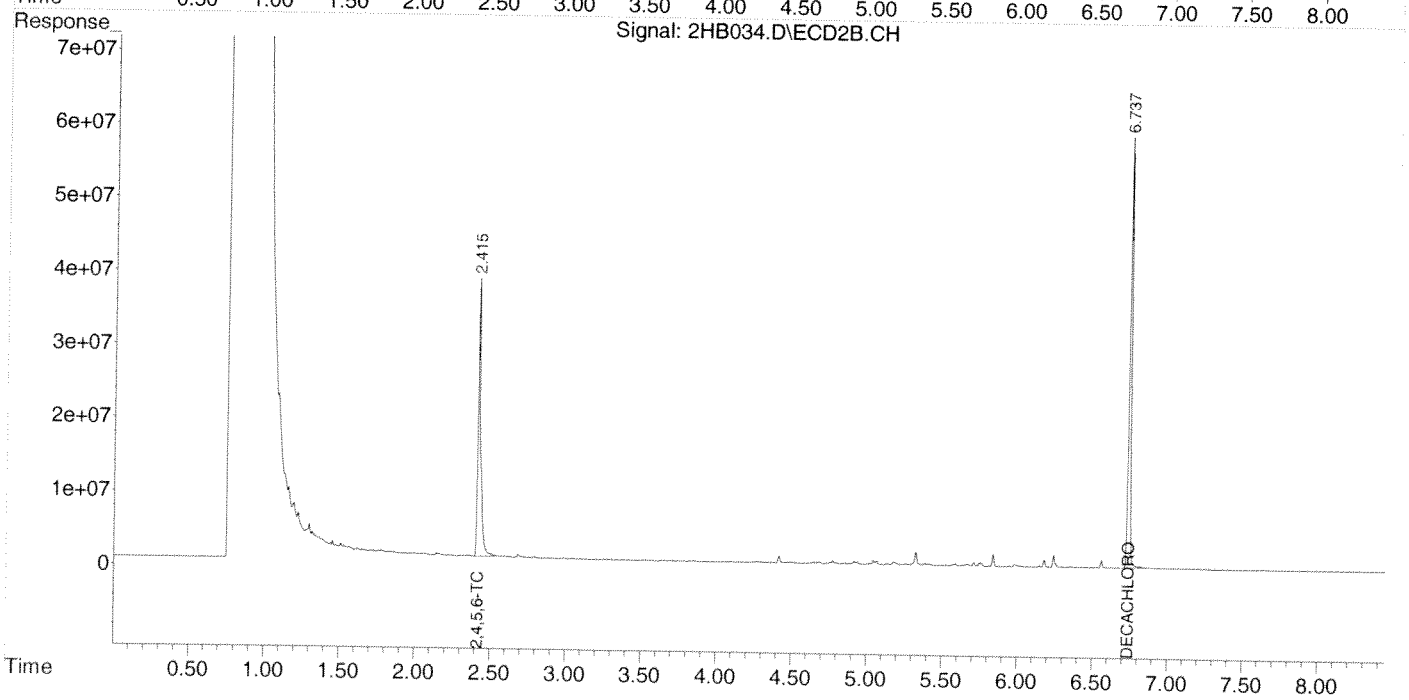
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:11
Operator : RC
Sample : A404270-18
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:12 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:23
Operator : RC
Sample : A404270-19
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:25 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

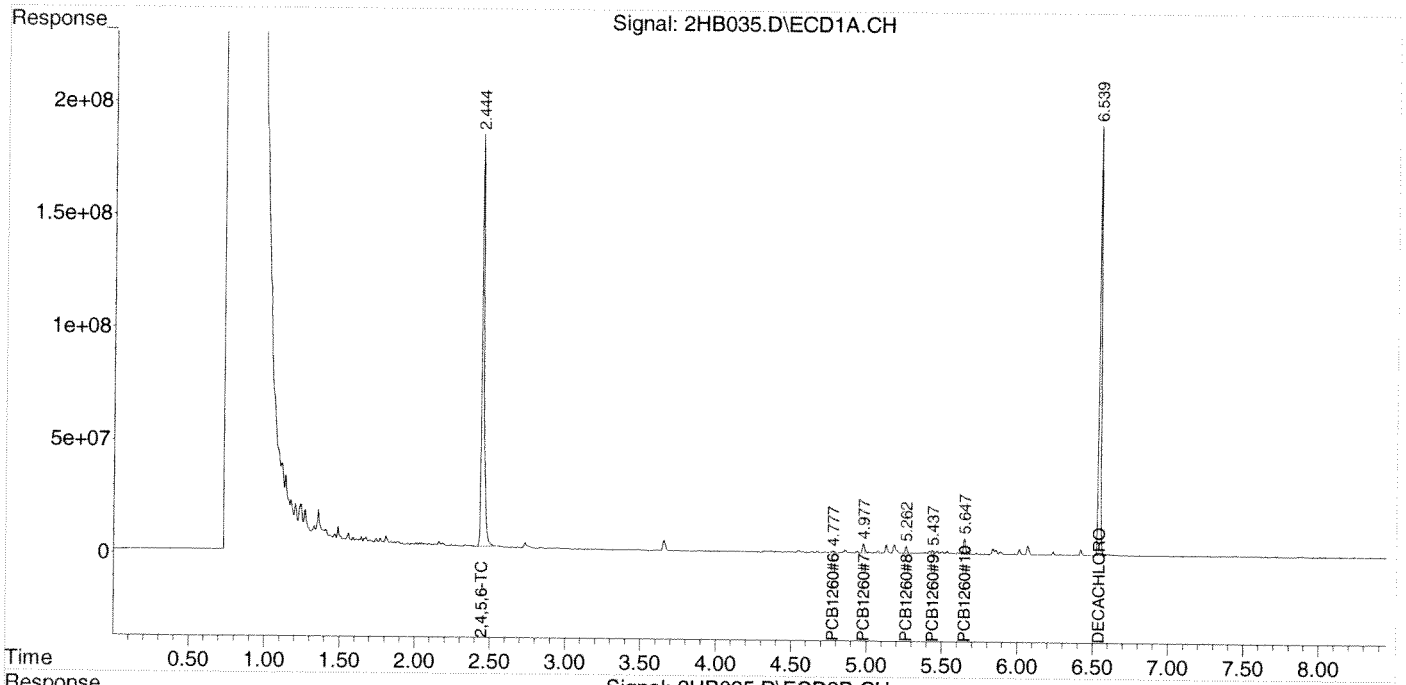
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1971.4E6	942.9E6	0.1156	0.1265	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.777	4.919	7793265	4690602	0.0104	0.0131	#
8)	PCB1260#7	4.977	5.065	43122895	20714963	0.0427	0.0527	
9)	PCB1260#8	5.262	5.382	29070072	14642868	0.0455	0.0490	
10)	PCB1260#9	5.436	5.587	14244660	8011034	0.0217	0.0246	
11)	PCB1260#10	5.647	5.749	77591383	17612916	0.0508	0.0276	#
12)	DECACHLOR...	6.539	6.740	1678.2E6	797.4E6	0.1651	0.1624	

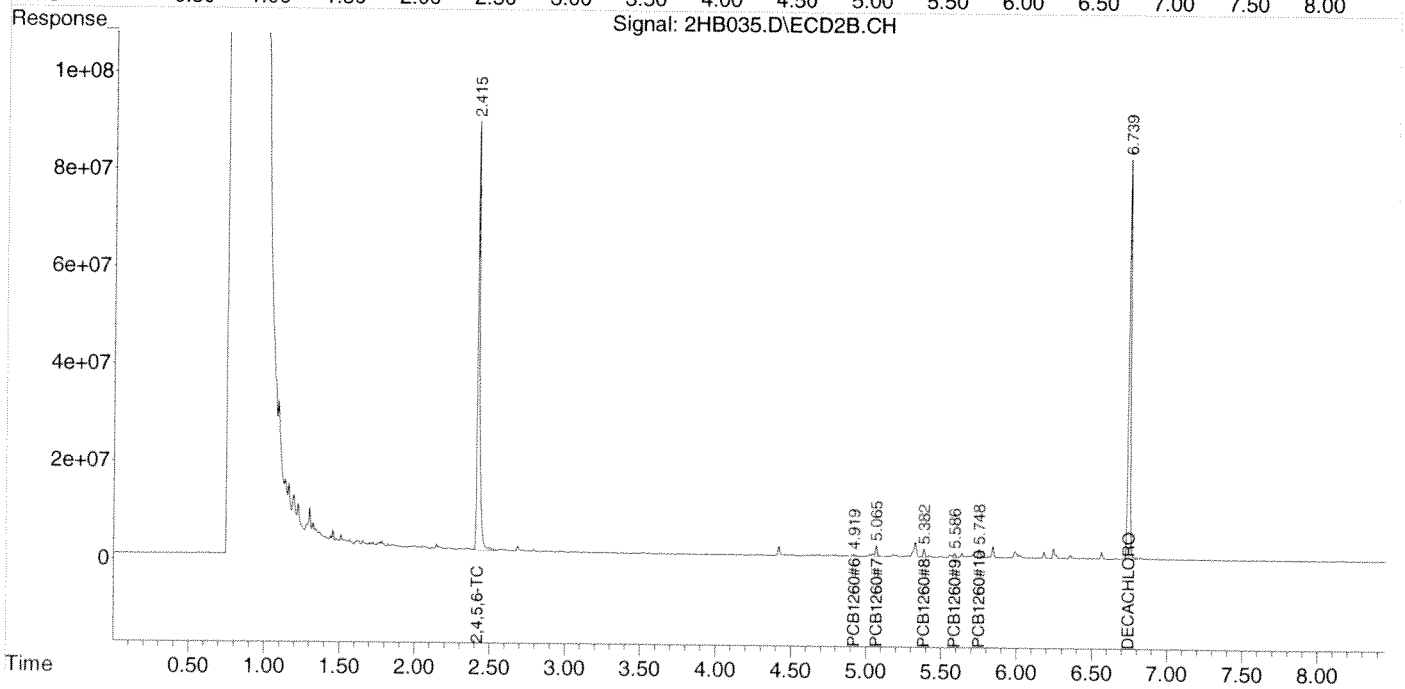
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB035.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:23
Operator : RC
Sample : A404270-19
Misc :
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:25 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:35
Operator : RC
Sample : A404270-20
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

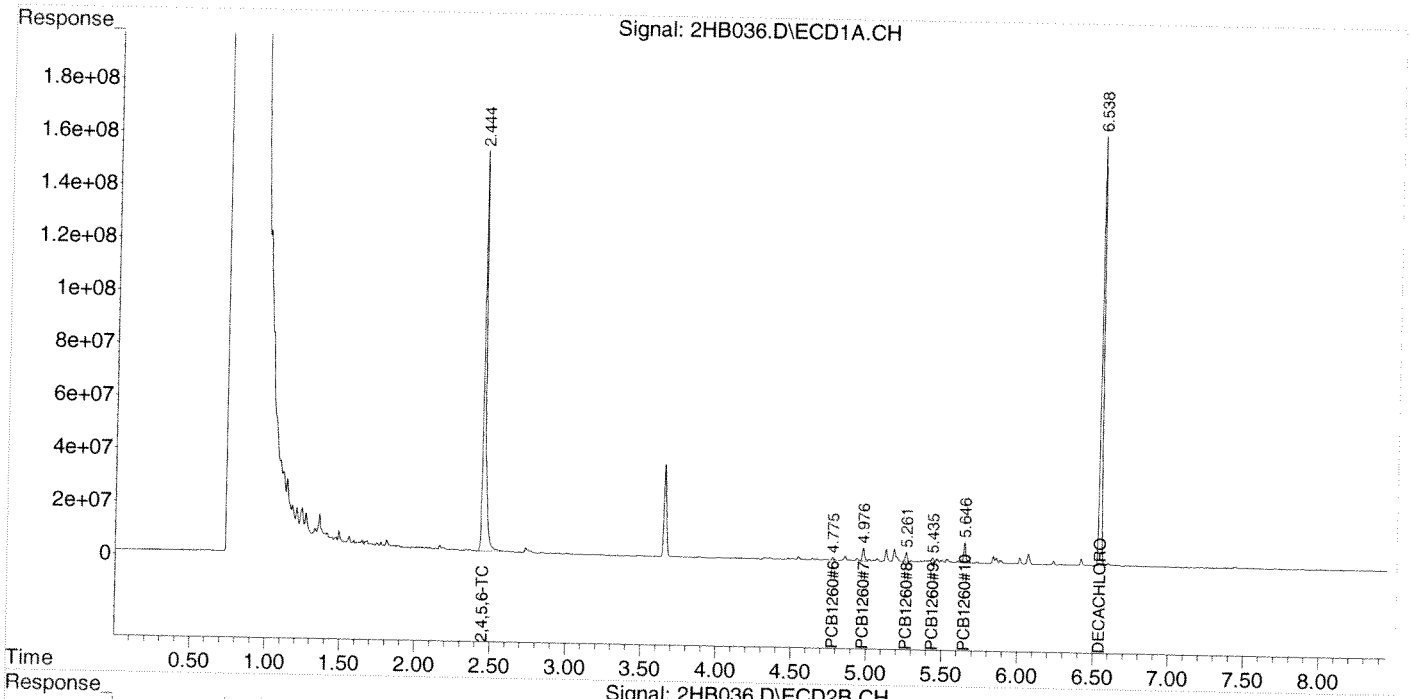
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1715.8E6	815.8E6	0.1006	0.1094	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.776	4.918	9698530	6698952	0.0129	0.0187	#
8)	PCB1260#7	4.977	5.064	51477129	24339592	0.0509	0.0619	
9)	PCB1260#8	5.261	5.381	35411457	16651613	0.0555	0.0557	
10)	PCB1260#9	5.436	5.586	17189315	8464301	0.0262	0.0260	
11)	PCB1260#10	5.646	5.747	85968417	18285750	0.0563	0.0287	#
12)	DECACHLOR...	6.539	6.738	1428.9E6	686.8E6	0.1406	0.1399	

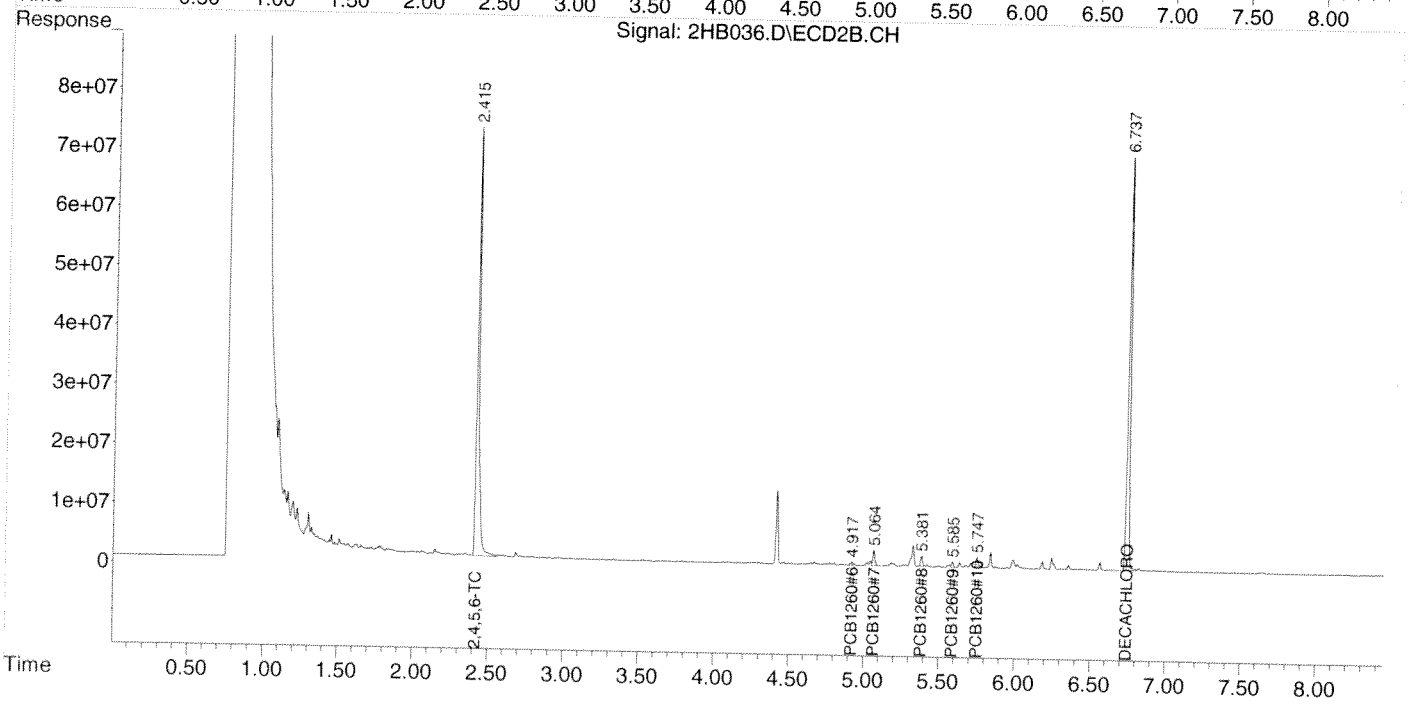
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:35
Operator : RC
Sample : A404270-20
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:09:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:47
Operator : RC
Sample : A404270-21
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:10:09 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1781.8E6	834.1E6	0.1045	0.1119
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.775	4.918	231.6E6	125.5E6	0.3091	0.3500
8)	PCB1260#7	4.976	5.064	400.5E6	160.8E6	0.3961	0.4091
9)	PCB1260#8	5.260	5.381	260.2E6	121.2E6	0.4075	0.4055
10)	PCB1260#9	5.435	5.585	237.7E6	129.4E6	0.3621	0.3972
11)	PCB1260#10	5.642	5.747	587.8E6	256.2E6	0.3848	0.4017
12)	DECACHLOR...	6.537	6.737	1402.9E6	670.4E6	0.1380	0.1365

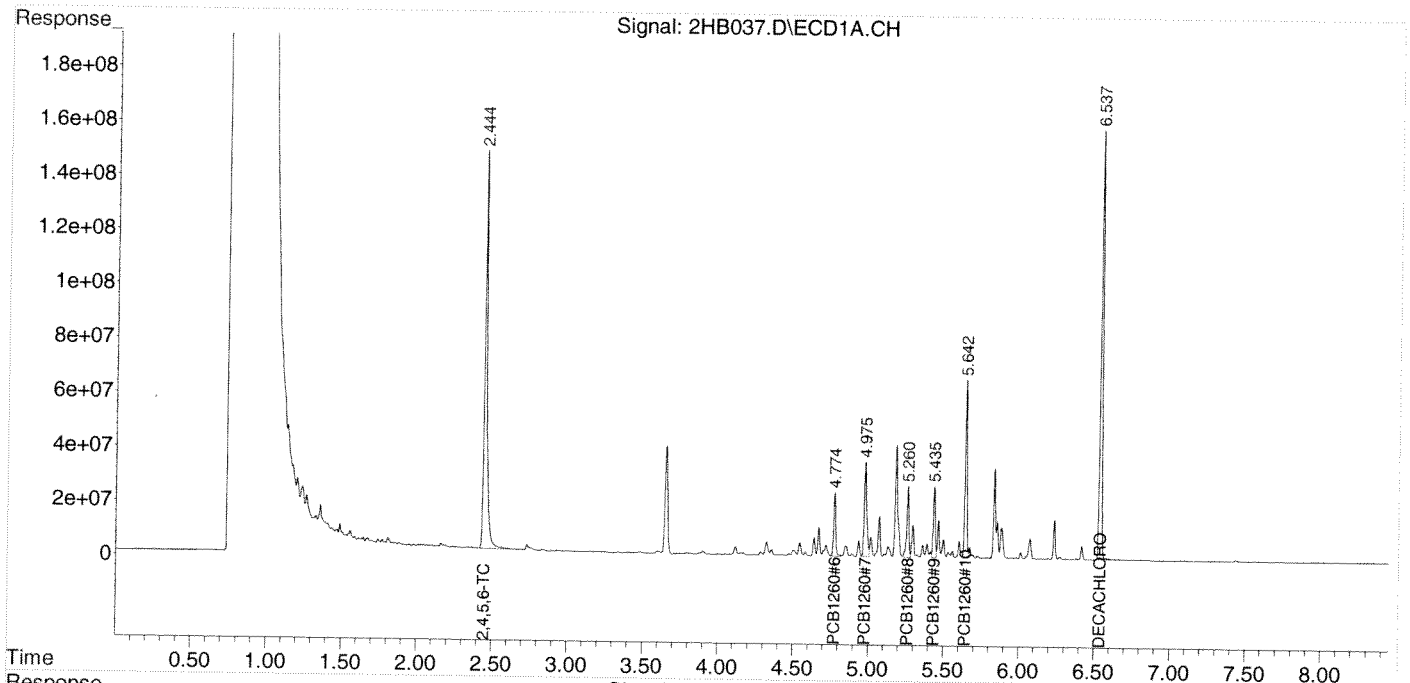
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

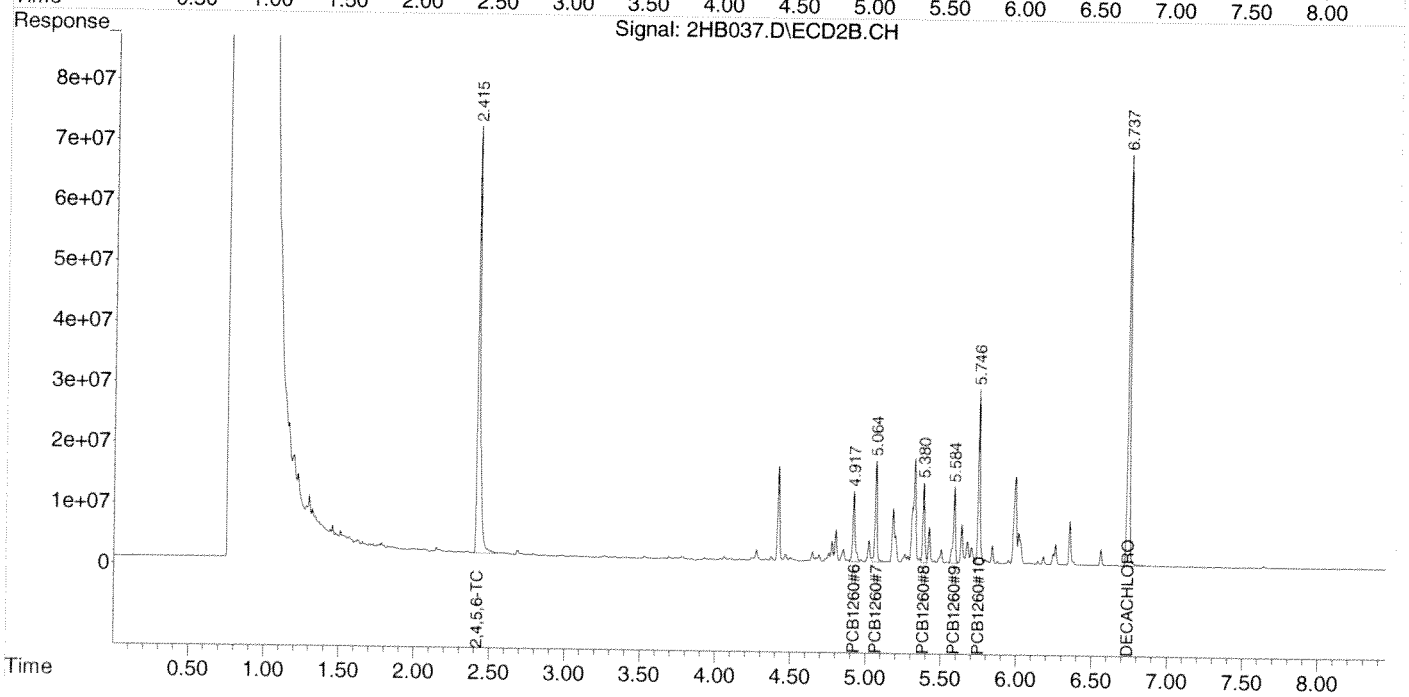
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:47
Operator : RC
Sample : A404270-21
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:10:09 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:47
Operator : RC
Sample : A404270-21
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:12 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

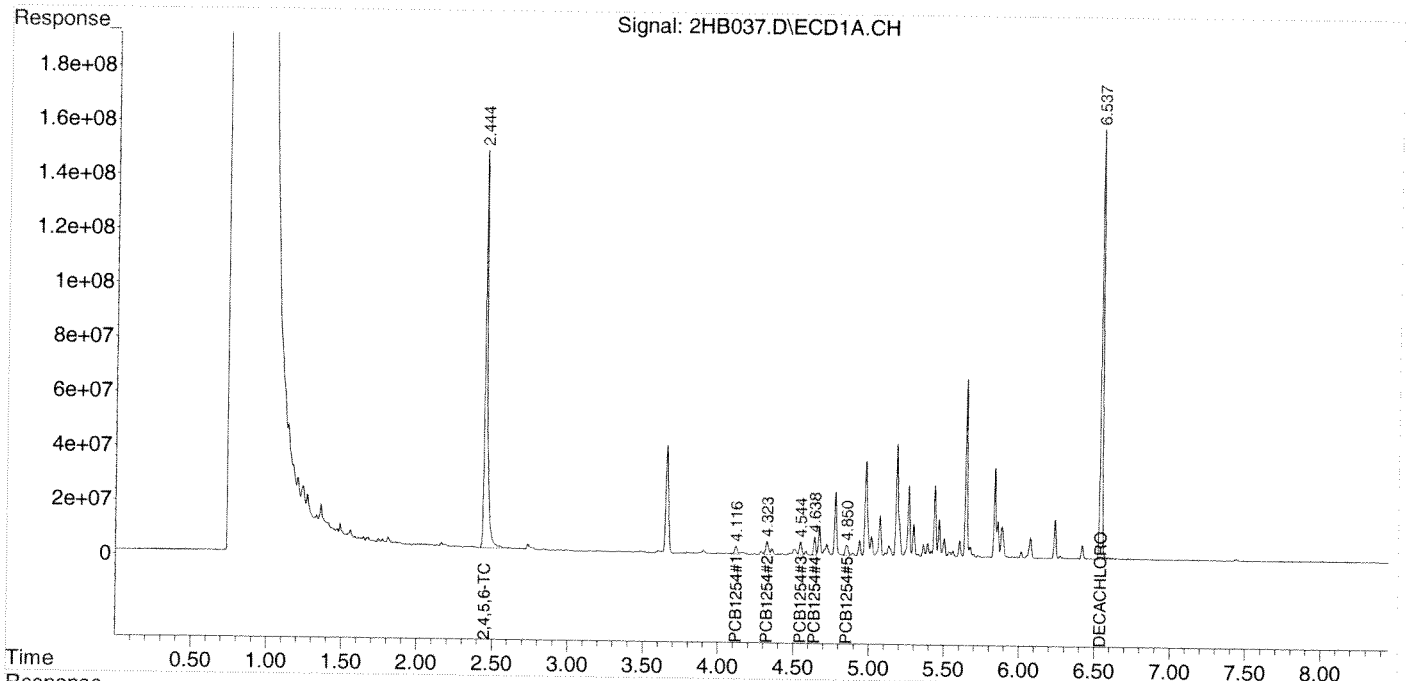
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1775.7E6	834.1E6	0.1061	0.1050	
2)	PCB1254#1	4.116	4.271	39830016	21068639	0.0814	0.0799	
3)	PCB1254#2	4.323	4.418	63116192	144.7E6	0.0738	0.5067	#
4)	PCB1254#3	4.544	4.687	54909218	10774680	0.1096	0.0460	#
5)	PCB1254#4	4.638	4.775	64346173	30284179	0.0755	0.0764	
6)	PCB1254#5	4.850	5.064	55476335	160.8E6	0.0833	0.8871	#
7)	DECACHLOR...	6.537	6.737	1409.6E6	670.4E6	0.1329	0.1279	

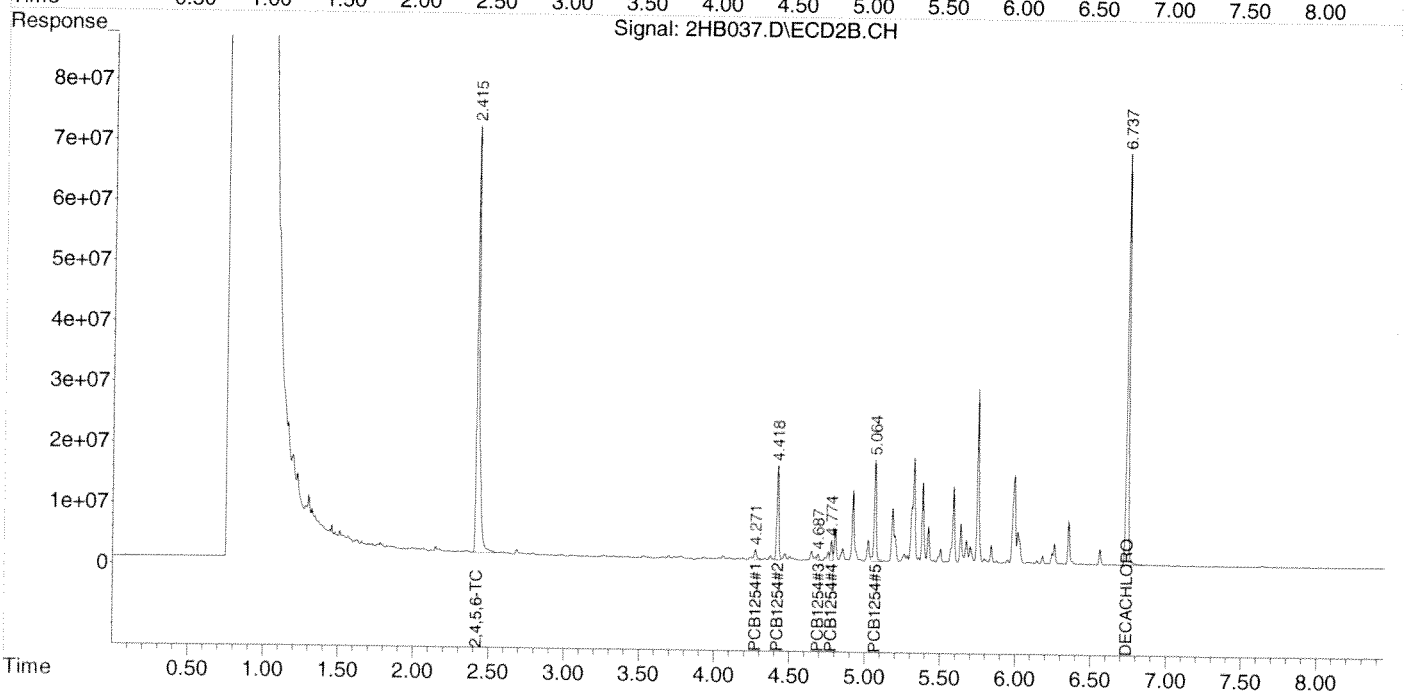
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 23:47
Operator : RC
Sample : A404270-21
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:13:12 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 00:00
Operator : RC
Sample : AA29933-CCV4
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:08:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.452	2.422	2017.2E6	909.5E6	0.1183	0.1220	
2)	PCB1016#1	2.710	2.764	372.4E6	167.8E6	1.1538	1.1739	
3)	PCB1016#2	2.976	3.062	703.5E6	163.6E6	1.1428	0.5722	#
4)	PCB1016#3	3.344	3.695	885.3E6	133.3E6	1.0835	1.0689	
5)	PCB1016#4	3.453	3.733	574.8E6	138.1E6	1.1483	1.0773	
6)	PCB1016#5	3.505	3.772	346.5E6	148.9E6	1.1403	1.1320	
7)	PCB1260#6	4.777	4.919	808.5E6	409.2E6	1.0787	1.1413	
8)	PCB1260#7	4.978	5.065	1148.0E6	423.9E6	1.1355	1.0787	
9)	PCB1260#8	5.262	5.382	708.7E6	325.8E6	1.1099	1.0904	
10)	PCB1260#9	5.437	5.586	728.0E6	359.7E6	1.1090	1.1038	
11)	PCB1260#10	5.644	5.748	1597.8E6	697.0E6	1.0459	1.0930	
12)	DECACHLOR...	6.540	6.739	1066.3E6	508.4E6	0.1049	0.1035	

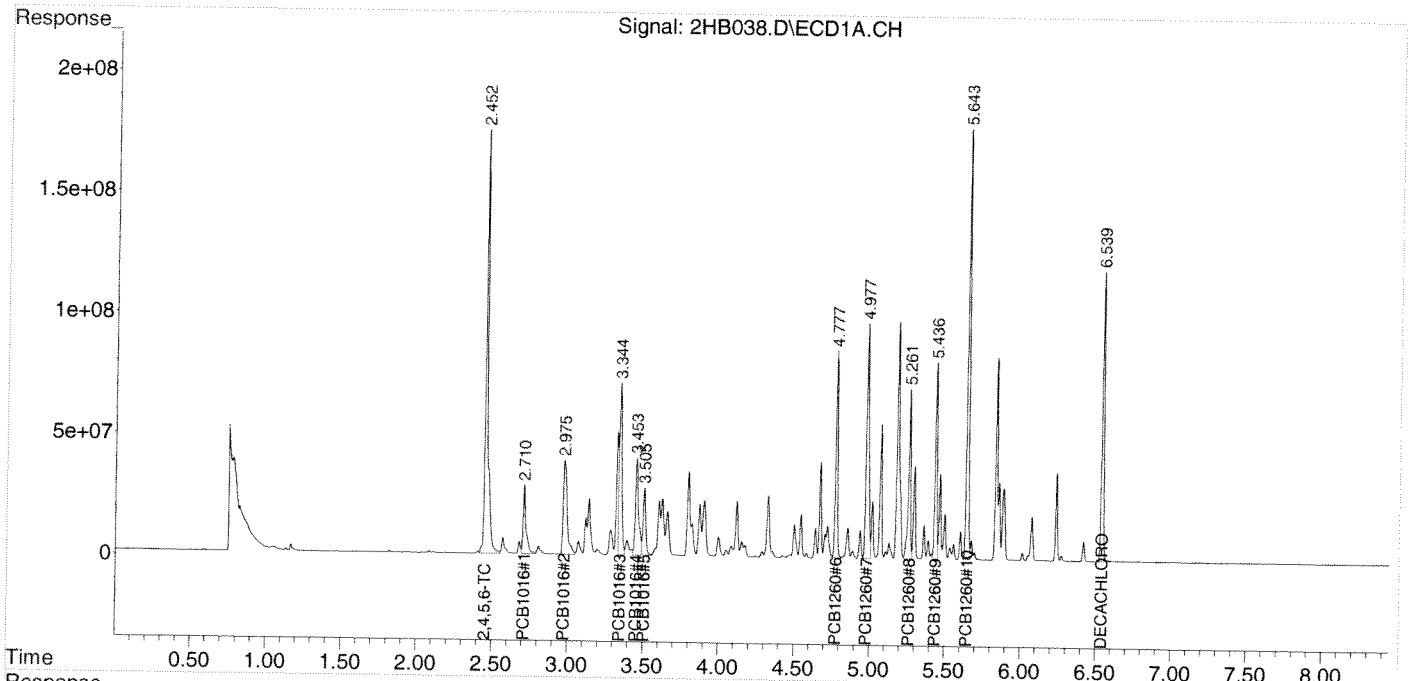
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

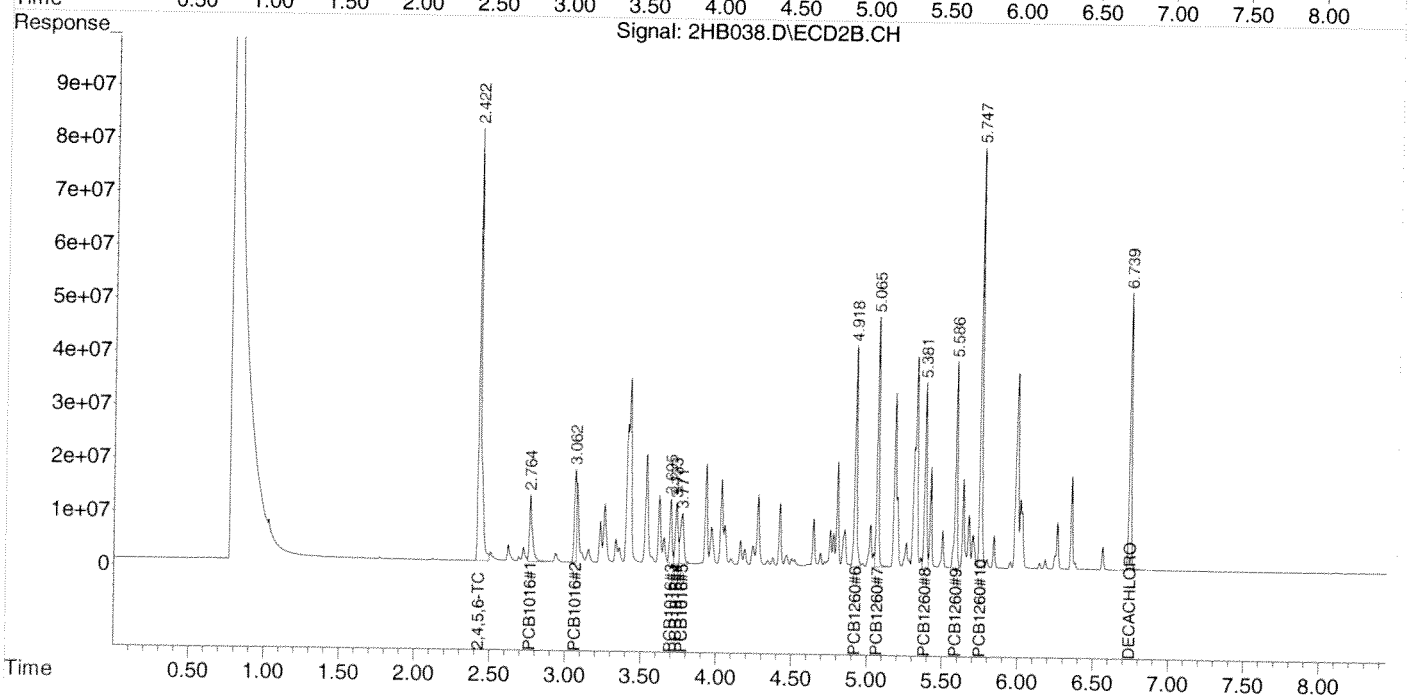
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 00:00
Operator : RC
Sample : AA29933-CCV4
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:08:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 00:12
Operator : RC
Sample : AA29933-ARC4
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:08:31 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.453	2.423	2028.1E6	941.0E6	0.1211	0.1185
2)	PCB1254#1	4.119	4.273	575.6E6	314.1E6	1.1761	1.1912
3)	PCB1254#2	4.324	4.419	1031.1E6	341.3E6	1.2056	1.1948
4)	PCB1254#3	4.546	4.689	615.4E6	259.2E6	1.2284	1.1062
5)	PCB1254#4	4.639	4.776	1065.9E6	491.6E6	1.2504	1.2401
6)	PCB1254#5	4.845	5.064	776.7E6	217.1E6	1.1666	1.1978
7)	DECACHLOR...	6.538	6.738	1162.1E6	564.2E6	0.1096	0.1077

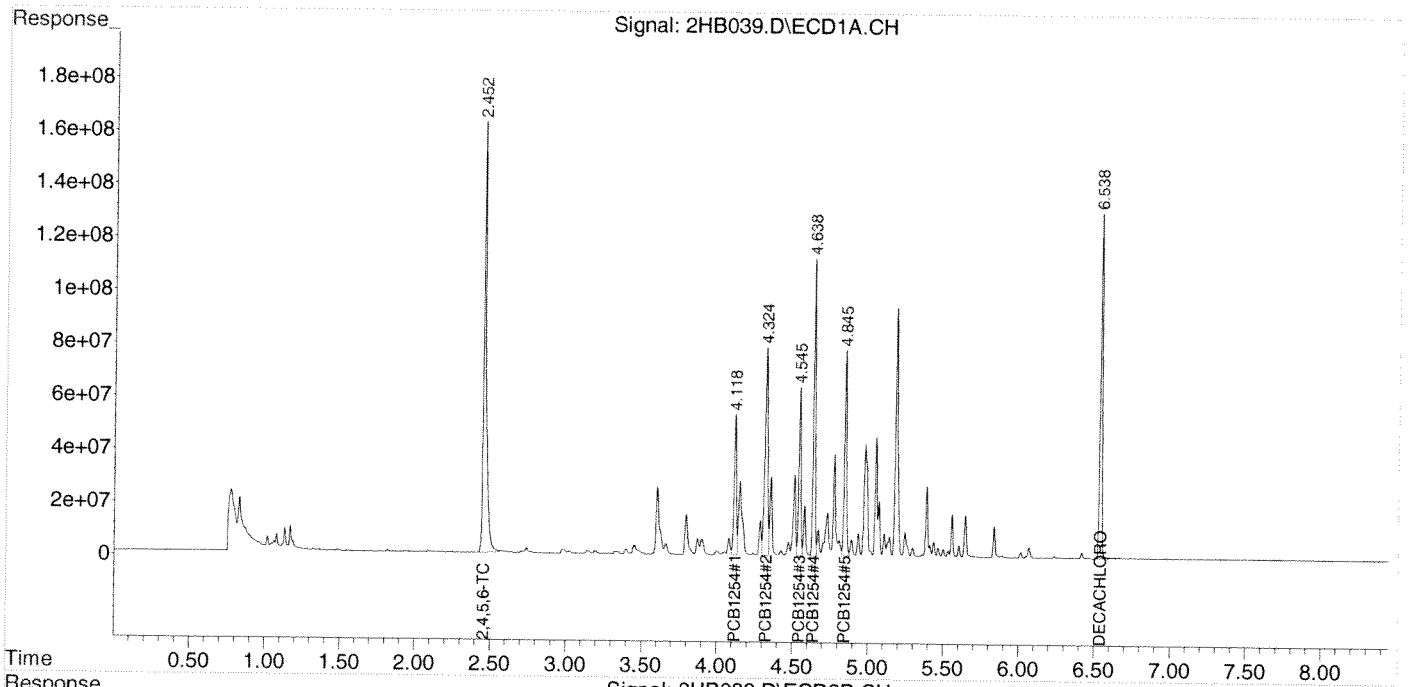
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

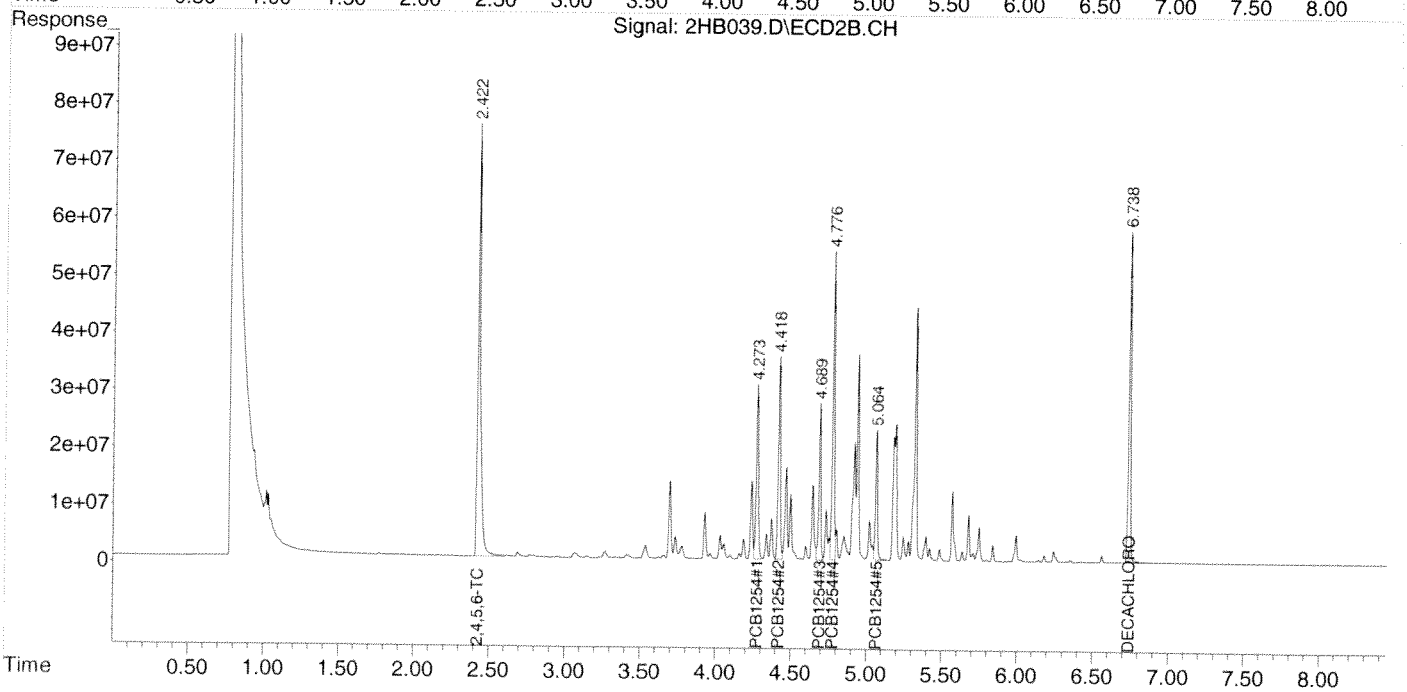
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 00:12
Operator : RC
Sample : AA29933-ARC4
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 07:08:31 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA29971

Instrument: OSVGCECD2

Calibration ID: 1408015

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29971-CCV1	QC		1		A4F0547		
AA29971-ARC1	QC		2		A4F0548		
4H06028-BLK1	QC		3				
4H06028-BS1	QC		4				
4H06028-BSD1	QC		5				
A404270-29	8082A DOD	A	6				CH2M Hill, Inc. (CH025)
4H06006-BLK1	QC		7				
4H06006-BS1	QC		8				
4H06006-MS1	QC		9				
4H06006-MSD1	QC		10				
A404270-28	8082A DOD	D	11				CH2M Hill, Inc. (CH025)
A404270-22	8082A DOD	D	12				CH2M Hill, Inc. (CH025)
AA29971-CCV2	QC		13		A4F0547		
AA29971-ARC2	QC		14		A4F0548		
A404270-23	8082A DOD	D	15				CH2M Hill, Inc. (CH025)
A404270-24	8082A DOD	D	16				CH2M Hill, Inc. (CH025)
A404270-25	8082A DOD	D	17				CH2M Hill, Inc. (CH025)
A404270-26	8082A DOD	D	18				CH2M Hill, Inc. (CH025)
A404270-27	8082A DOD	D	19				CH2M Hill, Inc. (CH025)
AA29971-CCV3	QC		20		A4F0547		
AA29971-ARC3	QC		21		A4F0548		

Samples Loaded By Date

Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/6/2014 1:39:40PM

Analysis
8082A DOD [EPA 8082A]

4H06028
ENCO Orlando

Prepared using: EPA 3510C

Surrogate Solution
~~A4G0114~~ **Pest/PCB Surrogate Working Mix**
A4H0094 MC 8·6·14

Spiking Solution
A4E0189 **PCB Spike Working Mix**

Matrix: Water

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (mL)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H06028-BLK1		Blank		QC	—	<0.5	100	1.0			100		
4H06028-BS1		LCS		QC	—	<0.5	100	1.0	A4E0189	100	100		
4H06028-BSD1		LCS Dup		QC	—	<0.5	100	1.0	A4E0189	100	100		
A404270-29 1	D	TR-5TH-CS-EB-080114 A[C10]	08-Aug-14	8082A DOD	—	<0.5	100	1.0			100		1254 & 1260 only

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 Water

Start Date/Time 8·6·14 13:54

StopDate/Time 8·6·14 14:43

Standard ID#	Description	Manufacture Lot#
A4E0359	Solvent Hexane	141800
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

Equipment Used

Sonicator _____ Tuned per manufacturer instructions? [ ] Yes [ ] No [X] NA
Turbovap _____ Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____
Turbovap _____ Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____
Turbovap OTVAP-3 Temperature (°C): 40°C N2 pressure (initial) (psi): 3 psi (final): 12 psi
Balance _____ Daily calibration complete? [ ] Yes [ ] No [X] NA
Thermometer ORL-T-42
Other

MAC 8·6·14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

1008 of 1287

PREPARATION BENCH SHEET

Printed: 8/6/2014 8:28:12AM

Analysis
8082A DOD [EPA 8082A]

4H06006
ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H06006-BLK1		Blank		QC	—	—	30.0	10.0			1000		
4H06006-BS1		LCS		QC	—	—	30.0	10.0	A4E0189	1000	1000		
4H06006-MS1		Matrix Spike [A404270-28]		QC	—	—	29.9	10.0	A4E0189	1000	1000		
4H06006-MSD1		Matrix Spike Dup [A404270-28]		QC	—	—	29.5	10.0	A4E0189	1000	1000		
A404270-22 1	D	TR-5TH-CSF04-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.4	10.0			1000		1254 & 1260 only
A404270-23 2	D	TR-5TH-CSF05-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.7	10.0			1000		1254 & 1260 only
A404270-24 3	D	TR-5TH-CSF05D-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.2	10.0			1000		1254 & 1260 only
A404270-25 4	D	TR-5TH-CSF06-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.6	10.0			1000		1254 & 1260 only
A404270-26 5	D	TR-5TH-CSF07-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.3	10.0			1000		1254 & 1260 only
A404270-27 6	D	TR-5TH-CSF08-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.8	10.0			1000		1254 & 1260 only
A404270-28 7	D	TR-5TH-CSF09-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.2	10.0			1000		1254 & 1260 only. USE for MS/M

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 soil

Start Date/Time 8.6.14 9:27

StopDate/Time 8.6.14 14:36

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
~~A4E0358~~ A4E0359	Solvent Hexane	141350
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

MC 8.6.14

1009 of 1287

PREPARATION BENCH SHEET

Printed: 8/6/2014 8:28:12AM

4H06006

ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

Equipment Used

Sonicator OSON-1,-2,-3 — Tuned per manufacturer instructions? [Y] Yes [ ] No [ ] NA
Turbovap _____ — Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____
Turbovap _____ — Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____
Turbovap _____ — Temperature (°C): _____ N2 pressure (initial) (psi): _____ (final): _____
Balance OEXTBAL7 — Daily calibration complete? [Y] Yes [ ] No [ ] NA
Thermometer ORL-T-42
Other

MAC 8.6.14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

1010 of 1287

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 6:46
Operator : RC
Sample : AA29971-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:55:00 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

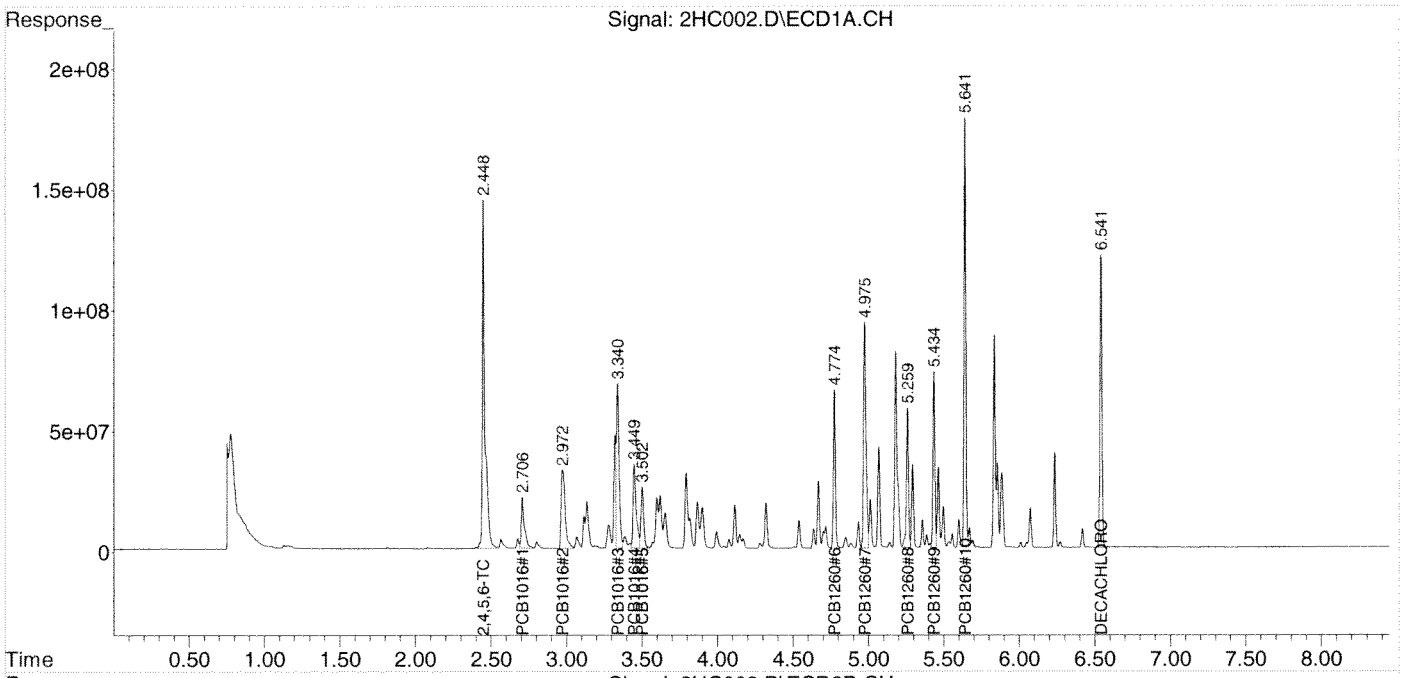
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.448	2.418	1797.9E6	811.6E6	0.1054	0.1089	
2)	PCB1016#1	2.706	2.759	303.1E6	135.9E6	0.9391	0.9512	
3)	PCB1016#2	2.973	3.068	606.7E6	140.4E6	0.9856	0.4909	#
4)	PCB1016#3	3.340	3.691	865.1E6	126.2E6	1.0587	1.0120	
5)	PCB1016#4	3.449	3.729	502.1E6	130.5E6	1.0030	1.0182	
6)	PCB1016#5	3.502	3.764	323.2E6	112.5E6	1.0638	0.8550	
7)	PCB1260#6	4.774	4.915	619.0E6	357.0E6	0.8258	0.9955	
8)	PCB1260#7	4.975	5.062	1055.6E6	412.8E6	1.0442	1.0504	
9)	PCB1260#8	5.260	5.379	565.6E6	306.6E6	0.8857	1.0262	
10)	PCB1260#9	5.435	5.583	649.9E6	333.4E6	0.9900	1.0232	
11)	PCB1260#10	5.642	5.746	1575.6E6	761.4E6	1.0313	1.1939	
12)	DECACHLOR...	6.541	6.740	1080.6E6	555.7E6	0.1063	0.1132	

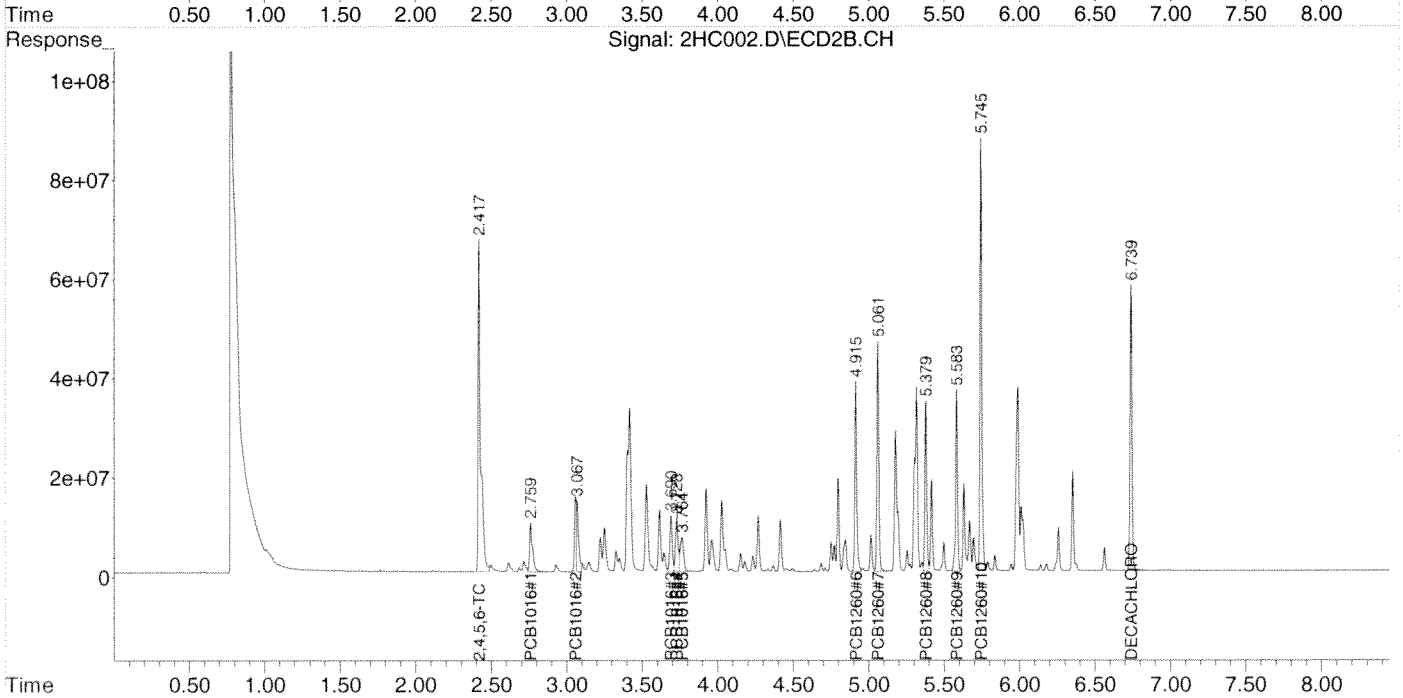
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 6:46
Operator : RC
Sample : AA29971-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 06:55:00 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 19:14:23 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 6:58
Operator : RC
Sample : AA29971-ARC1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:07:58 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

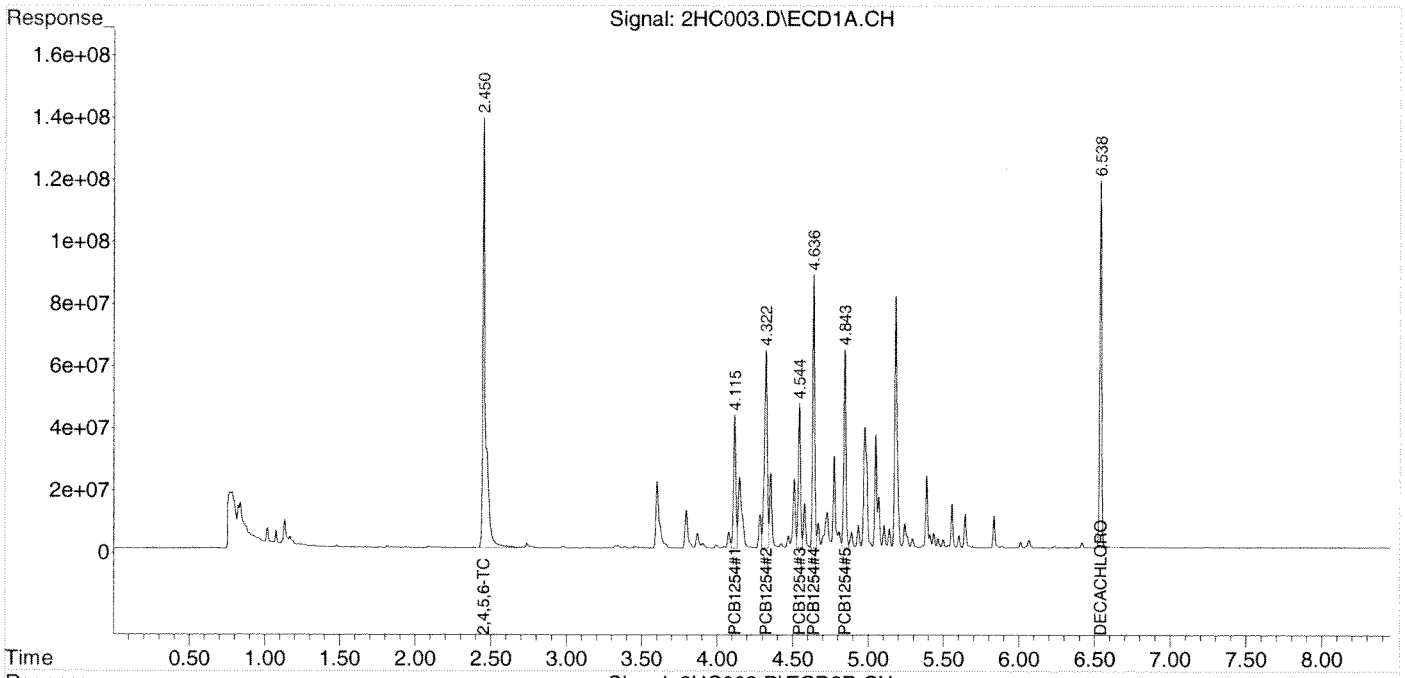
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.450	2.420	1737.9E6	568.4E6	0.1038	0.0716	#
2)	PCB1254#1	4.116	4.271	468.1E6	267.8E6	0.9565	1.0157	
3)	PCB1254#2	4.322	4.417	821.0E6	299.7E6	0.9600	1.0492	
4)	PCB1254#3	4.544	4.686	474.0E6	228.3E6	0.9462	0.9739	
5)	PCB1254#4	4.637	4.774	841.0E6	428.2E6	0.9865	1.0801	
6)	PCB1254#5	4.844	5.063	637.5E6	194.6E6	0.9576	1.0740	
7)	DECACHLOR...	6.538	6.737	1055.8E6	513.3E6	0.0996	0.0980	

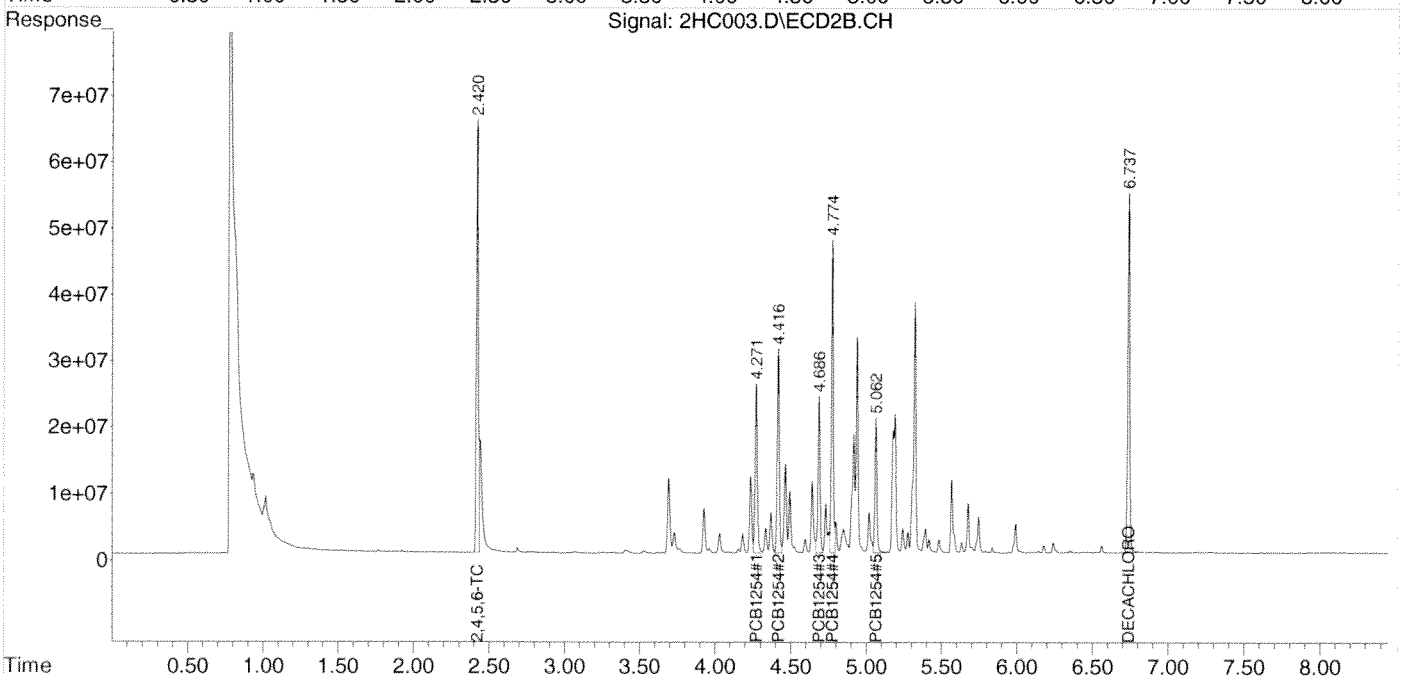
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 6:58
Operator : RC
Sample : AA29971-ARC1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:07:58 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:10
Operator : RC
Sample : 4H06028-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:35 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

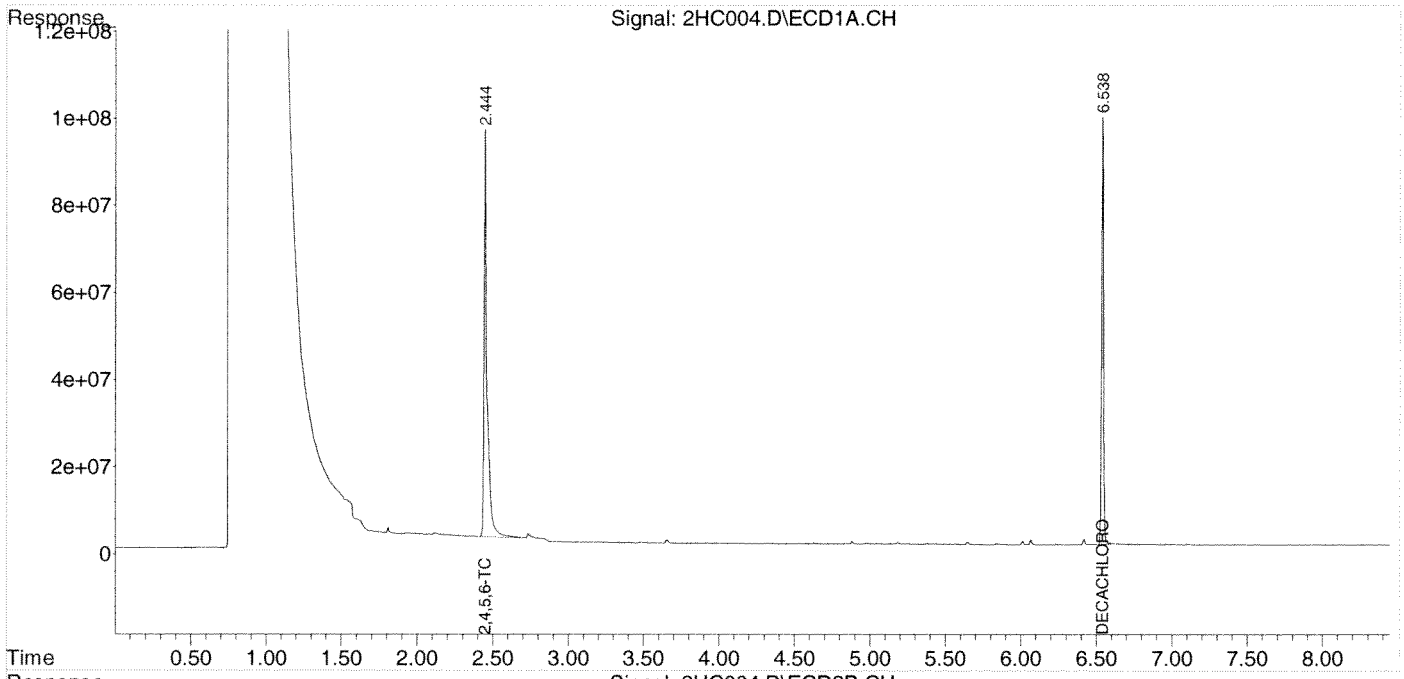
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1301.1E6	620.1E6	0.0763	0.0832
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.538	6.737	891.5E6	469.1E6	0.0877	0.0955

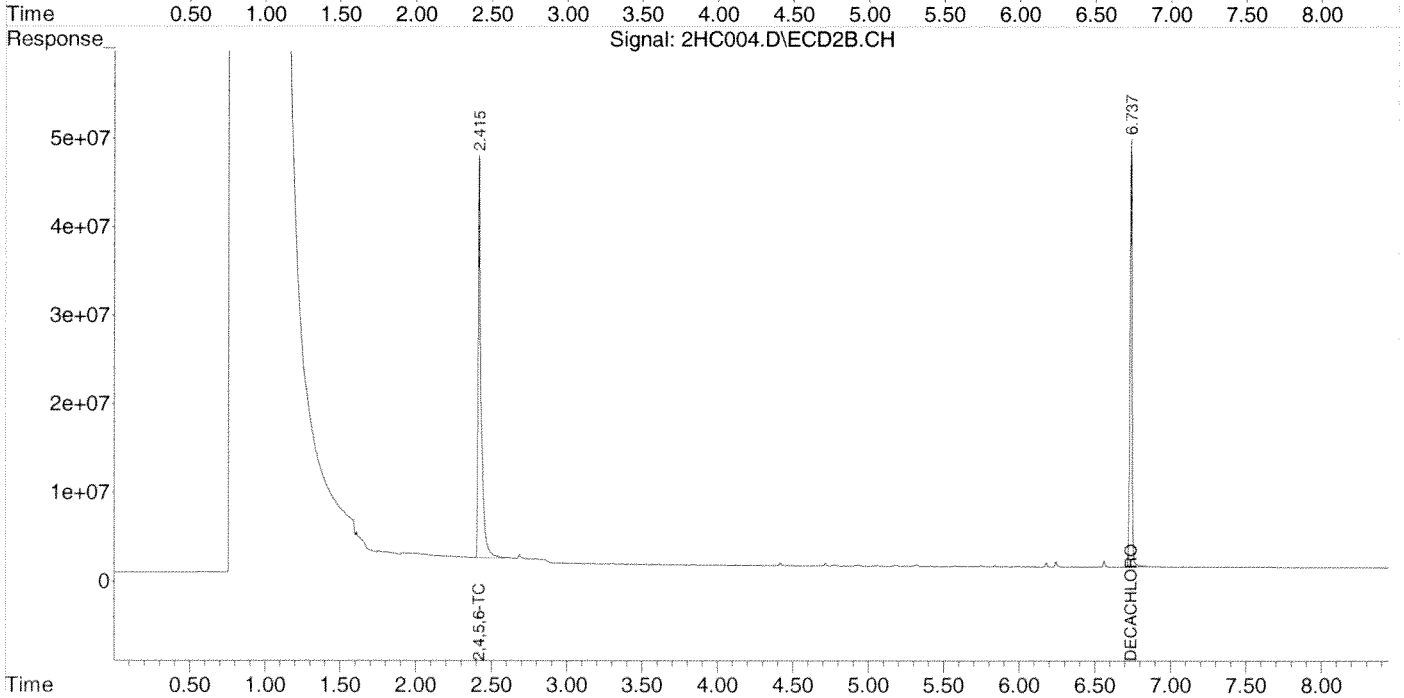
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:10
Operator : RC
Sample : 4H06028-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:35 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:22
Operator : RC
Sample : 4H06028-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:08:53 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

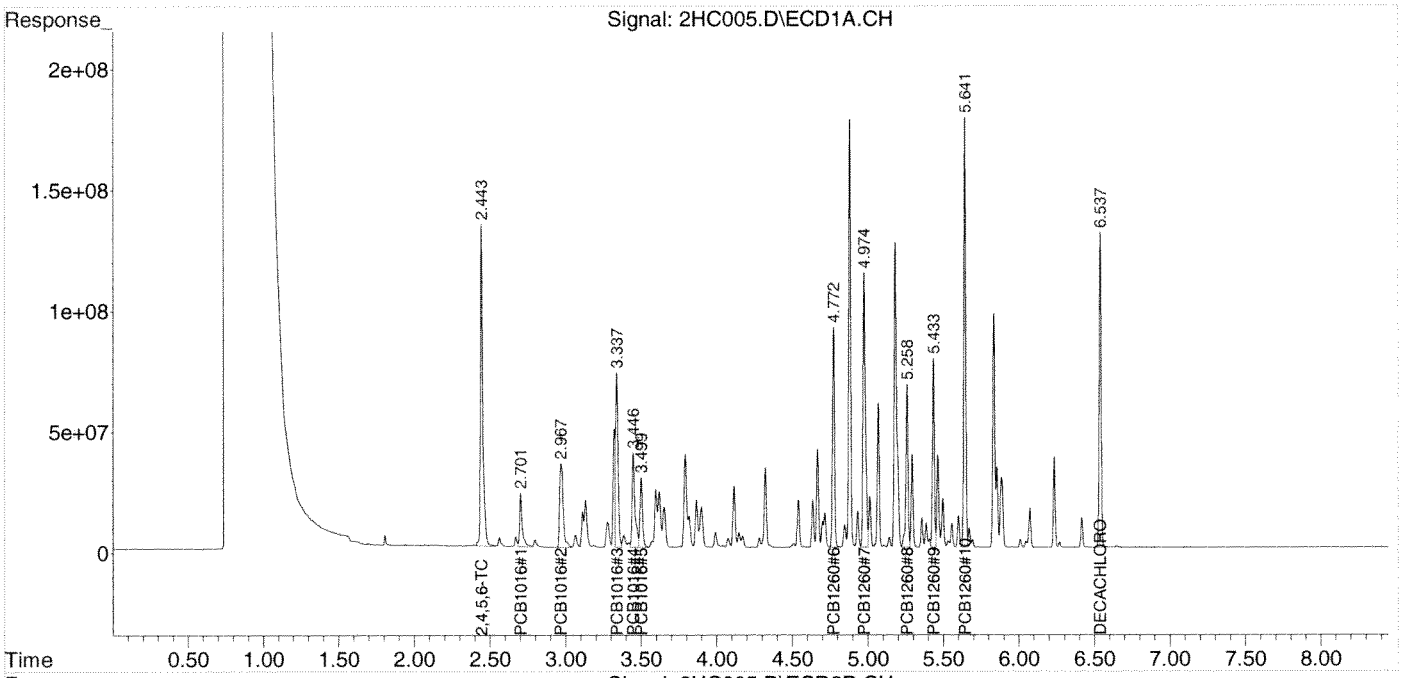
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.443	2.414	1413.8E6	656.9E6	0.0829	0.0881
2)	PCB1016#1	2.701	2.757	271.3E6	127.1E6	0.8406	0.8893
3)	PCB1016#2	2.968	3.056	577.7E6	247.1E6	0.9385	0.8641
4)	PCB1016#3	3.338	3.690	858.0E6	138.2E6	1.0501	1.1082
5)	PCB1016#4	3.447	3.728	519.9E6	140.2E6	1.0387	1.0931
6)	PCB1016#5	3.500	3.764	335.4E6	118.4E6	1.1040	0.9001
7)	PCB1260#6	4.773	4.916	855.7E6	438.5E6	1.1417	1.2230
8)	PCB1260#7	4.974	5.062	1349.4E6	499.1E6	1.3348	1.2700
9)	PCB1260#8	5.259	5.380	657.1E6	317.5E6	1.0291	1.0625
10)	PCB1260#9	5.434	5.584	698.9E6	375.1E6	1.0645	1.1511
11)	PCB1260#10	5.641	5.746	1549.0E6	778.5E6	1.0139	1.2208
12)	DECACHLOR...	6.537	6.737	1153.3E6	579.3E6	0.1134	0.1180

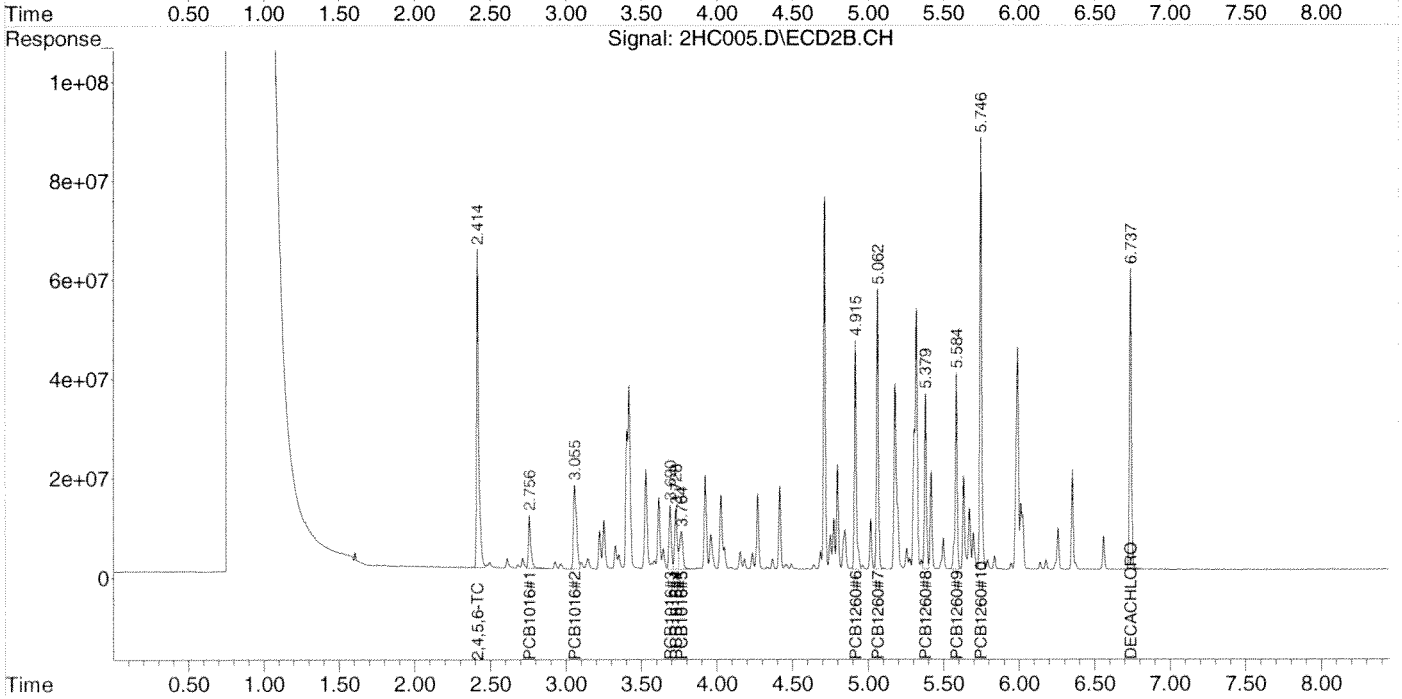
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:22
Operator : RC
Sample : 4H06028-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:08:53 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:34
Operator : RC
Sample : 4H06028-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:08:56 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

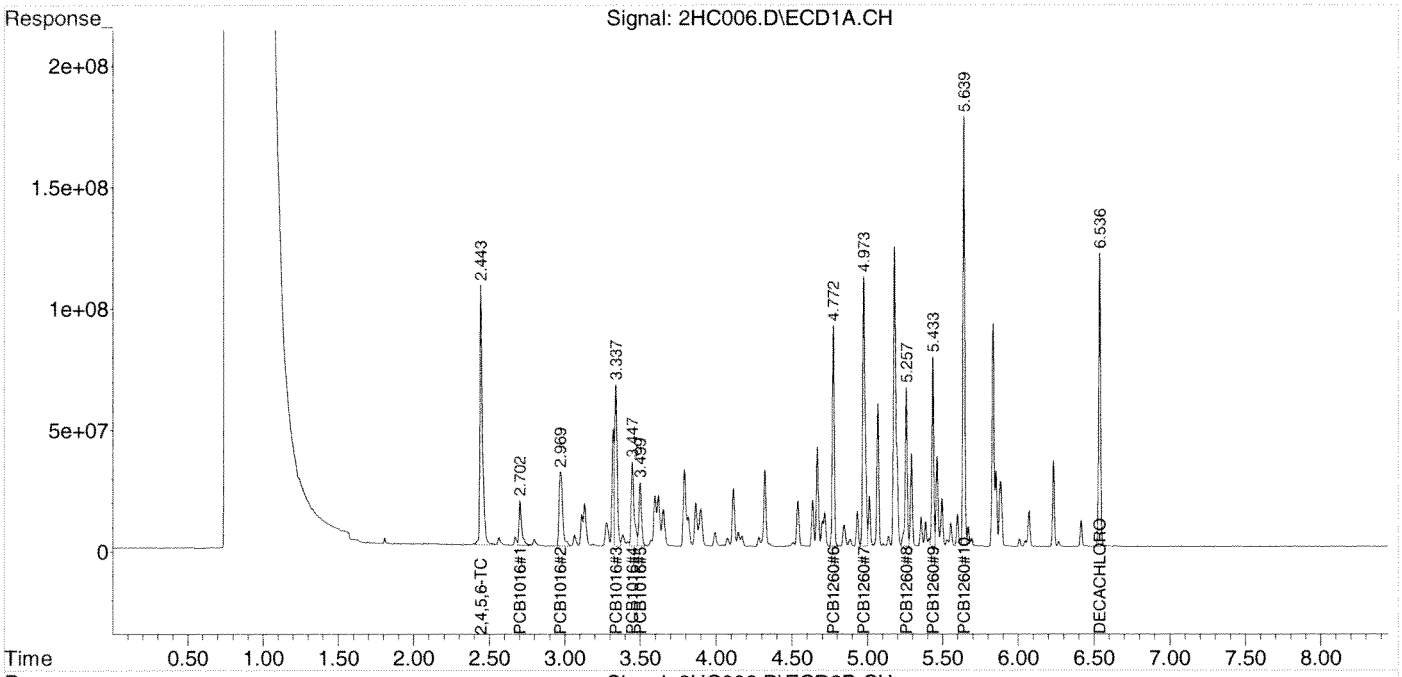
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1215.4E6	567.6E6	0.0713	0.0761
2)	PCB1016#1	2.703	2.758	242.6E6	115.3E6	0.7516	0.8066
3)	PCB1016#2	2.970	3.058	515.9E6	238.4E6	0.8380	0.8337
4)	PCB1016#3	3.338	3.690	808.2E6	128.3E6	0.9891	1.0288
5)	PCB1016#4	3.447	3.728	479.3E6	130.1E6	0.9576	1.0145
6)	PCB1016#5	3.500	3.764	313.0E6	109.5E6	1.0301	0.8324
7)	PCB1260#6	4.773	4.915	843.1E6	427.2E6	1.1249	1.1914
8)	PCB1260#7	4.974	5.061	1313.8E6	480.8E6	1.2995	1.2234
9)	PCB1260#8	5.258	5.379	639.0E6	309.5E6	1.0008	1.0360
10)	PCB1260#9	5.433	5.582	692.8E6	357.7E6	1.0553	1.0977
11)	PCB1260#10	5.640	5.745	1559.7E6	740.6E6	1.0210	1.1614
12)	DECACHLOR...	6.536	6.736	1067.6E6	527.6E6	0.1050	0.1074

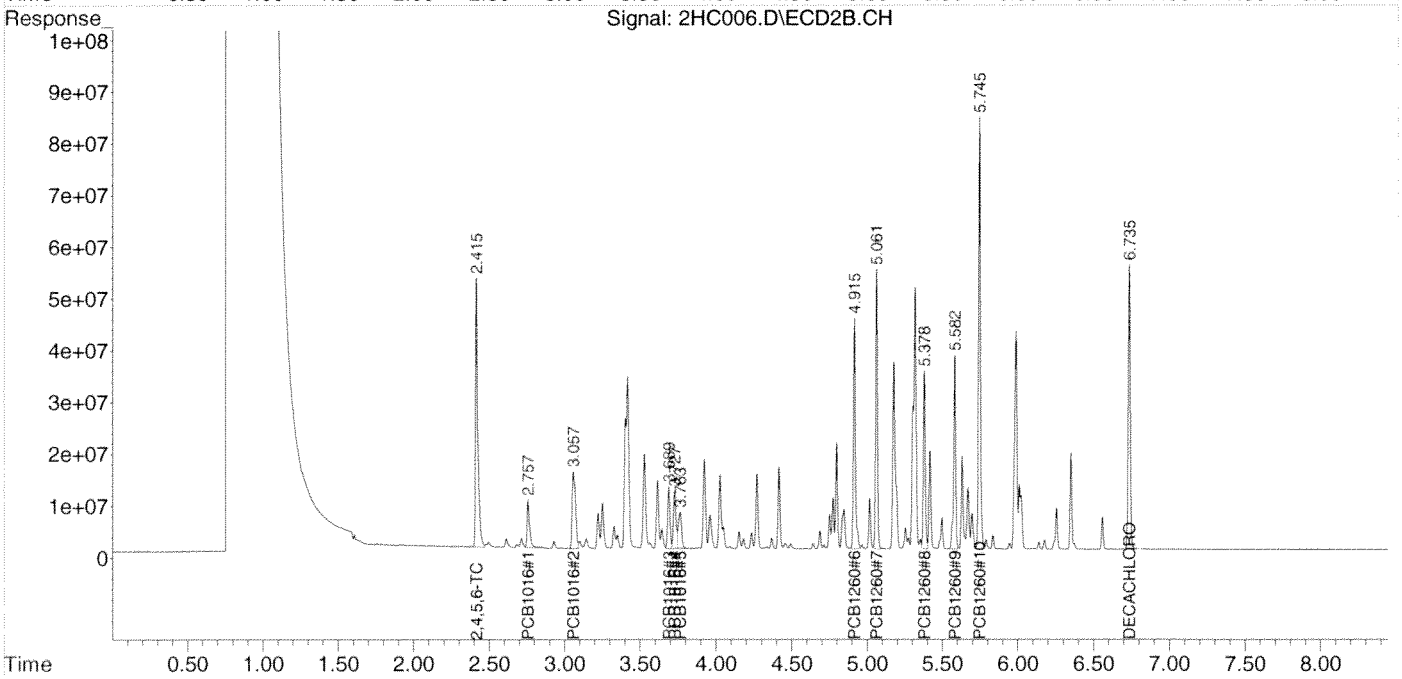
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:34
Operator : RC
Sample : 4H06028-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:08:56 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:46
Operator : RC
Sample : A404270-29
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:10:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1459.6E6	693.8E6	0.0856	0.0931
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.538	6.738	698.9E6	366.4E6	0.0687	0.0746

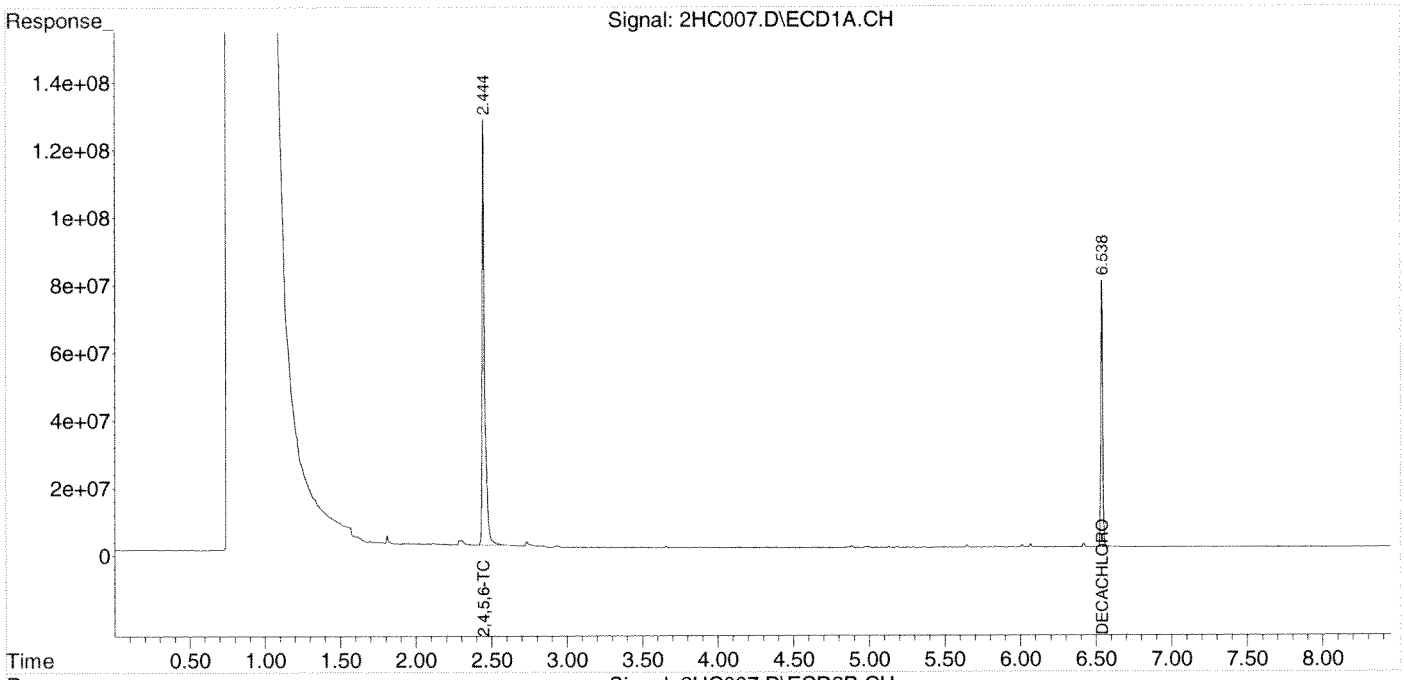
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

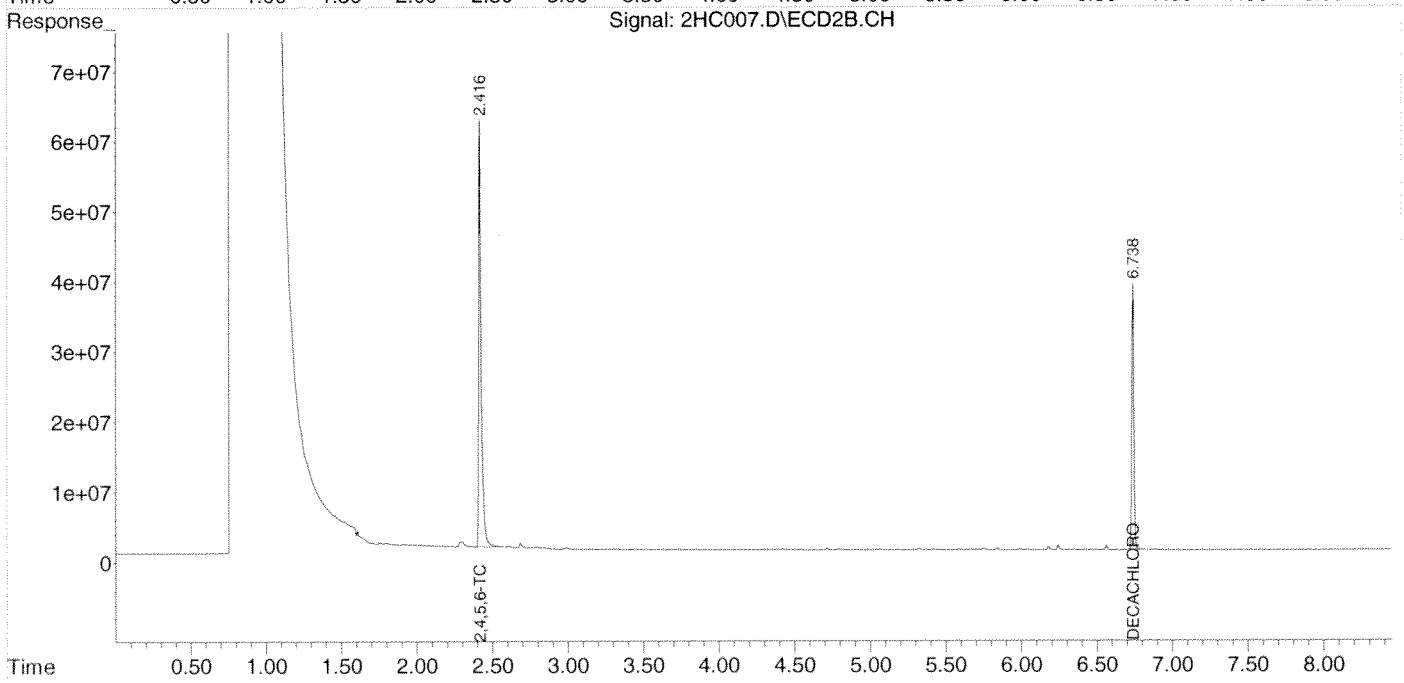
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 7:46
Operator : RC
Sample : A404270-29
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:10:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:02
Operator : RC
Sample : 4H06006-BLK1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:10:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

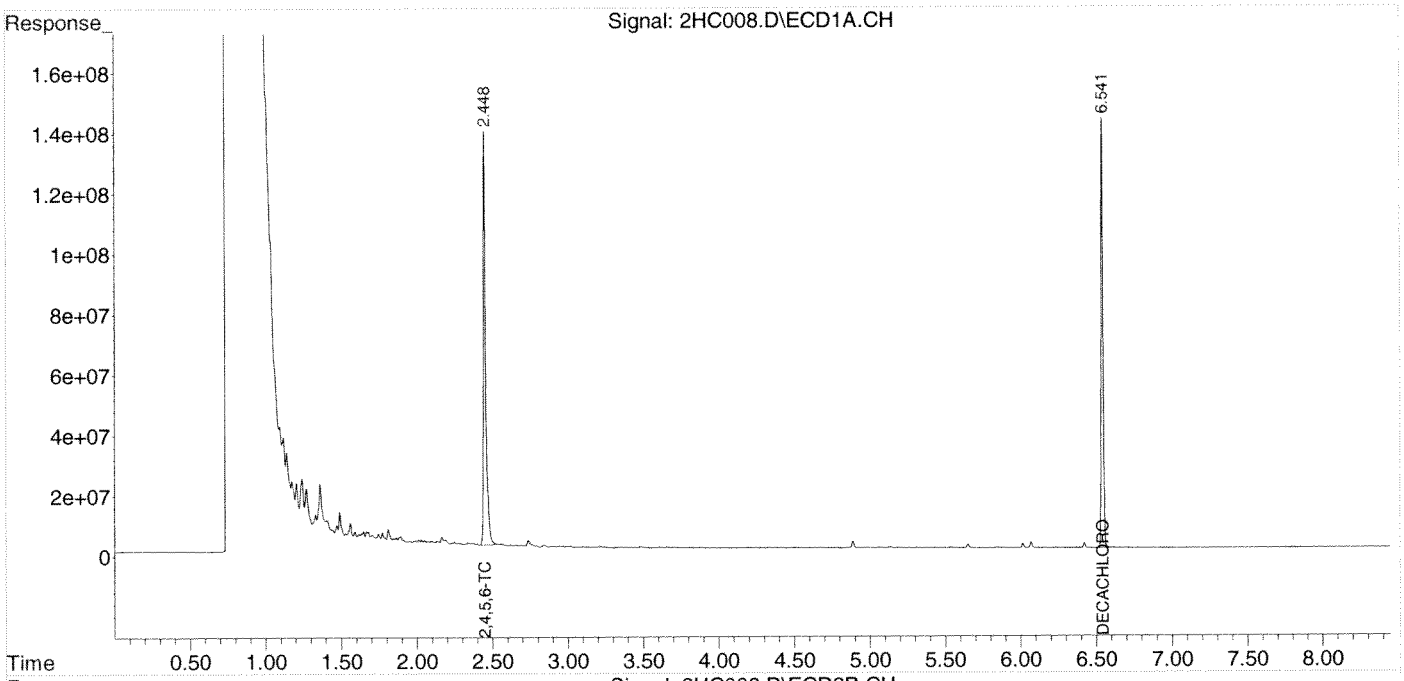
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.448	2.415	1443.5E6	715.9E6	0.0846	0.0960
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.541	6.739	1247.7E6	643.8E6	0.1227	0.1311

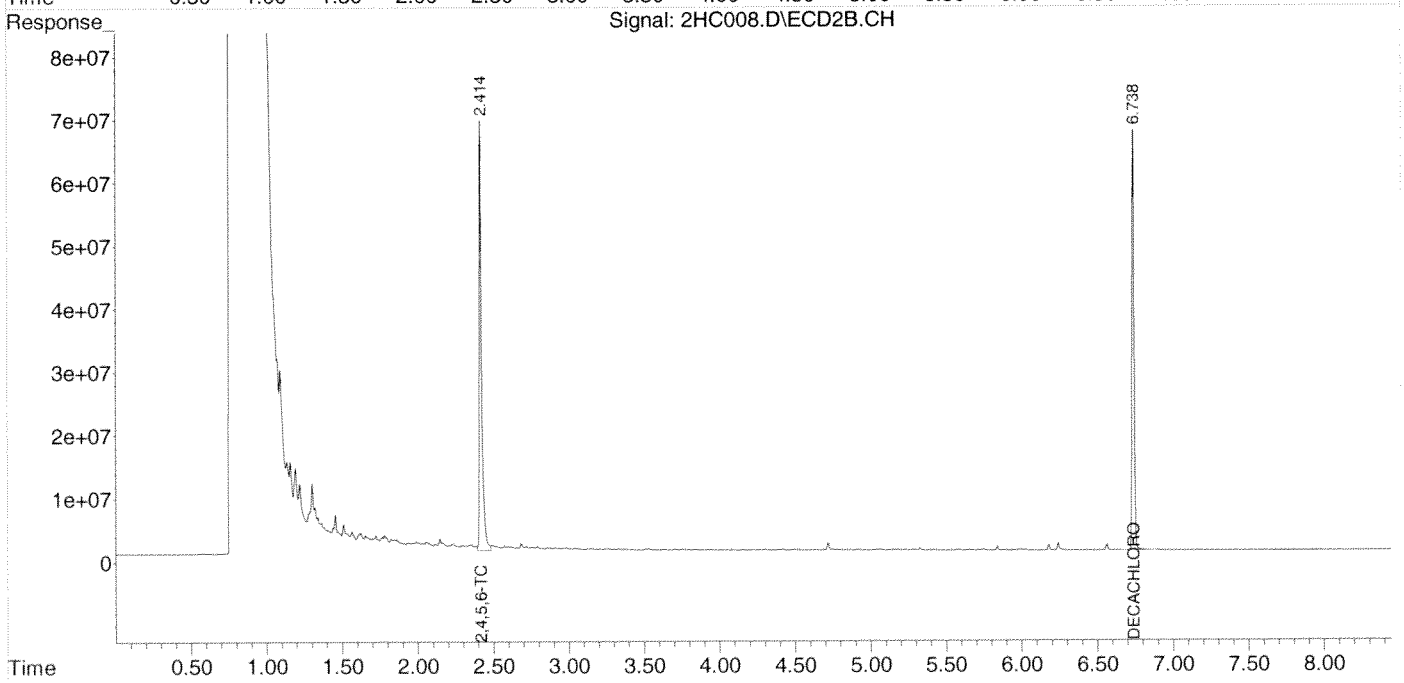
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:02
Operator : RC
Sample : 4H06006-BLK1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:10:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:14
Operator : RC
Sample : 4H06006-BS1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.415	1584.7E6	733.8E6	0.0929	0.0984
2)	PCB1016#1	2.702	2.758	315.1E6	139.7E6	0.9762	0.9774
3)	PCB1016#2	2.969	3.057	615.8E6	300.0E6	1.0004	1.0491
4)	PCB1016#3	3.339	3.691	933.0E6	154.4E6	1.1418	1.2379
5)	PCB1016#4	3.448	3.729	584.2E6	156.8E6	1.1672	1.2233
6)	PCB1016#5	3.500	3.765	370.1E6	133.9E6	1.2180	1.0180
7)	PCB1260#6	4.774	4.917	1004.0E6	504.5E6	1.3395	1.4070
8)	PCB1260#7	4.976	5.063	1579.2E6	574.0E6	1.5620	1.4607
9)	PCB1260#8	5.260	5.381	777.5E6	369.3E6	1.2176	1.2360
10)	PCB1260#9	5.435	5.585	829.1E6	437.4E6	1.2629	1.3421
11)	PCB1260#10	5.642	5.747	1898.6E6	889.9E6	1.2428	1.3955
12)	DECACHLOR...	6.540	6.739	1319.8E6	679.6E6	0.1298	0.1384

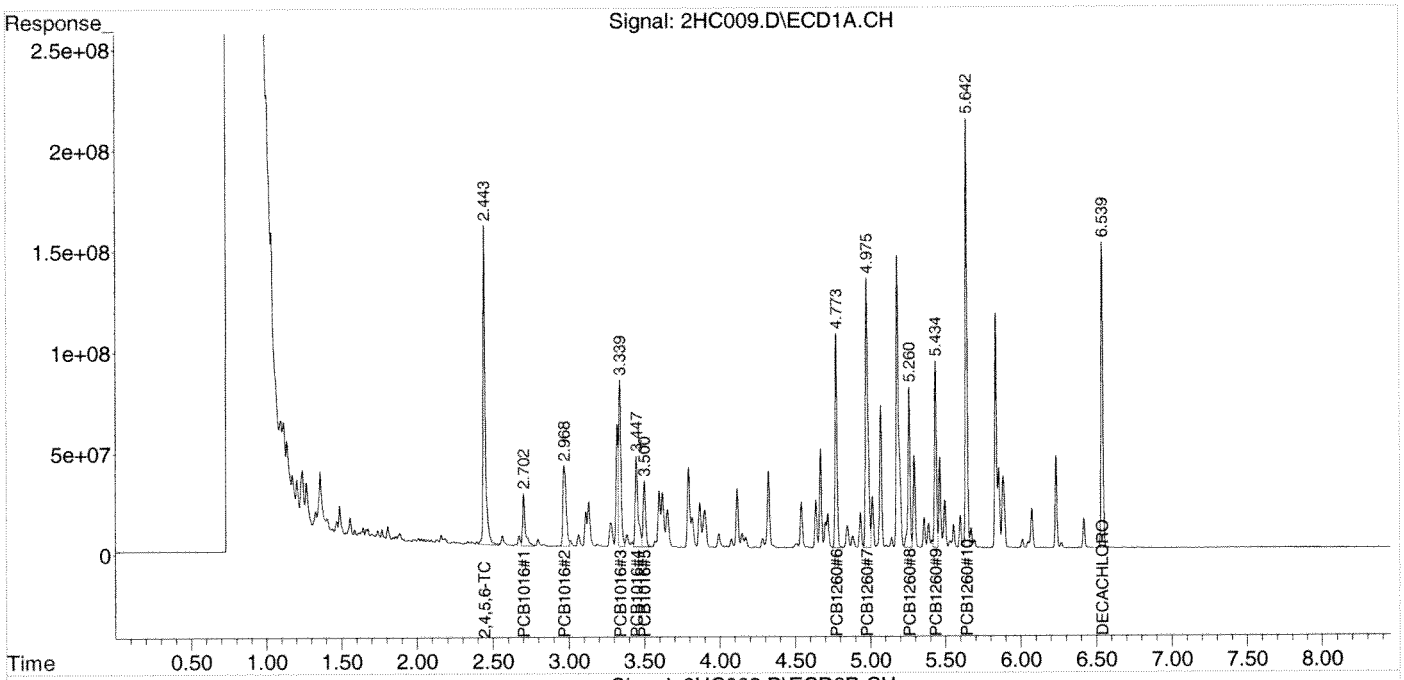
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

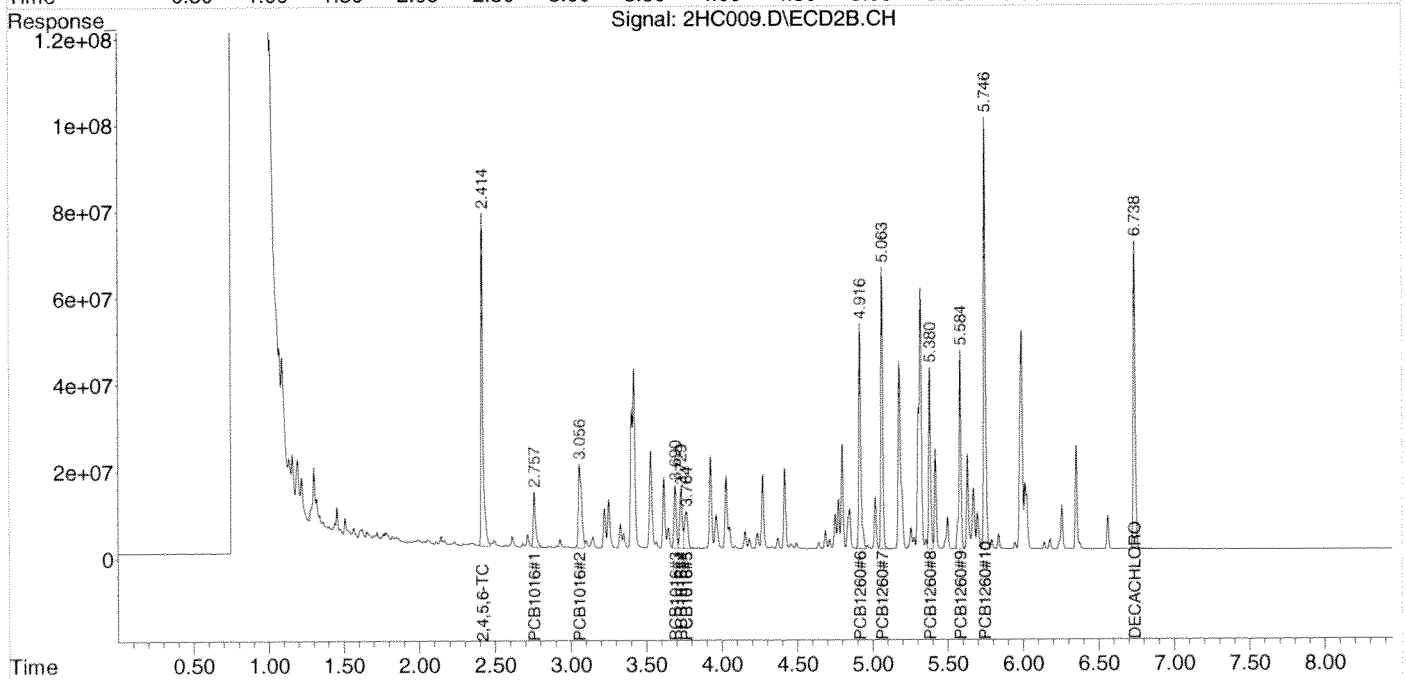
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:14
Operator : RC
Sample : 4H06006-BS1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:26
Operator : RC
Sample : 4H06006-MS1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:08 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

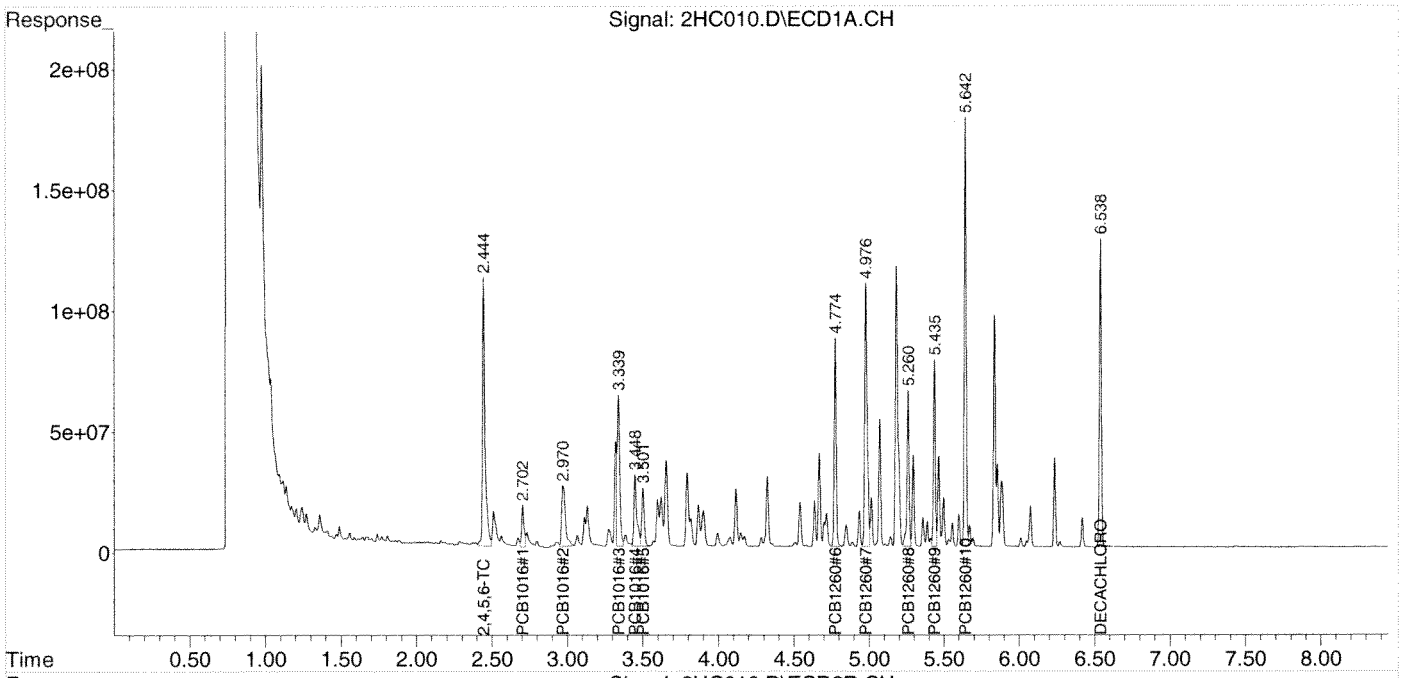
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1261.0E6	623.0E6	0.0739	0.0836	
2)	PCB1016#1	2.703	2.758	198.3E6	147.1E6	0.6143	1.0296	#
3)	PCB1016#2	2.970	3.058	461.2E6	252.6E6	0.7492	0.8833	
4)	PCB1016#3	3.340	3.692	761.8E6	139.0E6	0.9324	1.1147	
5)	PCB1016#4	3.449	3.730	406.8E6	138.1E6	0.8128	1.0771	#
6)	PCB1016#5	3.501	3.766	278.7E6	131.5E6	0.9171	0.9997	
7)	PCB1260#6	4.774	4.917	809.1E6	427.2E6	1.0795	1.1914	
8)	PCB1260#7	4.976	5.064	1286.6E6	504.5E6	1.2726	1.2838	
9)	PCB1260#8	5.260	5.381	634.6E6	323.8E6	0.9939	1.0837	
10)	PCB1260#9	5.435	5.585	697.1E6	380.9E6	1.0619	1.1689	
11)	PCB1260#10	5.642	5.747	1585.3E6	768.3E6	1.0377	1.2047	
12)	DECACHLOR...	6.538	6.738	1136.8E6	561.8E6	0.1118	0.1144	

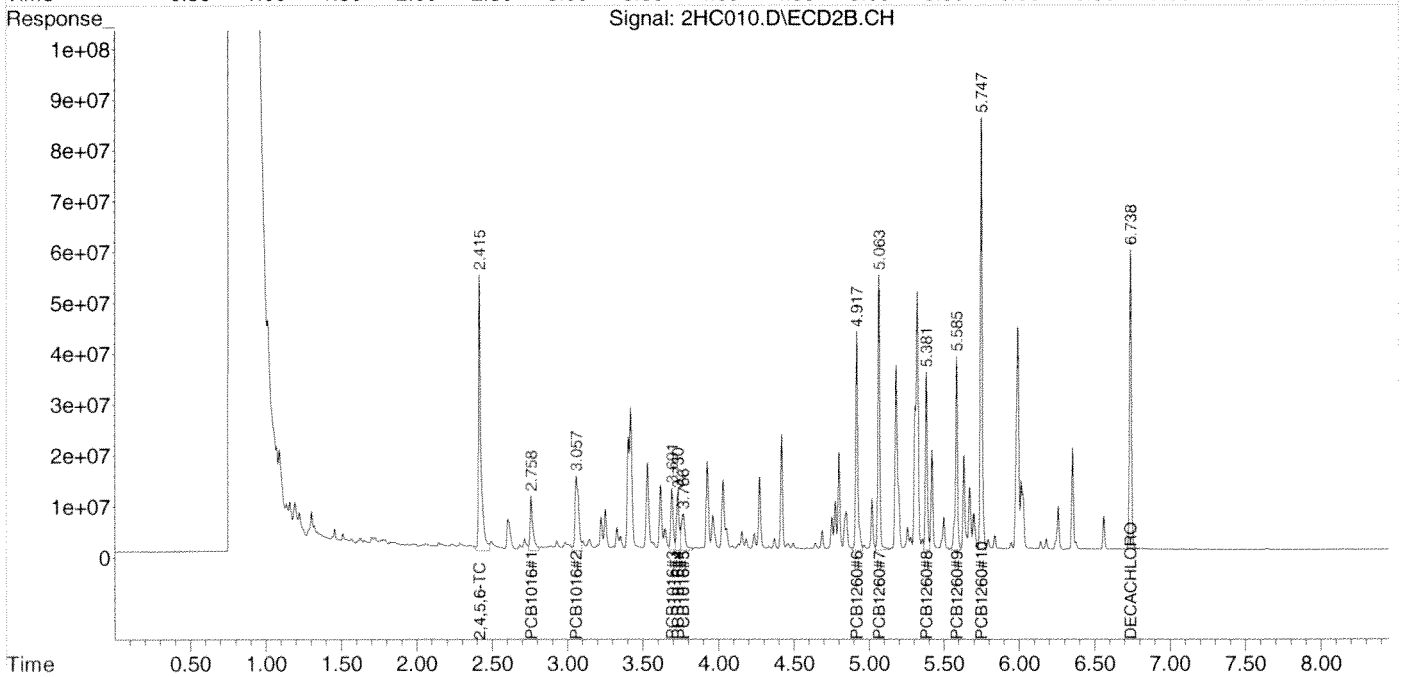
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:26
Operator : RC
Sample : 4H06006-MS1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:08 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:38
Operator : RC
Sample : 4H06006-MSD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:11 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

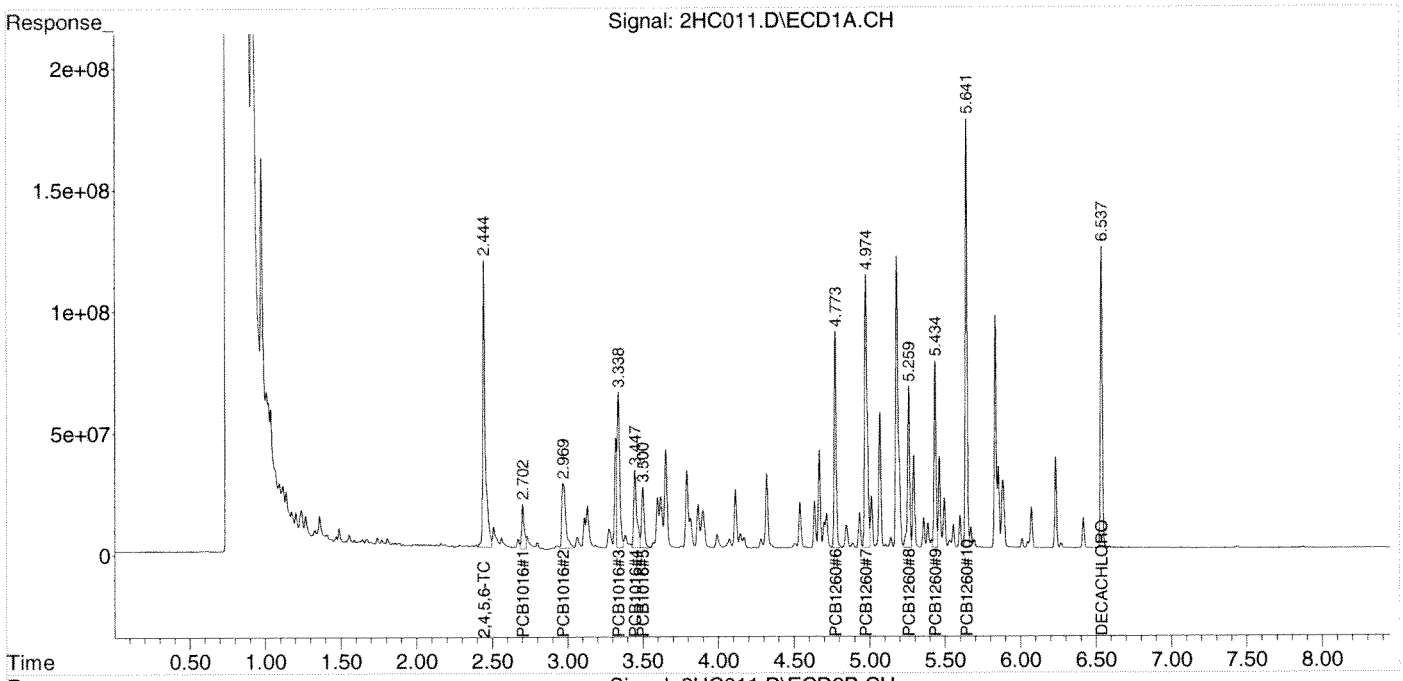
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1327.1E6	644.9E6	0.0778	0.0865	
2)	PCB1016#1	2.703	2.758	211.7E6	127.5E6	0.6560	0.8922	#
3)	PCB1016#2	2.970	3.058	497.0E6	245.0E6	0.8074	0.8568	
4)	PCB1016#3	3.339	3.691	809.7E6	134.9E6	0.9910	1.0817	
5)	PCB1016#4	3.448	3.729	444.0E6	134.4E6	0.8870	1.0479	
6)	PCB1016#5	3.500	3.765	305.1E6	120.4E6	1.0039	0.9149	
7)	PCB1260#6	4.774	4.917	848.4E6	431.9E6	1.1319	1.2045	
8)	PCB1260#7	4.975	5.063	1339.2E6	500.1E6	1.3246	1.2725	
9)	PCB1260#8	5.259	5.380	658.2E6	322.0E6	1.0308	1.0779	
10)	PCB1260#9	5.434	5.584	695.8E6	367.3E6	1.0599	1.1271	
11)	PCB1260#10	5.641	5.746	1561.3E6	756.4E6	1.0220	1.1861	
12)	DECACHLOR...	6.538	6.737	1097.5E6	542.2E6	0.1080	0.1104	

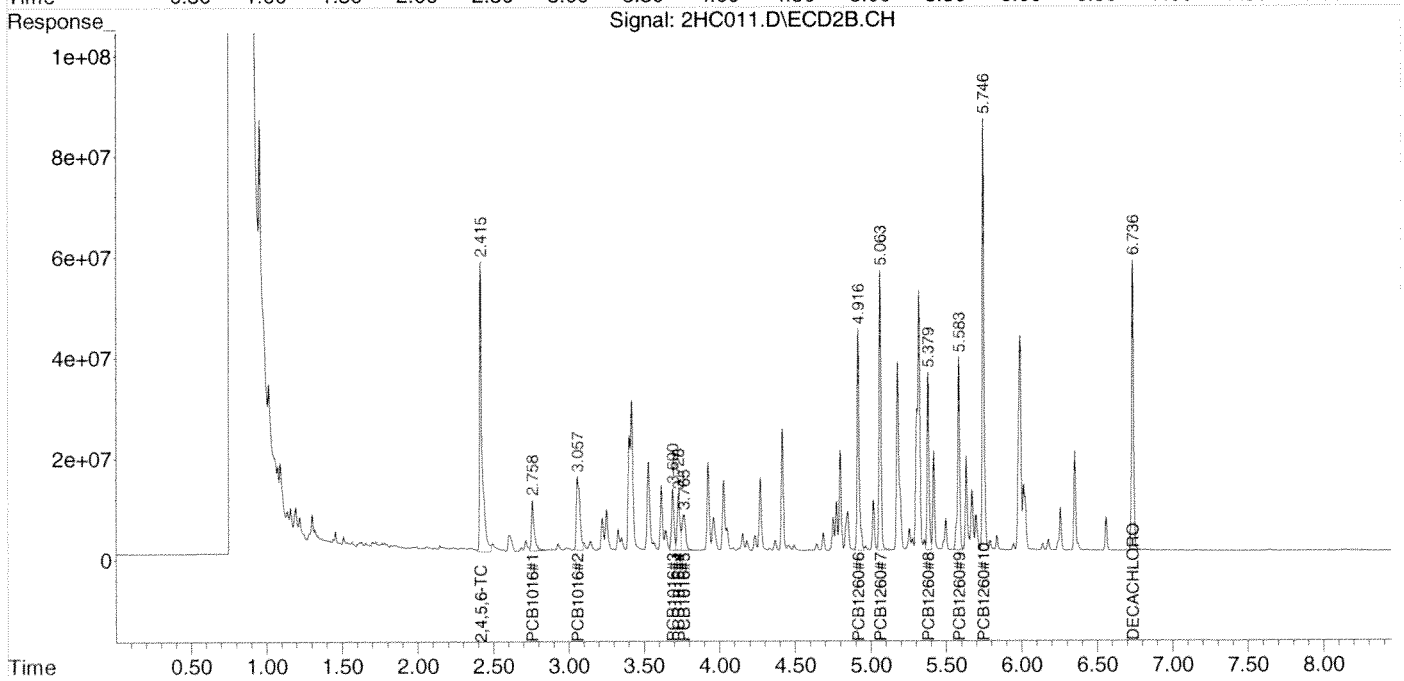
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:38
Operator : RC
Sample : 4H06006-MSD1
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:09:11 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:50
Operator : RC
Sample : A404270-28
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:11:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.444	2.415	1365.2E6	700.8E6	0.0800	0.0940	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.774	4.917	9159494	5187527	0.0122	0.0145	
8)	PCB1260#7	4.975	5.063	33446544	15443797	0.0331	0.0393	
9)	PCB1260#8	5.259	5.380	22363263	12508851	0.0350	0.0419	
10)	PCB1260#9	5.434	5.584	12517097	7302354	0.0191	0.0224	
11)	PCB1260#10	5.643	5.746	30490763	17100871	0.0200	0.0268	#
12)	DECACHLOR...	6.537	6.738	1148.5E6	575.7E6	0.1130	0.1172	

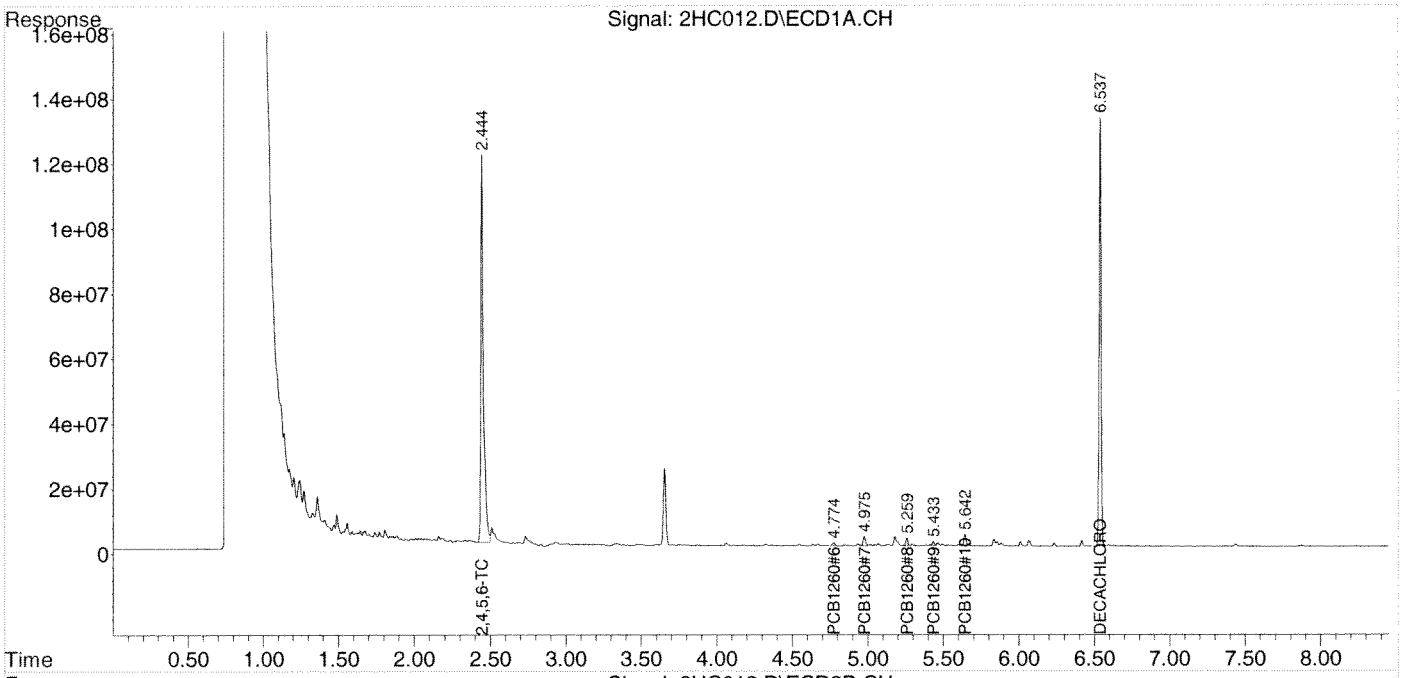
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

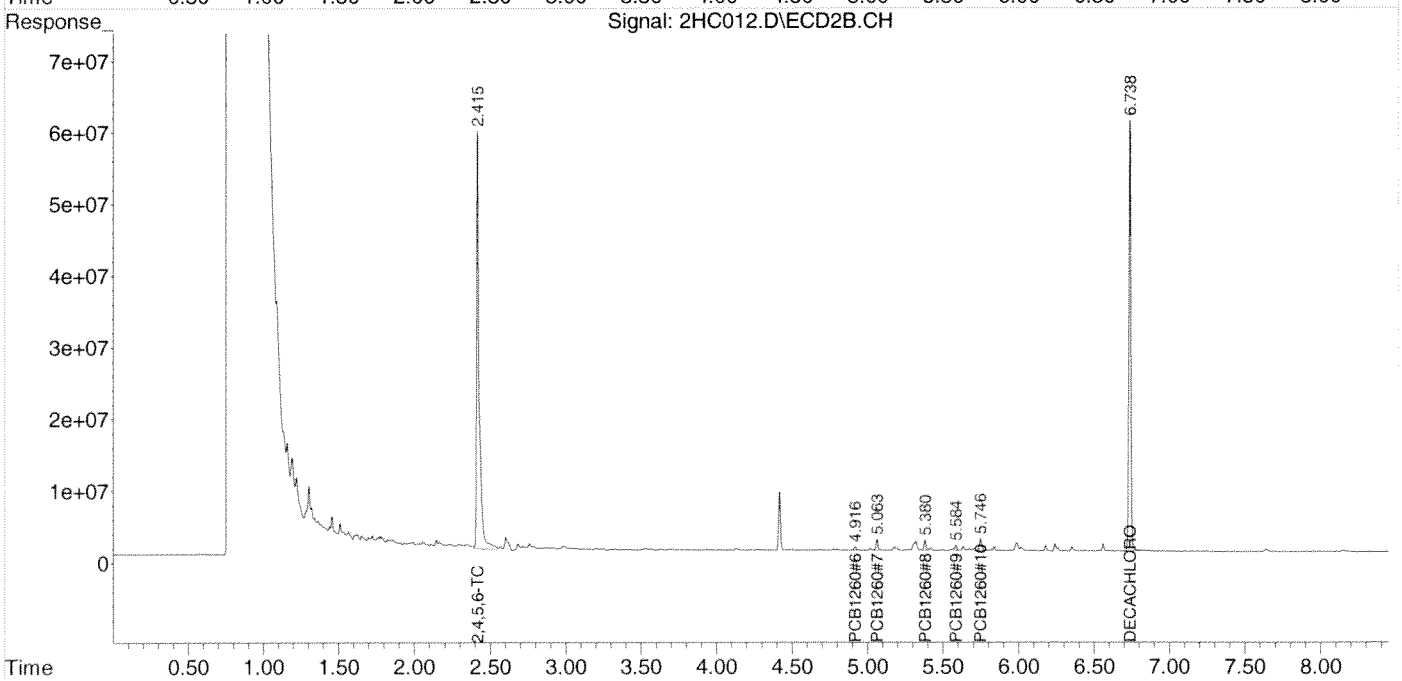
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 8:50
Operator : RC
Sample : A404270-28
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:11:33 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:02
Operator : RC
Sample : A404270-22
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:11:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

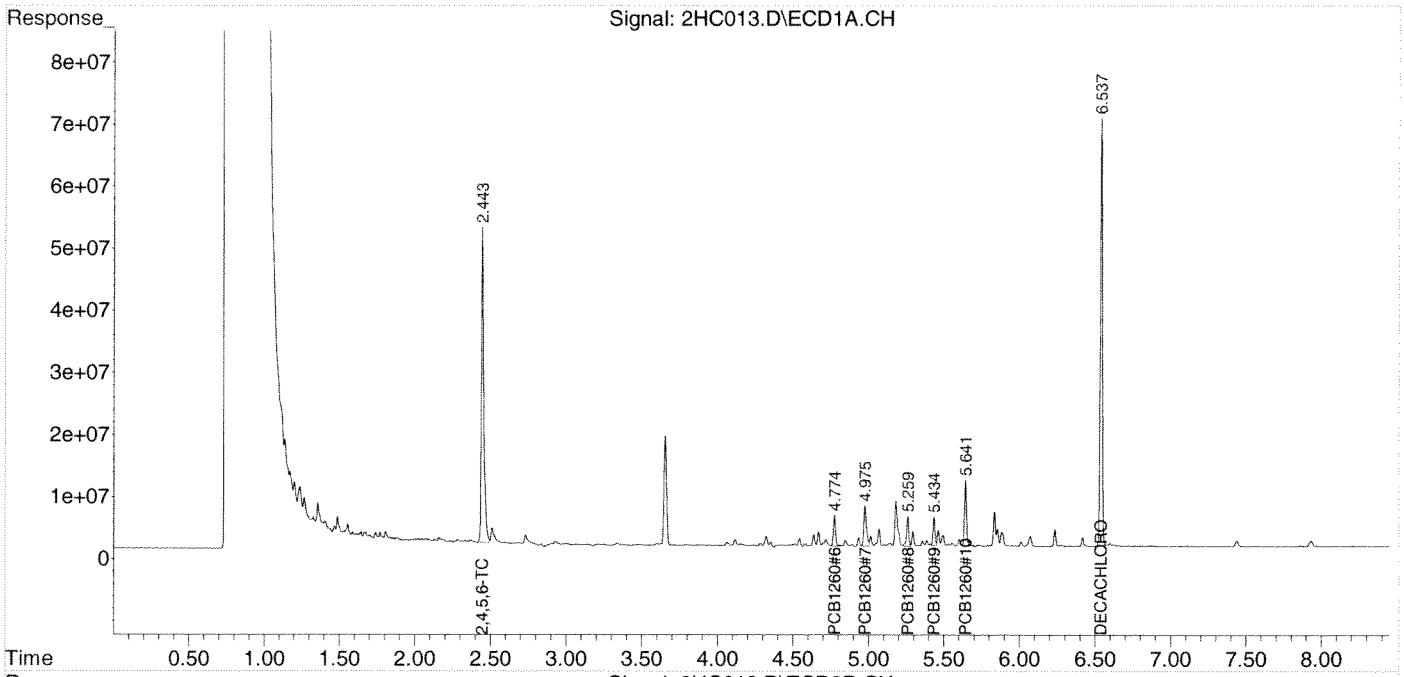
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.443	2.415	535.1E6	265.0E6	0.0314	0.0355
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.774	4.917	51027601	24970562	0.0681	0.0696
8)	PCB1260#7	4.975	5.064	79726334	30550019	0.0789	0.0777
9)	PCB1260#8	5.260	5.380	47965052	24232935	0.0751	0.0811
10)	PCB1260#9	5.434	5.584	41485113	22173450	0.0632	0.0680
11)	PCB1260#10	5.642	5.747	99579460	46711469	0.0652	0.0732
12)	DECACHLOR...	6.538	6.738	610.5E6	307.5E6	0.0600	0.0626

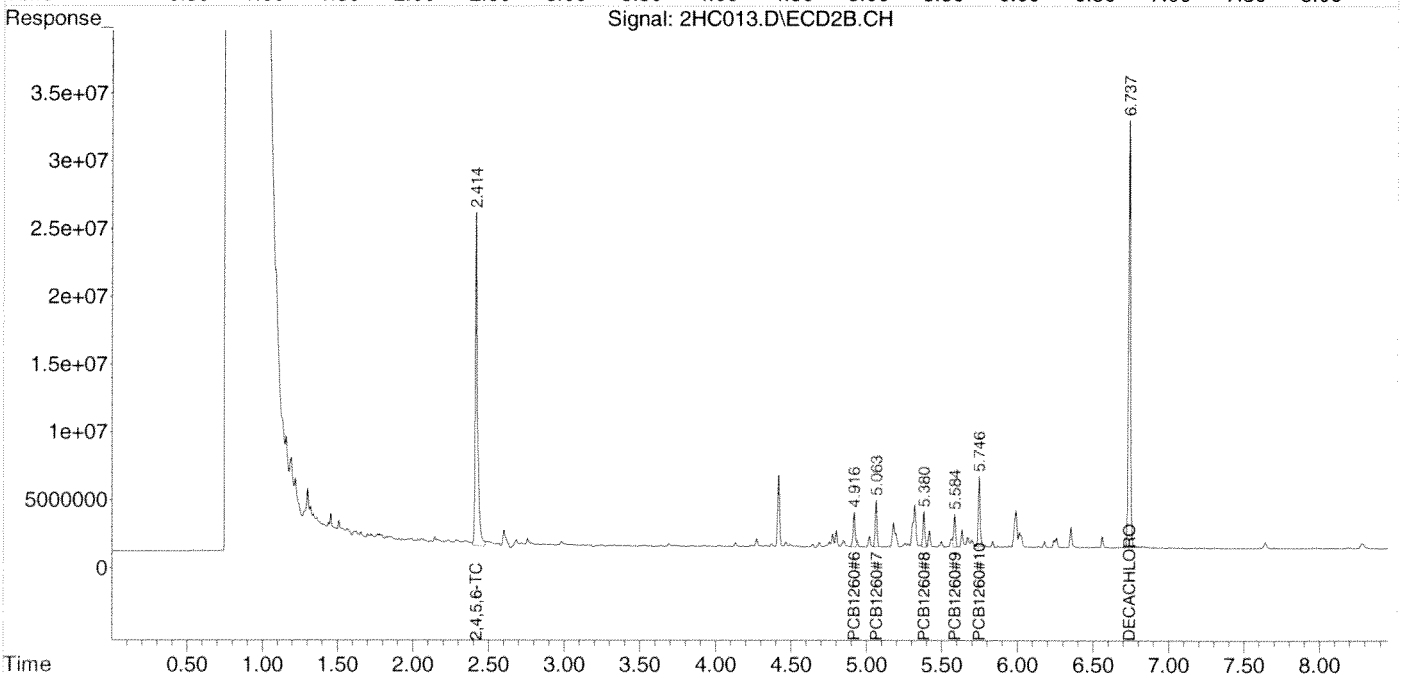
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:02
Operator : RC
Sample : A404270-22
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:11:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:02
Operator : RC
Sample : A404270-22
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:37:24 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.443	2.415	549.3E6	265.0E6	0.0328	0.0334	
2)	PCB1254#1	4.115	4.271	10438141	4957417	0.0213	0.0188	
3)	PCB1254#2	4.322	4.418	21730593	49994886	0.0254	0.1750	#
4)	PCB1254#3	4.542	4.687	15804855	5091048	0.0315	0.0217	#
5)	PCB1254#4	4.637	4.774	23837750	9179316	0.0280	0.0232	
6)	PCB1254#5	4.846	5.064	14762891	30550019	0.0222	0.1686	#
7)	DECACHLOR...	6.538	6.738	615.2E6	307.5E6	0.0580	0.0587	

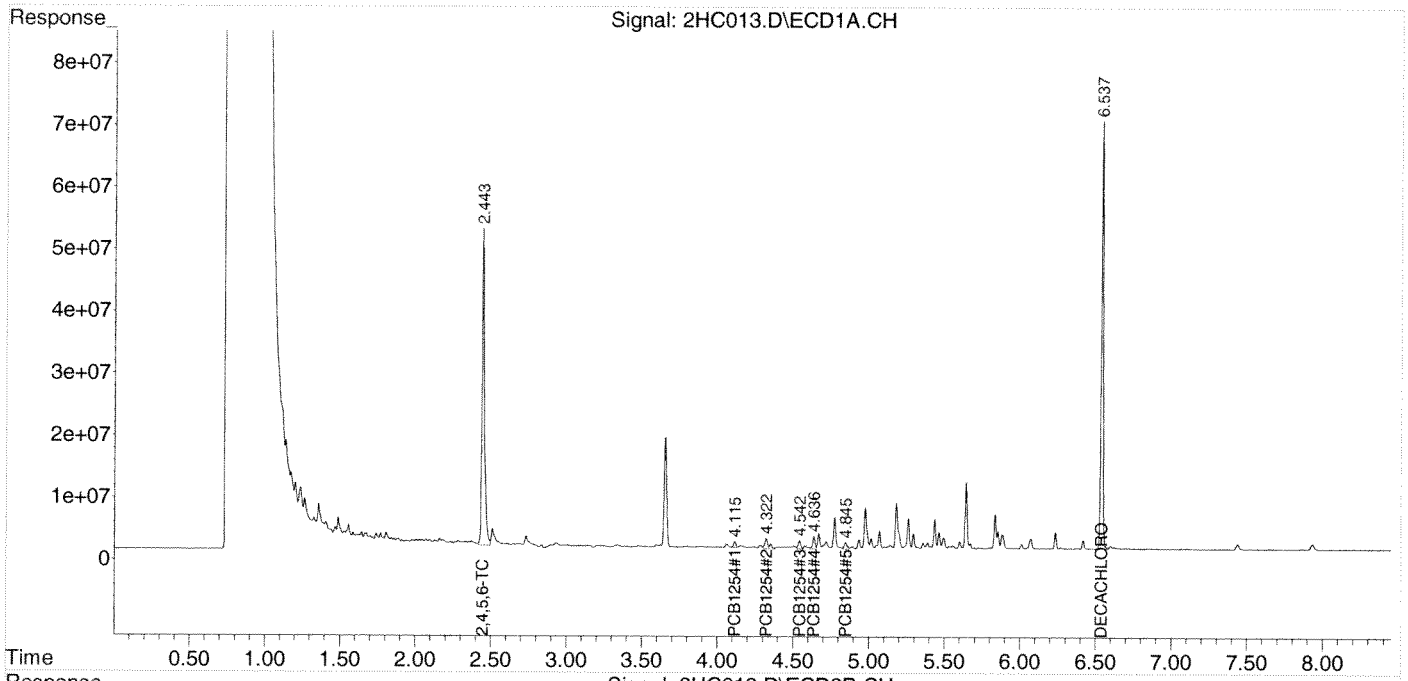
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

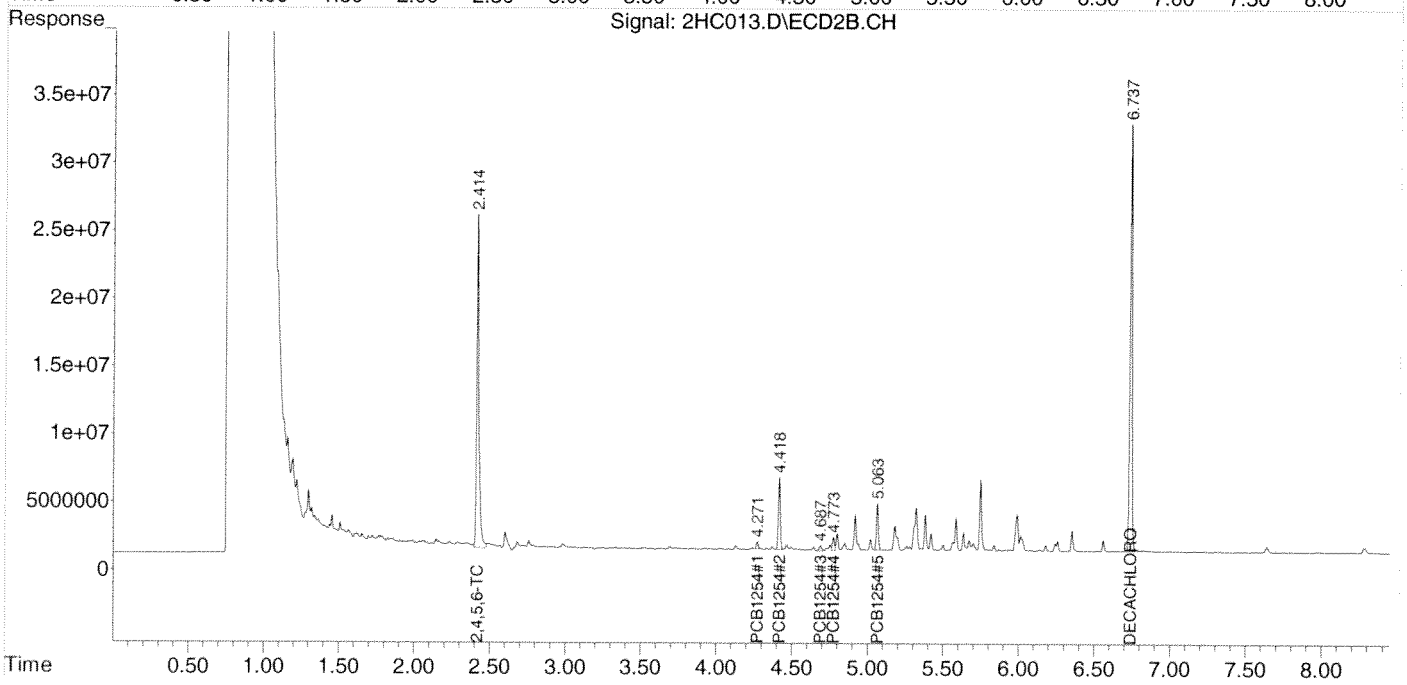
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:02
Operator : RC
Sample : A404270-22
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:37:24 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:27
Operator : RC
Sample : AA29971-CCV2
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:36:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

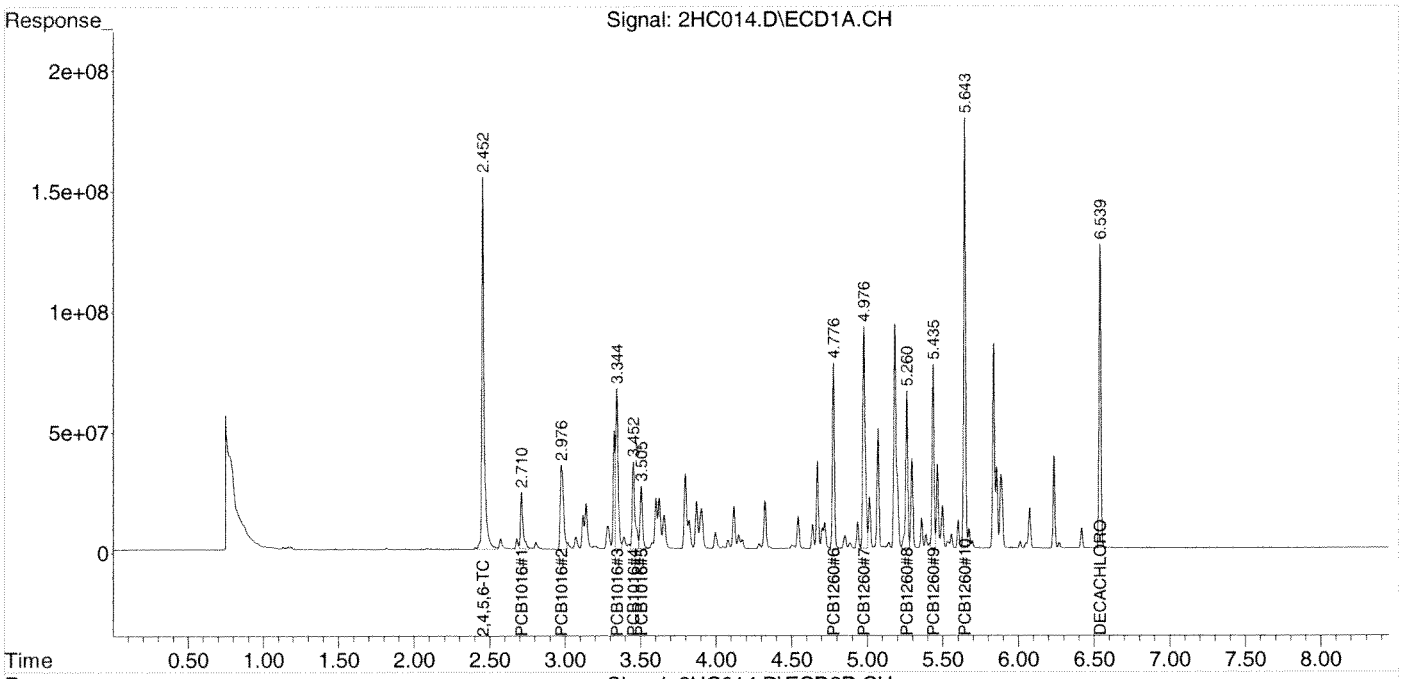
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.453	2.422	1683.0E6	772.5E6	0.0987	0.1036
2)	PCB1016#1	2.711	2.765	273.6E6	131.6E6	0.8475	0.9211
3)	PCB1016#2	2.976	3.063	534.2E6	250.6E6	0.8679	0.8762
4)	PCB1016#3	3.344	3.695	763.9E6	119.1E6	0.9350	0.9550
5)	PCB1016#4	3.453	3.733	469.9E6	123.0E6	0.9388	0.9592
6)	PCB1016#5	3.505	3.769	297.6E6	107.0E6	0.9795	0.8131
7)	PCB1260#6	4.776	4.918	711.3E6	352.3E6	0.9491	0.9825
8)	PCB1260#7	4.977	5.065	1059.1E6	413.4E6	1.0476	1.0521
9)	PCB1260#8	5.261	5.381	631.4E6	312.6E6	0.9889	1.0462
10)	PCB1260#9	5.436	5.585	676.2E6	337.2E6	1.0301	1.0349
11)	PCB1260#10	5.643	5.747	1550.3E6	728.9E6	1.0148	1.1429
12)	DECACHLOR...	6.539	6.738	1106.2E6	550.1E6	0.1088	0.1120

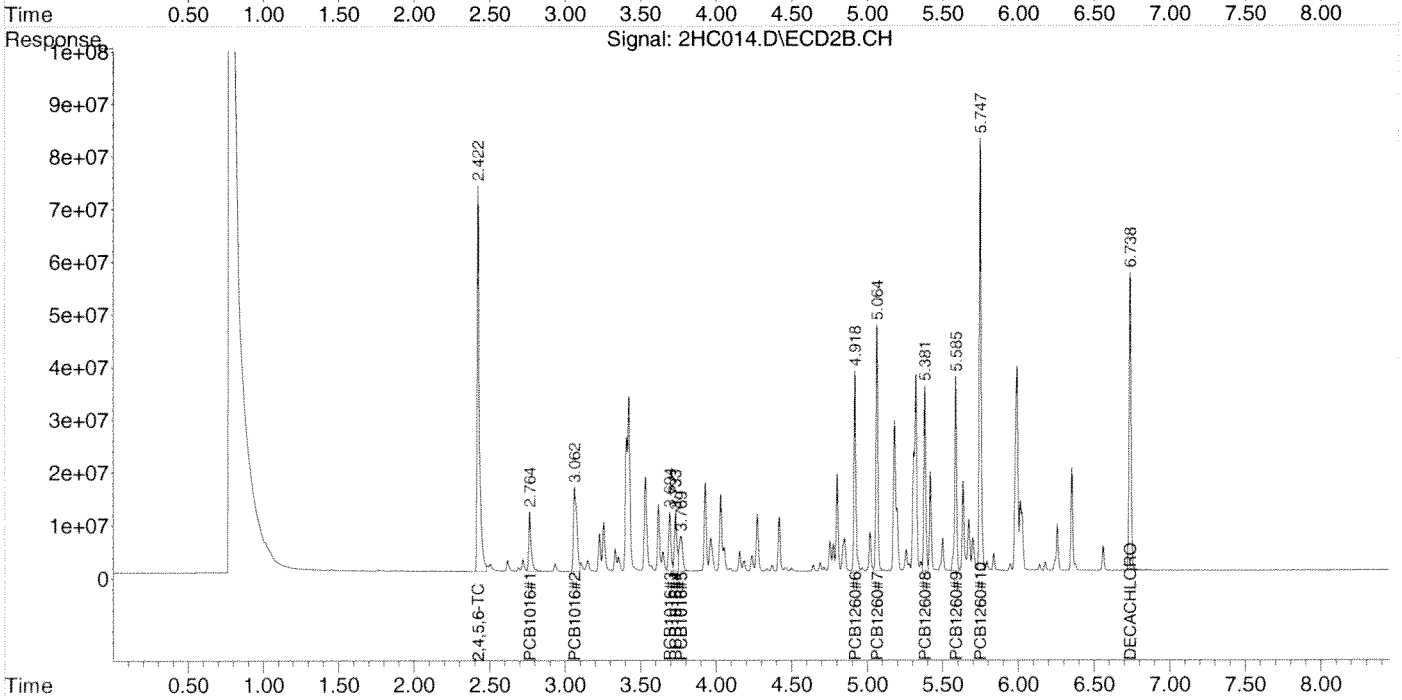
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:27
Operator : RC
Sample : AA29971-CCV2
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:36:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:39
Operator : RC
Sample : AA29971-ARC2
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:48:24 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.453	2.422	1804.3E6	857.4E6	0.1078	0.1080
2)	PCB1254#1	4.117	4.272	509.9E6	289.1E6	1.0418	1.0961
3)	PCB1254#2	4.324	4.418	922.1E6	325.8E6	1.0782	1.1409
4)	PCB1254#3	4.545	4.688	565.0E6	252.3E6	1.1279	1.0764
5)	PCB1254#4	4.638	4.775	992.5E6	472.0E6	1.1643	1.1905
6)	PCB1254#5	4.845	5.064	732.5E6	214.0E6	1.1002	1.1810
7)	DECACHLOR...	6.538	6.738	1170.0E6	582.3E6	0.1103	0.1111

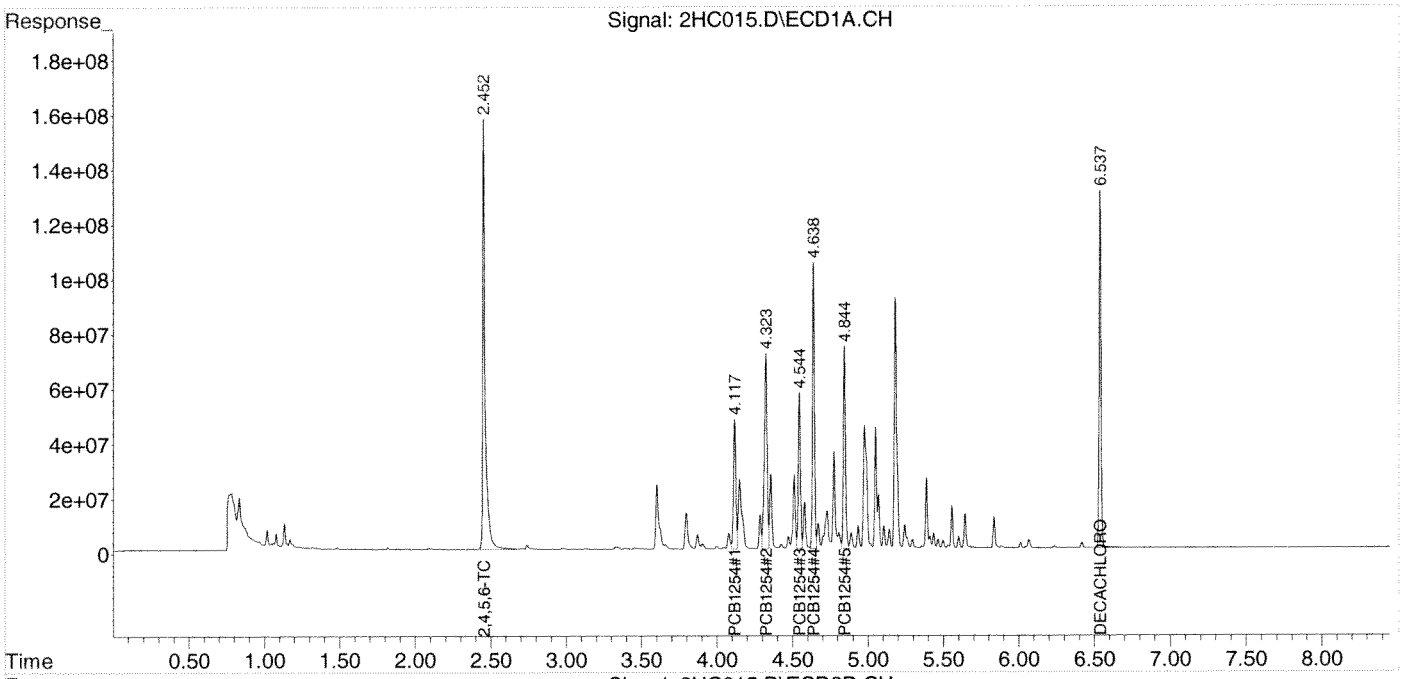
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

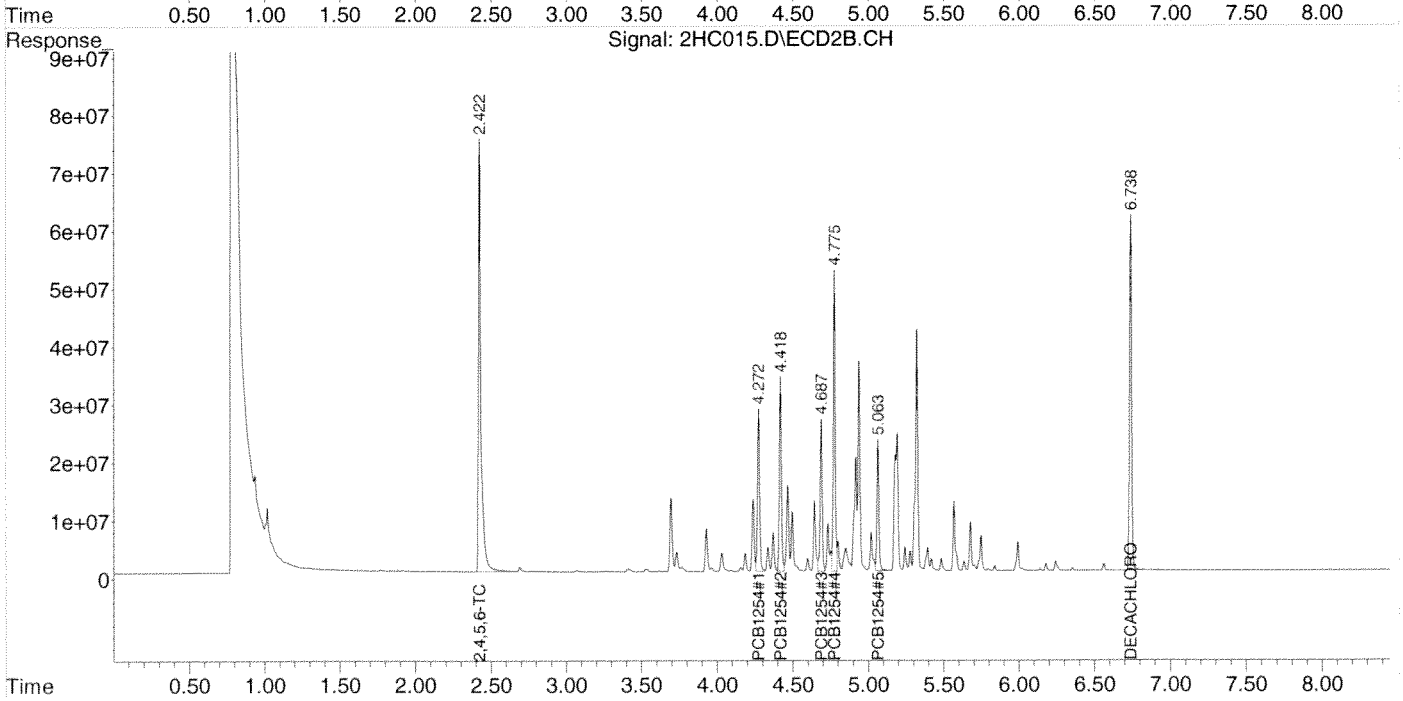
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC015.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:39
Operator : RC
Sample : AA29971-ARC2
Misc :
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 09:48:24 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:51
Operator : RC
Sample : A404270-23
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:07:35 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

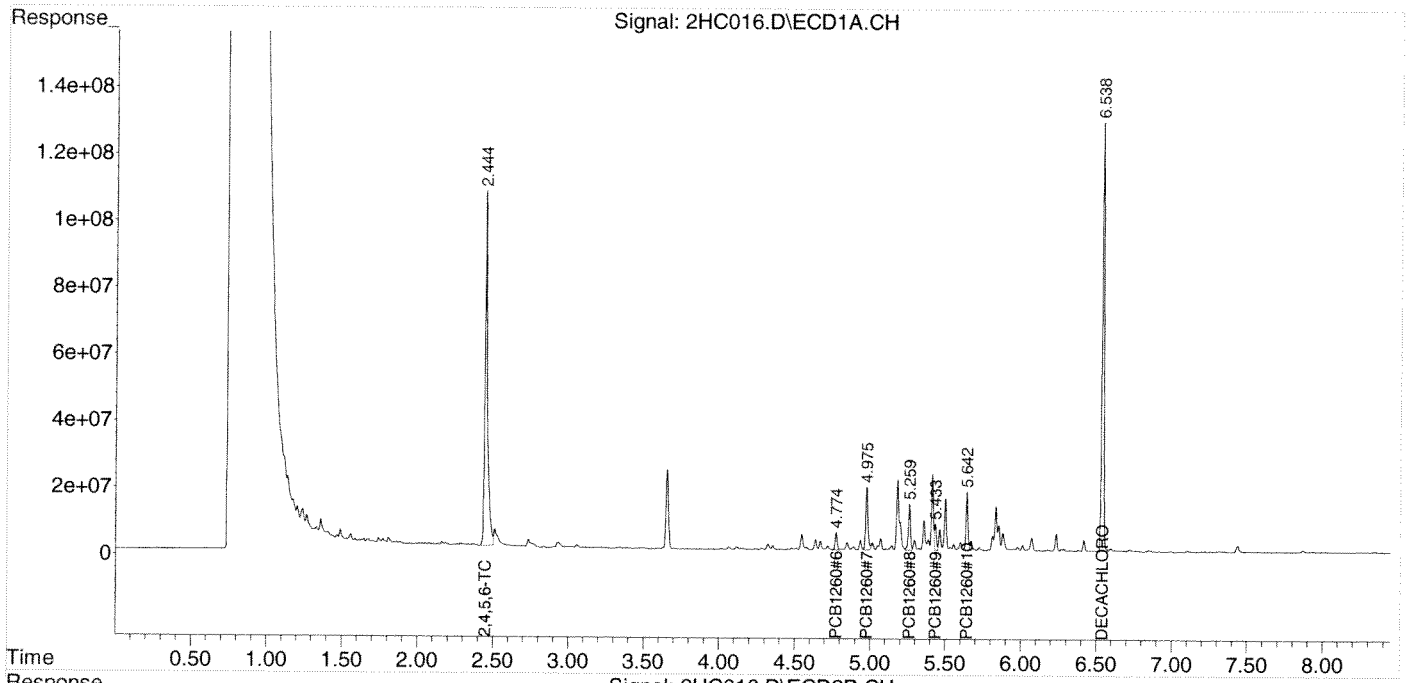
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1268.9E6	643.4E6	0.0744	0.0863	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.774	4.917	50933828	28392800	0.0680	0.0792	
8)	PCB1260#7	4.976	5.064	197.3E6	88986303	0.1952	0.2264	
9)	PCB1260#8	5.260	5.380	136.1E6	70685969	0.2131	0.2366	
10)	PCB1260#9	5.434	5.591	68610732	72849131	0.1045	0.2236	#
11)	PCB1260#10	5.642	5.747	164.8E6	89138060	0.1079	0.1398	#
12)	DECACHLOR...	6.538	6.737	1125.9E6	572.5E6	0.1107	0.1166	

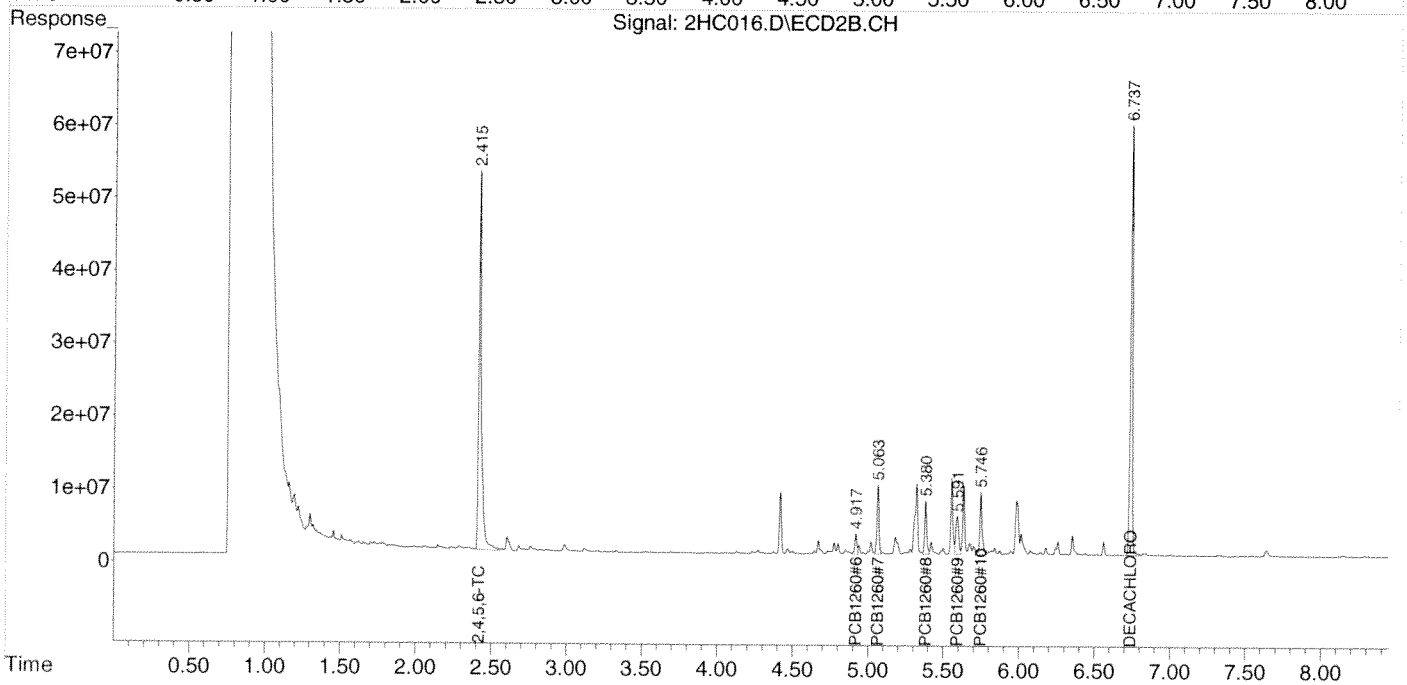
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:51
Operator : RC
Sample : A404270-23
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:07:35 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:51
Operator : RC
Sample : A404270-23
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:21:50 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

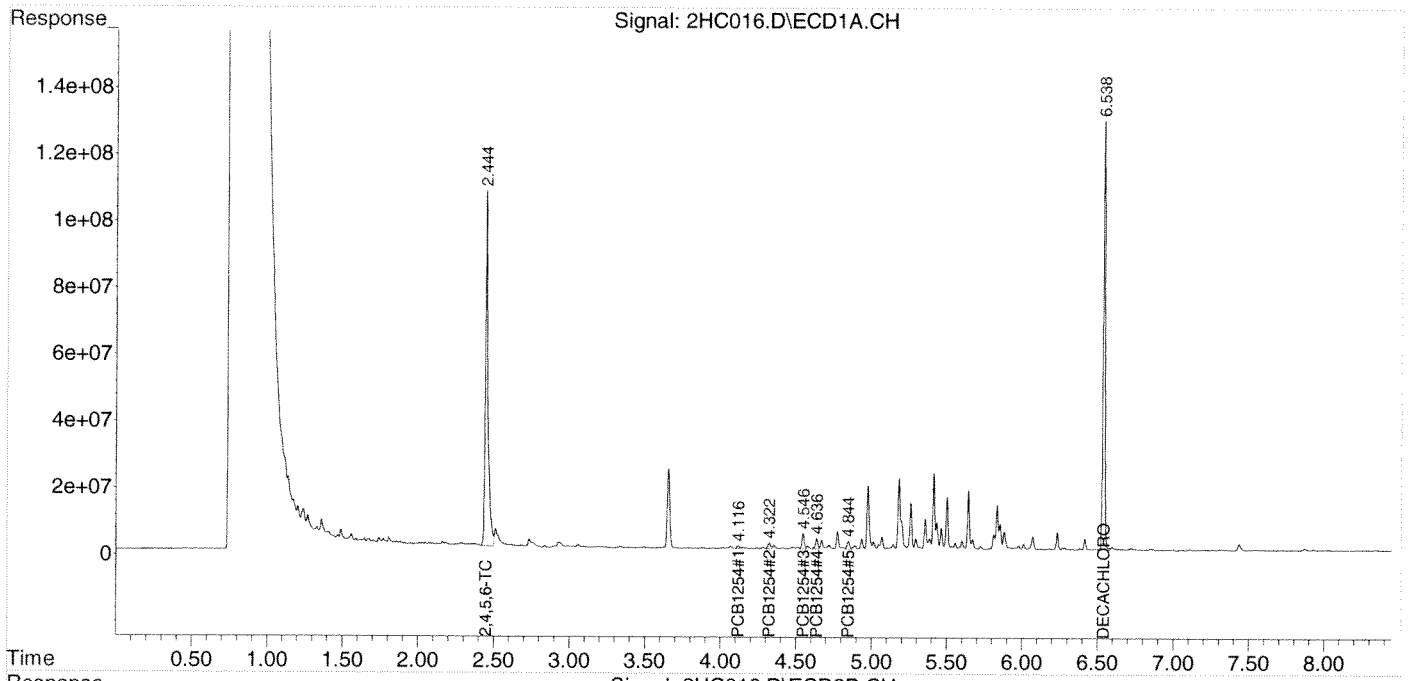
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1279.2E6	643.4E6	0.0764	0.0810	
2)	PCB1254#1	4.117	4.271	10582312	6157715	0.0216	0.0233	
3)	PCB1254#2	4.323	4.418	20781473	77387789	0.0243	0.2710	#
4)	PCB1254#3	4.547	4.687	49161648	5330538	0.0981	0.0227	#
5)	PCB1254#4	4.637	4.774	33552119	14807455	0.0394	0.0373	
6)	PCB1254#5	4.845	5.064	27154139	88986303	0.0408	0.4911	#
7)	DECACHLOR...	6.538	6.737	1127.4E6	572.5E6	0.1063	0.1092	

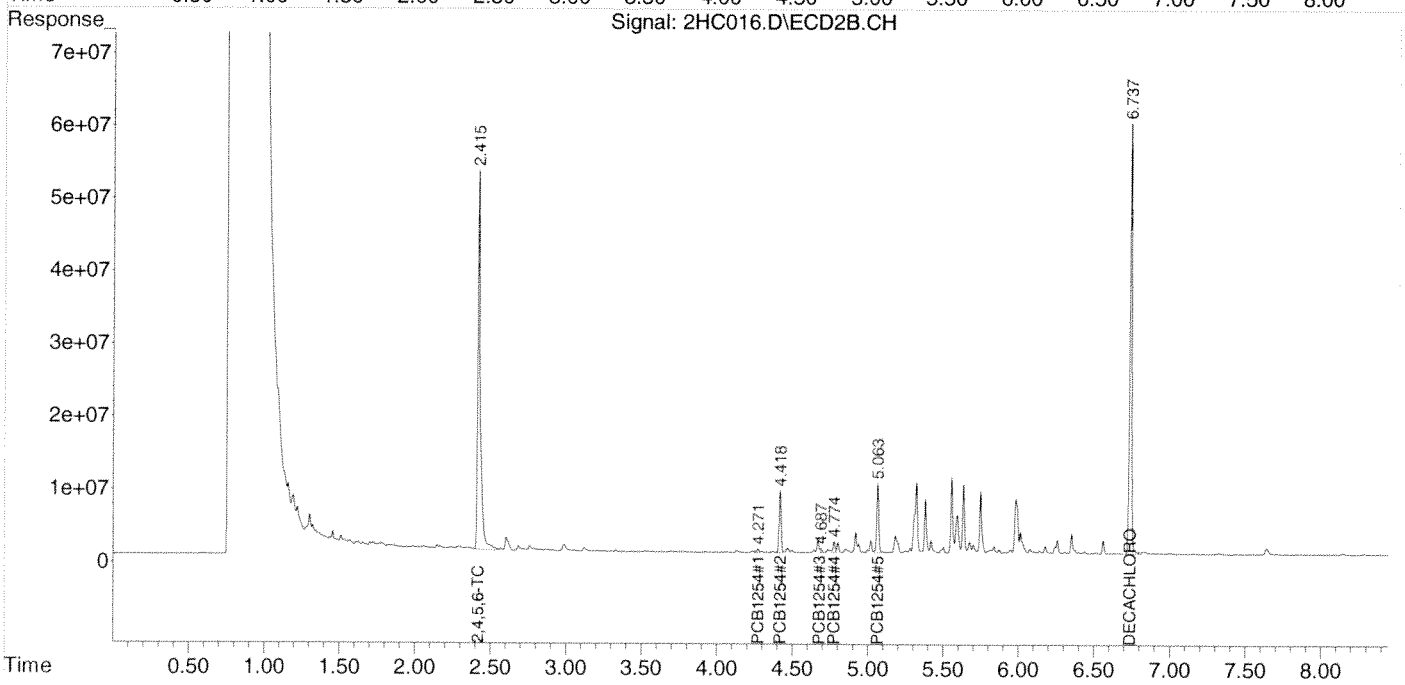
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC016.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 9:51
Operator : RC
Sample : A404270-23
Misc :
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:21:50 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:03
Operator : RC
Sample : A404270-24
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:19:53 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.444	2.416	1515.7E6	732.1E6	0.0889	0.0982
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	4.918	0	2171096	N.D.	0.0061 #
8)	PCB1260#7	4.976	5.064	18030140	9789720	0.0178	0.0249 #
9)	PCB1260#8	5.261	5.381	8971852	5017734	0.0141	0.0168
10)	PCB1260#9	5.435	5.585	3883690	3312214	0.0059	0.0102 #
11)	PCB1260#10	5.645	5.747	25293031	8475691	0.0166	0.0133
12)	DECACHLOR...	6.539	6.739	1145.8E6	579.1E6	0.1127	0.1179

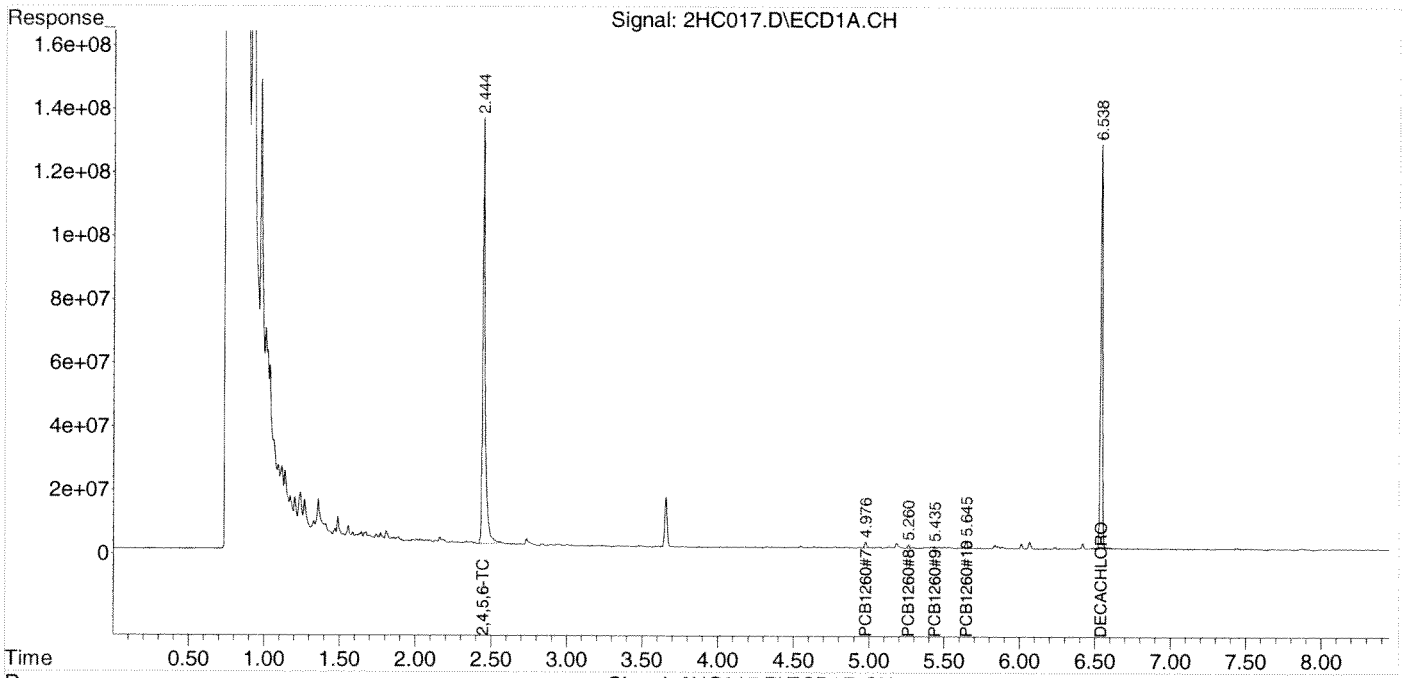
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

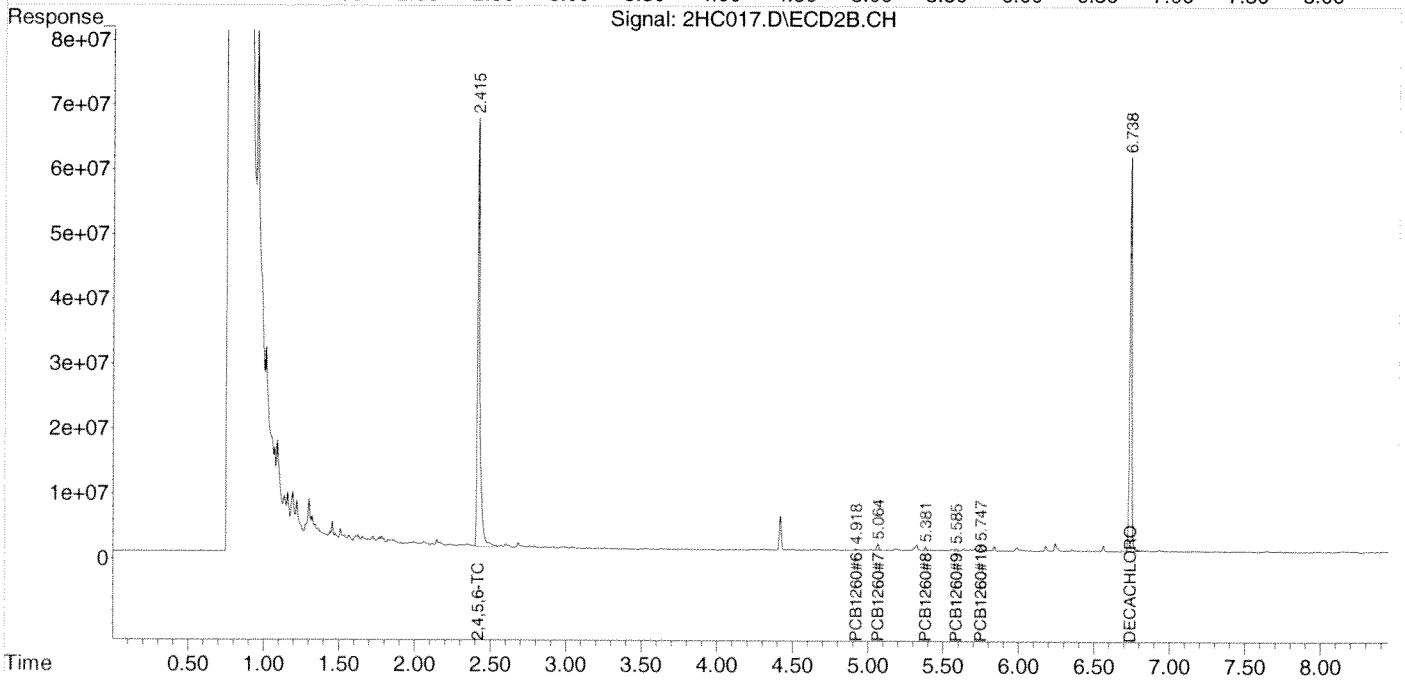
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC017.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:03
Operator : RC
Sample : A404270-24
Misc :
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:19:53 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:15
Operator : RC
Sample : A404270-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:25:30 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

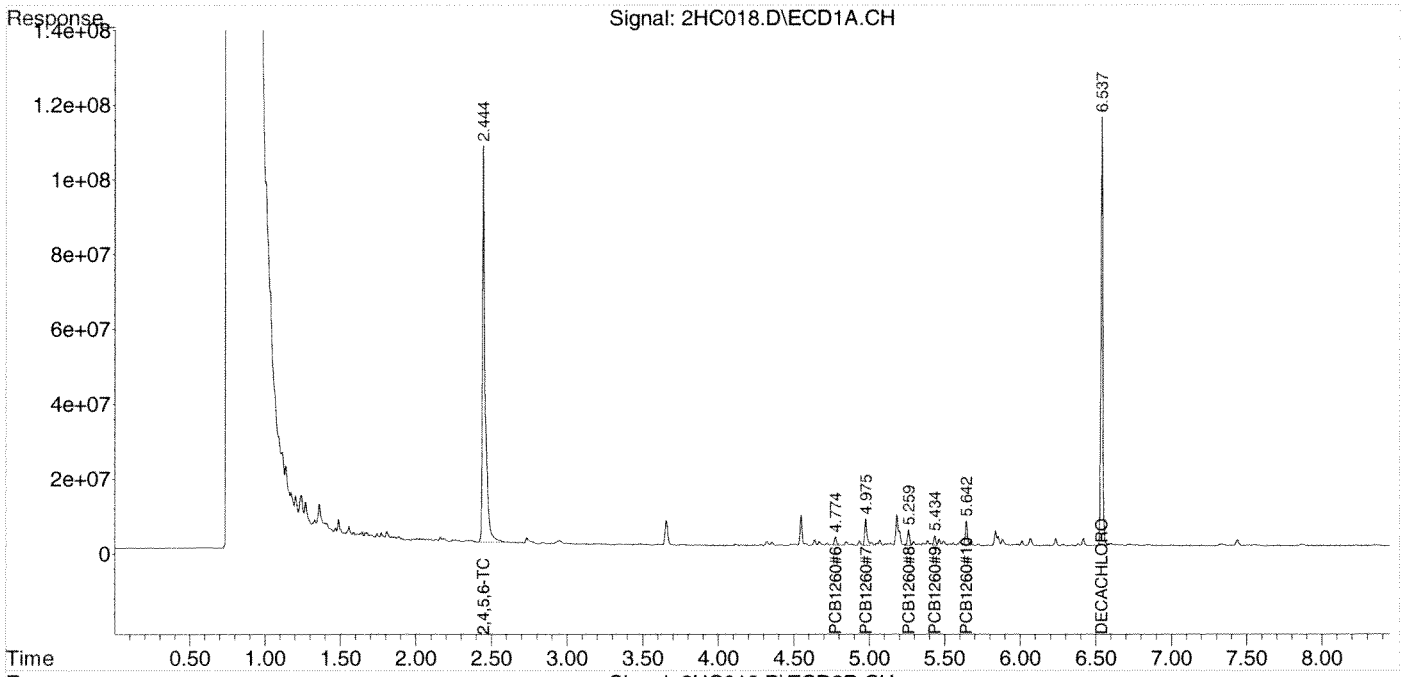
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.445	2.416	1347.3E6	648.1E6	0.0790	0.0869
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.774	4.917	22044184	12761220	0.0294	0.0356
8)	PCB1260#7	4.975	5.064	76075853	35726328	0.0752	0.0909
9)	PCB1260#8	5.260	5.381	41006443	22201340	0.0642	0.0743
10)	PCB1260#9	5.434	5.585	25104998	13339842	0.0382	0.0409
11)	PCB1260#10	5.642	5.746	64087433	31572817	0.0420	0.0495
12)	DECACHLOR...	6.538	6.737	1016.1E6	515.3E6	0.0999	0.1049

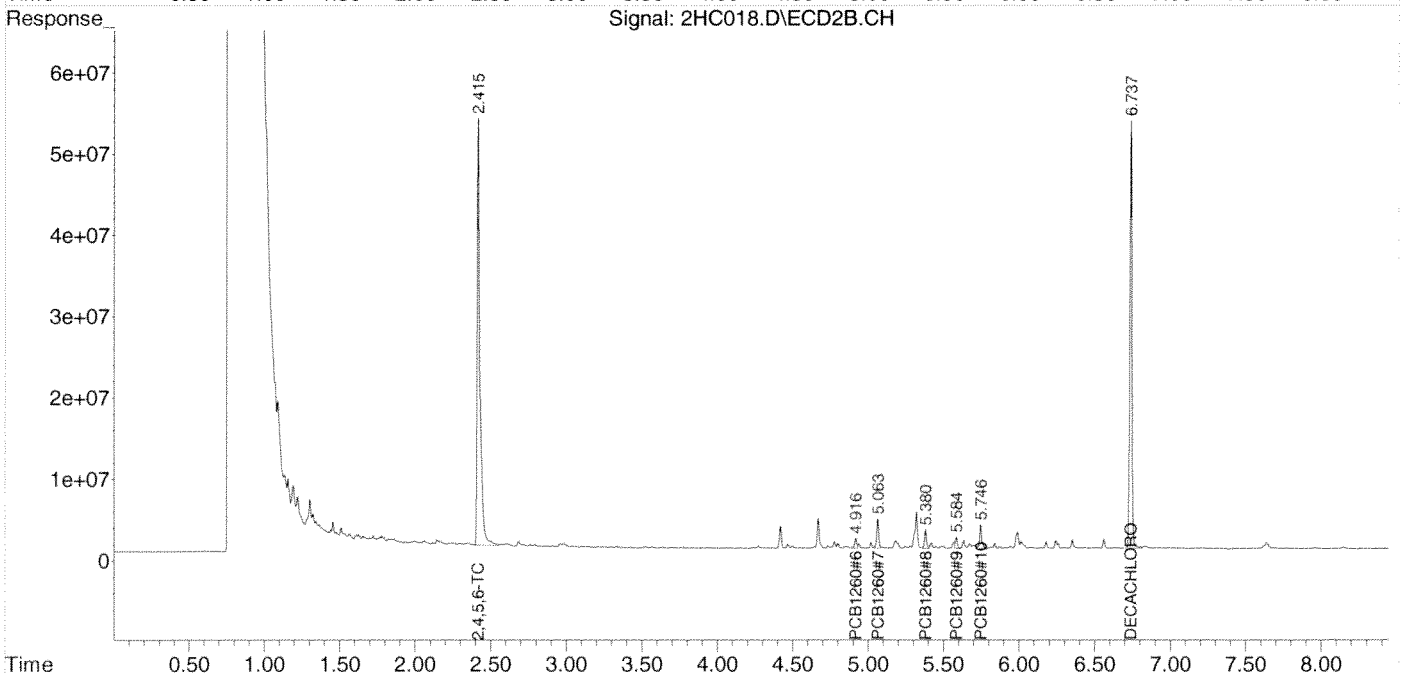
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC018.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:15
Operator : RC
Sample : A404270-25
Misc :
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:25:30 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:27
Operator : RC
Sample : A404270-26
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:45:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1349.0E6	643.1E6	0.0791	0.0863	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.774	4.916	7789925	4760243	0.0104	0.0133	#
8)	PCB1260#7	4.975	5.063	41787031	20537086	0.0413	0.0523	#
9)	PCB1260#8	5.259	5.380	27982155	14554768	0.0438	0.0487	
10)	PCB1260#9	5.434	5.585	14227824	8396774	0.0217	0.0258	
11)	PCB1260#10	5.643	5.746	36857956	17635121	0.0241	0.0277	
12)	DECACHLOR...	6.539	6.738	1093.4E6	548.1E6	0.1076	0.1116	

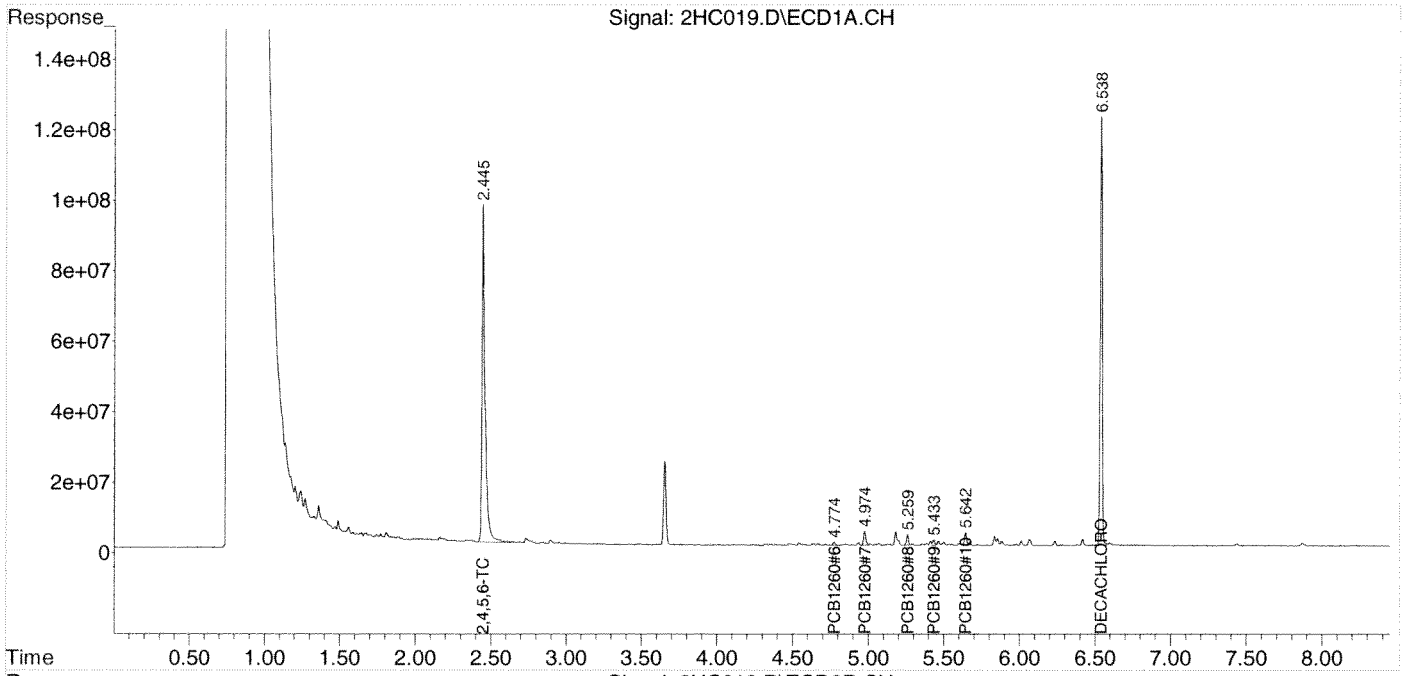
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

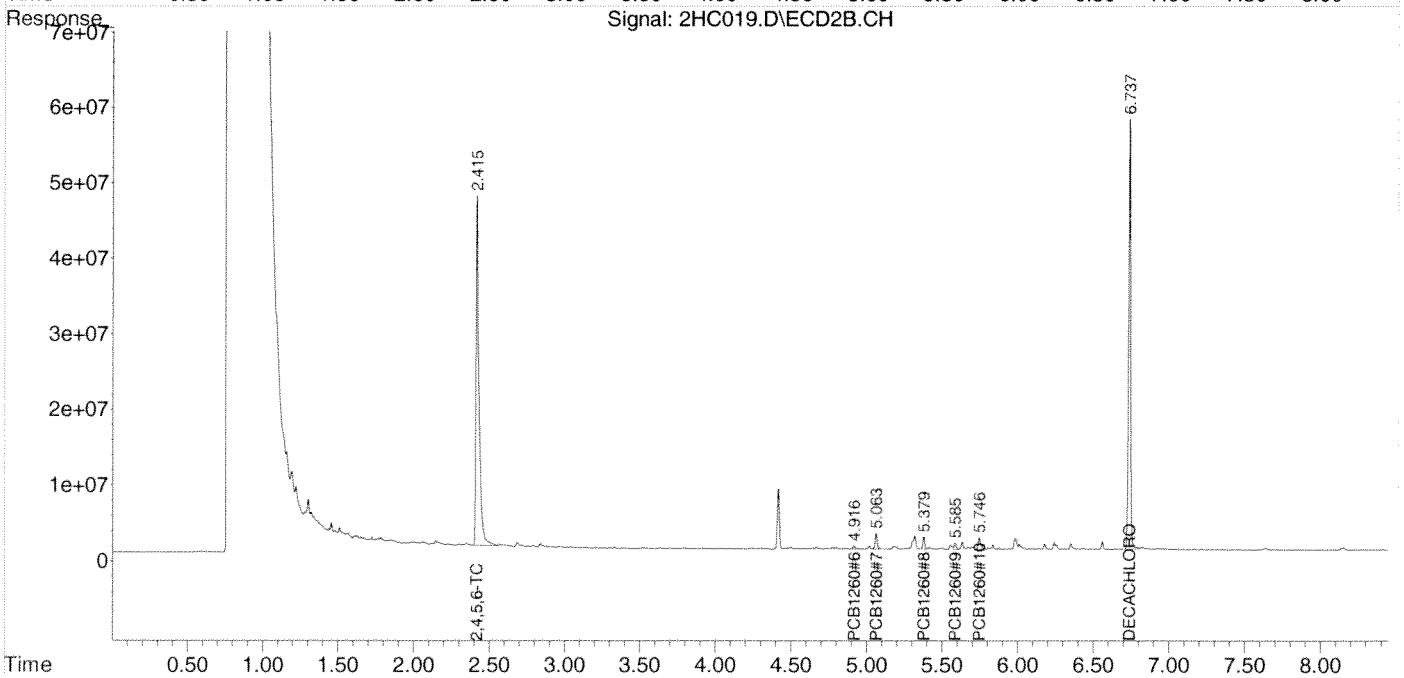
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC019.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:27
Operator : RC
Sample : A404270-26
Misc :
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:45:01 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:39
Operator : RC
Sample : A404270-27
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:48:57 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1430.8E6	731.9E6	0.0839	0.0982	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.775	4.917	93543065	43830948	0.1248	0.1222	
8)	PCB1260#7	4.975	5.064	334.8E6	148.3E6	0.3312	0.3774	
9)	PCB1260#8	5.260	5.381	260.6E6	130.1E6	0.4081	0.4354	
10)	PCB1260#9	5.435	5.585	133.3E6	66714402	0.2031	0.2047	
11)	PCB1260#10	5.642	5.747	260.6E6	139.2E6	0.1706	0.2183	#
12)	DECACHLOR...	6.538	6.738	1003.2E6	498.3E6	0.0987	0.1015	

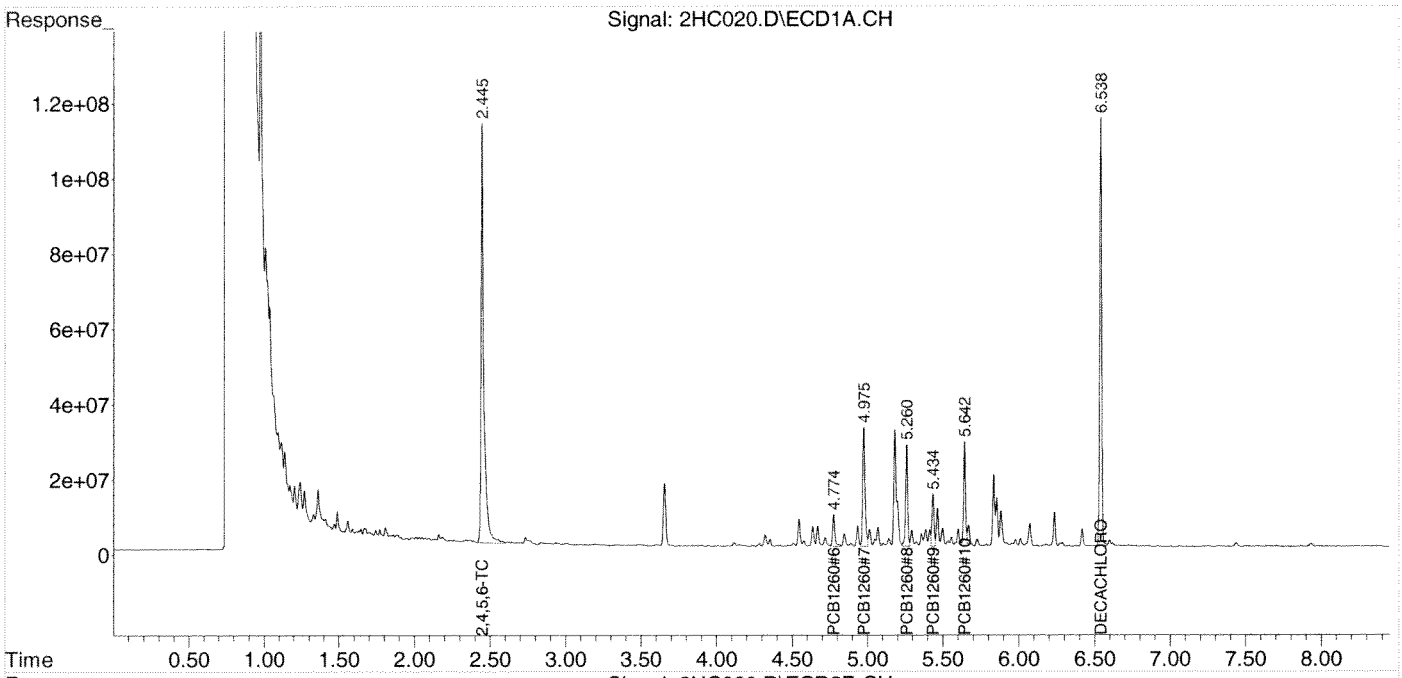
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

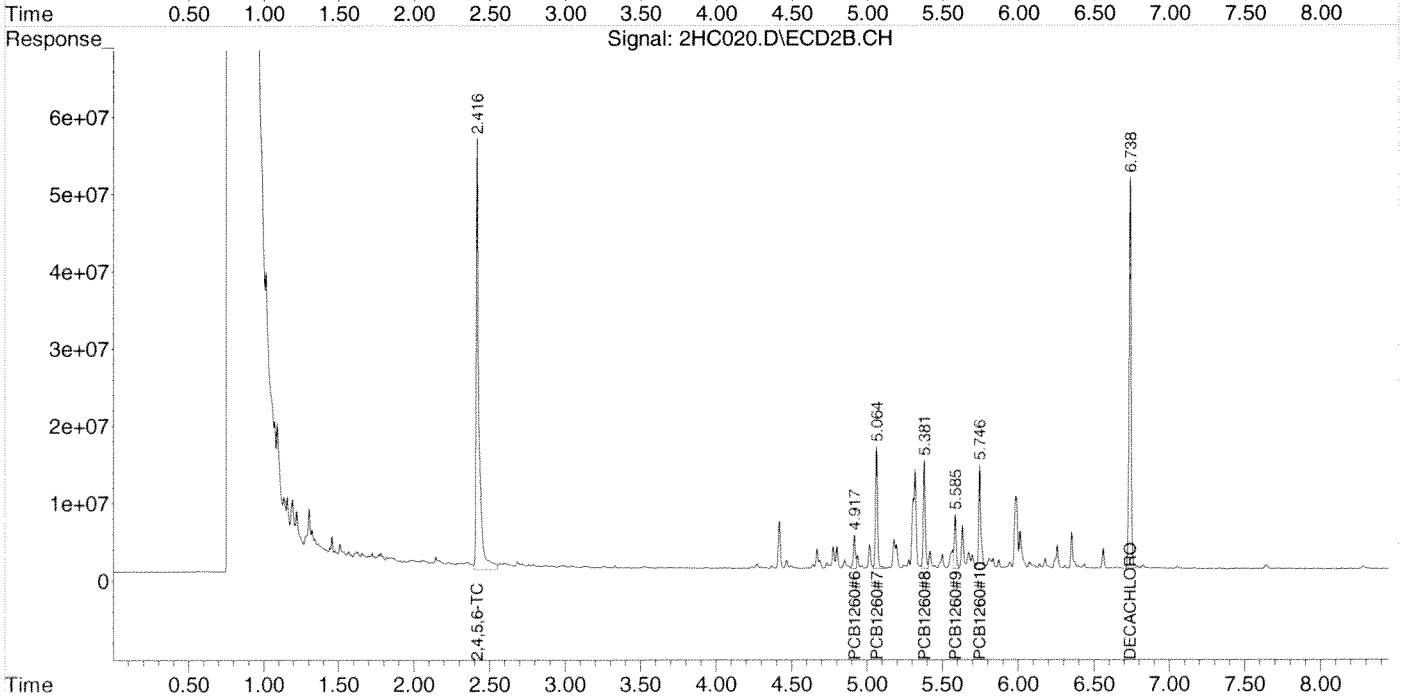
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:39
Operator : RC
Sample : A404270-27
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:48:57 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:39
Operator : RC
Sample : A404270-27
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:51:00 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.445	2.416	1524.5E6	731.9E6	0.0911	0.0922	
2)	PCB1254#1	4.116	4.271	11882404	7199886	0.0243	0.0273	
3)	PCB1254#2	4.323	4.419	35464588	59123276	0.0415	0.2070	#
4)	PCB1254#3	4.547	4.687	73463238	9692283	0.1466	0.0414	#
5)	PCB1254#4	4.637	4.775	54665385	26419199	0.0641	0.0666	
6)	PCB1254#5	4.845	5.064	37362778	148.3E6	0.0561	0.8185	#
7)	DECACHLOR...	6.538	6.738	1006.7E6	498.3E6	0.0949	0.0951	

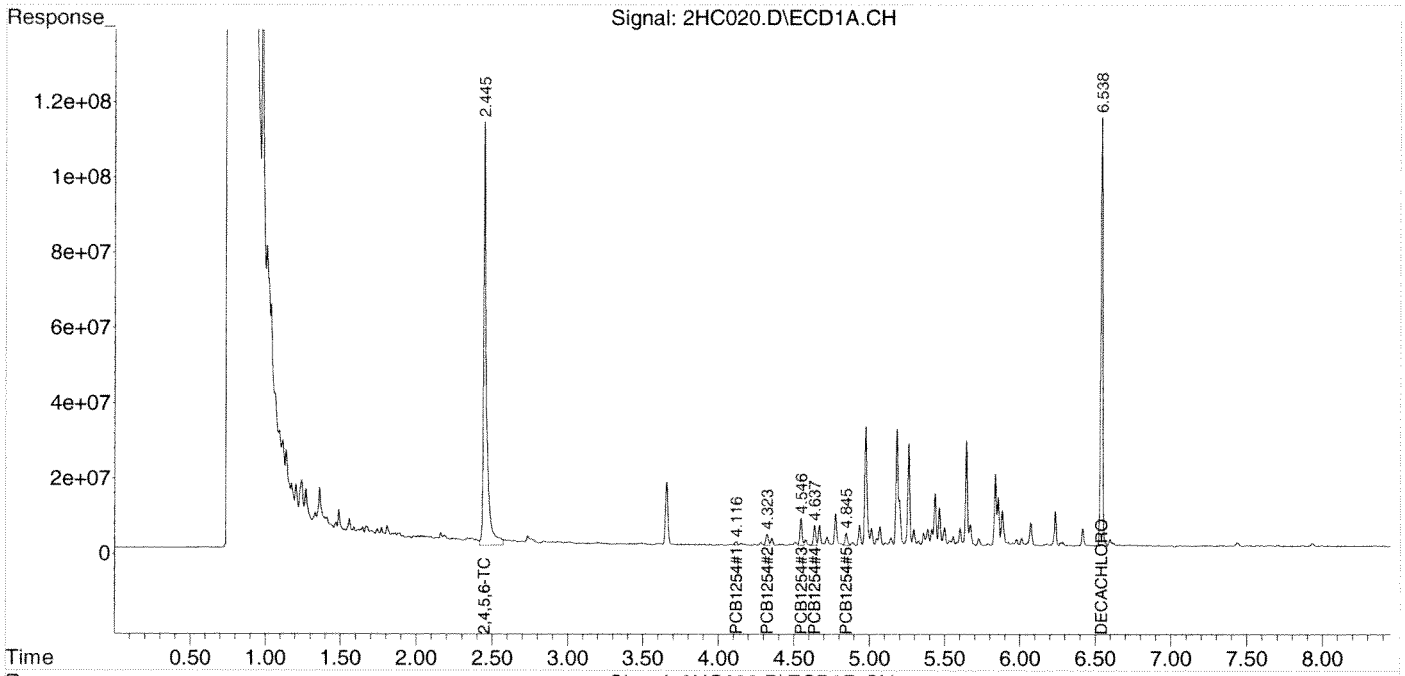
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

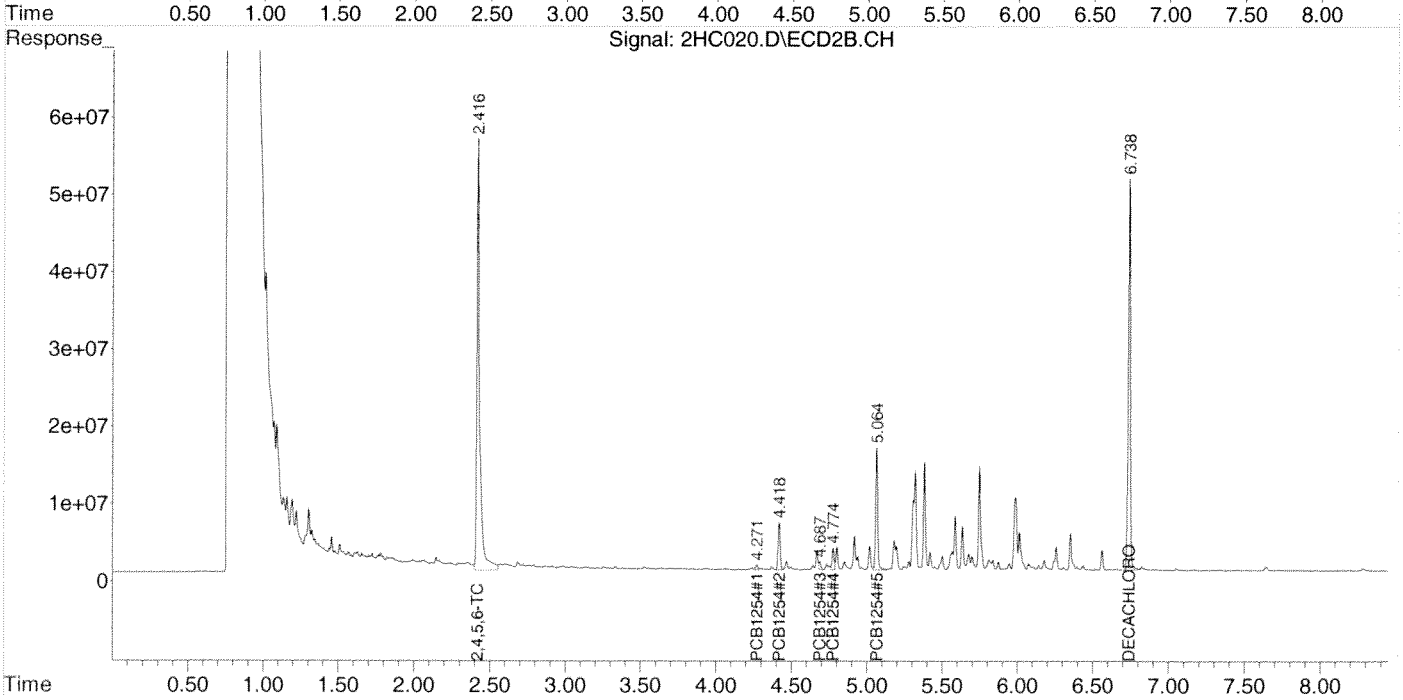
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC020.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:39
Operator : RC
Sample : A404270-27
Misc :
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 10:51:00 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HC14\
Data File : 2HC021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:52
Operator : RC
Sample : AA29971-CCV3
Misc : AA29972-CCV1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 11:00:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

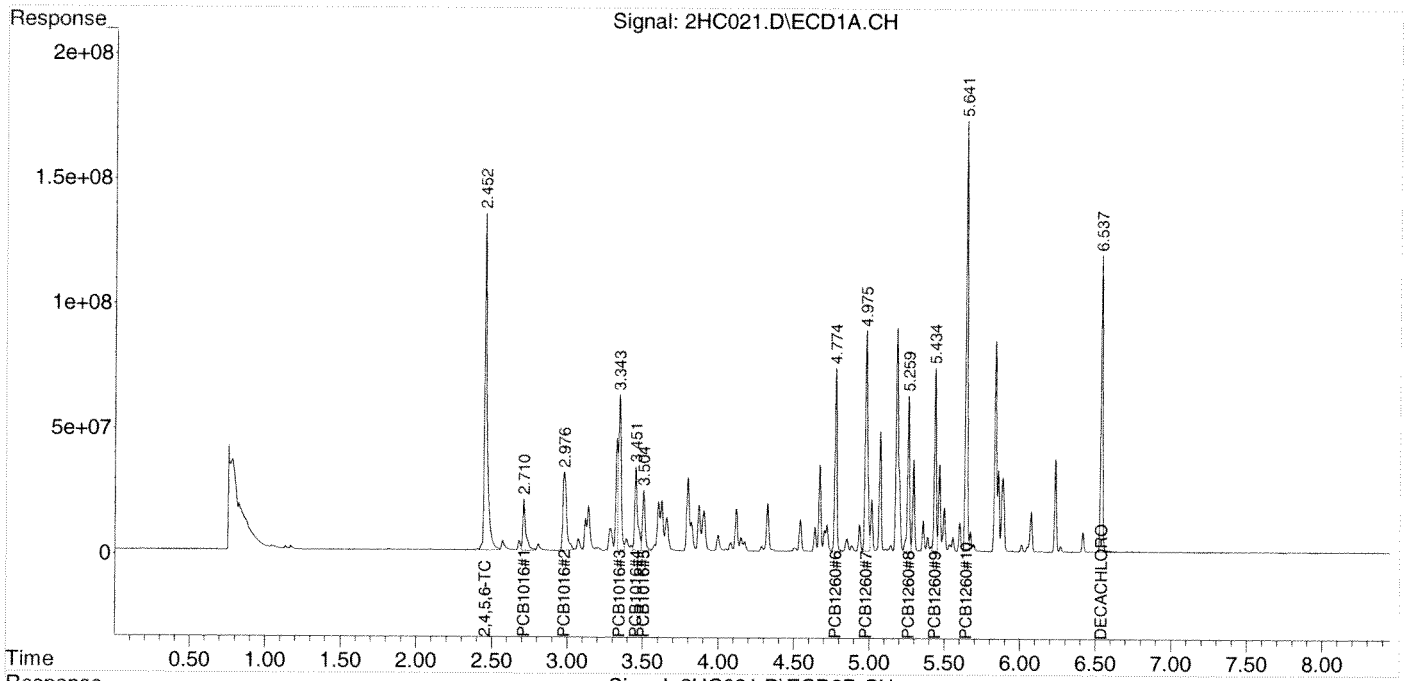
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.452	2.423	1614.2E6	754.1E6	0.0946	0.1011
2)	PCB1016#1	2.710	2.765	278.1E6	129.3E6	0.8616	0.9048
3)	PCB1016#2	2.976	3.063	540.3E6	243.1E6	0.8778	0.8502
4)	PCB1016#3	3.343	3.694	763.6E6	115.4E6	0.9345	0.9252
5)	PCB1016#4	3.452	3.732	452.1E6	119.8E6	0.9031	0.9340
6)	PCB1016#5	3.505	3.769	289.8E6	104.2E6	0.9537	0.7922
7)	PCB1260#6	4.775	4.917	687.5E6	341.5E6	0.9172	0.9525
8)	PCB1260#7	4.976	5.064	1024.8E6	401.3E6	1.0137	1.0211
9)	PCB1260#8	5.259	5.380	600.1E6	302.9E6	0.9398	1.0138
10)	PCB1260#9	5.434	5.585	661.2E6	328.4E6	1.0071	1.0078
11)	PCB1260#10	5.641	5.747	1509.1E6	705.7E6	0.9878	1.1066
12)	DECACHLOR...	6.538	6.738	1056.5E6	522.5E6	0.1039	0.1064

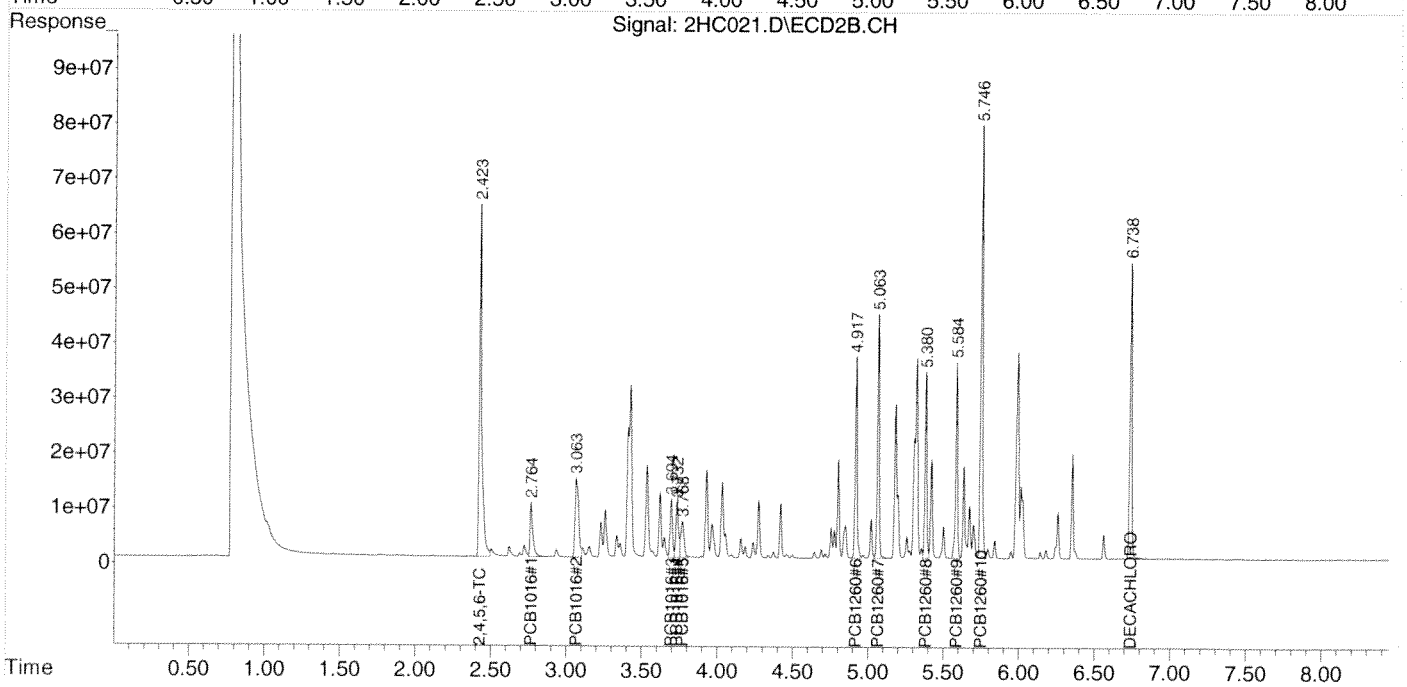
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC021.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 10:52
Operator : RC
Sample : AA29971-CCV3
Misc : AA29972-CCV1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 11:00:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Fri Aug 08 09:08:26 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 11:04
Operator : RC
Sample : AA29971-ARC3
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 11:12:51 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.452	2.423	1568.7E6	737.2E6	0.0937	0.0928
2)	PCB1254#1	4.118	4.273	451.6E6	255.8E6	0.9227	0.9699
3)	PCB1254#2	4.324	4.419	811.7E6	289.6E6	0.9491	1.0140
4)	PCB1254#3	4.545	4.688	499.0E6	221.0E6	0.9962	0.9430
5)	PCB1254#4	4.638	4.775	866.4E6	413.5E6	1.0164	1.0431
6)	PCB1254#5	4.845	5.065	642.2E6	197.8E6	0.9647	1.0914
7)	DECACHLOR...	6.538	6.737	1002.3E6	493.0E6	0.0945	0.0941

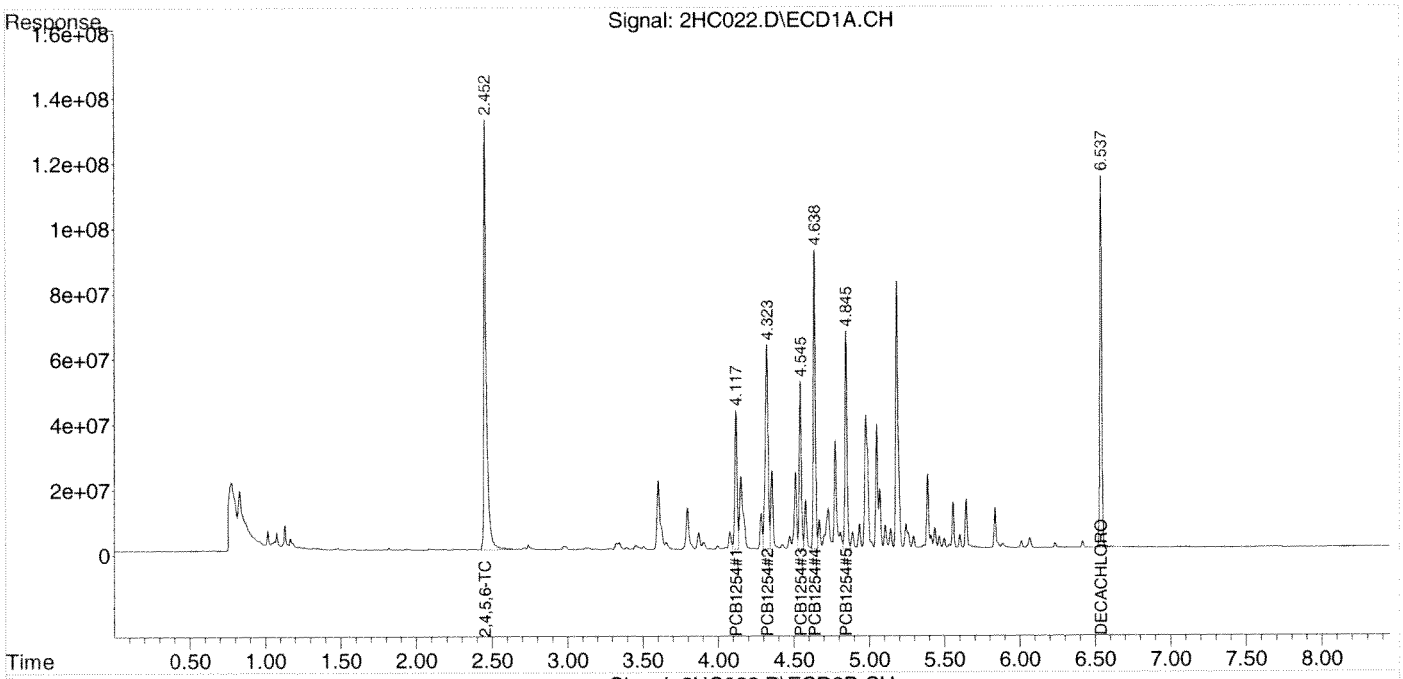
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

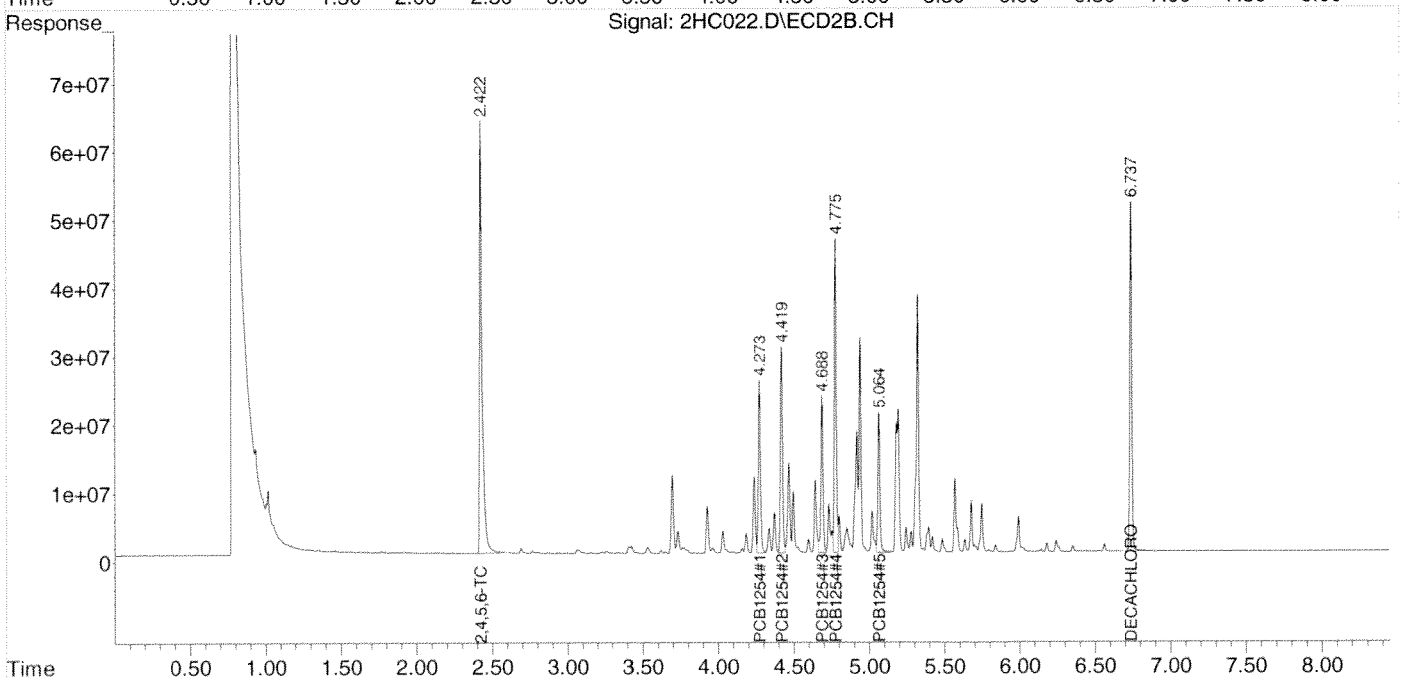
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HC14\
Data File : 2HC022.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 08 Aug 2014 11:04
Operator : RC
Sample : AA29971-ARC3
Misc :
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 11:12:51 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA30013

Instrument: OSVGCECD2

Calibration ID: 1408030

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA30013-CCV1	QC		1		A4F0547		
AA30013-ARC1	QC		2		A4F0548		
4H08042-BLK1	QC		3				
4H08042-BS1	QC		4				
4H08042-MS1	QC		5				
4H08042-MSD1	QC		6				
A404270-11RE1	8082A DOD	D	7				CH2M Hill, Inc. (CH025)
A404270-02RE1	8082A DOD	D	8				CH2M Hill, Inc. (CH025)
A404270-06RE1	8082A DOD	D	9				CH2M Hill, Inc. (CH025)
A404270-10RE1	8082A DOD	D	10				CH2M Hill, Inc. (CH025)
A404270-14RE1	8082A DOD	D	11				CH2M Hill, Inc. (CH025)
A404270-21RE1	8082A DOD	D	12				CH2M Hill, Inc. (CH025)
AA30013-CCV2	QC		13		A4F0547		
AA30013-ARC2	QC		14		A4F0548		
A404270-22RE1	8082A DOD	D	15				CH2M Hill, Inc. (CH025)
A404270-23RE1	8082A DOD	D	16				CH2M Hill, Inc. (CH025)
AA30013-CCV3	QC		17		A4F0547		
AA30013-ARC3	QC		18		A4F0548		

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/8/2014 4:21:56PM

Analysis
8082A DOD [EPA 8082A]

4H08042
ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H08042-BLK1		Blank		QC	—	—	30.0	10.0			1000		
4H08042-BS1		LCS		QC	—	—	30.0	10.0	A4E0189	1000	1000		
4H08042-MS1		Matrix Spike [A404270-11RE1]		QC	—	—	29.6	10.0	A4E0189	1000	1000		
4H08042-MSD1		Matrix Spike Dup [A404270-11RE1]		QC	—	—	29.7	10.0	A4E0189	1000	1000		
A404270-02RE1 1	D	TR-5TH-CSW02-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.9	10.0			1000		Surrogate biased high, hits in sa
A404270-06RE1 2	D	TR-5TH-CSW06-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.5	10.0			1000		Surrogate biased high, hits in sa
A404270-10RE1 3	D	TR-5TH-CSW09-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.1	10.0			1000		Surrogate biased high, hits in sa
A404270-11RE1 4	D	TR-5TH-CSW010-0814 D[C10]	08-Aug-14	8082A DOD	—	—	30.2	10.0			1000		Surrogate biased high, hits in sa
A404270-14RE1 5	D	TR-5TH-CSW12-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.6	10.0			1000		Surrogate biased high, hits in sa
A404270-21RE1 6	D	TR-5TH-CSF03-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.5	10.0			1000		Surrogate biased high, hits in sa
A404270-22RE1 7	D	TR-5TH-CSF04-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.9	10.0			1000		LCS biased high, hits in sample.
A404270-23RE1 8	D	TR-5TH-CSF05-0814 D[C10]	08-Aug-14	8082A DOD	—	—	29.7	10.0			1000		LCS biased high, hits in sample.

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 soil

Start Date/Time 8.9.14 8:42

StopDate/Time 8.9.14 11:32

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4E0359	Solvent Hexane	141800
A4F0167	Baked Sodium Sulfate	137632
A4G0236	Solvent Dichloromethane	Solvent Lot # DK095

PREPARATION BENCH SHEET

Printed: 8/8/2014 4:21:56PM

4H08042

ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4E0189 PCB Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

Equipment Used

Sonicator OSON-1,-2,-3 — Tuned per manufacturer instructions? [X] Yes [ ] No [ ] NA
Turbovap OTVAP-1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi
Turbovap OTVAP-2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi
Turbovap OTVAP-3 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi (final): 12 psi
Balance OEXTBAL7 — Daily calibration complete? [X] Yes [ ] No [ ] NA
Thermometer ORL-T-42
Other

MAC 8.9.14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

1061 of 1287

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:03
Operator : JJB
Sample : AA30013-CCV1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:12:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.431	2.397	1842.8E6	896.7E6	0.1081	0.1203
2)	PCB1016#1	2.689	2.736	308.2E6	153.9E6	0.9549	1.0772
3)	PCB1016#2	2.953	3.033	618.8E6	300.9E6	1.0052	1.0524
4)	PCB1016#3	3.320	3.662	859.7E6	141.0E6	1.0522	1.1304
5)	PCB1016#4	3.428	3.700	515.0E6	145.9E6	1.0290	1.1381
6)	PCB1016#5	3.480	3.737	330.1E6	125.8E6	1.0863	0.9563
7)	PCB1260#6	4.753	4.891	779.5E6	421.3E6	1.0400	1.1750
8)	PCB1260#7	4.955	5.039	1125.7E6	492.0E6	1.1135	1.2520
9)	PCB1260#8	5.239	5.356	695.2E6	372.8E6	1.0889	1.2476
10)	PCB1260#9	5.415	5.561	759.1E6	405.6E6	1.1562	1.2447
11)	PCB1260#10	5.623	5.723	1717.7E6	872.2E6	1.1244	1.3677
12)	DECACHLOR...	6.523	6.715	1123.0E6	610.1E6	0.1105	0.1242

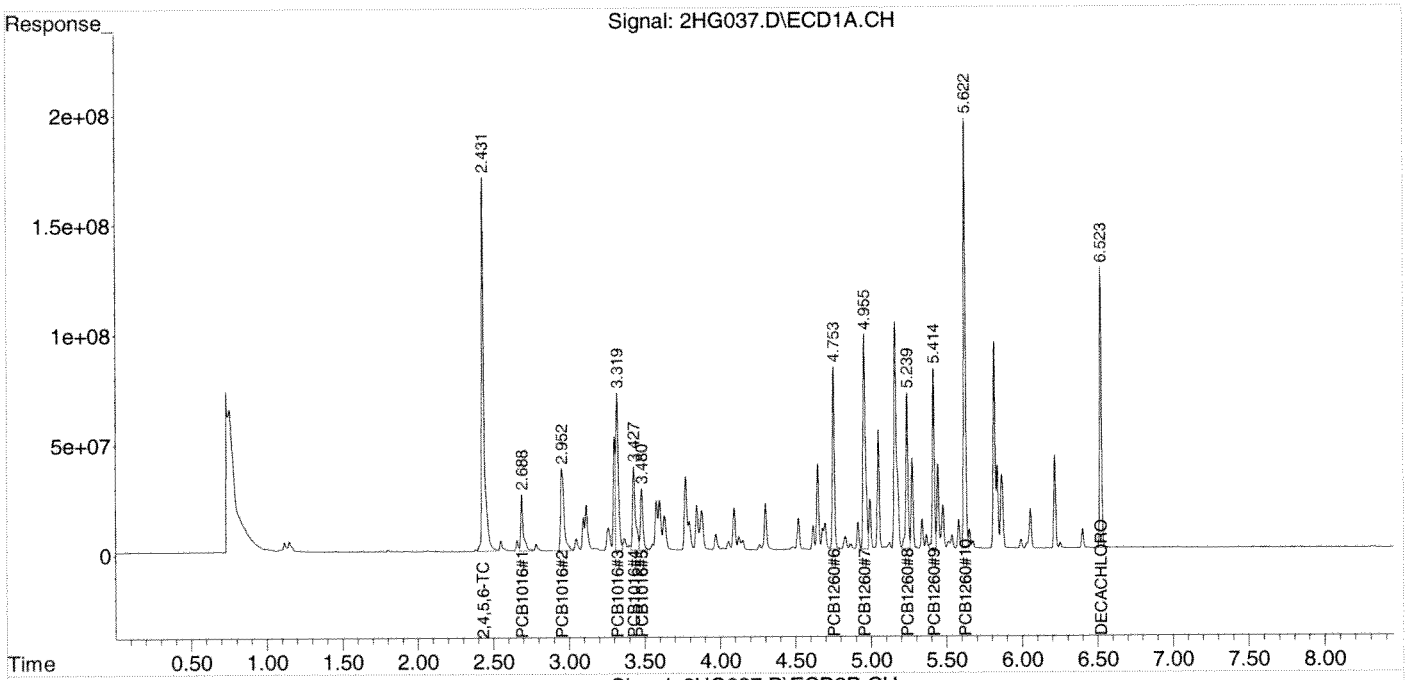
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

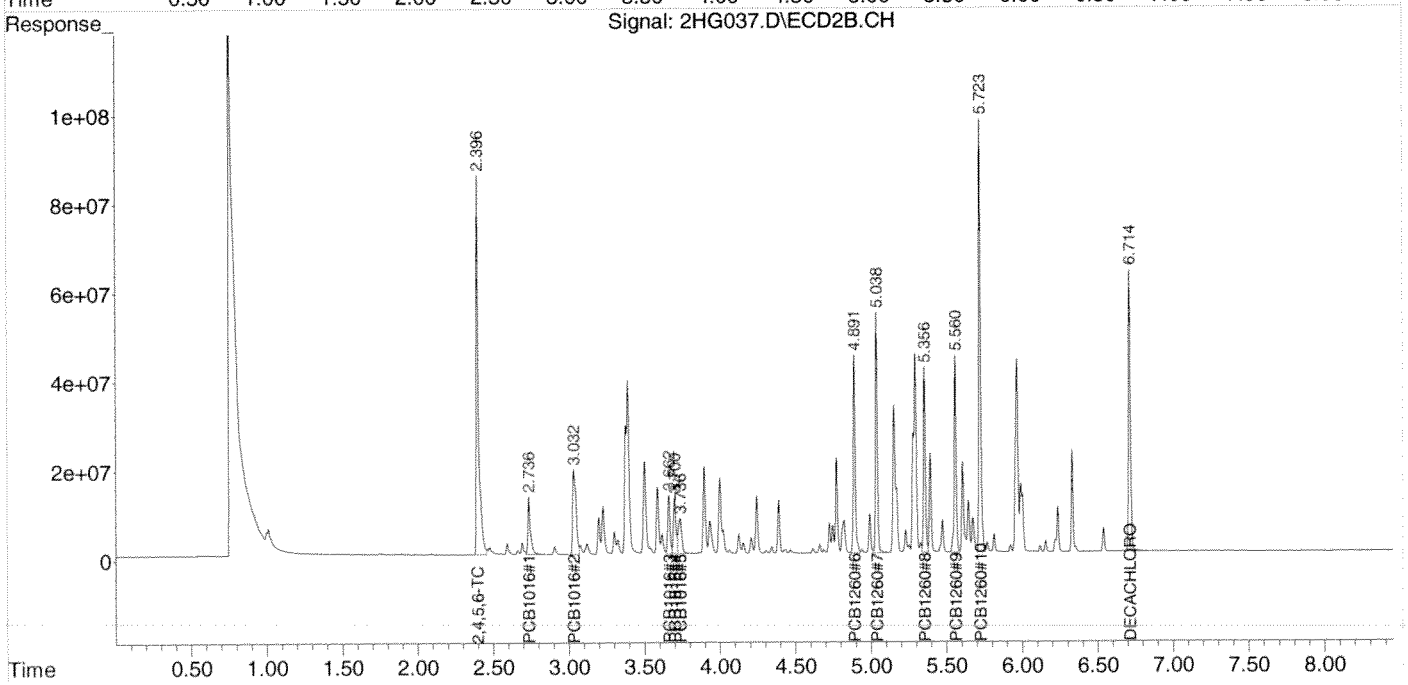
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:03
Operator : JJB
Sample : AA30013-CCV1
Misc :
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:12:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:15
Operator : JJB
Sample : AA30013-ARC1
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:26:08 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.430	2.398	1309.9E6	800.5E6	0.0782	0.1008	#
2)	PCB1254#1	4.091	4.245	451.9E6	286.1E6	0.9232	1.0848	
3)	PCB1254#2	4.298	4.391	830.8E6	257.1E6	0.9715	0.9001	
4)	PCB1254#3	4.520	4.662	456.4E6	249.7E6	0.9110	1.0654	
5)	PCB1254#4	4.614	4.750	812.2E6	467.3E6	0.9527	1.1788	
6)	PCB1254#5	4.822	5.039	655.9E6	180.2E6	0.9852	0.9945	
7)	DECACHLOR...	6.518	6.713	1081.8E6	513.9E6	0.1020	0.0981	

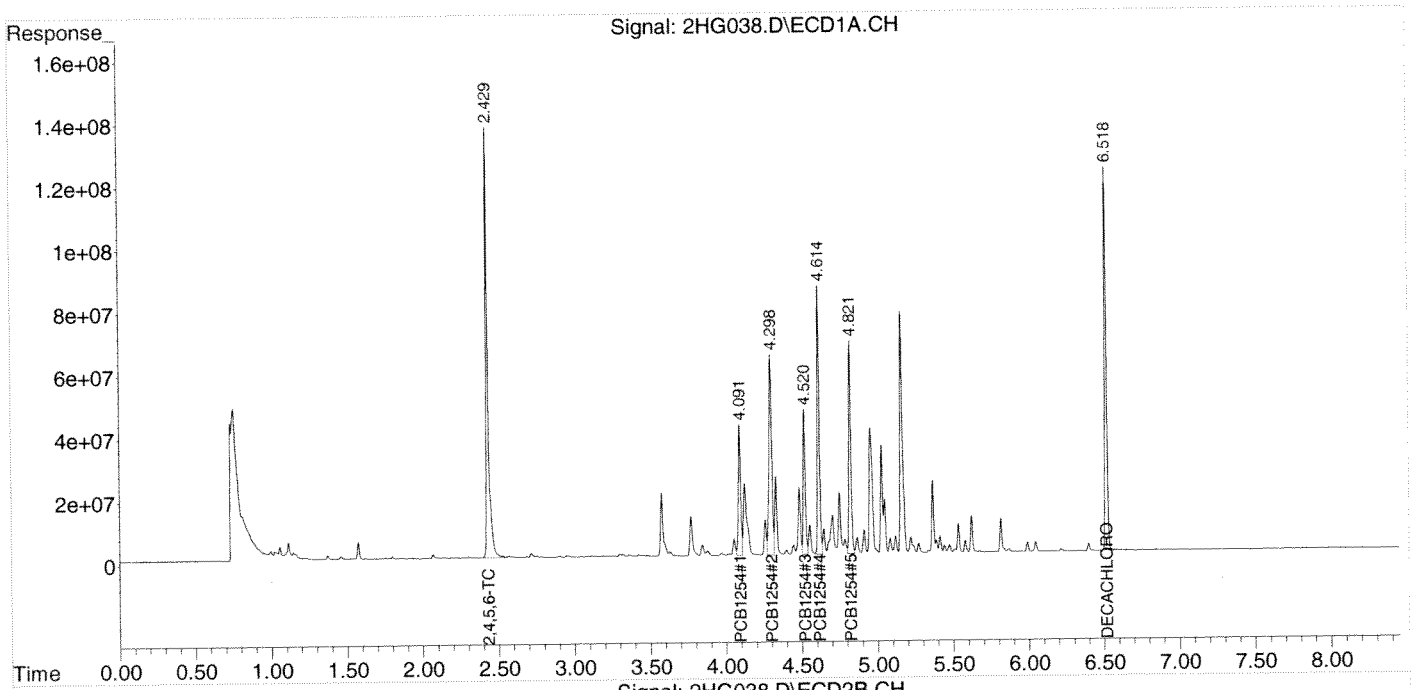
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

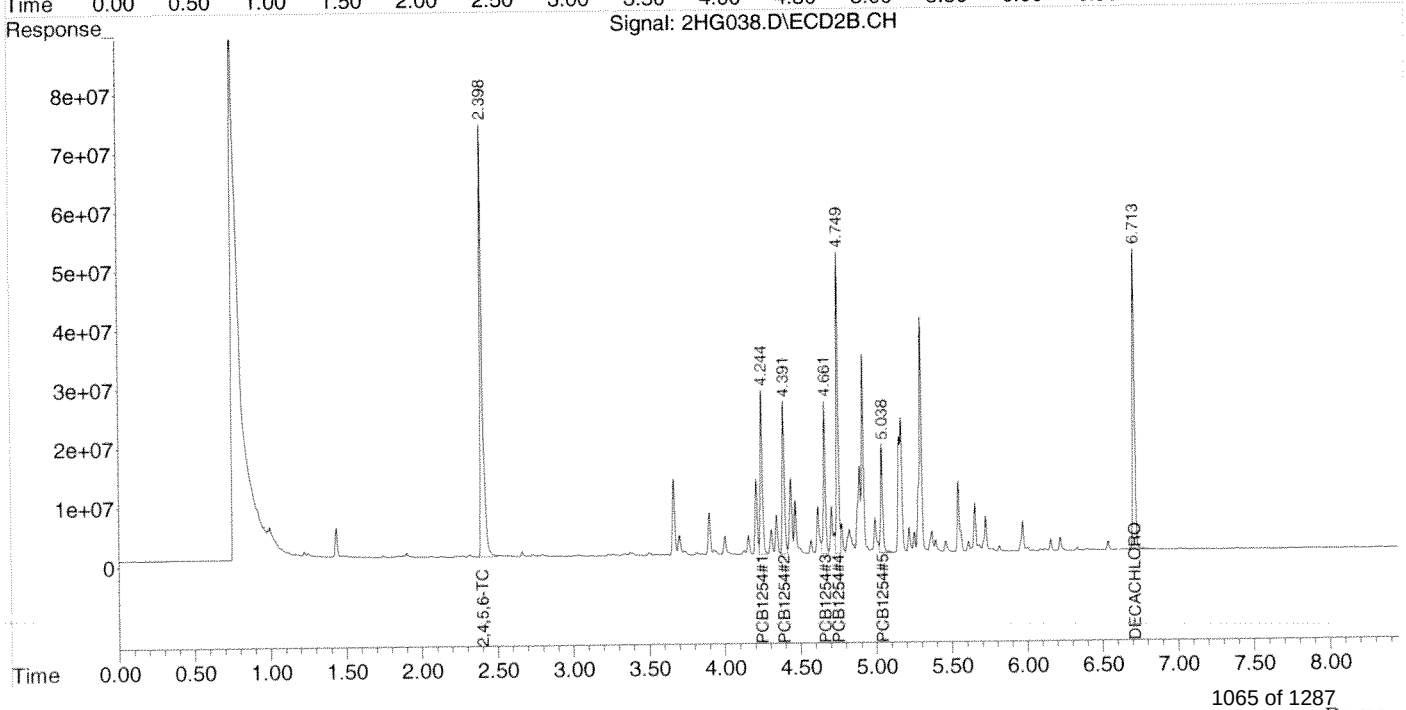
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG038.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:15
Operator : JJB
Sample : AA30013-ARC1
Misc :
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:26:08 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:27
Operator : JJB
Sample : 4H08042-BLK1
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:37:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.426	2.395	1326.4E6	801.4E6	0.0778	0.1075 #
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.518	6.713	972.2E6	555.4E6	0.0956	0.1131

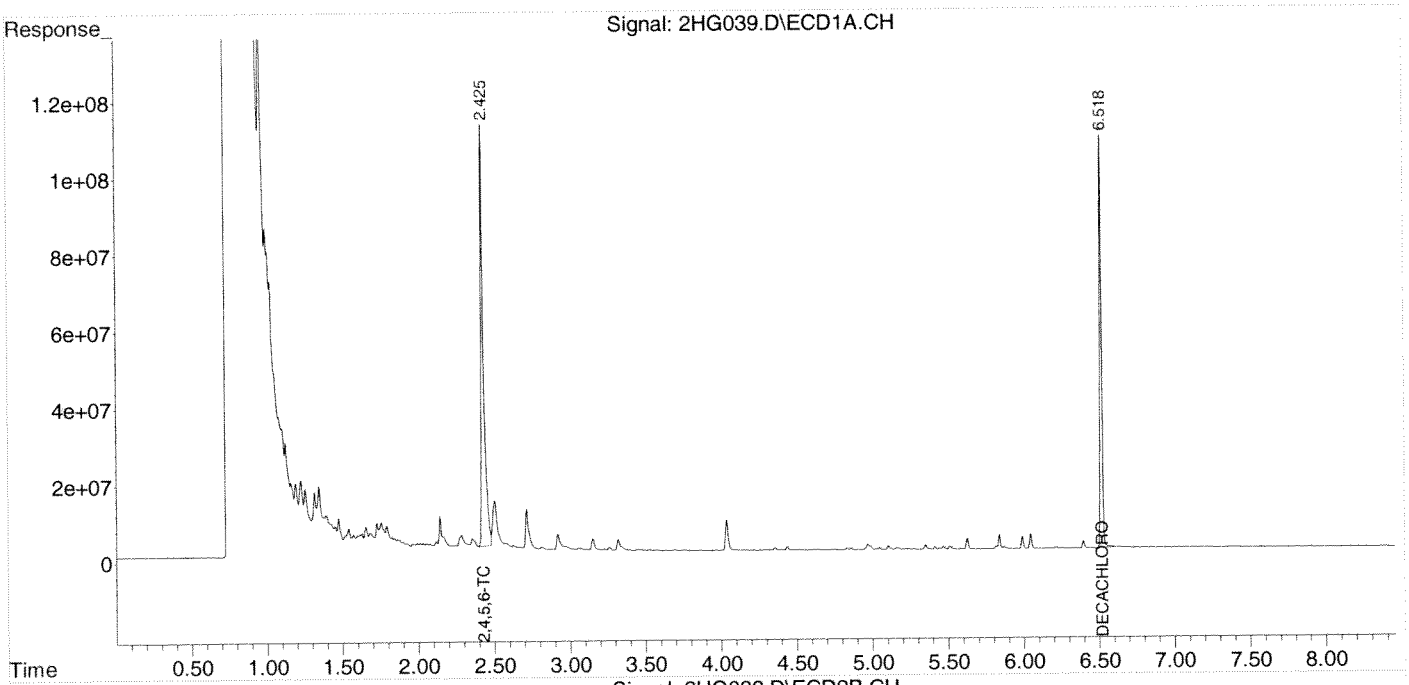
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

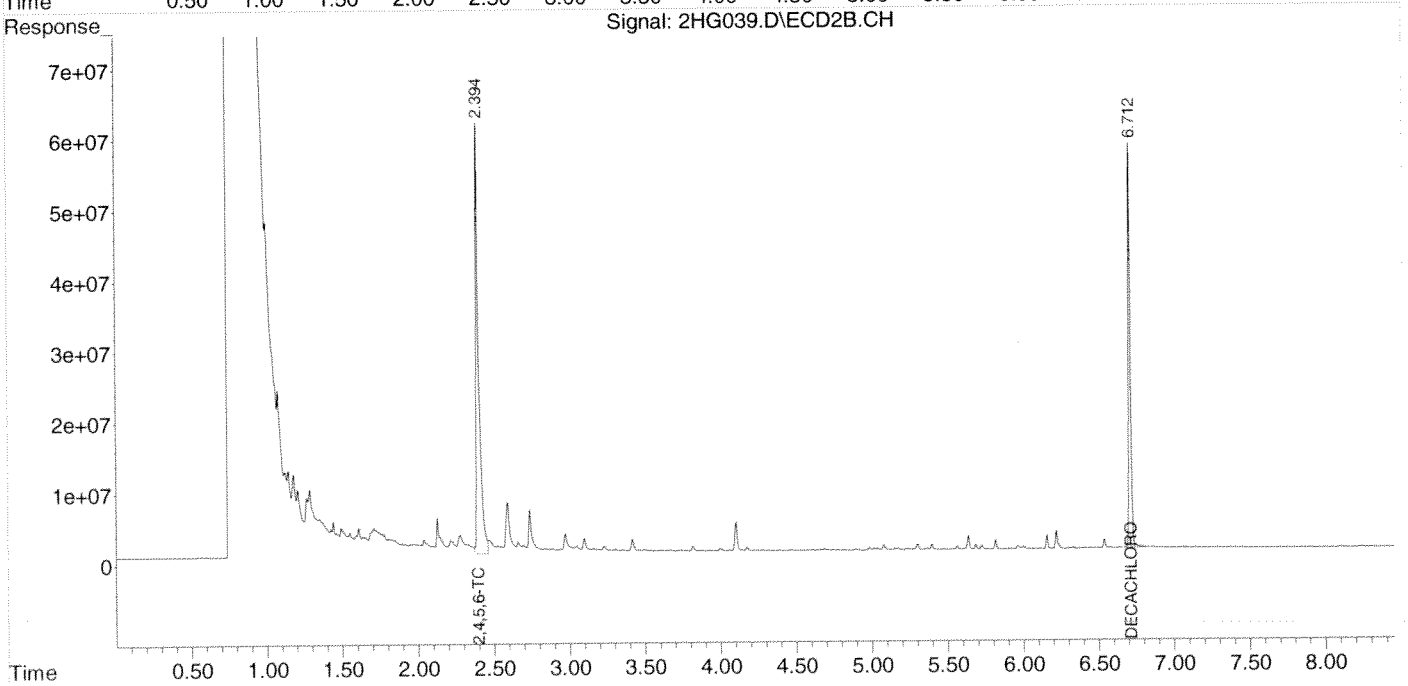
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG039.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:27
Operator : JJB
Sample : 4H08042-BLK1
Misc :
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:37:44 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG040.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:39
Operator : JJB
Sample : 4H08042-BS1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:48:41 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.426	2.396	1238.3E6	751.3E6	0.0726	0.1008	#
2)	PCB1016#1	2.684	2.738	223.8E6	195.9E6	0.6933	1.3707	#
3)	PCB1016#2	2.951	3.035	564.2E6	317.1E6	0.9166	1.1087	
4)	PCB1016#3	3.317	3.665	790.0E6	149.1E6	0.9668	1.1957	
5)	PCB1016#4	3.425	3.703	467.1E6	149.0E6	0.9332	1.1622	
6)	PCB1016#5	3.477	3.738	305.8E6	148.9E6	1.0065	1.1315	
7)	PCB1260#6	4.751	4.893	770.2E6	442.9E6	1.0276	1.2351	
8)	PCB1260#7	4.953	5.040	1212.1E6	504.0E6	1.1989	1.2826	
9)	PCB1260#8	5.238	5.357	580.3E6	323.9E6	0.9088	1.0840	
10)	PCB1260#9	5.413	5.562	653.6E6	379.2E6	0.9956	1.1636	
11)	PCB1260#10	5.621	5.725	1504.5E6	778.8E6	0.9848	1.2213	
12)	DECACHLOR...	6.519	6.713	1032.0E6	555.1E6	0.1015	0.1131	

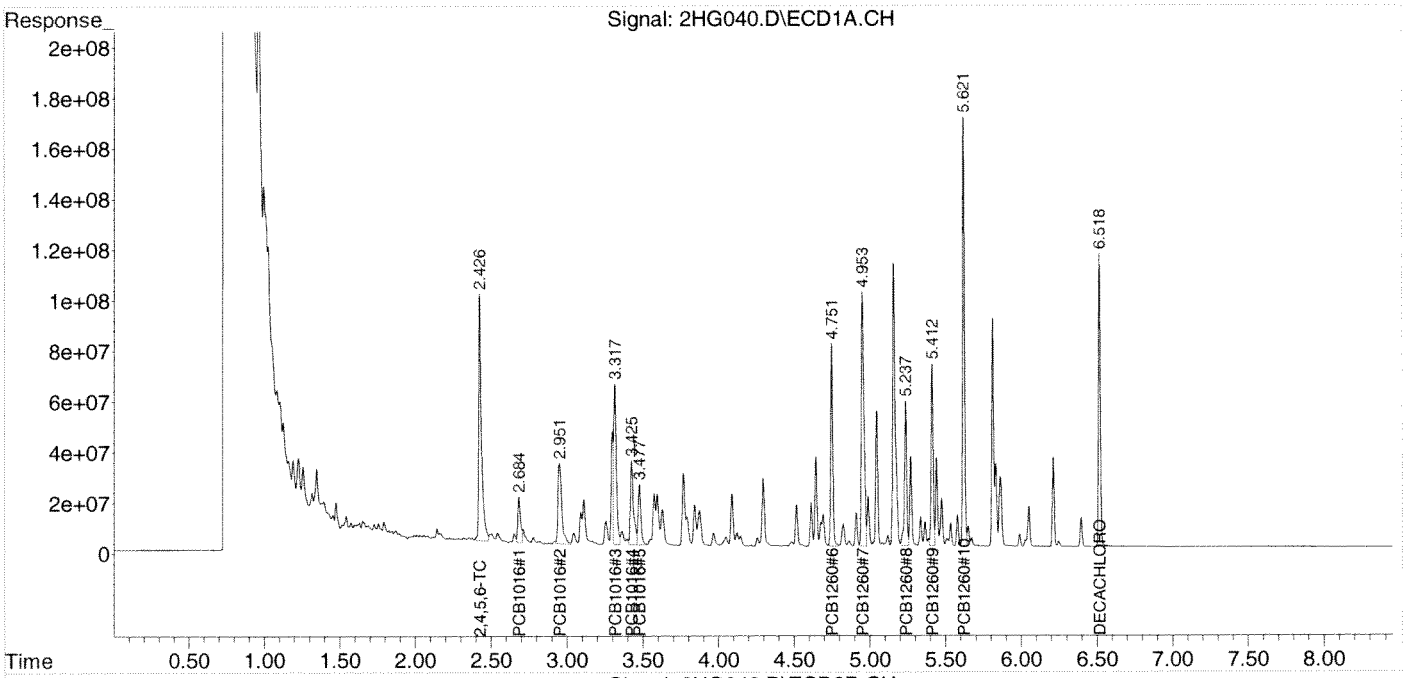
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

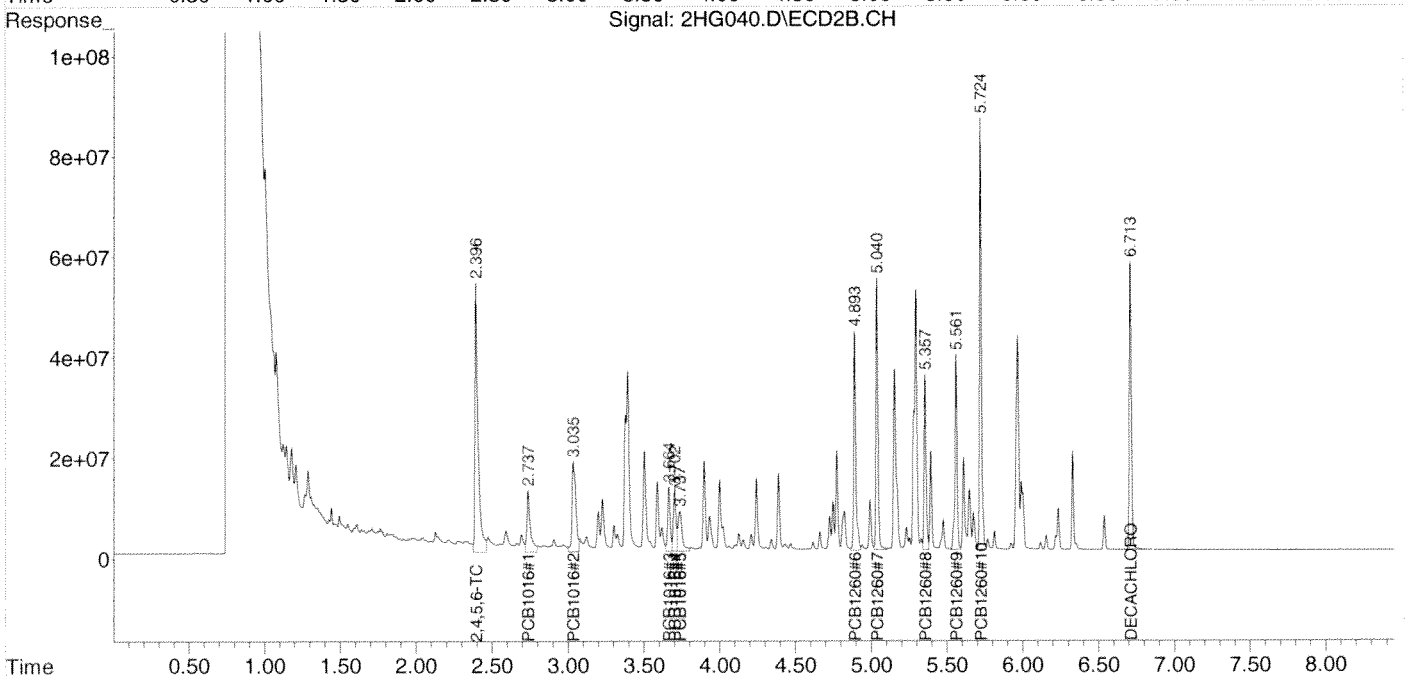
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG040.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:39
Operator : JJB
Sample : 4H08042-BS1
Misc :
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 05:48:41 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG041.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:51
Operator : JJB
Sample : 4H08042-MS1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:04:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1469.5E6	832.4E6	0.0862	0.1117	#
2)	PCB1016#1	2.683	2.736	343.5E6	202.2E6	1.0641	1.4148	#
3)	PCB1016#2	2.952	3.035	720.2E6	392.0E6	1.1701	1.3707	
4)	PCB1016#3	3.316	3.665	1098.5E6	198.4E6	1.3444	1.5905	
5)	PCB1016#4	3.425	3.703	632.9E6	199.9E6	1.2643	1.5593	
6)	PCB1016#5	3.477	3.738	419.3E6	192.7E6	1.3800	1.4646	
7)	PCB1260#6	4.751	4.893	1047.8E6	596.4E6	1.3979	1.6632	
8)	PCB1260#7	4.953	5.040	1690.9E6	704.7E6	1.6725	1.7932	
9)	PCB1260#8	5.238	5.358	831.4E6	444.2E6	1.3021	1.4868	
10)	PCB1260#9	5.413	5.562	854.7E6	506.9E6	1.3019	1.5554	
11)	PCB1260#10	5.621	5.725	1935.5E6	1027.0E6	1.2670	1.6104	#
12)	DECACHLOR...	6.518	6.713	1288.1E6	702.3E6	0.1267	0.1430	

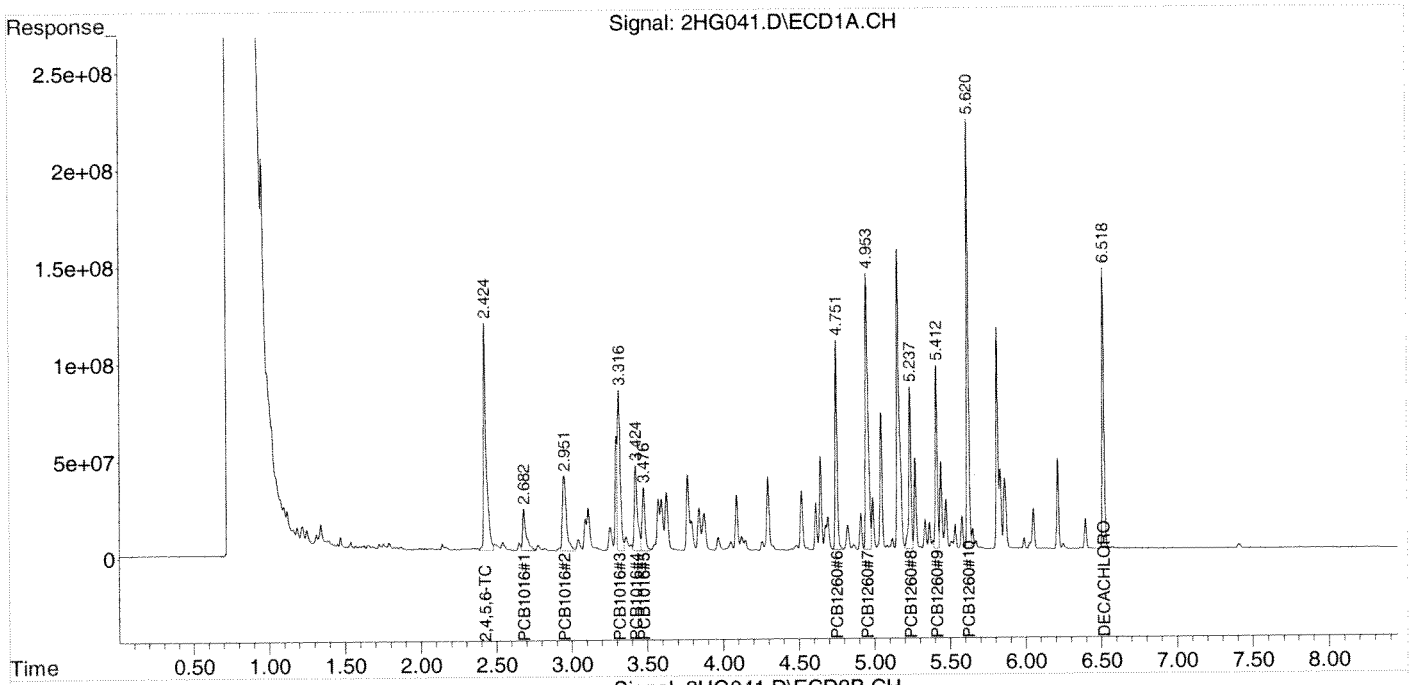
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

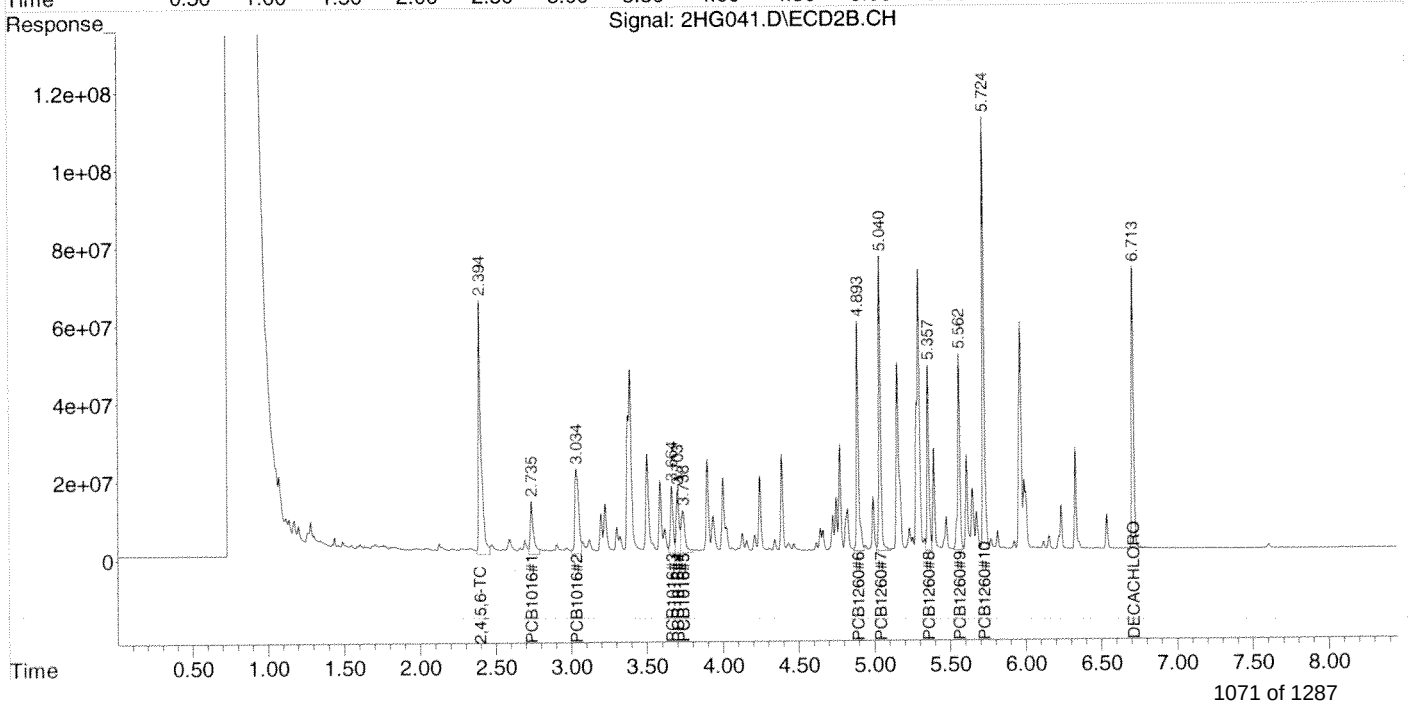
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG041.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 5:51
Operator : JJB
Sample : 4H08042-MS1
Misc :
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:04:16 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:03
Operator : JJB
Sample : 4H08042-MSD1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:05:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1810.1E6	895.8E6	0.1061	0.1202	
2)	PCB1016#1	2.682	2.736	309.3E6	205.1E6	0.9582	1.4354	#
3)	PCB1016#2	2.948	3.033	726.2E6	369.4E6	1.1797	1.2918	
4)	PCB1016#3	3.316	3.664	1087.4E6	191.8E6	1.3308	1.5381	
5)	PCB1016#4	3.424	3.702	680.8E6	195.0E6	1.3601	1.5209	
6)	PCB1016#5	3.476	3.738	450.4E6	167.9E6	1.4823	1.2765	
7)	PCB1260#6	4.751	4.893	1133.2E6	624.2E6	1.5119	1.7408	
8)	PCB1260#7	4.952	5.040	1832.6E6	730.0E6	1.8127	1.8577	
9)	PCB1260#8	5.237	5.357	896.6E6	466.8E6	1.4043	1.5624	
10)	PCB1260#9	5.412	5.562	943.6E6	532.7E6	1.4374	1.6346	
11)	PCB1260#10	5.620	5.724	2127.2E6	1096.7E6	1.3924	1.7198	
12)	DECACHLOR...	6.517	6.712	1385.2E6	744.0E6	0.1363	0.1515	

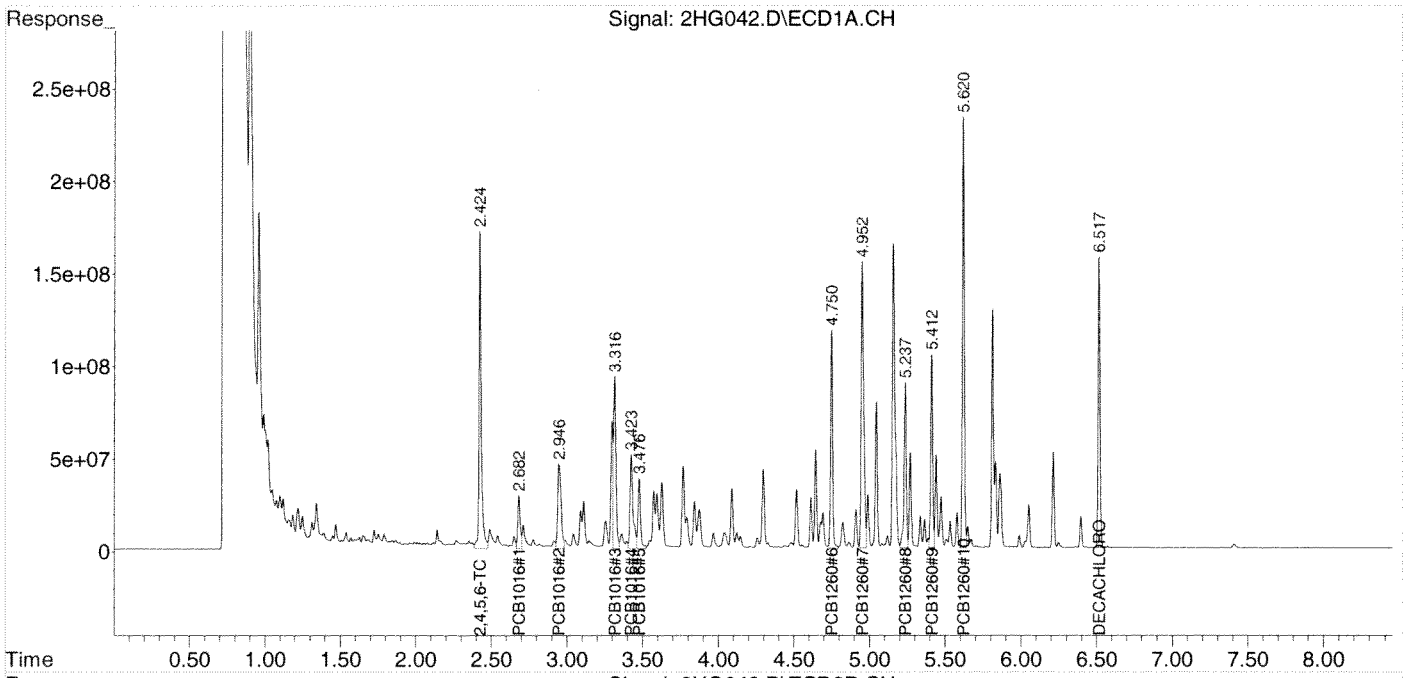
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

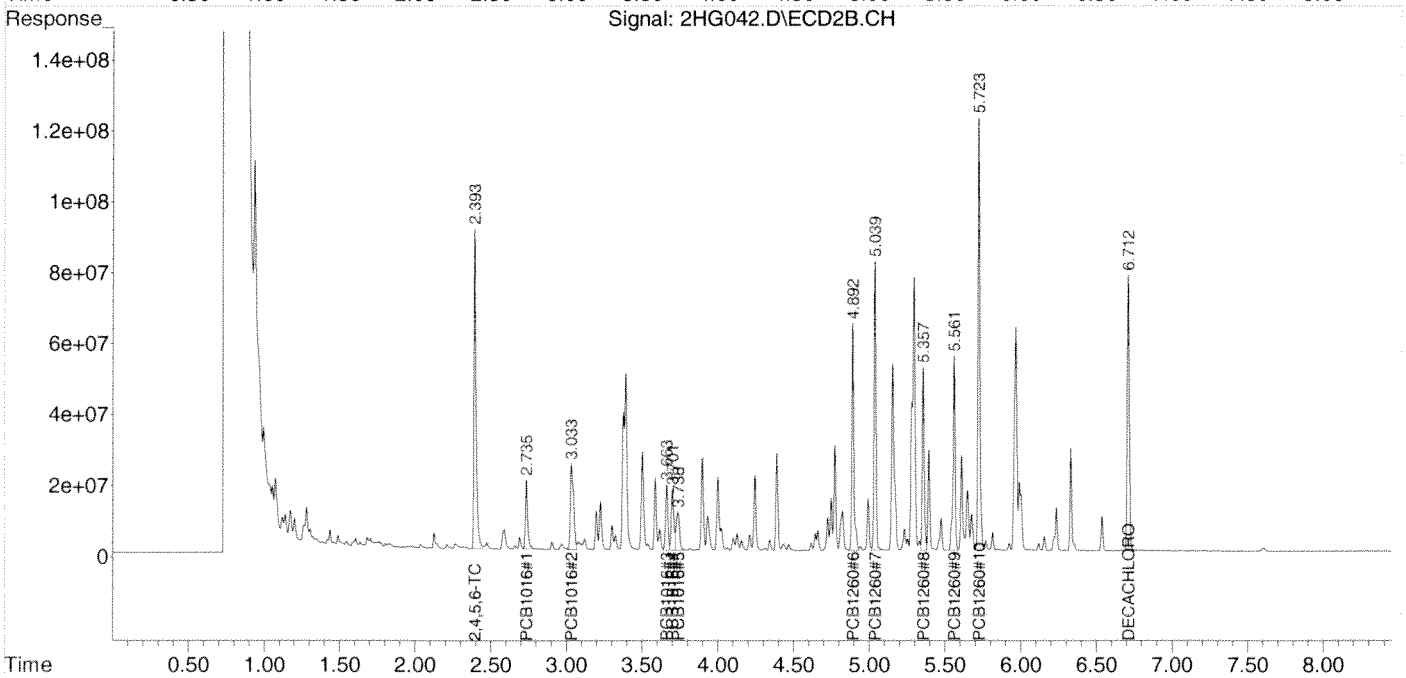
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:03
Operator : JJB
Sample : 4H08042-MSD1
Misc :
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:05:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:16
Operator : JJB
Sample : A404270-11RE1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:06:48 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1691.6E6	899.6E6	0.0992	0.1207	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.751	4.893	30702268	18732129	0.0410	0.0522	#
8)	PCB1260#7	4.953	5.040	108.9E6	50702336	0.1077	0.1290	
9)	PCB1260#8	5.238	5.358	53639318	29179938	0.0840	0.0977	
10)	PCB1260#9	5.412	5.562	38121512	20046473	0.0581	0.0615	
11)	PCB1260#10	5.622	5.724	108.8E6	54643340	0.0712	0.0857	
12)	DECACHLOR...	6.518	6.713	1234.0E6	672.8E6	0.1214	0.1370	

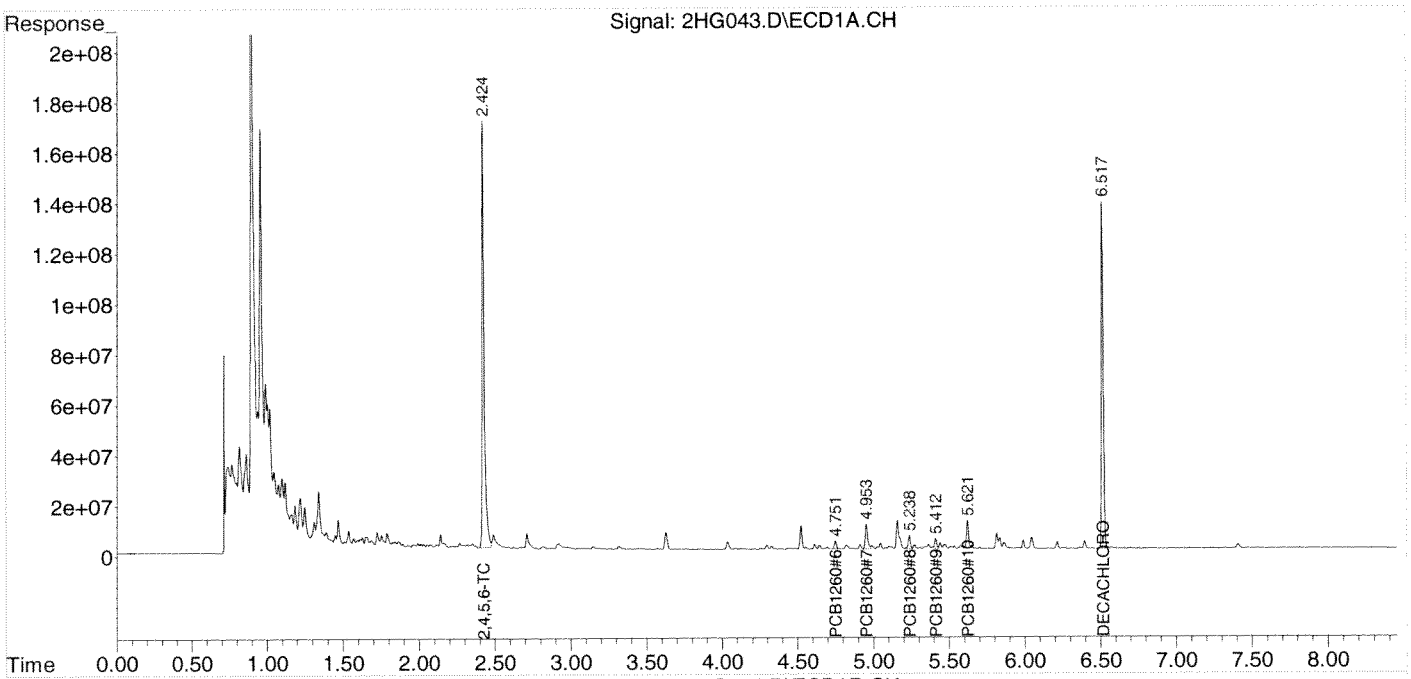
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

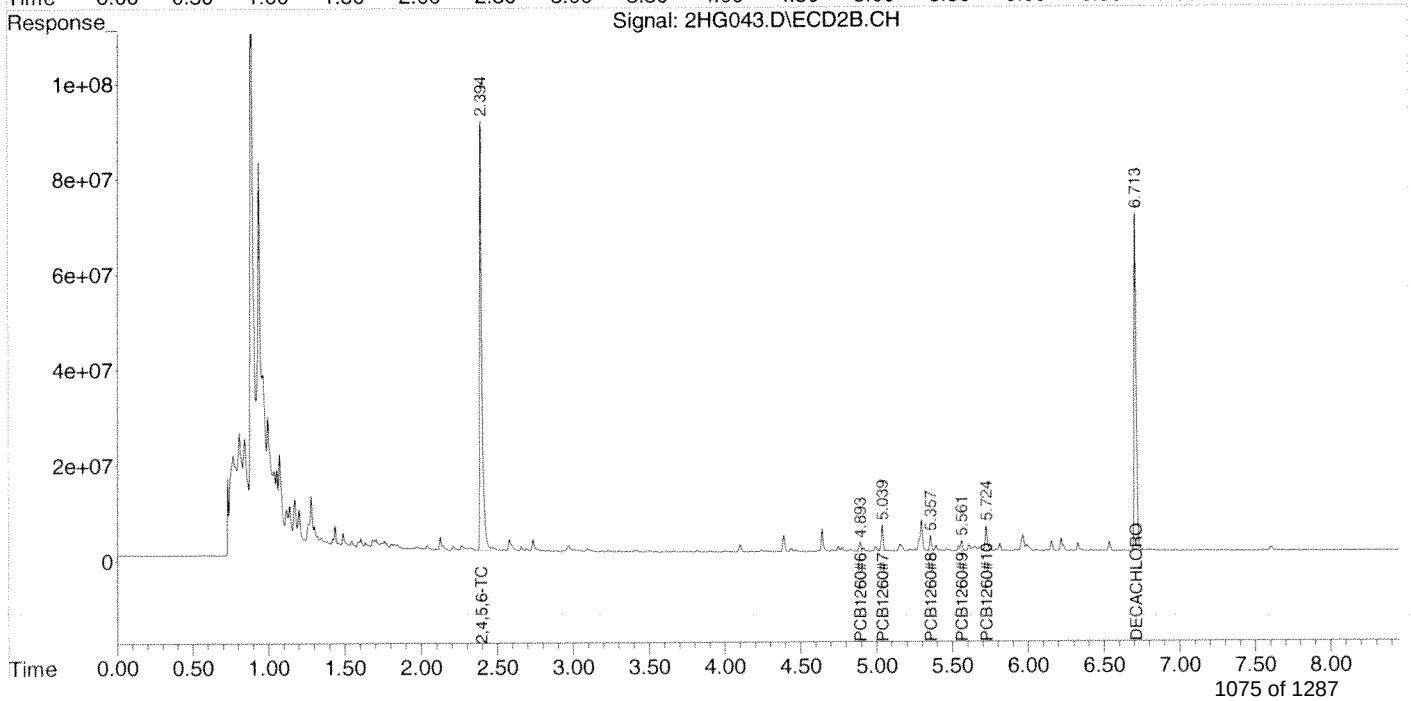
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:16
Operator : JJB
Sample : A404270-11RE1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:06:48 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:16
Operator : JJB
Sample : A404270-11RE1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:23:16 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1759.1E6	935.9E6	0.1051	0.1179	
2)	PCB1254#1	4.091	4.245	7909156	4021993	0.0162	0.0153	
3)	PCB1254#2	4.298	4.391	20736474	32510518	0.0242	0.1138	#
4)	PCB1254#3	4.524	4.644f	90689890	45223478	0.1810	0.1930	
5)	PCB1254#4	4.614	4.750	21327178	10346629	0.0250	0.0261	
6)	PCB1254#5	4.823	5.040	22352893	53736618	0.0336	0.2965	#
7)	DECACHLOR...	6.518	6.713	1238.1E6	676.0E6	0.1167	0.1290	

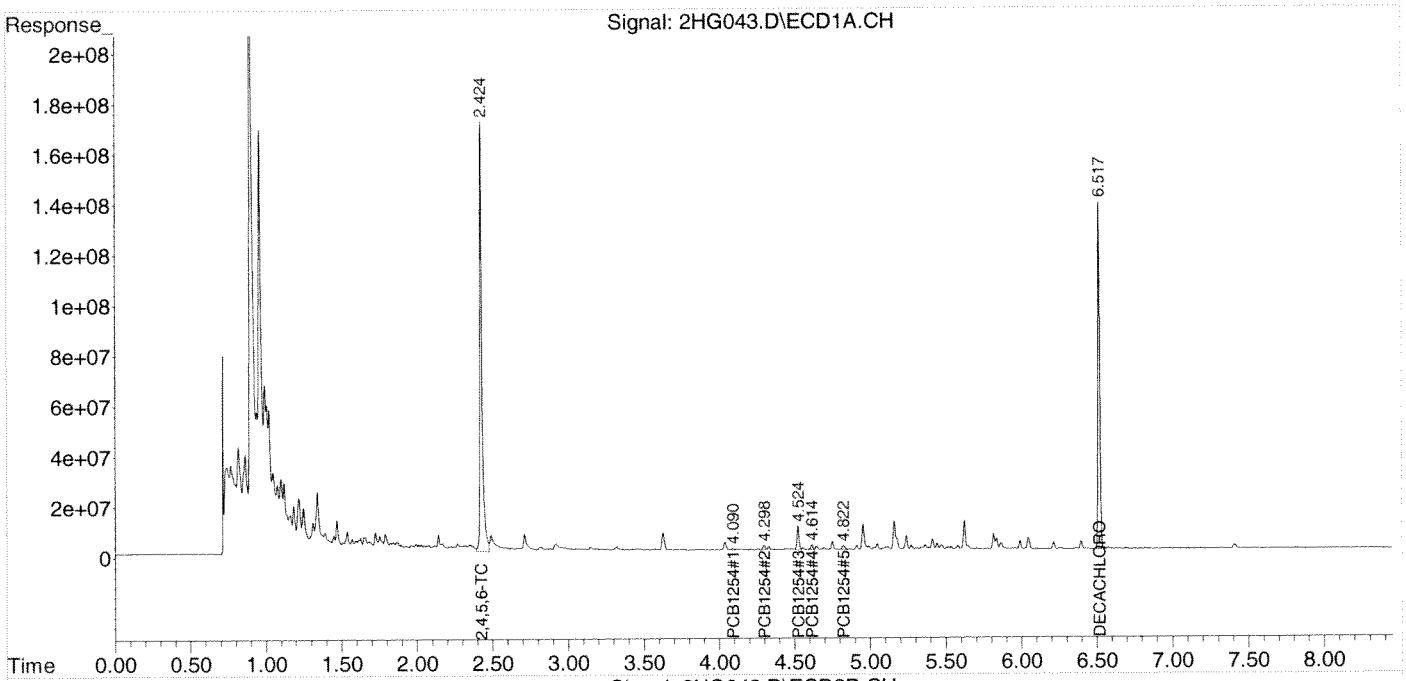
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

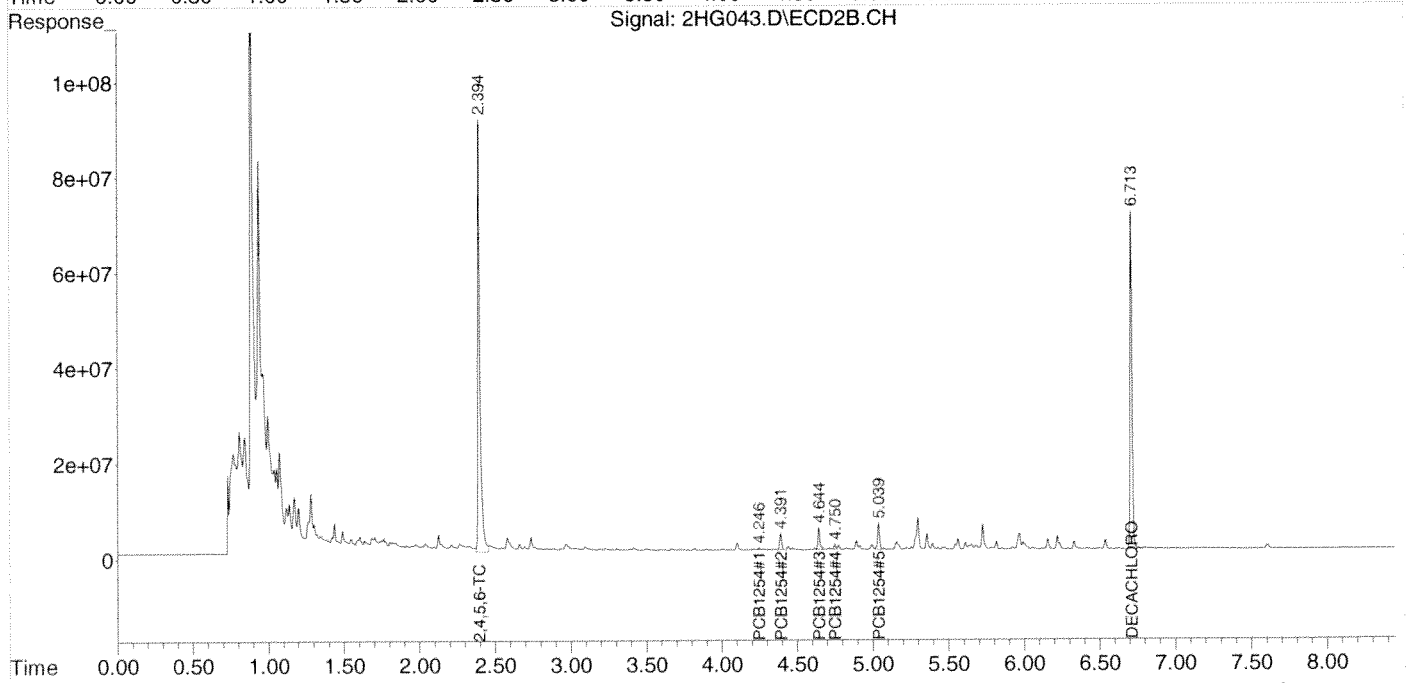
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:16
Operator : JJB
Sample : A404270-11RE1
Misc :
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:23:16 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:28
Operator : JJB
Sample : A404270-02RE1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:17 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.394	786.1E6	429.4E6	0.0461	0.0576	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.752	4.893	295.0E6	176.7E6	0.3936	0.4928	#
8)	PCB1260#7	4.954	5.040	466.3E6	203.0E6	0.4612	0.5166	
9)	PCB1260#8	5.238	5.358	309.9E6	171.9E6	0.4854	0.5754	
10)	PCB1260#9	5.413	5.562	306.5E6	182.5E6	0.4669	0.5601	
11)	PCB1260#10	5.622	5.725	593.4E6	318.9E6	0.3885	0.5001	#
12)	DECACHLOR...	6.518	6.714	484.5E6	271.3E6	0.0477	0.0553	

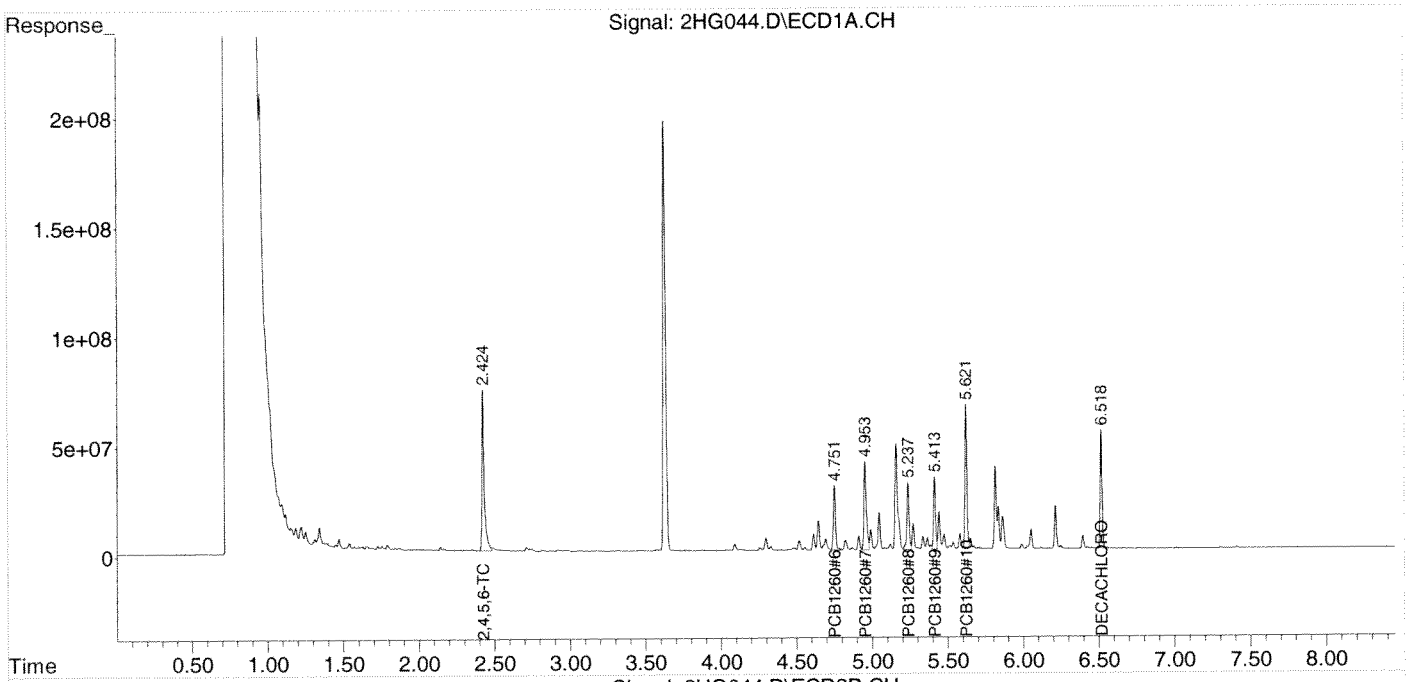
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

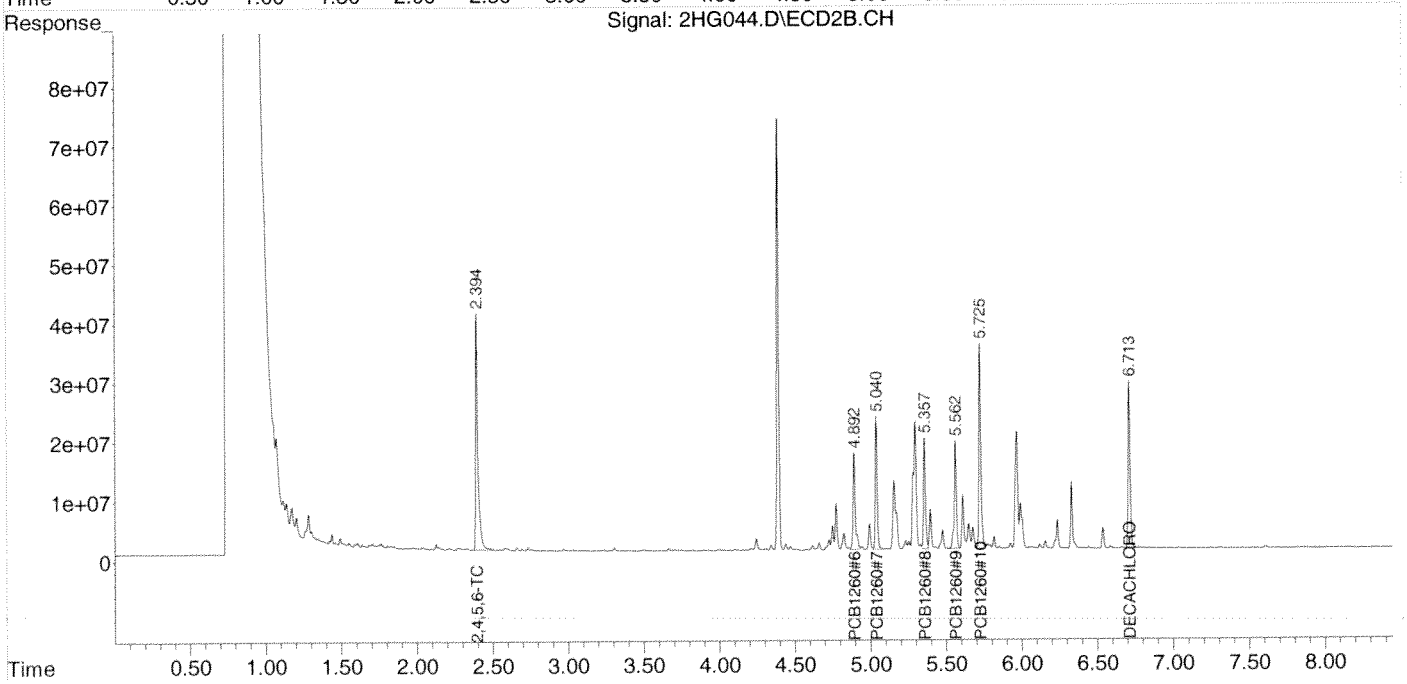
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:28
Operator : JJB
Sample : A404270-02RE1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:17 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:28
Operator : JJB
Sample : A404270-02RE1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:36:42 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.394	790.6E6	432.0E6	0.0472	0.0544	
2)	PCB1254#1	4.090	4.245	34892998	23440788	0.0713	0.0889	
3)	PCB1254#2	4.298	4.391	67736513	664.7E6	0.0792	2.3274	#
4)	PCB1254#3	4.519	4.662	52530838	13986694	0.1049	0.0597	#
5)	PCB1254#4	4.614	4.750	71591174	37526549	0.0840	0.0947	
6)	PCB1254#5	4.823	5.040	52412505	200.9E6	0.0787	1.1084	#
7)	DECACHLOR...	6.518	6.714	488.8E6	272.9E6	0.0461	0.0521	

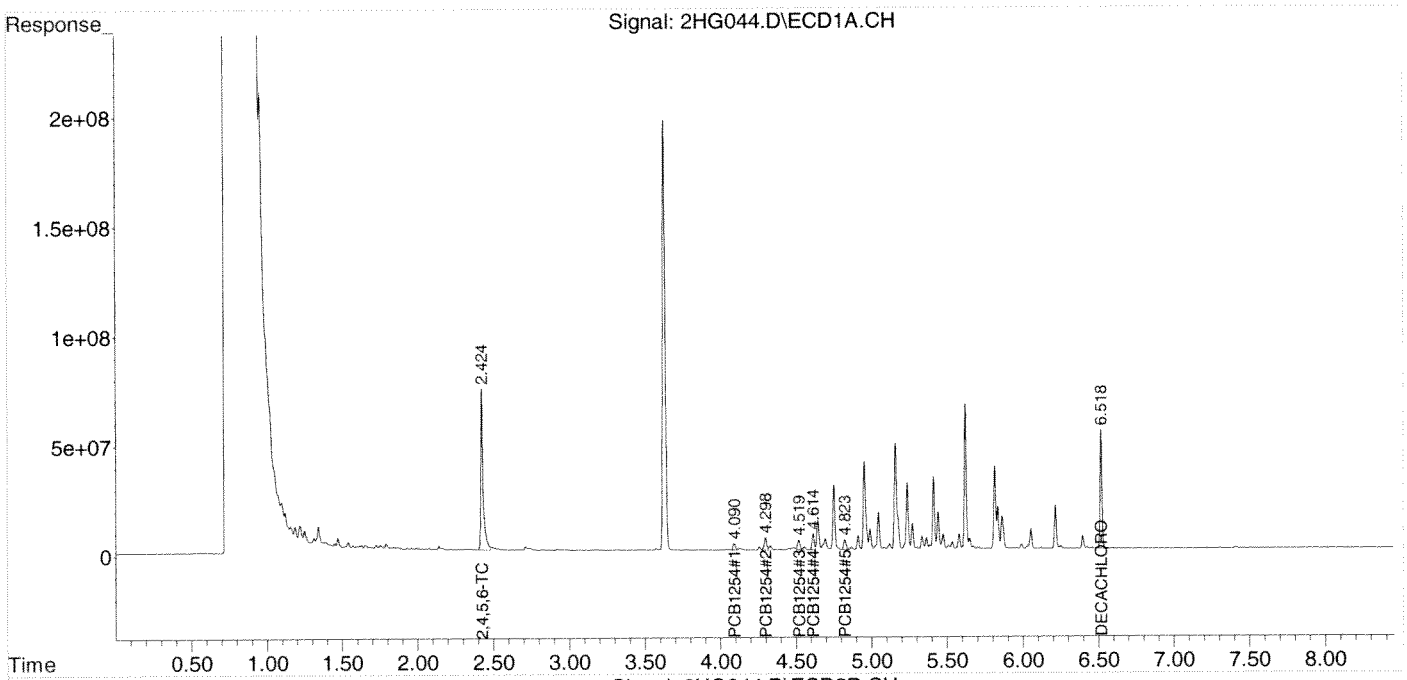
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

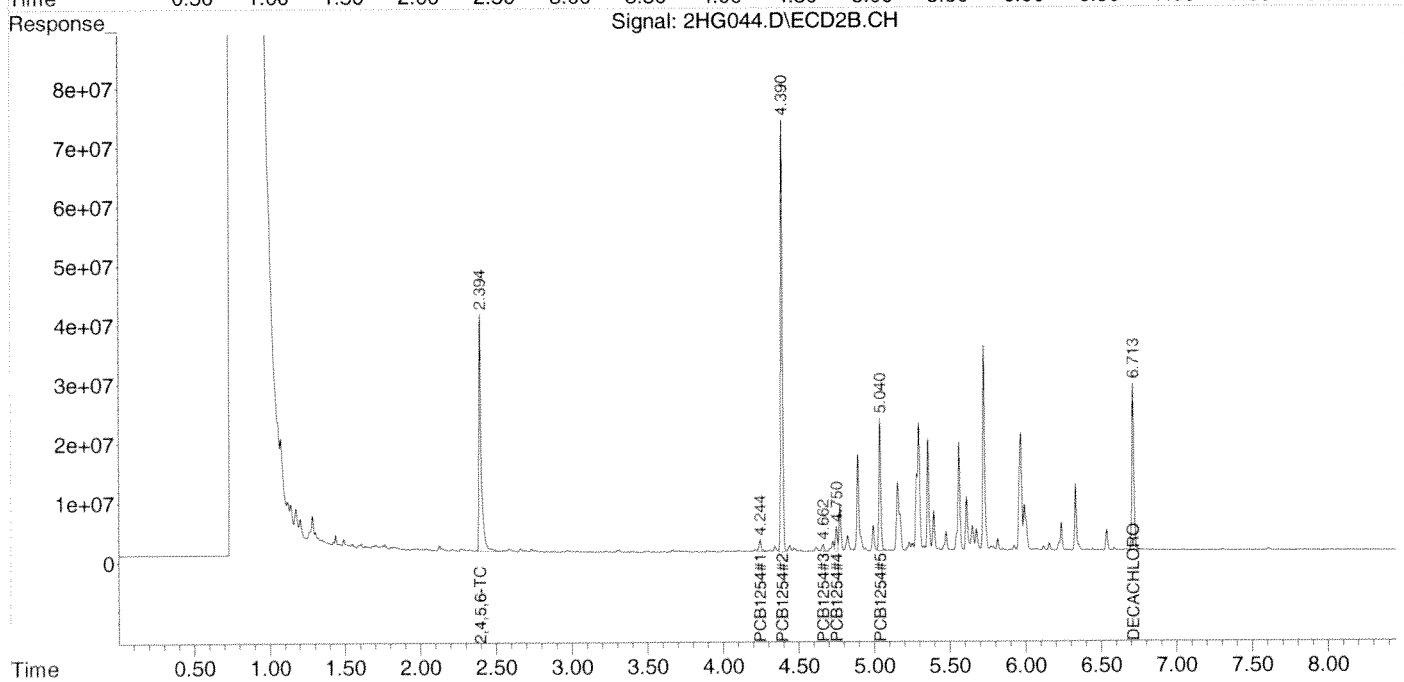
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:28
Operator : JJB
Sample : A404270-02RE1
Misc :
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:36:42 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:40
Operator : JJB
Sample : A404270-06RE1
Misc :
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:37 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.395	1658.4E6	875.7E6	0.0972	0.1175	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.752	4.894	29562981	16375454	0.0394	0.0457	
8)	PCB1260#7	4.954	5.041	103.1E6	47473786	0.1020	0.1208	
9)	PCB1260#8	5.239	5.359	49593580	26164942	0.0777	0.0876	
10)	PCB1260#9	5.413	5.563	34347947	17589886	0.0523	0.0540	
11)	PCB1260#10	5.622	5.725	89310528	48519616	0.0585	0.0761	#
12)	DECACHLOR...	6.517	6.713	1210.3E6	659.7E6	0.1191	0.1343	

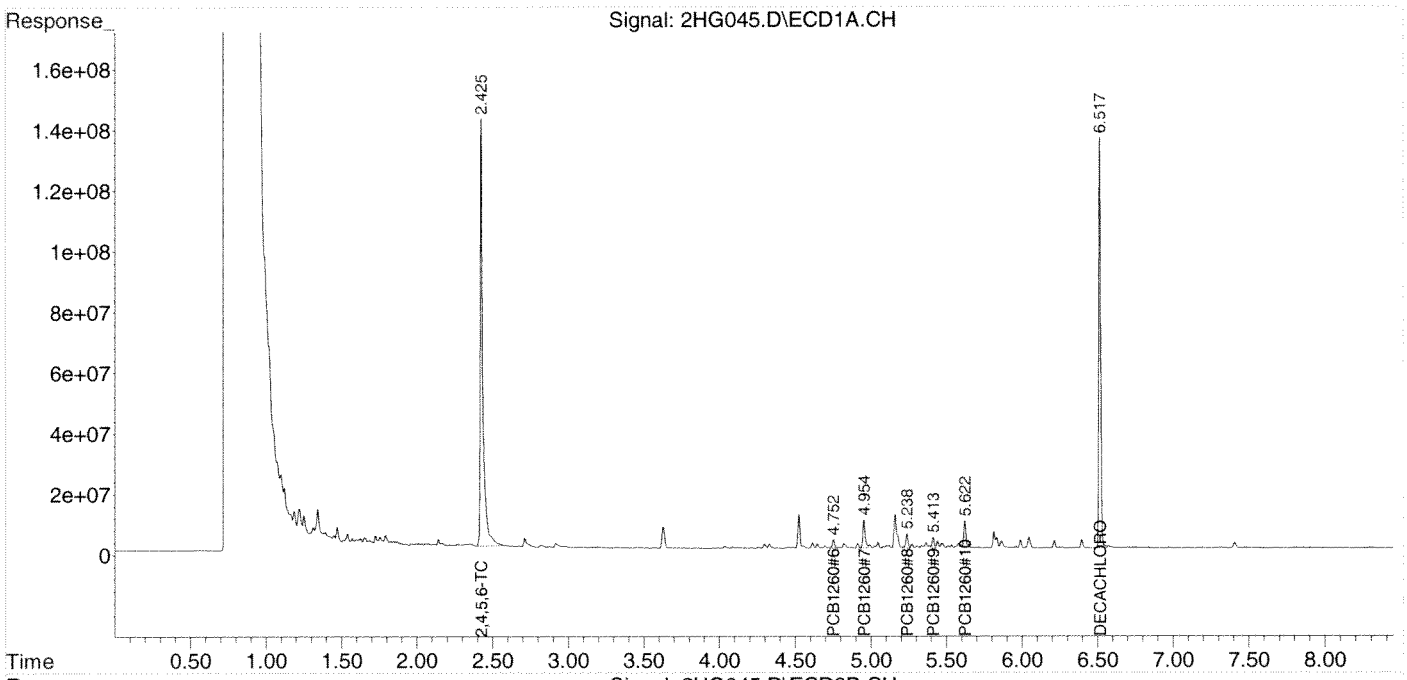
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

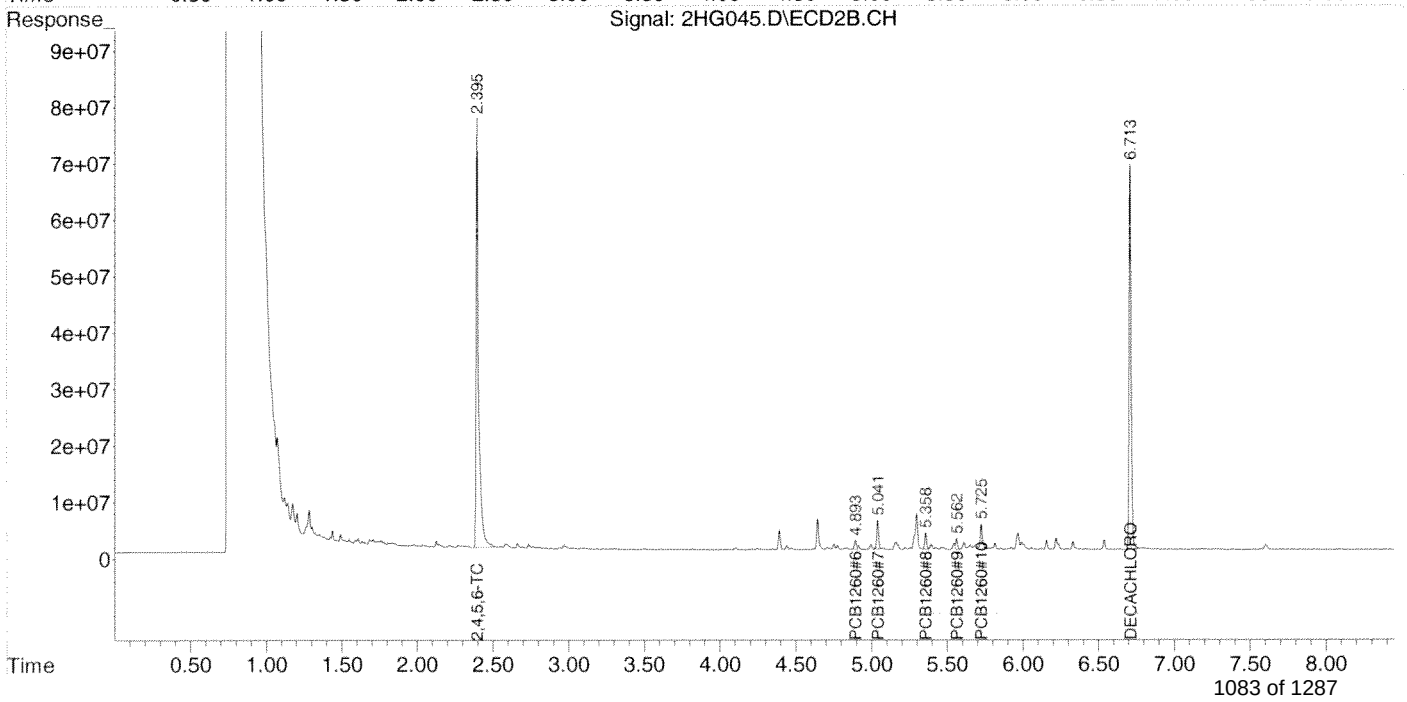
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:40
Operator : JJB
Sample : A404270-06RE1
Misc :
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:37 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:52
Operator : JJB
Sample : A404270-10RE1
Misc :
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:56 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.426	2.396	1425.9E6	711.5E6	0.0836	0.0954	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.753	4.894	14430999	5607390	0.0193	0.0156	
8)	PCB1260#7	4.955	5.041	78161356	40397828	0.0773	0.1028	#
9)	PCB1260#8	5.240	5.359	67570213	35793654	0.1058	0.1198	
10)	PCB1260#9	5.414	5.564	29514292	18619163	0.0450	0.0571	#
11)	PCB1260#10	5.624	5.726	80394121	41893314	0.0526	0.0657	
12)	DECACHLOR...	6.519	6.714	1099.5E6	612.2E6	0.1082	0.1247	

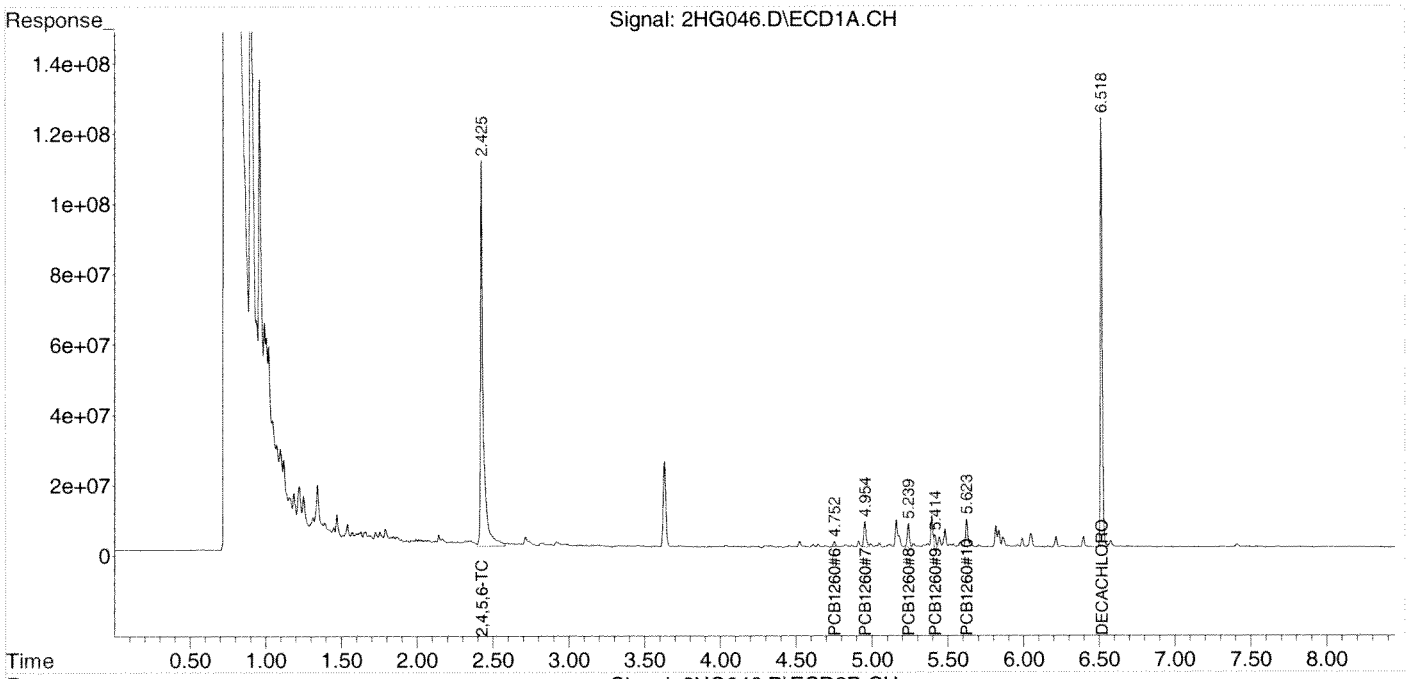
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

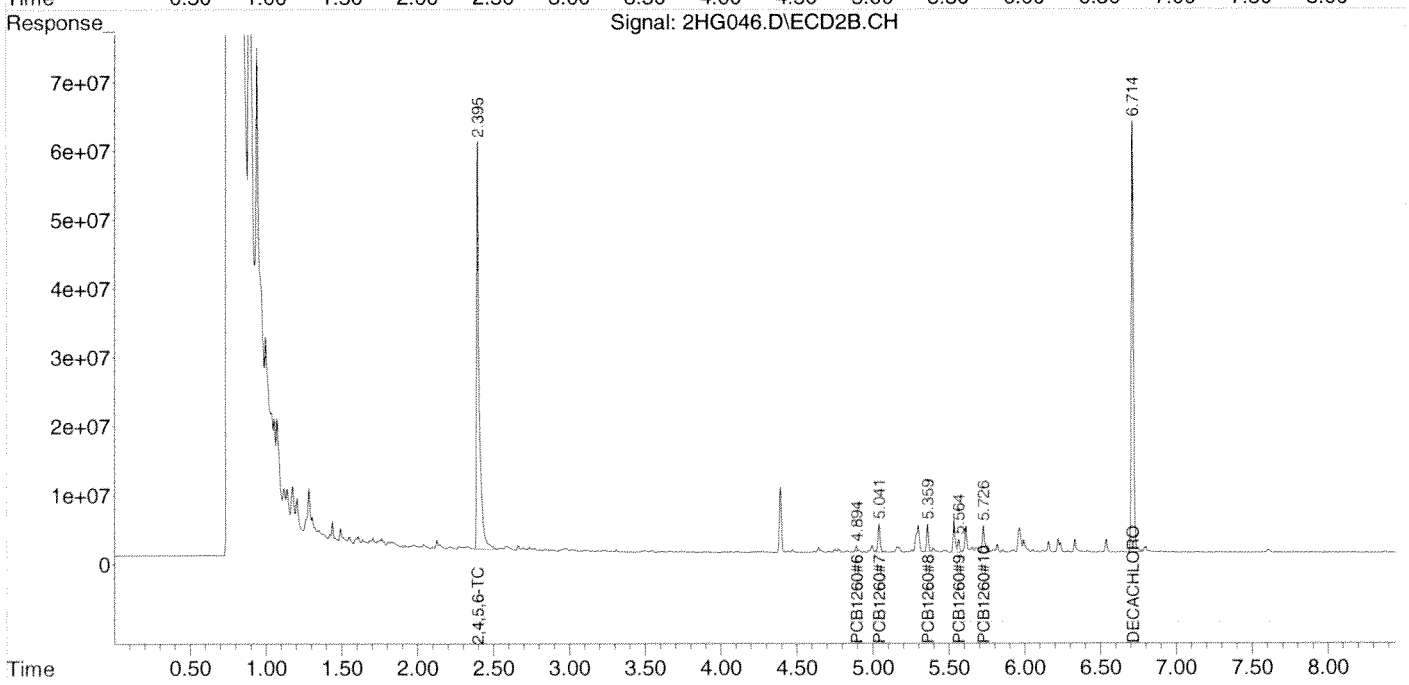
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 6:52
Operator : JJB
Sample : A404270-10RE1
Misc :
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:07:56 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:04
Operator : JJB
Sample : A404270-14RE1
Misc :
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:15:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.395	1237.0E6	662.8E6	0.0725	0.0889	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.752	4.893	33560779	20924319	0.0448	0.0584	#
8)	PCB1260#7	4.954	5.040	77250180	31248923	0.0764	0.0795	
9)	PCB1260#8	5.238	5.358	32617536	19372132	0.0511	0.0648	#
10)	PCB1260#9	5.413	5.562	33771467	19195332	0.0514	0.0589	
11)	PCB1260#10	5.623	5.725	94661916	38660069	0.0620	0.0606	
12)	DECACHLOR...	6.518	6.713	1224.7E6	660.5E6	0.1205	0.1345	

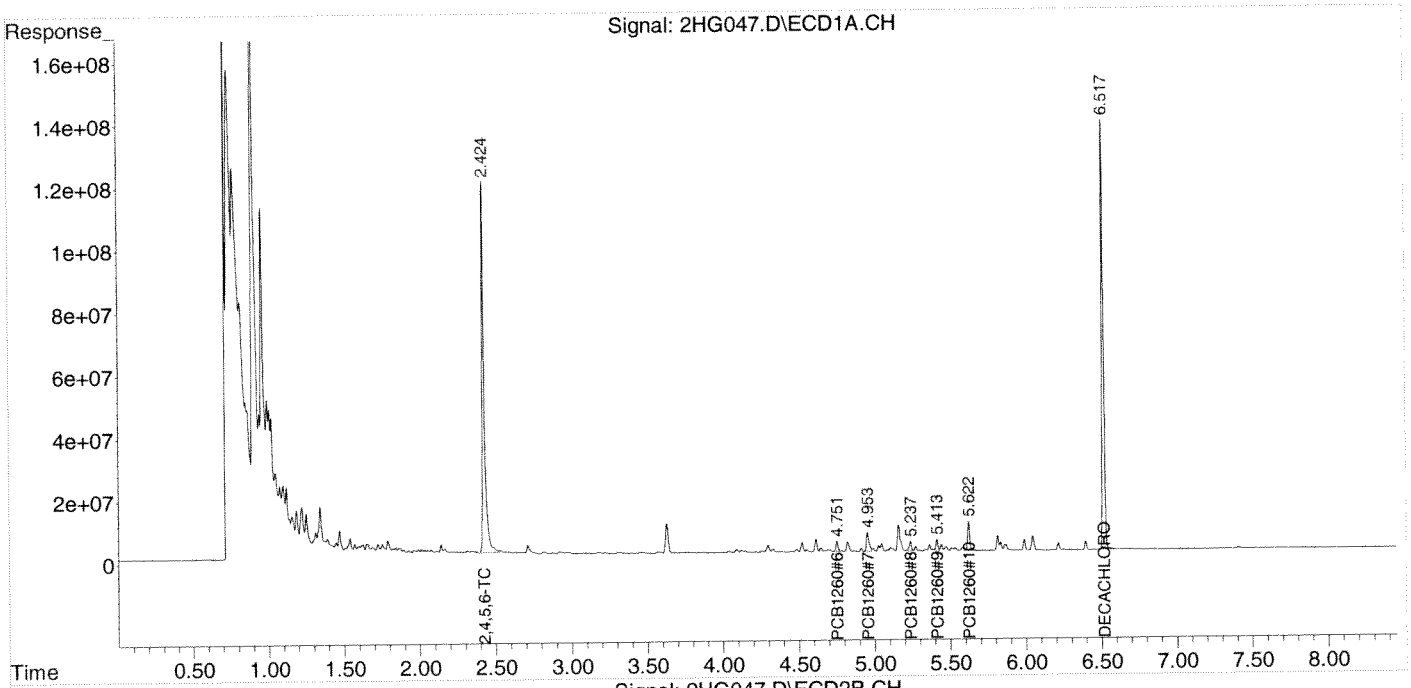
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

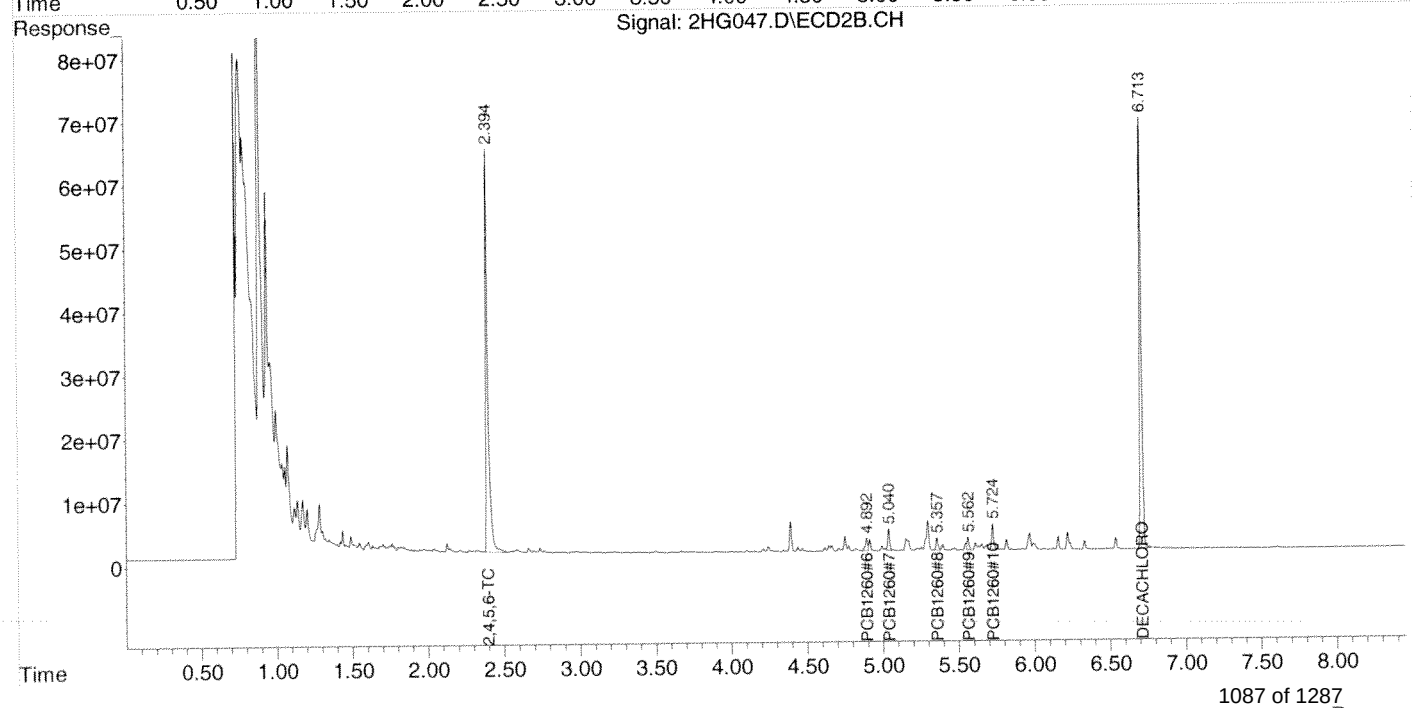
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:04
Operator : JJB
Sample : A404270-14RE1
Misc :
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:15:54 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:04
Operator : JJB
Sample : A404270-14RE1
Misc :
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:23:22 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.395	1320.7E6	690.7E6	0.0789	0.0870	
2)	PCB1254#1	4.091	4.246	13143380	8232237	0.0269	0.0312	
3)	PCB1254#2	4.298	4.392	27795587	45601388	0.0325	0.1597	#
4)	PCB1254#3	4.522	4.662	32141376	8781738	0.0642	0.0375	#
5)	PCB1254#4	4.614	4.750	41251092	21507178	0.0484	0.0542	
6)	PCB1254#5	4.822	5.040	36748648	31310435	0.0552	0.1728	#
7)	DECACHLOR...	6.518	6.713	1227.3E6	667.3E6	0.1157	0.1273	

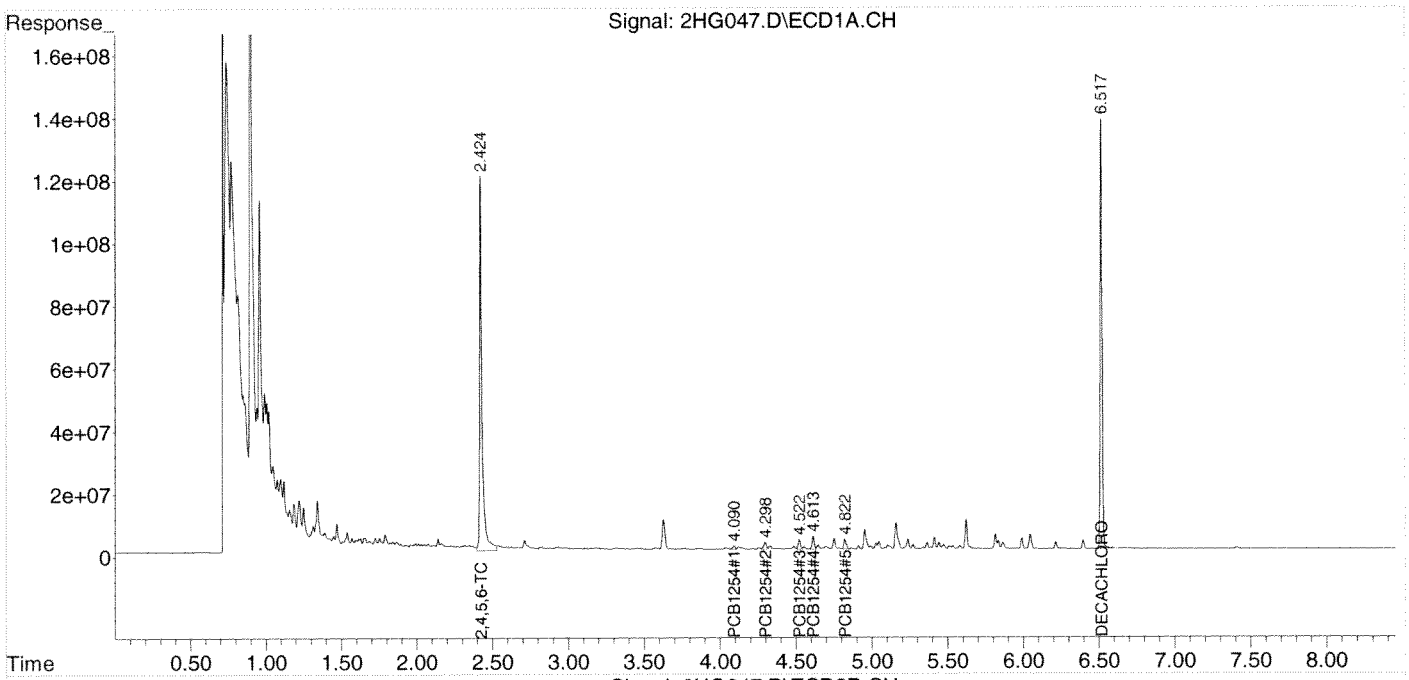
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

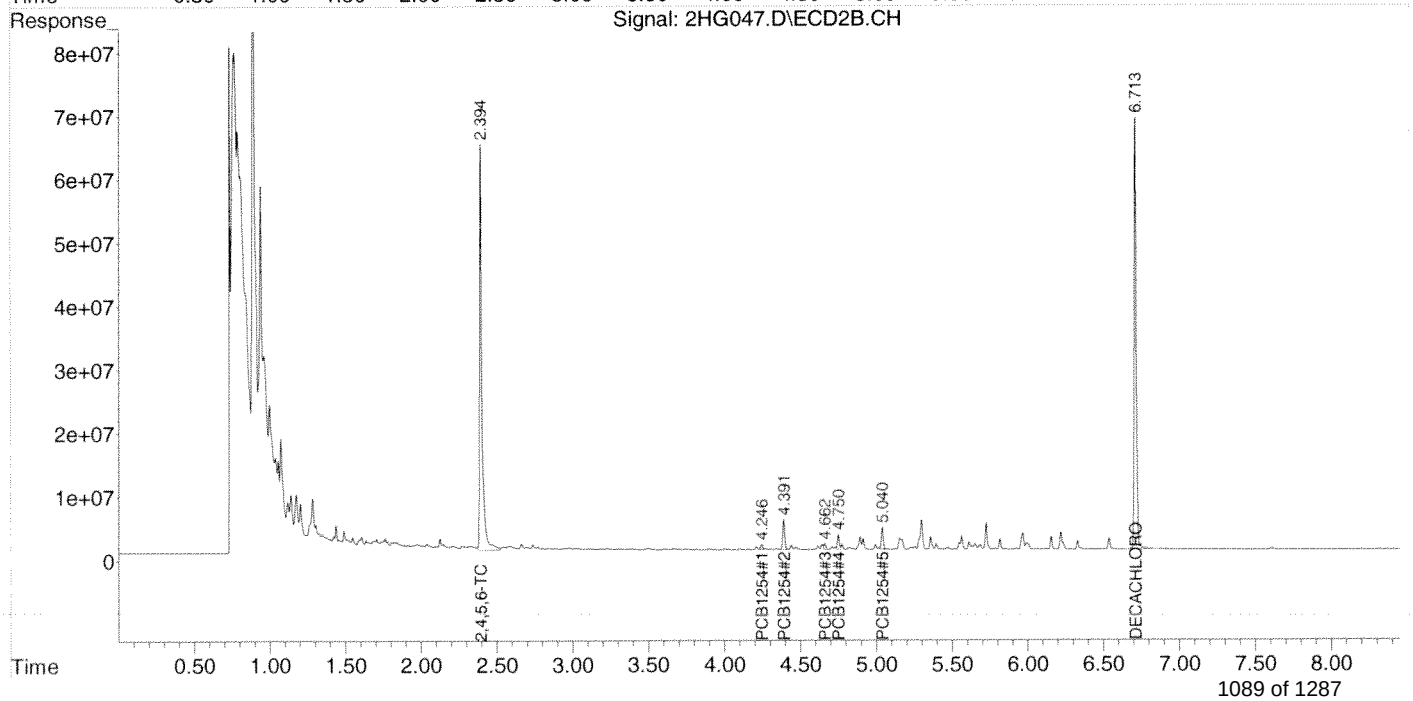
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG047.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:04
Operator : JJB
Sample : A404270-14RE1
Misc :
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:23:22 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:16
Operator : JJB
Sample : A404270-21RE1
Misc :
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:37:29 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1754.8E6	916.8E6	0.1029	0.1230	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.751	4.893	410.0E6	219.7E6	0.5470	0.6126	
8)	PCB1260#7	4.953	5.040	712.8E6	298.1E6	0.7051	0.7584	
9)	PCB1260#8	5.238	5.357	438.4E6	236.6E6	0.6866	0.7919	
10)	PCB1260#9	5.413	5.562	415.8E6	251.4E6	0.6333	0.7715	
11)	PCB1260#10	5.620	5.725	971.1E6	515.9E6	0.6357	0.8090	#
12)	DECACHLOR...	6.518	6.713	1330.9E6	724.6E6	0.1309	0.1476	

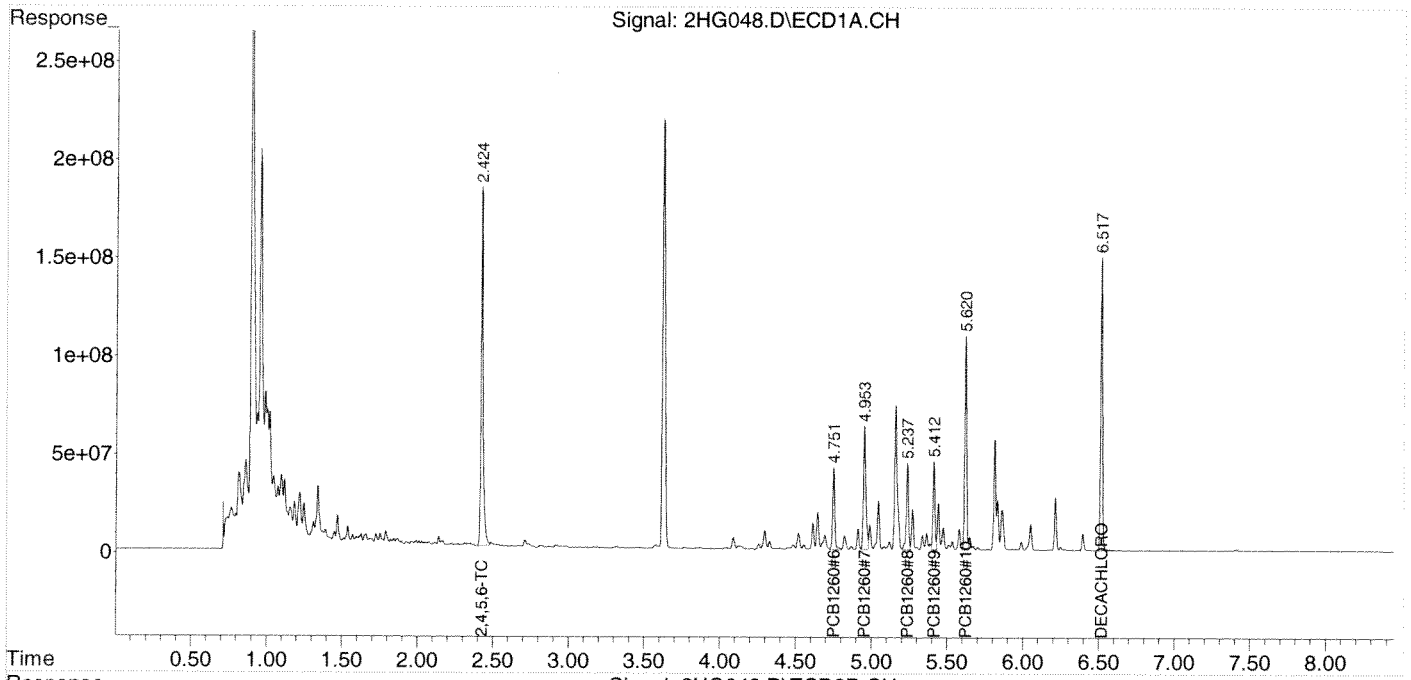
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

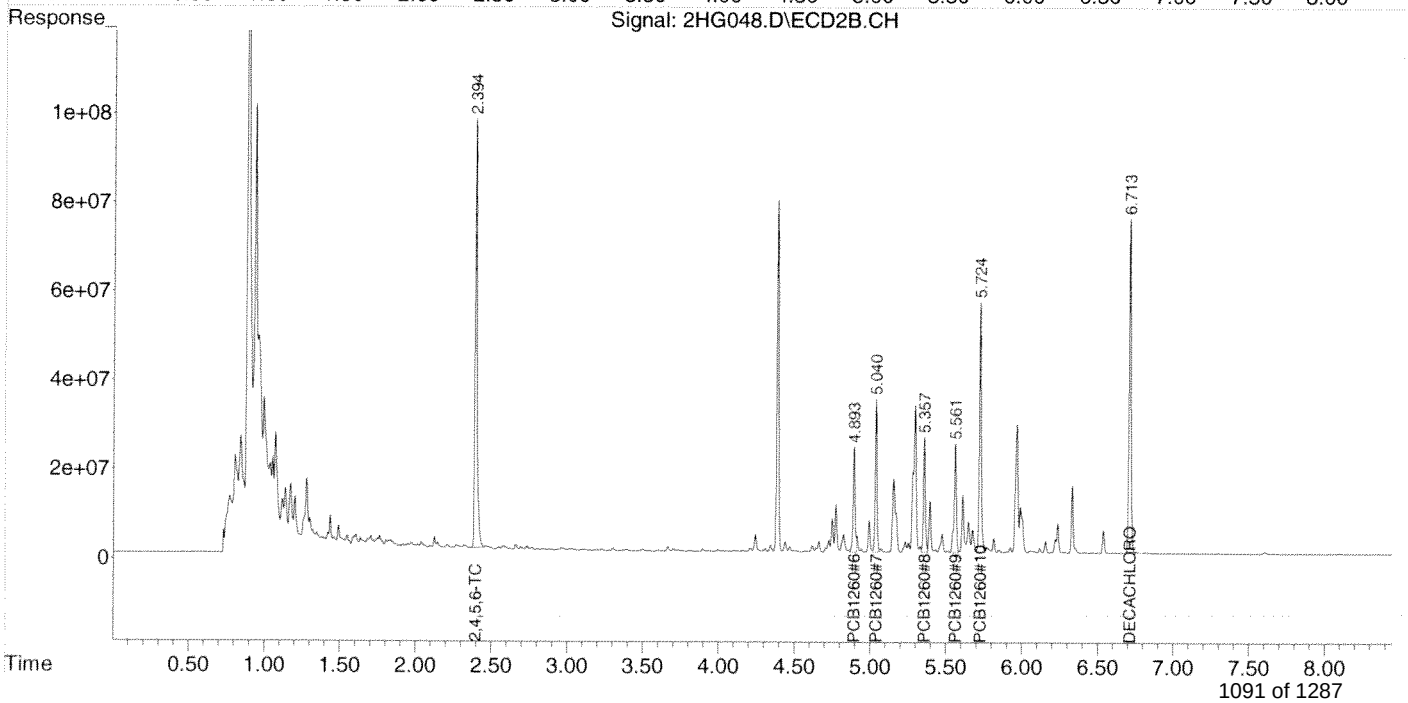
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:16
Operator : JJB
Sample : A404270-21RE1
Misc :
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:37:29 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:16
Operator : JJB
Sample : A404270-21RE1
Misc :
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:41:23 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.424	2.394	1868.2E6	965.2E6	0.1116	0.1216	
2)	PCB1254#1	4.090	4.245	79967061	43281884	0.1634	0.1641	
3)	PCB1254#2	4.298	4.391	125.8E6	725.0E6	0.1471	2.5386	#
4)	PCB1254#3	4.519	4.662	105.6E6	23851921	0.2108	0.1018	#
5)	PCB1254#4	4.614	4.750	141.4E6	67326637	0.1659	0.1698	
6)	PCB1254#5	4.823	5.040	90764605	300.7E6	0.1363	1.6594	#
7)	DECACHLOR...	6.518	6.713	1335.8E6	725.3E6	0.1260	0.1384	

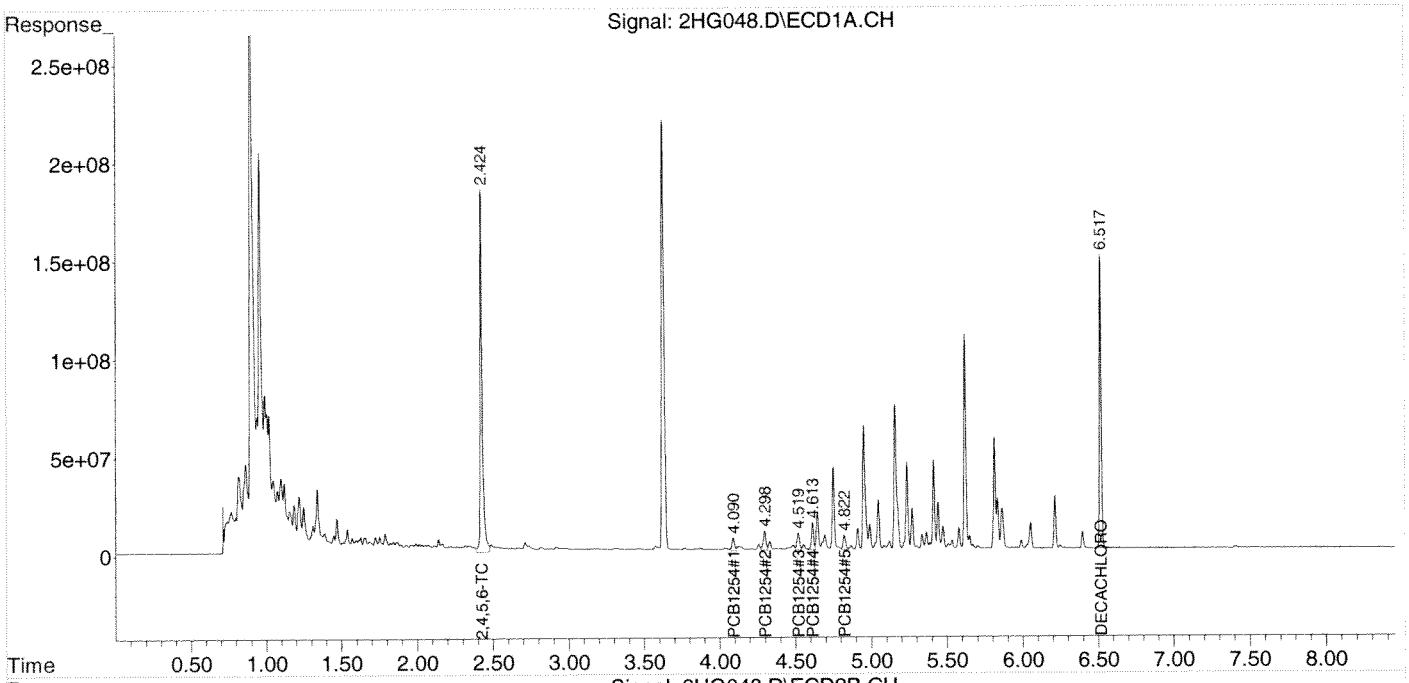
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

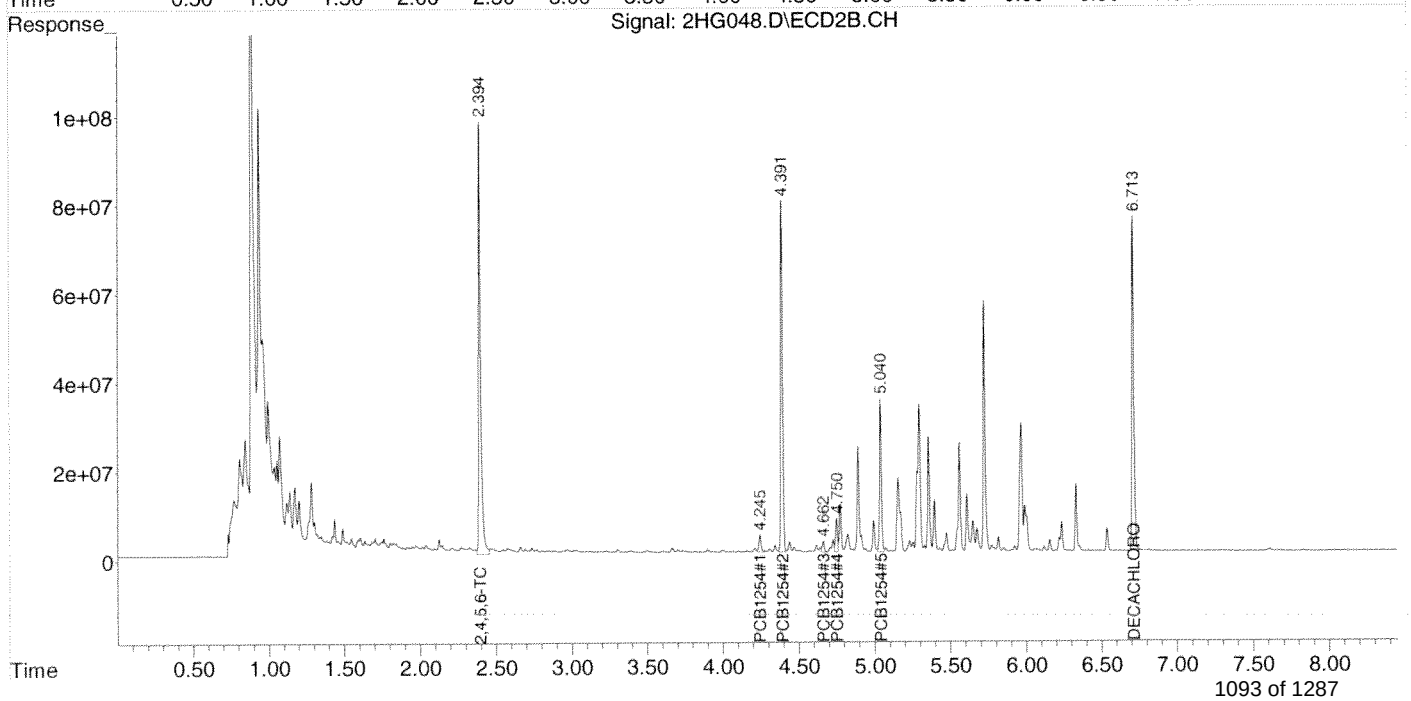
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG048.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:16
Operator : JJB
Sample : A404270-21RE1
Misc :
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:41:23 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG049.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:28
Operator : JJB
Sample : AA30013-CCV2
Misc : AA30030-CCV1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:37:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.432	2.401	1788.7E6	888.6E6	0.1049	0.1192
2)	PCB1016#1	2.689	2.742	296.0E6	148.2E6	0.9170	1.0374
3)	PCB1016#2	2.954	3.039	602.1E6	298.5E6	0.9781	1.0440
4)	PCB1016#3	3.321	3.668	828.7E6	139.2E6	1.0142	1.1165
5)	PCB1016#4	3.429	3.706	503.8E6	144.2E6	1.0065	1.1242
6)	PCB1016#5	3.481	3.742	318.9E6	122.7E6	1.0497	0.9327
7)	PCB1260#6	4.753	4.895	755.8E6	415.9E6	1.0084	1.1598
8)	PCB1260#7	4.955	5.042	1106.0E6	485.4E6	1.0939	1.2351
9)	PCB1260#8	5.240	5.359	666.3E6	368.9E6	1.0435	1.2348
10)	PCB1260#9	5.415	5.564	736.3E6	403.0E6	1.1215	1.2365
11)	PCB1260#10	5.623	5.727	1702.0E6	872.3E6	1.1141	1.3678
12)	DECACHLOR...	6.519	6.715	1130.9E6	627.2E6	0.1112	0.1277

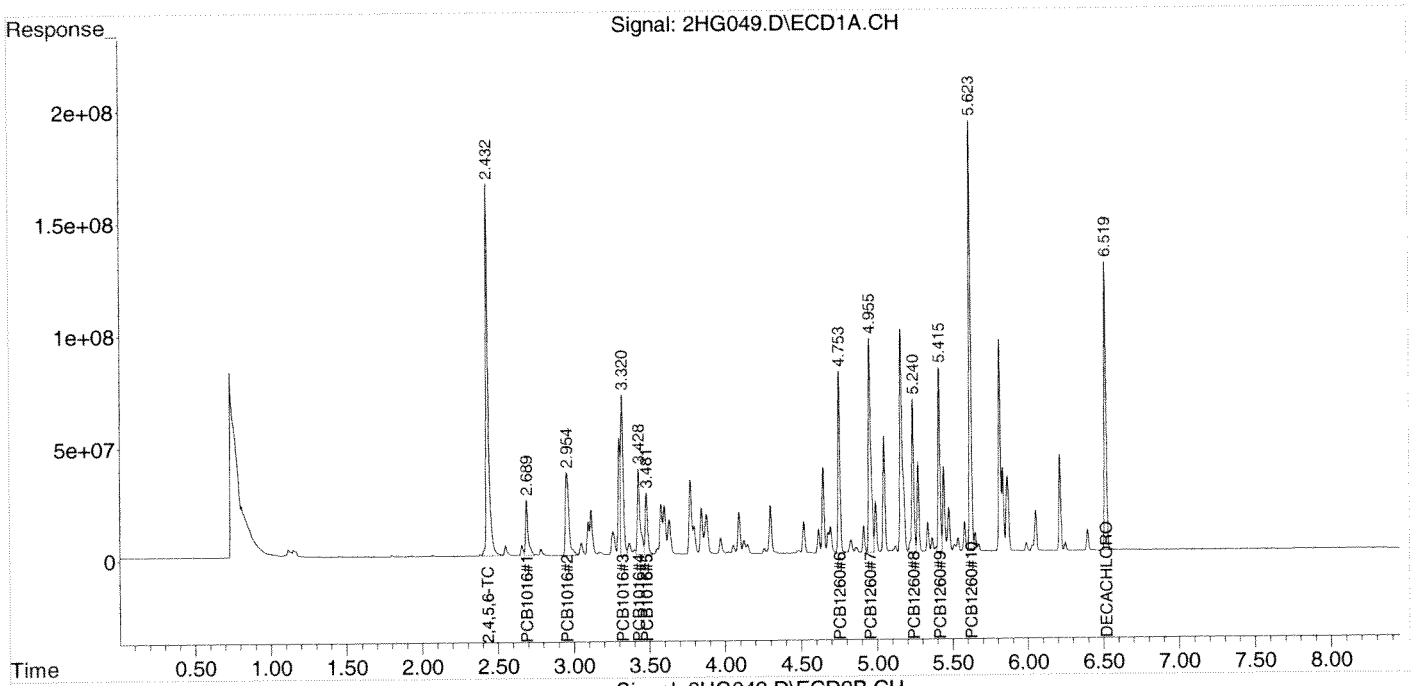
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

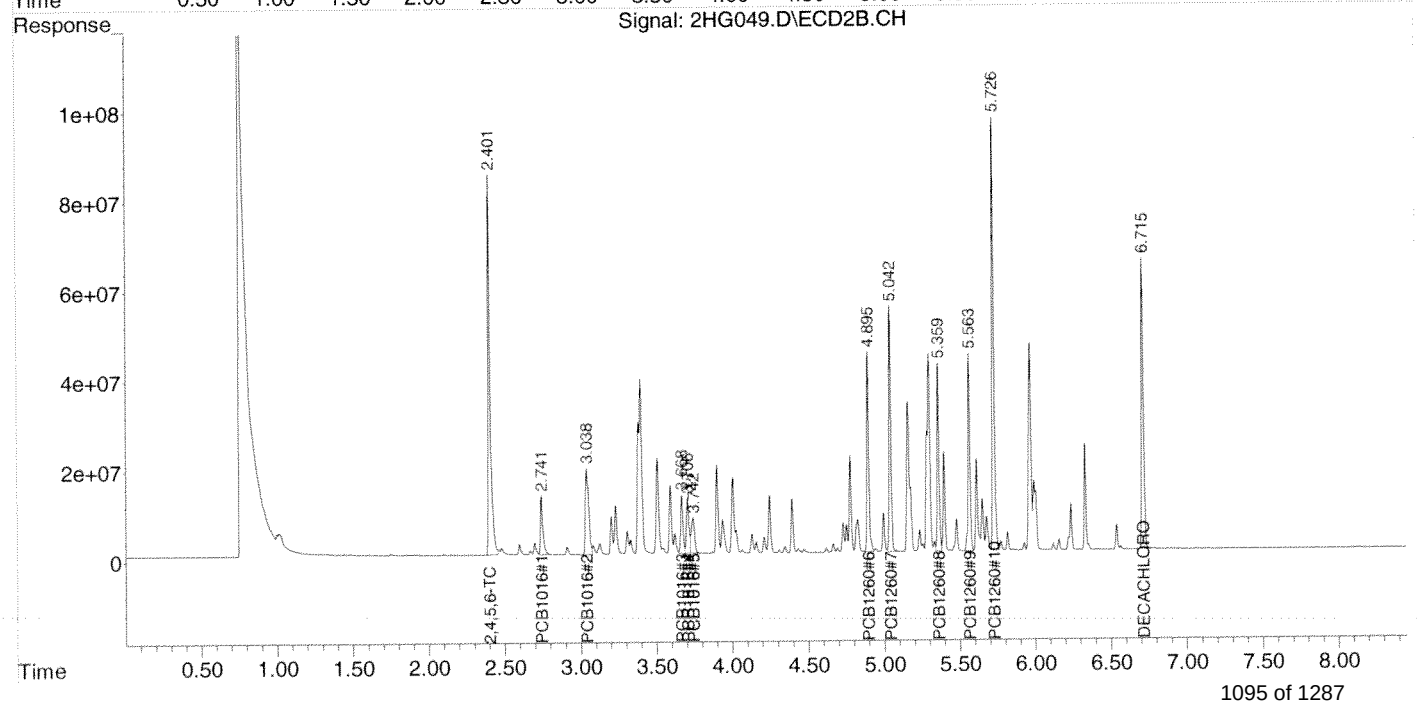
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG049.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:28
Operator : JJB
Sample : AA30013-CCV2
Misc : AA30030-CCV1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:37:45 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:40
Operator : JJB
Sample : AA30013-ARC2
Misc :
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:49:22 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.434	2.403	1228.7E6	766.4E6	0.0734	0.0965	#
2)	PCB1254#1	4.094	4.247	405.5E6	266.5E6	0.8284	1.0104	
3)	PCB1254#2	4.300	4.394	746.3E6	239.5E6	0.8727	0.8386	
4)	PCB1254#3	4.522	4.664	416.3E6	228.2E6	0.8310	0.9736	
5)	PCB1254#4	4.615	4.751	721.5E6	425.7E6	0.8464	1.0739	#
6)	PCB1254#5	4.823	5.040	589.1E6	168.1E6	0.8848	0.9275	
7)	DECACHLOR...	6.518	6.713	1006.5E6	493.3E6	0.0949	0.0941	

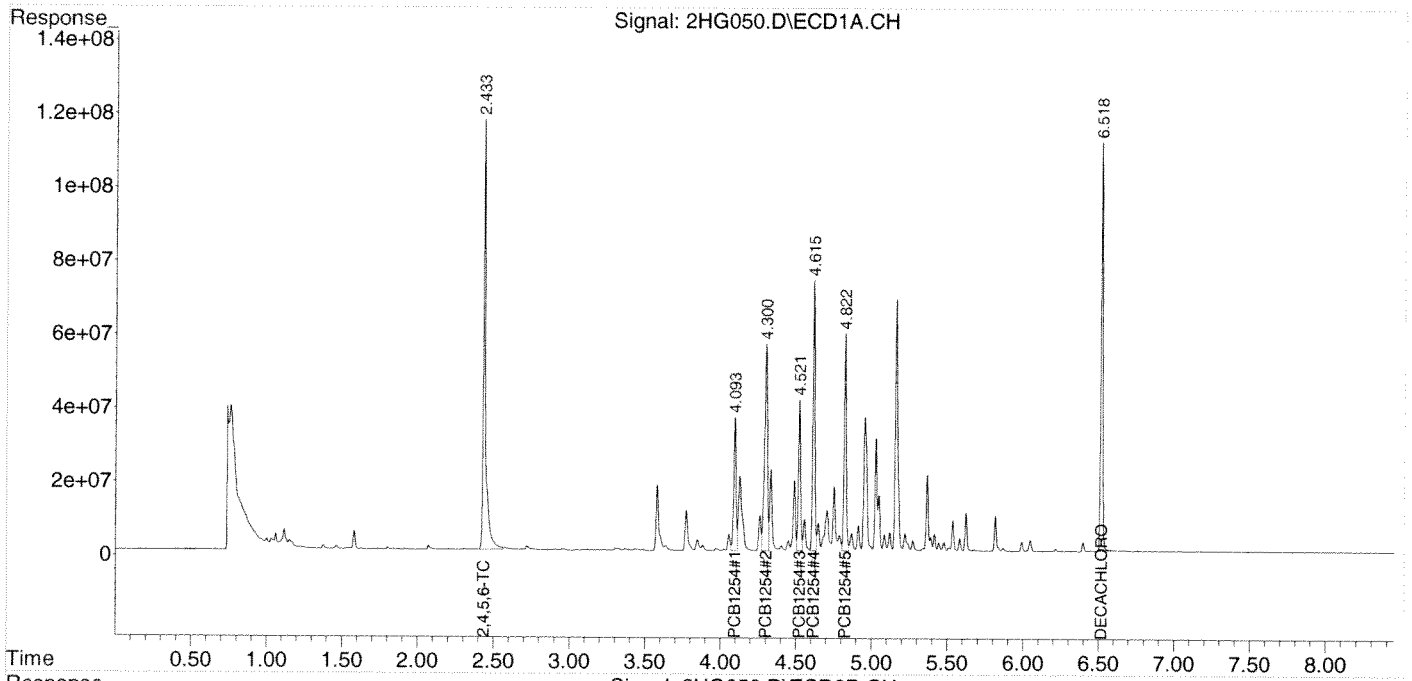
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

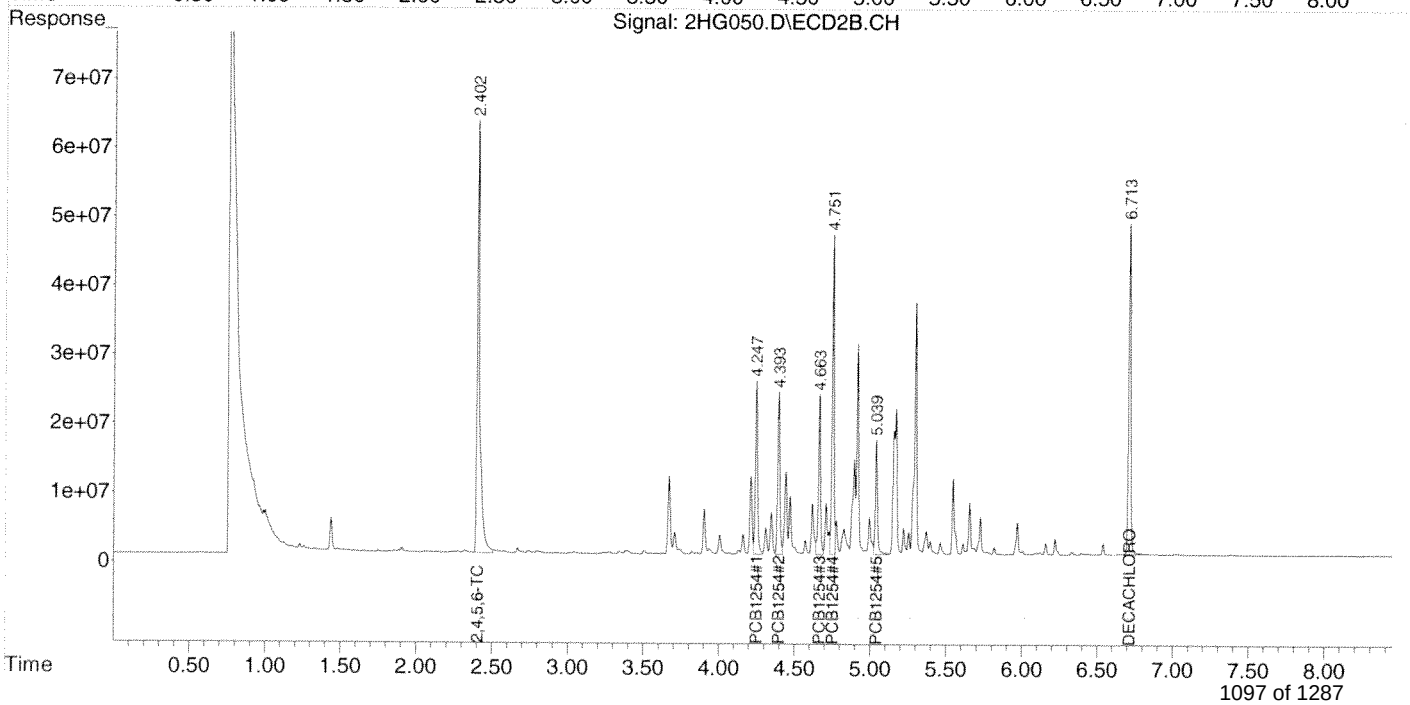
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG050.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:40
Operator : JJB
Sample : AA30013-ARC2
Misc :
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 07:49:22 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:52
Operator : JJB
Sample : A404270-22RE1
Misc :
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:04:32 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.396	686.7E6	372.2E6	0.0403	0.0499	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.752	4.894	52539048	29115083	0.0701	0.0812	
8)	PCB1260#7	4.954	5.041	89614596	40143194	0.0886	0.1022	
9)	PCB1260#8	5.238	5.358	56242554	32091086	0.0881	0.1074	
10)	PCB1260#9	5.413	5.563	55462948	34948354	0.0845	0.1072	#
11)	PCB1260#10	5.622	5.725	129.3E6	64769267	0.0846	0.1016	
12)	DECACHLOR...	6.518	6.713	769.0E6	433.8E6	0.0756	0.0883	

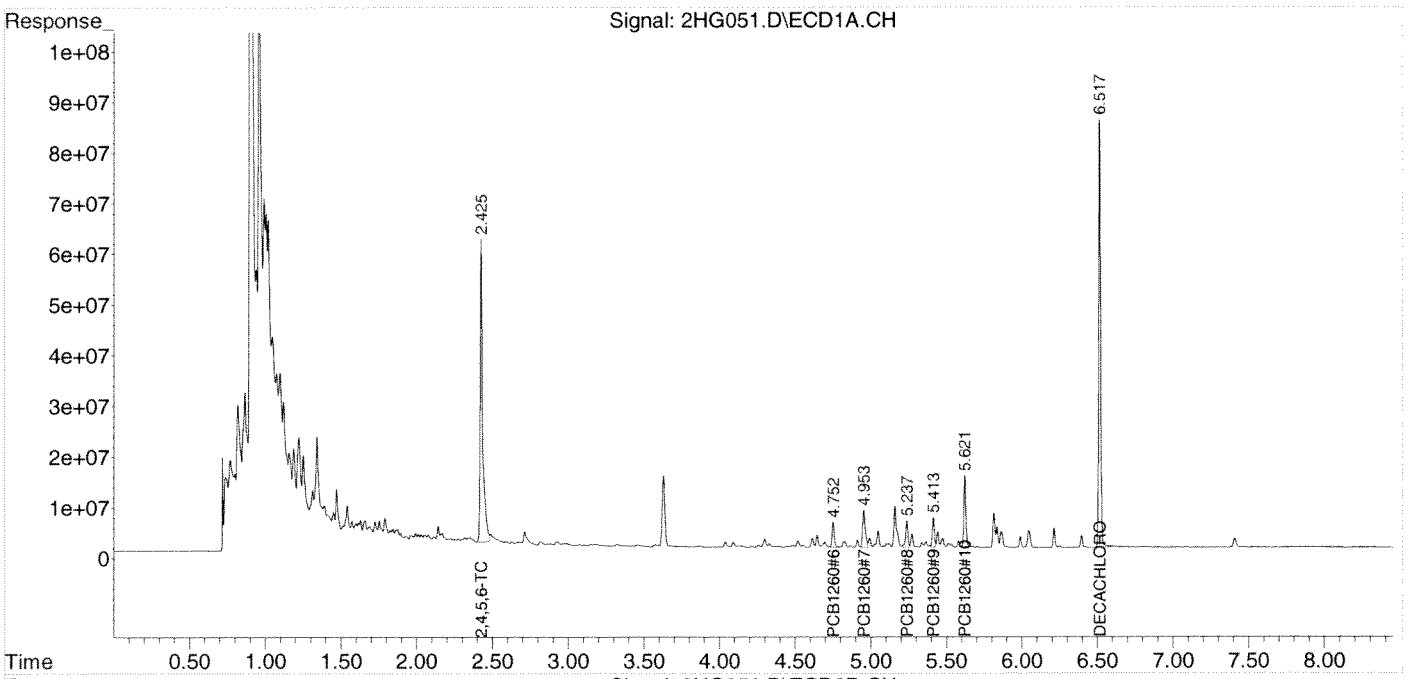
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

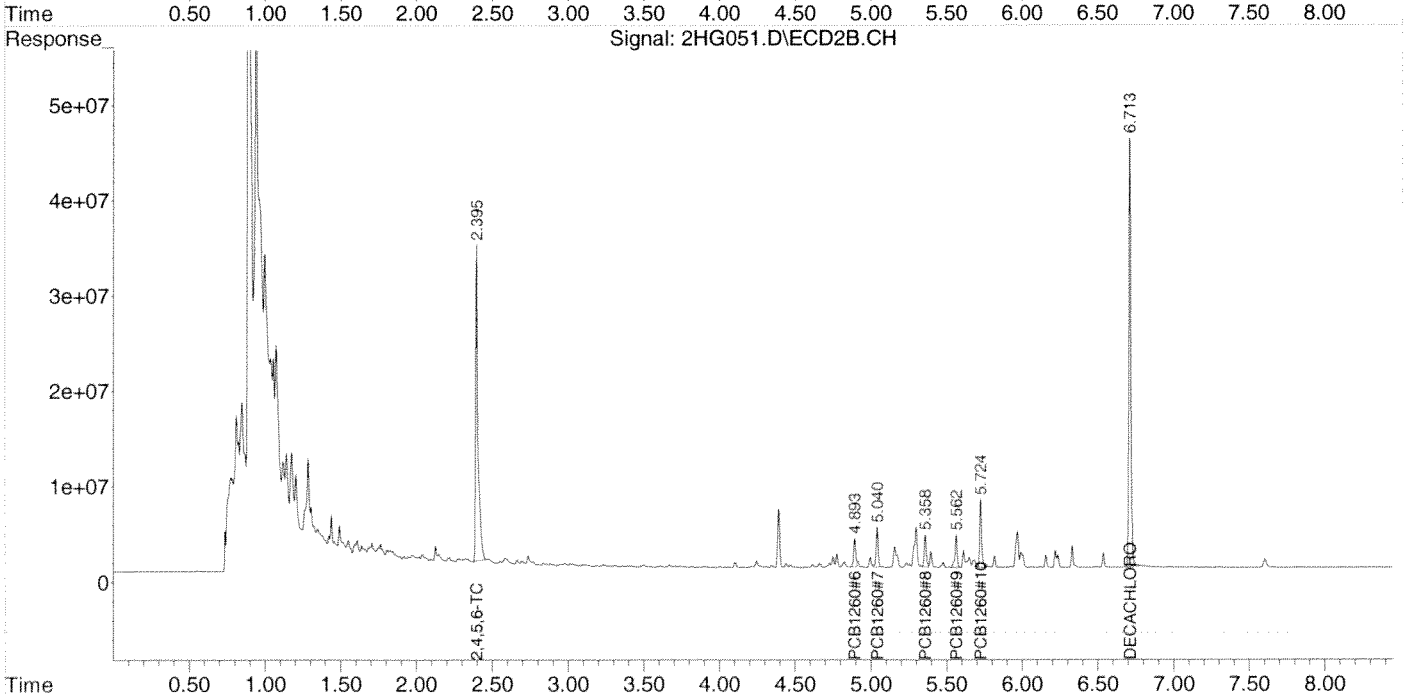
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:52
Operator : JJB
Sample : A404270-22RE1
Misc :
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:04:32 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:52
Operator : JJB
Sample : A404270-22RE1
Misc :
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:05:56 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.425	2.396	753.4E6	416.0E6	0.0450	0.0524	
2)	PCB1254#1	4.091	4.246	12682473	7672417	0.0259	0.0291	
3)	PCB1254#2	4.299	4.392	21556577	58634104	0.0252	0.2053	#
4)	PCB1254#3	4.519	4.664	15770975	4786081	0.0315	0.0204	#
5)	PCB1254#4	4.614	4.751	20926891	10767070	0.0245	0.0272	
6)	PCB1254#5	4.825	5.041	17578957	38903177	0.0264	0.2147	#
7)	DECACHLOR...	6.518	6.713	776.4E6	437.3E6	0.0732	0.0834	

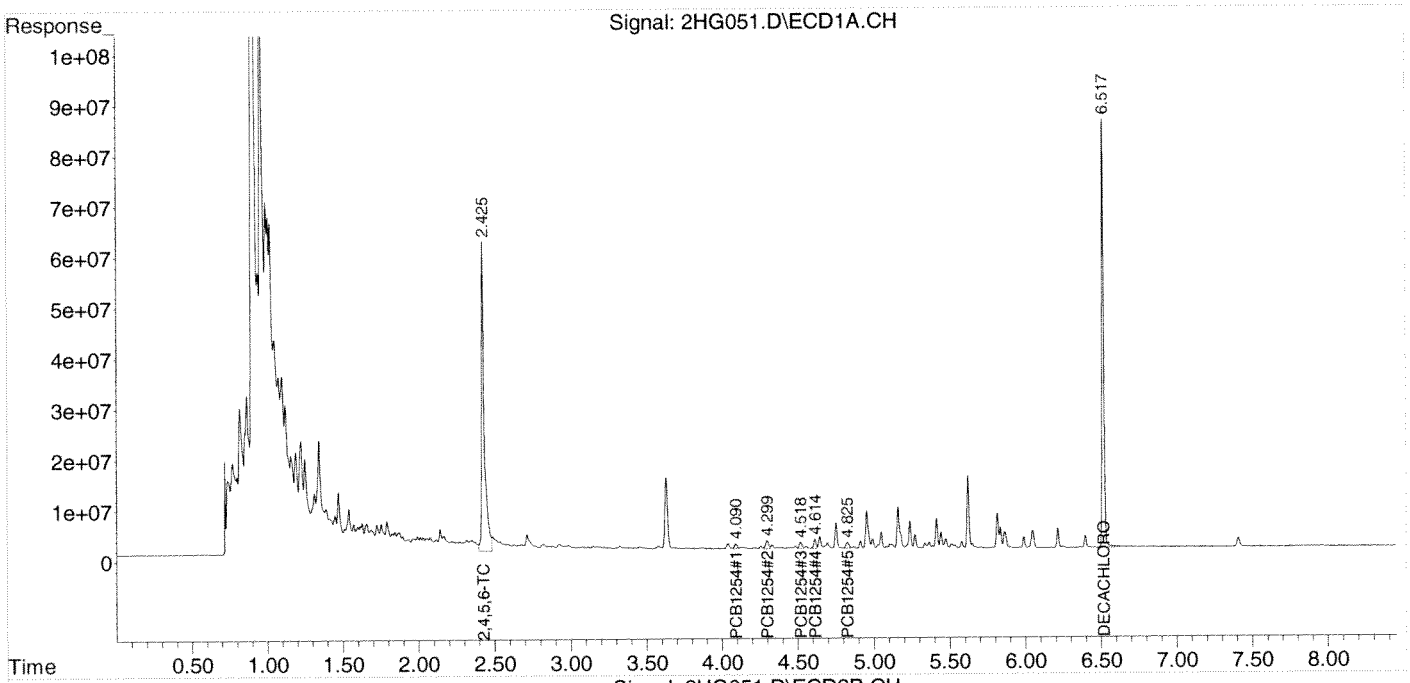
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

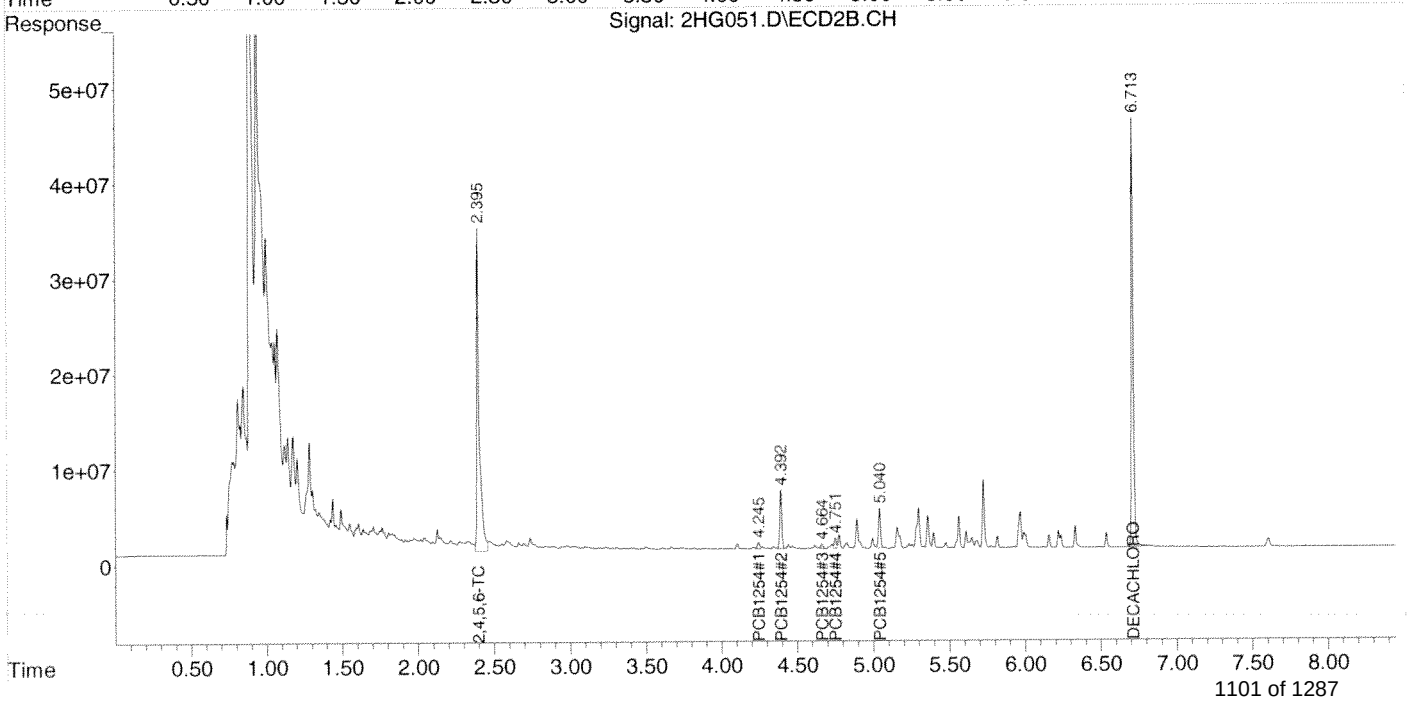
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG051.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 7:52
Operator : JJB
Sample : A404270-22RE1
Misc :
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:05:56 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:04
Operator : JJB
Sample : A404270-23RE1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:20:18 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.426	2.396	1631.5E6	853.7E6	0.0957	0.1145	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.753	4.894	43514164	26334983	0.0581	0.0734	#
8)	PCB1260#7	4.954	5.041	215.2E6	100.1E6	0.2128	0.2546	
9)	PCB1260#8	5.239	5.359	136.0E6	79415569	0.2130	0.2658	
10)	PCB1260#9	5.413	5.563	63442001	35138590	0.0966	0.1078	
11)	PCB1260#10	5.622	5.725	160.3E6	89422606	0.1050	0.1402	#
12)	DECACHLOR...	6.519	6.714	1452.9E6	776.1E6	0.1429	0.1580	

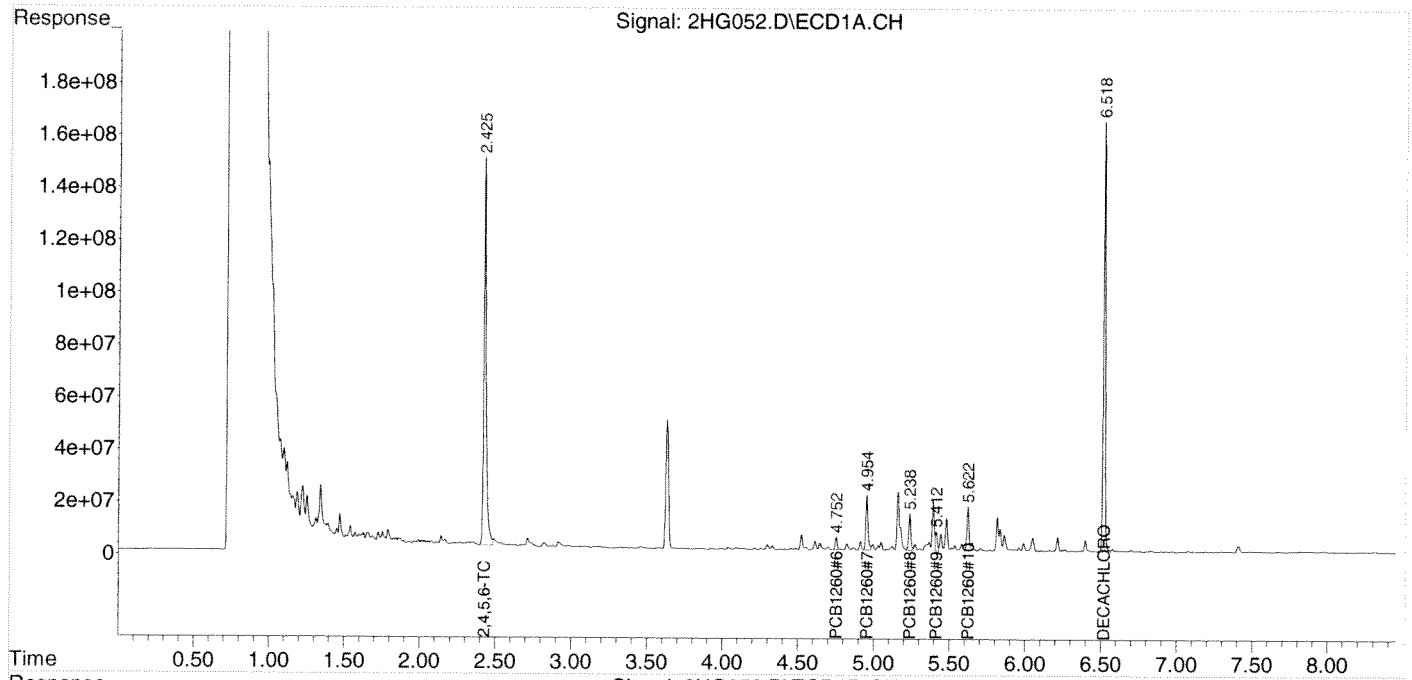
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

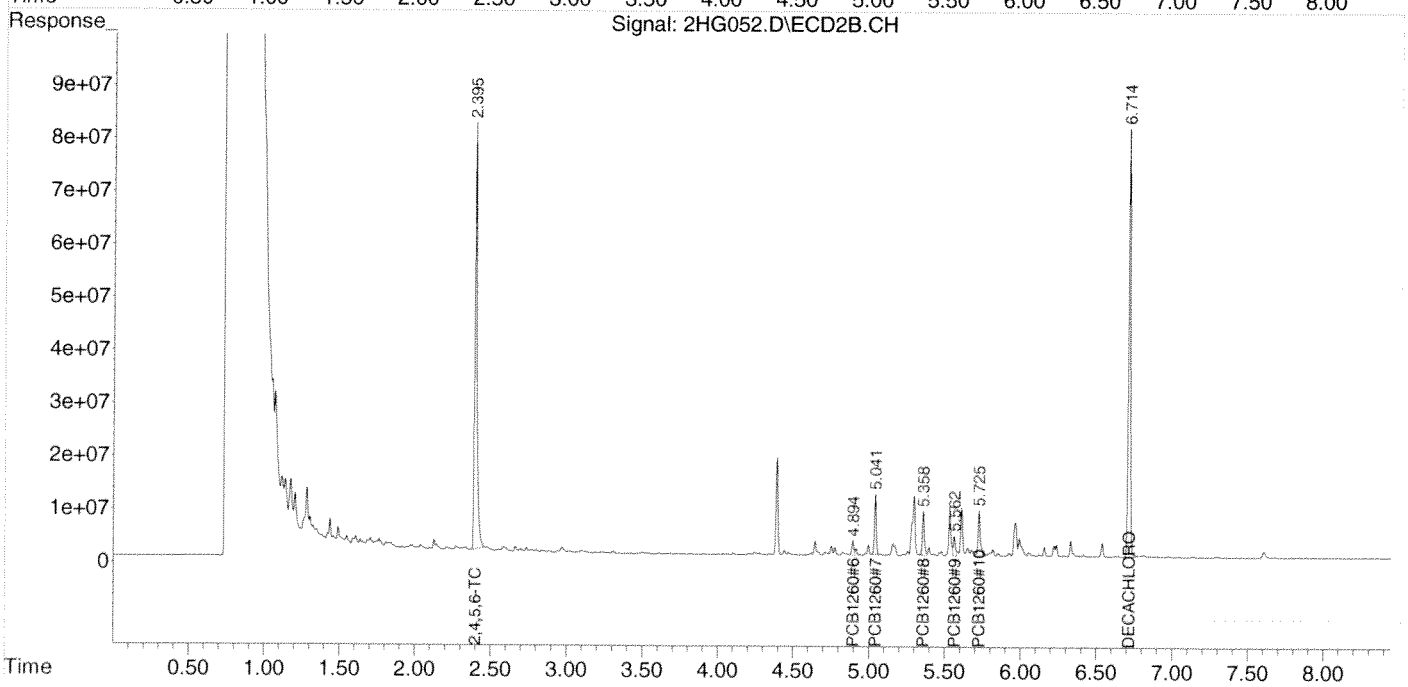
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:04
Operator : JJB
Sample : A404270-23RE1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:20:18 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:04
Operator : JJB
Sample : A404270-23RE1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:21:59 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.426	2.396	1635.0E6	873.1E6	0.0977	0.1100	
2)	PCB1254#1	4.092	4.246	7914997	6119848	0.0162	0.0232	#
3)	PCB1254#2	4.300	4.393	21417469	170.0E6	0.0250	0.5953	#
4)	PCB1254#3	4.525	4.665	60036198	5734642	0.1198	0.0245	#
5)	PCB1254#4	4.615	4.751	36275886	15963539	0.0426	0.0403	
6)	PCB1254#5	4.823	5.041	29257680	105.5E6	0.0439	0.5821	#
7)	DECACHLOR...	6.519	6.714	1455.6E6	778.7E6	0.1372	0.1486	

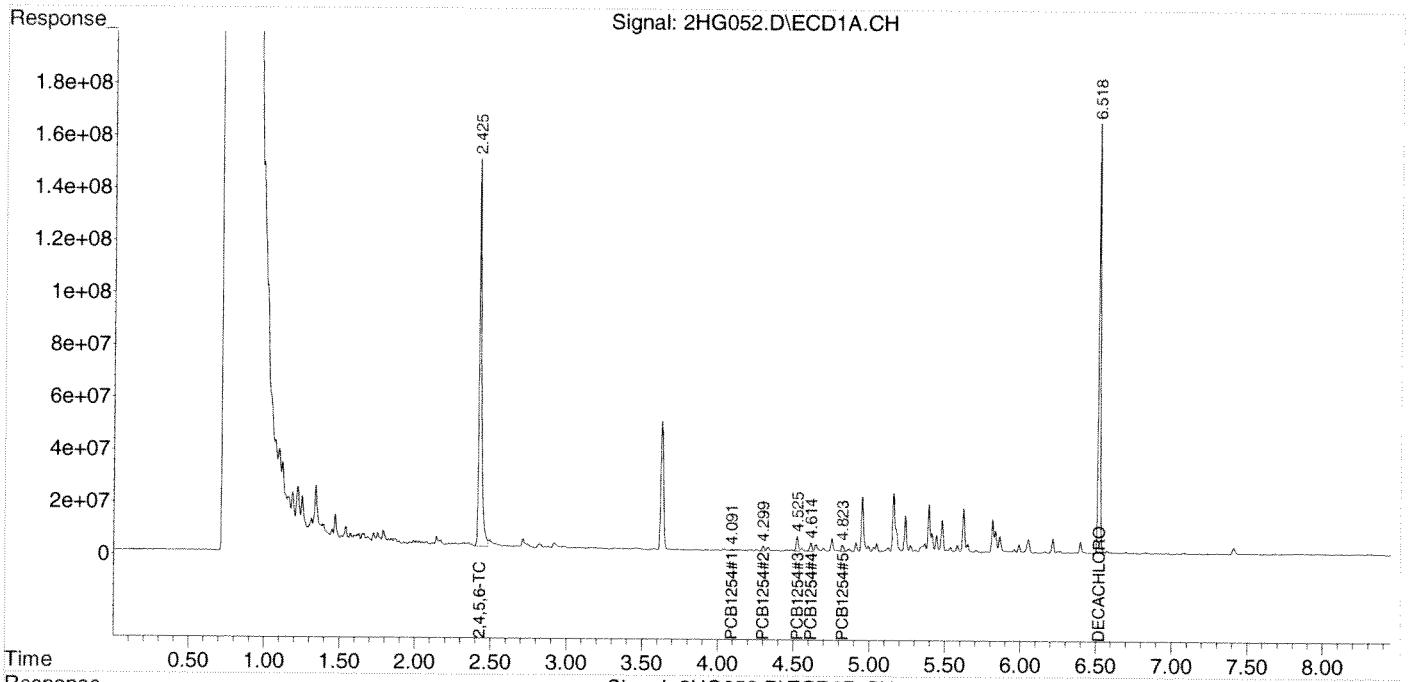
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

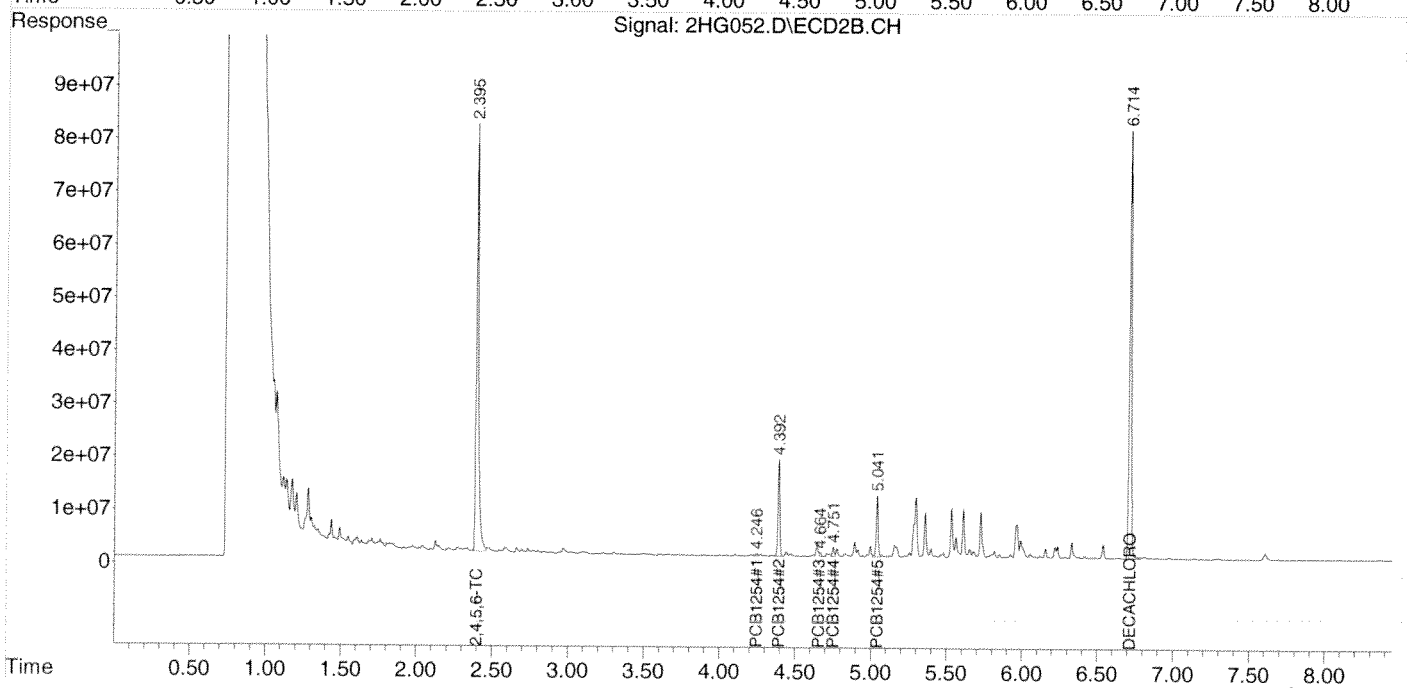
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:04
Operator : JJB
Sample : A404270-23RE1
Misc :
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:21:59 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG053.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:16
Operator : JJB
Sample : AA30013-CCV3
Misc : AA30030-CCV1
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:25:40 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.432	2.401	1812.8E6	904.0E6	0.1063	0.1213
2)	PCB1016#1	2.689	2.742	298.2E6	148.3E6	0.9239	1.0374
3)	PCB1016#2	2.954	3.038	585.0E6	303.2E6	0.9504	1.0602
4)	PCB1016#3	3.320	3.667	819.2E6	140.9E6	1.0026	1.1301
5)	PCB1016#4	3.428	3.705	511.0E6	145.3E6	1.0208	1.1335
6)	PCB1016#5	3.481	3.741	316.2E6	122.7E6	1.0406	0.9328
7)	PCB1260#6	4.752	4.894	768.2E6	424.0E6	1.0250	1.1824
8)	PCB1260#7	4.954	5.041	1136.2E6	492.7E6	1.1238	1.2538
9)	PCB1260#8	5.238	5.358	662.4E6	374.8E6	1.0375	1.2545
10)	PCB1260#9	5.414	5.563	773.6E6	413.9E6	1.1784	1.2703
11)	PCB1260#10	5.621	5.725	1738.2E6	885.3E6	1.1378	1.3883
12)	DECACHLOR...	6.518	6.713	1132.8E6	621.7E6	0.1114	0.1266

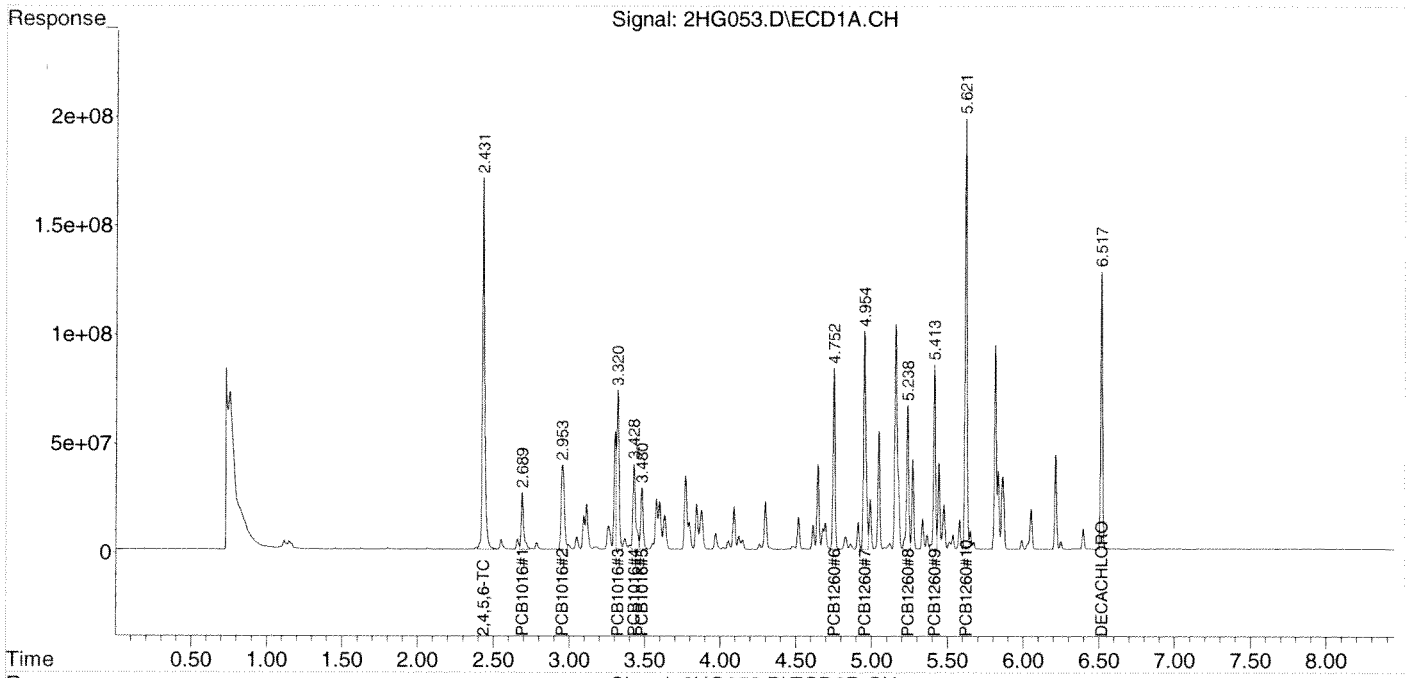
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

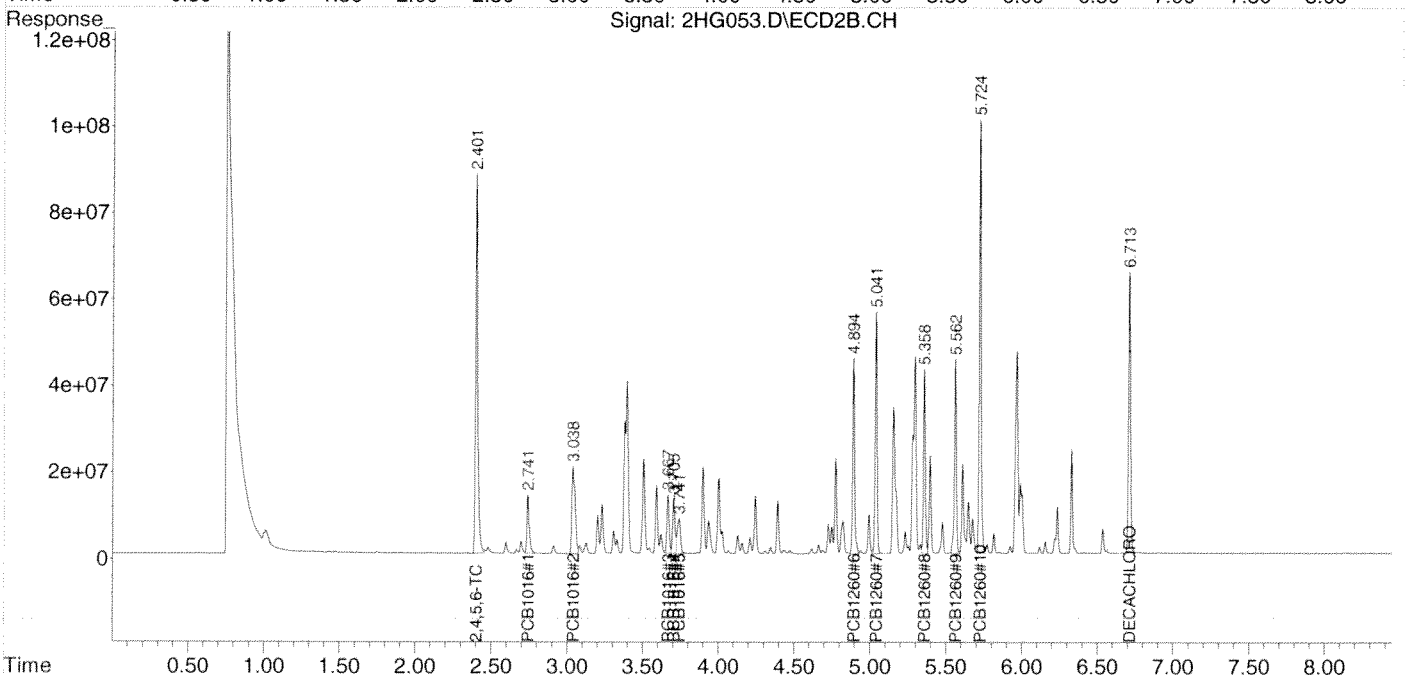
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG053.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:16
Operator : JJB
Sample : AA30013-CCV3
Misc : AA30030-CCV1
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:25:40 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Tue Aug 12 16:25:30 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG054.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:28
Operator : JJB
Sample : AA30013-ARC3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:50:31 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.432	2.402	1338.5E6	832.9E6	0.0799	0.1049	#
2)	PCB1254#1	4.094	4.248	466.0E6	295.8E6	0.9520	1.1217	
3)	PCB1254#2	4.301	4.394	860.5E6	264.8E6	1.0062	0.9273	
4)	PCB1254#3	4.522	4.665	470.7E6	259.7E6	0.9395	1.1083	
5)	PCB1254#4	4.616	4.752	820.5E6	486.6E6	0.9625	1.2273	#
6)	PCB1254#5	4.823	5.041	677.5E6	178.5E6	1.0176	0.9848	
7)	DECACHLOR...	6.519	6.715	1137.9E6	539.7E6	0.1073	0.1030	

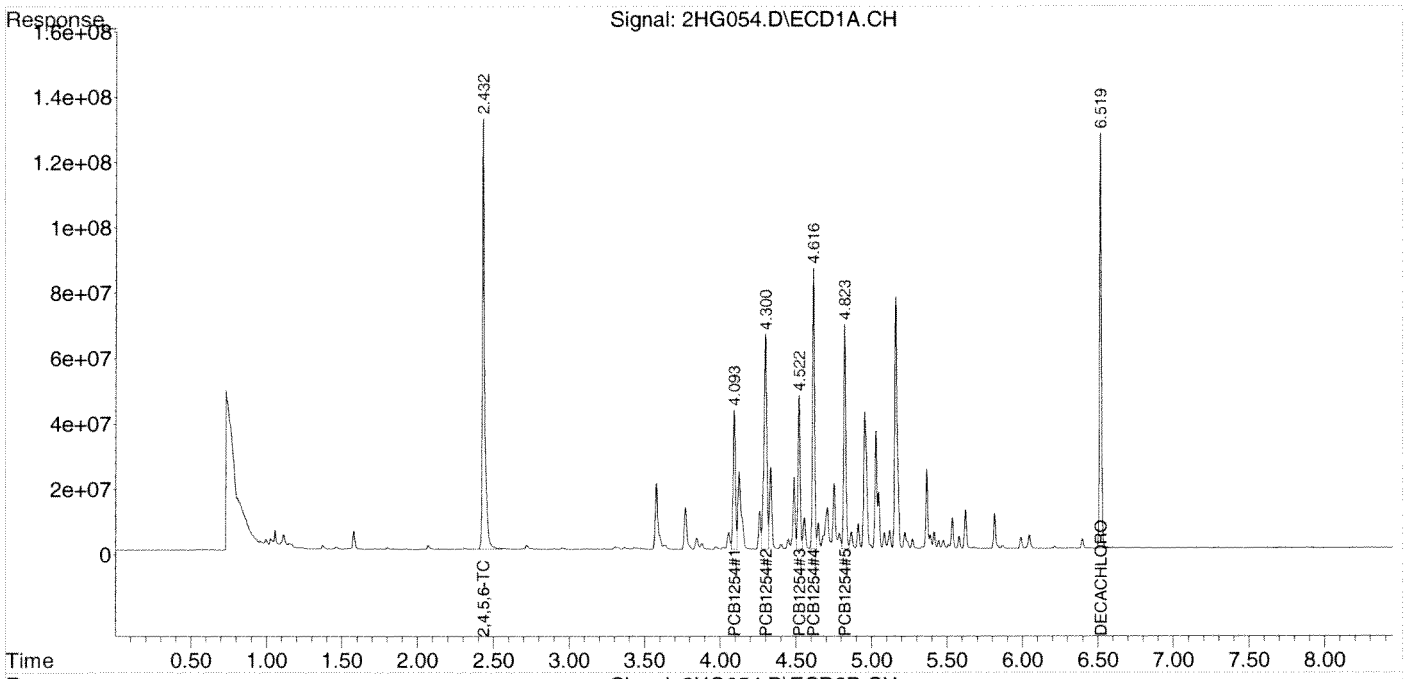
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

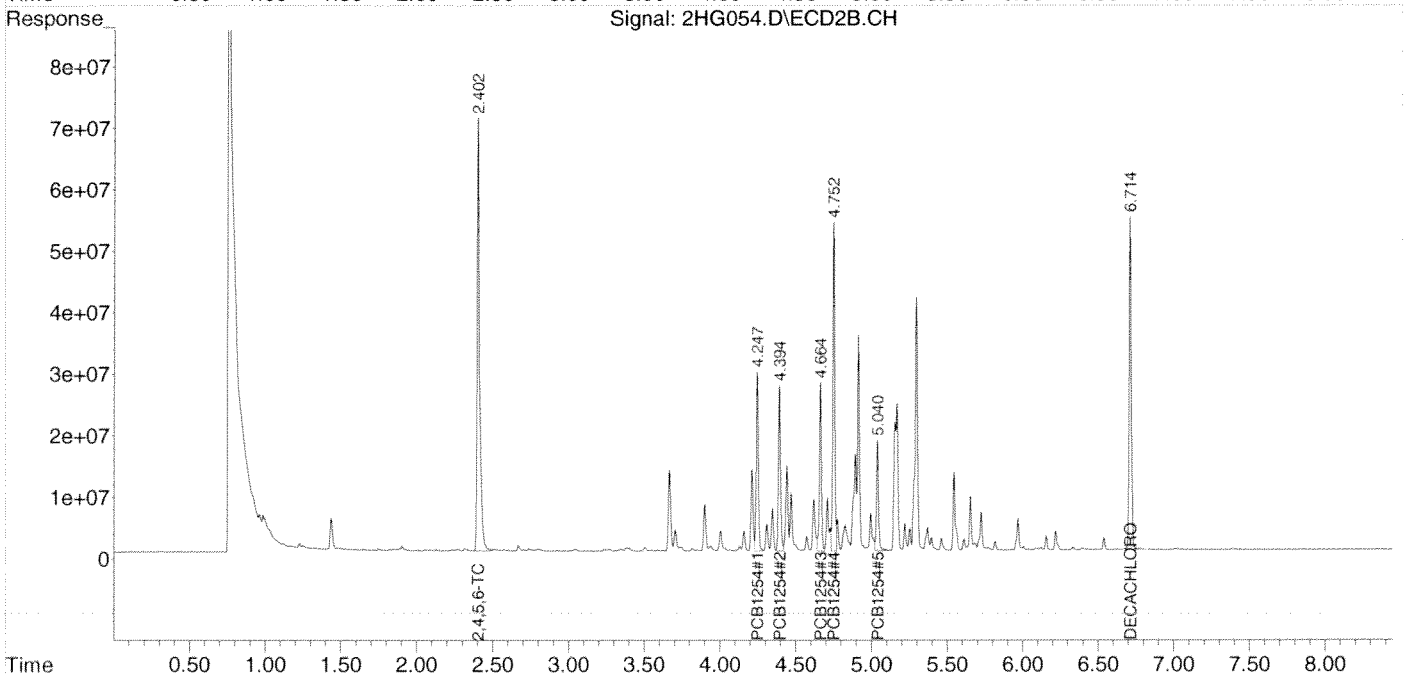
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HG14\
Data File : 2HG054.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 Aug 2014 8:28
Operator : JJB
Sample : AA30013-ARC3
Misc :
ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 13 08:50:31 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 13 05:26:03 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA30071

Instrument: OSVGCECD2

Calibration ID: 1408030

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA30071-CCV1	QC		1		A4F0547		
AA30071-ARC1	QC		2		A4F0548		
4H13024-BLK1	QC		3				
4H13024-BS1	QC		4				
4H13024-BSD1	QC		5				
A404270-05RE1	8082A DOD	D	6				CH2M Hill, Inc. (CH025)
A404270-09RE1	8082A DOD	D	7				CH2M Hill, Inc. (CH025)
A404270-19RE1	8082A DOD	D	8				CH2M Hill, Inc. (CH025)
A404270-20RE1	8082A DOD	D	9				CH2M Hill, Inc. (CH025)
A404270-25RE1	8082A DOD	D	10				CH2M Hill, Inc. (CH025)
A404270-27RE1	8082A DOD	D	11				CH2M Hill, Inc. (CH025)
AA30071-CCV2	QC		12		A4F0547		
AA30071-ARC2	QC		13		A4F0548		

Samples Loaded By Date Data Processed By Date

PREPARATION BENCH SHEET

Printed: 8/13/2014 1:33:19PM

Analysis
8082A DOD [EPA 8082A]

4H13024
ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
__ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4H0180 PCB 1268 Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location		Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments
4H13024-BLK1		Blank			QC	—	—	30.0	10			1000		
4H13024-BS1		LCS			QC	—	—	30.0	10	A4H0180	1000	1000		
4H13024-BSD1		LCS Dup			QC	—	—	30.0	10	A4H0180	1000	1000		
A404270-05RE1	1 D	TR-5TH-CSW05-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.1	10			1000		Re-extract added 8/13/2014 by
A404270-09RE1	2 D	TR-5TH-CSW08-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.2	10			1000		Re-extract added 8/13/2014 by
A404270-19RE1	3 D	TR-5TH-CSF01-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.0	10			1000		Re-extract added 8/13/2014 by
A404270-20RE1	4 D	TR-5TH-CSF02-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.2	10			1000		Re-extract added 8/13/2014 by
A404270-25RE1	5 D	TR-5TH-CSF06-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.1	10			1000		Re-extract added 8/13/2014 by
A404270-27RE1	6 D	TR-5TH-CSF08-0814	D[C10]	08-Aug-14	8082A DOD	—	—	30.1	10			1000		Re-extract added 8/13/2014 by

(1) Before solvent extraction proceeds, verify that there is no residual chlorine above 0.5 mg/L. Any sample above this must be treated to remove excess chlorine before extraction, and this documented as a comment.

8082 soil

Start Date/Time 08-13-14 14:00

StopDate/Time 08-13-14 18:15

Standard ID#	Description	Manufacture Lot#
A3C0397	Baked Sand	A3C0396
A4E0359	Solvent Hexane	141800
A4F0167	Baked Sodium Sulfate	137632
A4H0217	Solvent Dichloromethane	Solvent Lot # DK356

1111 of 1287

PREPARATION BENCH SHEET

Printed: 8/13/2014 1:33:19PM

4H13024

ENCO Orlando

Prepared using: EPA 3550C

Surrogate Solution
___ A4H0094 Pest/PCB Surrogate Working Mix

Spiking Solution
A4H0180 PCB 1268 Spike Working Mix

Matrix: Soil

Lab Number	Code	Sample ID, Source and Sample Location	Due Date	Analysis	pH adj	Res Cl(1)	Initial (g)	Final (mL)	Spike ID	ul Spike	ul Surr1	ul Surr2	Extraction Comments

Equipment Used

Sonicator OSON 1,2,3 — Tuned per manufacturer instructions? [X] Yes [ ] No [ ] NA
Turbovap OTVAP1 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Turbovap OTVAP2 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Turbovap OTVAP3 — Temperature (°C): 40°C — N2 pressure (initial) (psi): 3 psi — (final): 12 psi
Balance OEXTBAL 7 — Daily calibration complete? [X] Yes [ ] No [ ] NA
Thermometer
Other

CVP 08-13-14
Samples Prepared By Date

Samples Prepared By Date

Samples Prepared By Date

1112 of 1287

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 8:59
Operator : JJB
Sample : AA30071-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 09:08:34 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.420	2.383	1894.7E6	957.0E6	0.1111	0.1284	
2)	PCB1016#1	2.677	2.723	311.8E6	156.2E6	0.9661	1.0927	
3)	PCB1016#2	2.940	3.018	606.2E6	328.9E6	0.9848	1.1502	
4)	PCB1016#3	3.307	3.647	791.5E6	150.8E6	0.9687	1.2093	
5)	PCB1016#4	3.414	3.685	530.7E6	156.7E6	1.0603	1.2222	
6)	PCB1016#5	3.467	3.721	319.7E6	140.0E6	1.0522	1.0640	
7)	PCB1260#6	4.741	4.877	765.8E6	460.1E6	1.0217	1.2831	#
8)	PCB1260#7	4.944	5.025	1172.1E6	494.3E6	1.1594	1.2577	
9)	PCB1260#8	5.229	5.342	687.0E6	391.8E6	1.0760	1.3114	
10)	PCB1260#9	5.404	5.547	764.9E6	428.3E6	1.1651	1.3143	
11)	PCB1260#10	5.612	5.710	1646.4E6	852.2E6	1.0777	1.3363	
12)	DECACHLOR...	6.513	6.701	881.6E6	505.9E6	0.0867	0.1030	

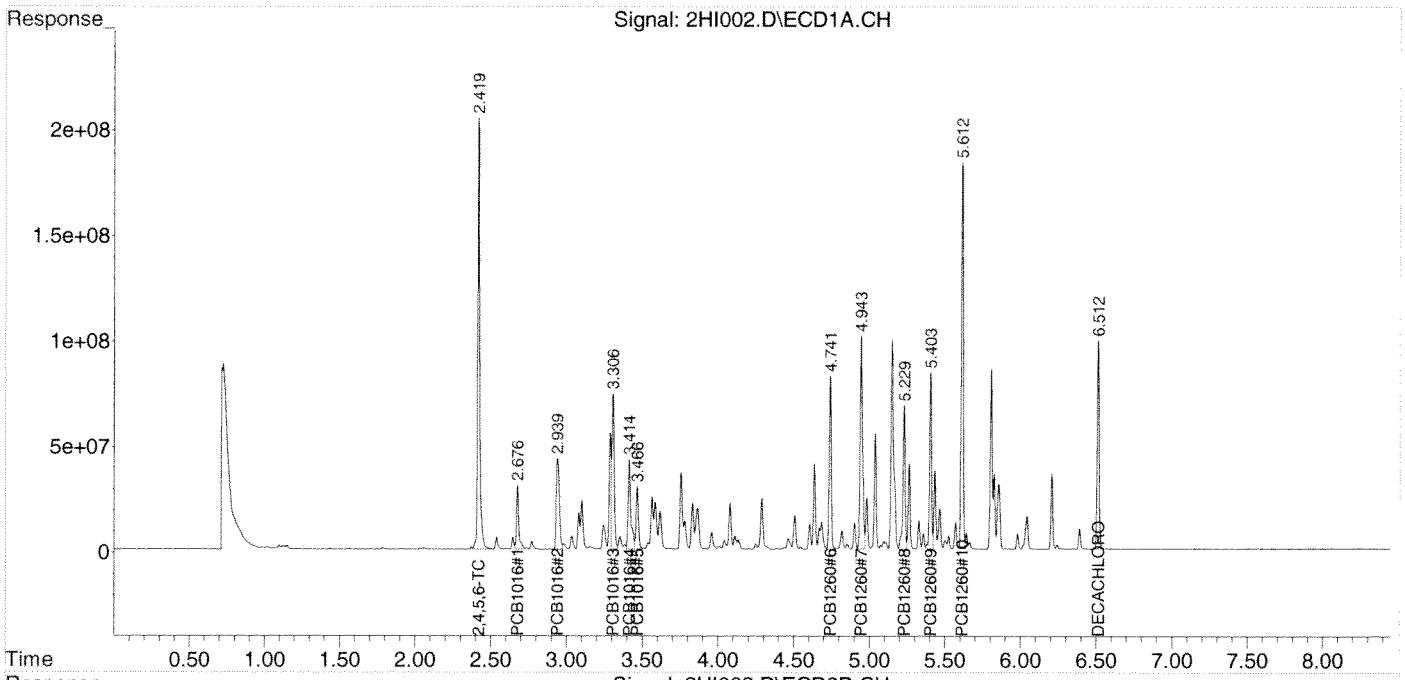
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

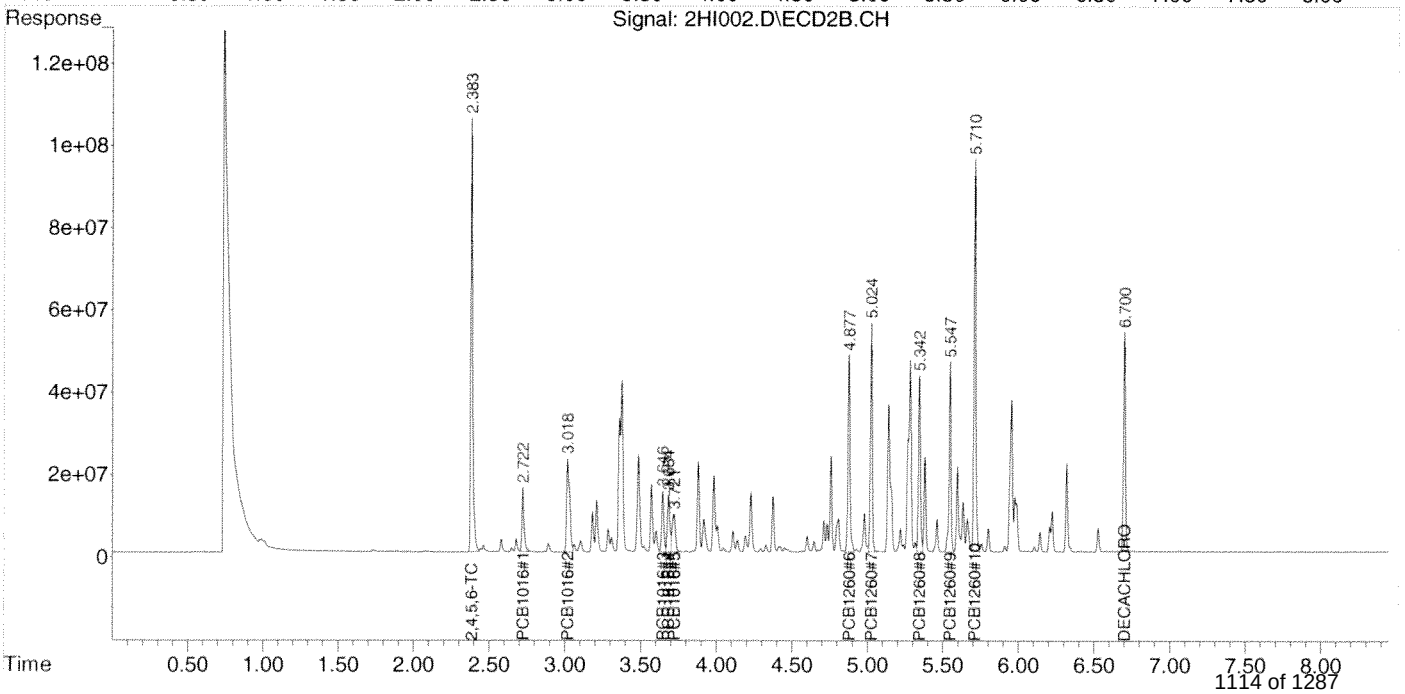
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 8:59
Operator : JJB
Sample : AA30071-CCV1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 09:08:34 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 9:11
Operator : JJB
Sample : AA30071-ARC1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:07 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.417	2.385	2014.0E6	1033.9E6	0.1203	0.1302	
2)	PCB1254#1	4.077	4.229	545.3E6	339.4E6	1.1141	1.2869	
3)	PCB1254#2	4.285	4.375	959.3E6	375.1E6	1.1217	1.3133	
4)	PCB1254#3	4.507	4.646	570.1E6	286.8E6	1.1381	1.2238	
5)	PCB1254#4	4.601	4.734	982.6E6	529.3E6	1.1527	1.3350	
6)	PCB1254#5	4.809	5.024	668.9E6	229.8E6	1.0047	1.2681	#
7)	DECACHLOR...	6.508	6.697	948.6E6	494.7E6	0.0894	0.0944	

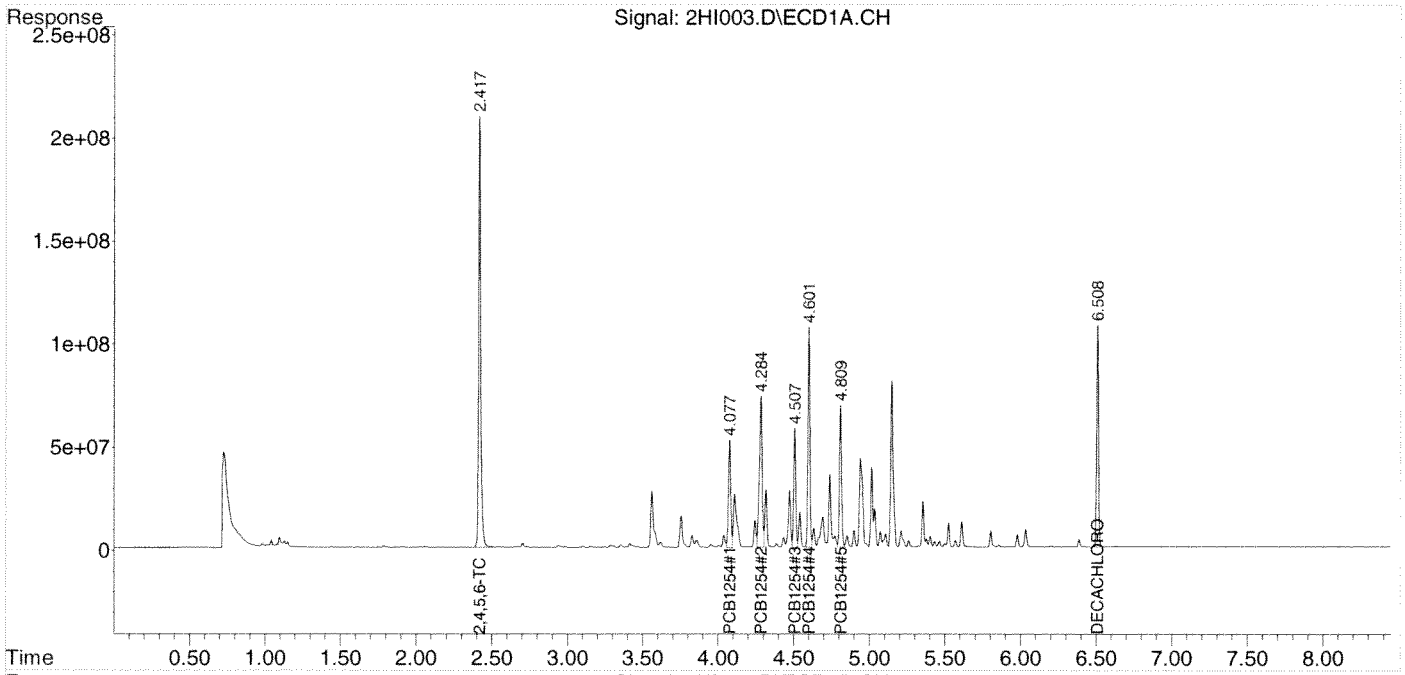
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

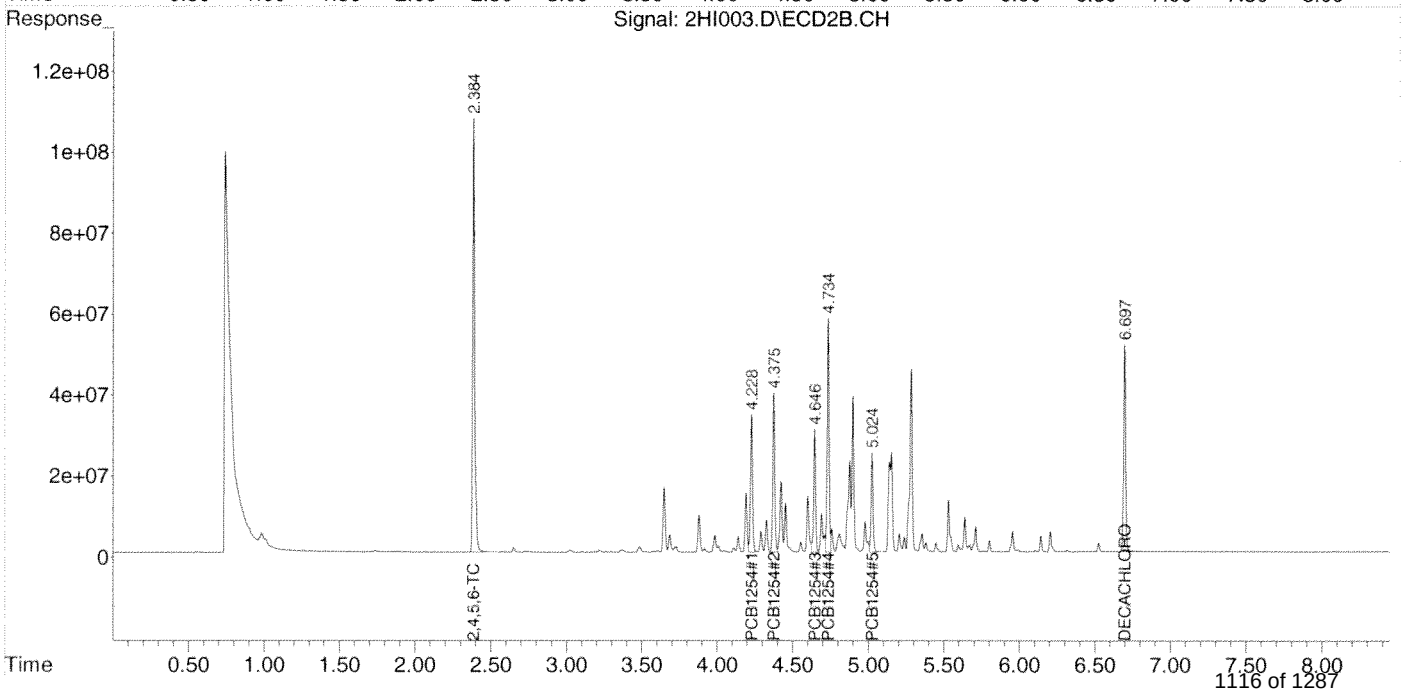
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 9:11
Operator : JJB
Sample : AA30071-ARC1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:07 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 9:54
Operator : JJB
Sample : 4H13024-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:03:42 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.418	2.381	1464.8E6	765.9E6	0.0859	0.1027
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	0.000	0.000	0	0	N.D. d	N.D. d
8)	PCB1260#7	0.000	0.000	0	0	N.D. d	N.D. d
9)	PCB1260#8	0.000	0.000	0	0	N.D. d	N.D. d
10)	PCB1260#9	0.000	0.000	0	0	N.D. d	N.D. d
11)	PCB1260#10	0.000	0.000	0	0	N.D. d	N.D. d
12)	DECACHLOR...	6.517	6.703	982.6E6	578.7E6	0.0967	0.1179

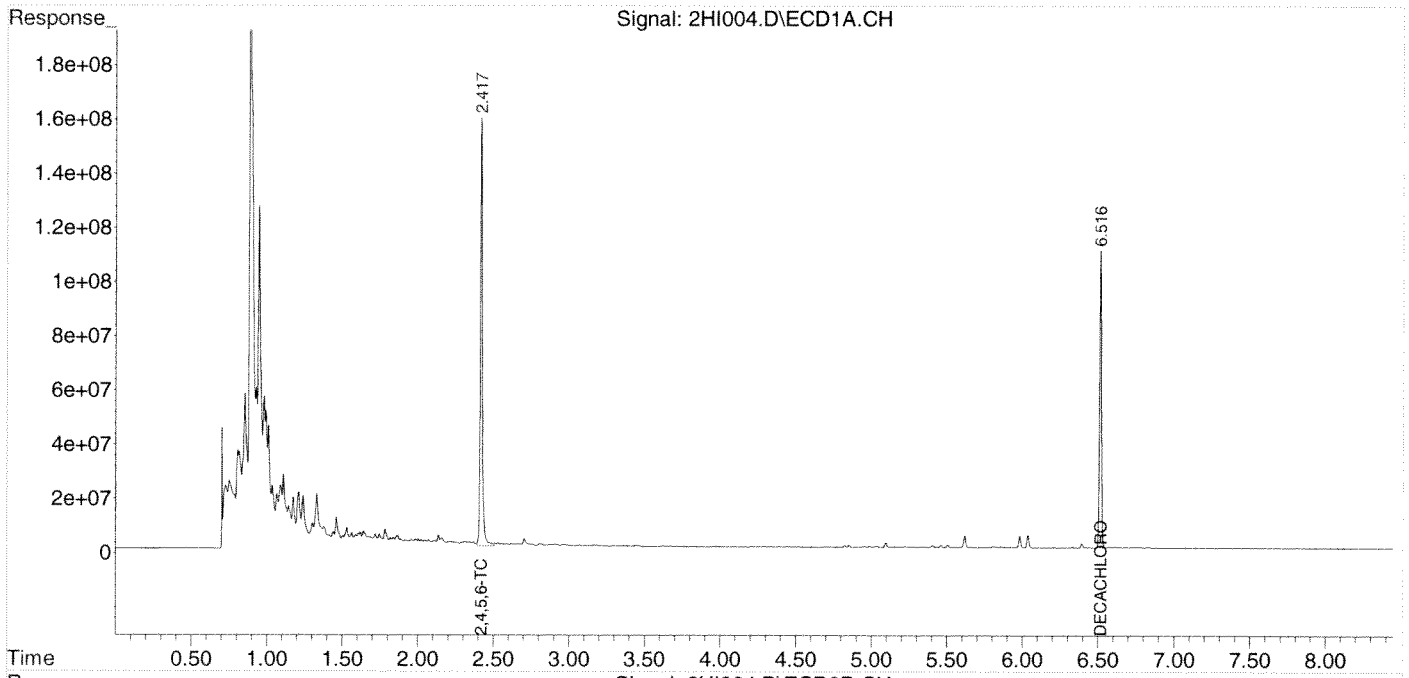
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

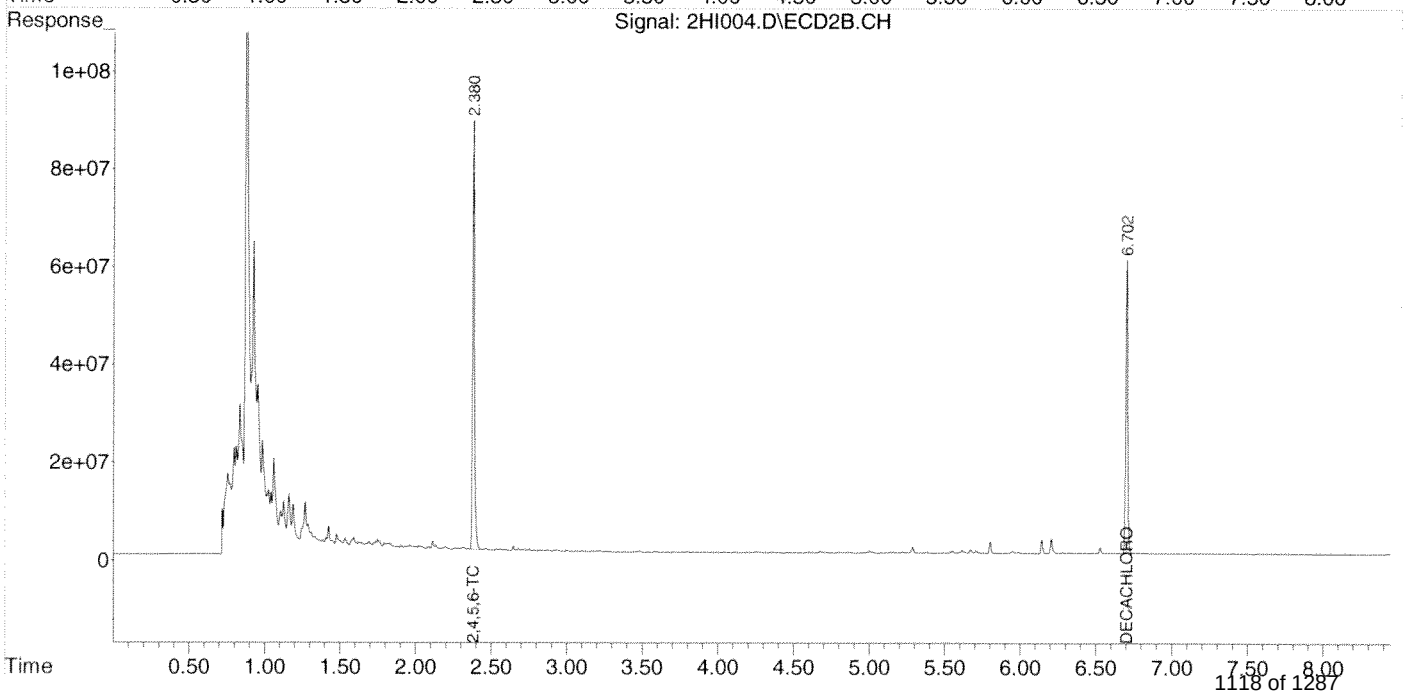
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 9:54
Operator : JJB
Sample : 4H13024-BLK1
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:03:42 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:06
Operator : JJB
Sample : 4H13024-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:16:38 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.413	2.381	1566.0E6	826.0E6	0.0918	0.1108	
2)	PCB1016#1	2.671	2.722	275.9E6	142.8E6	0.8547	0.9994	
3)	PCB1016#2	2.936	3.018	552.0E6	316.8E6	0.8967	1.1077	
4)	PCB1016#3	3.303	3.647	803.5E6	156.1E6	0.9834	1.2516	#
5)	PCB1016#4	3.411	3.685	516.6E6	159.1E6	1.0320	1.2406	
6)	PCB1016#5	3.463	3.722	322.2E6	137.8E6	1.0602	1.0474	
7)	PCB1260#6	4.740	4.878	832.2E6	501.4E6	1.1104	1.3983	#
8)	PCB1260#7	4.943	5.025	1340.8E6	550.7E6	1.3263	1.4013	
9)	PCB1260#8	5.228	5.343	659.0E6	364.7E6	1.0321	1.2207	
10)	PCB1260#9	5.403	5.548	712.3E6	428.4E6	1.0850	1.3146	
11)	PCB1260#10	5.611	5.711	1630.6E6	868.4E6	1.0674	1.3617	#
12)	DECACHLOR...	6.509	6.699	1085.5E6	605.1E6	0.1068	0.1232	

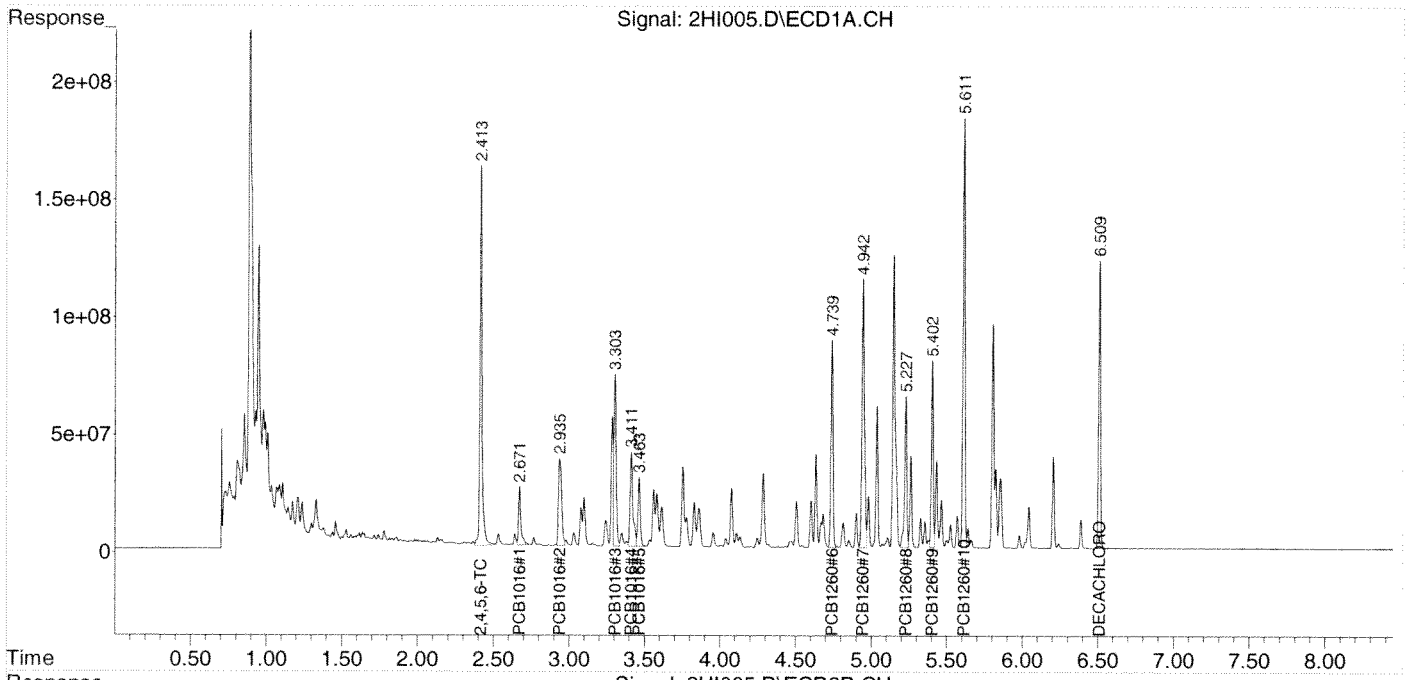
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

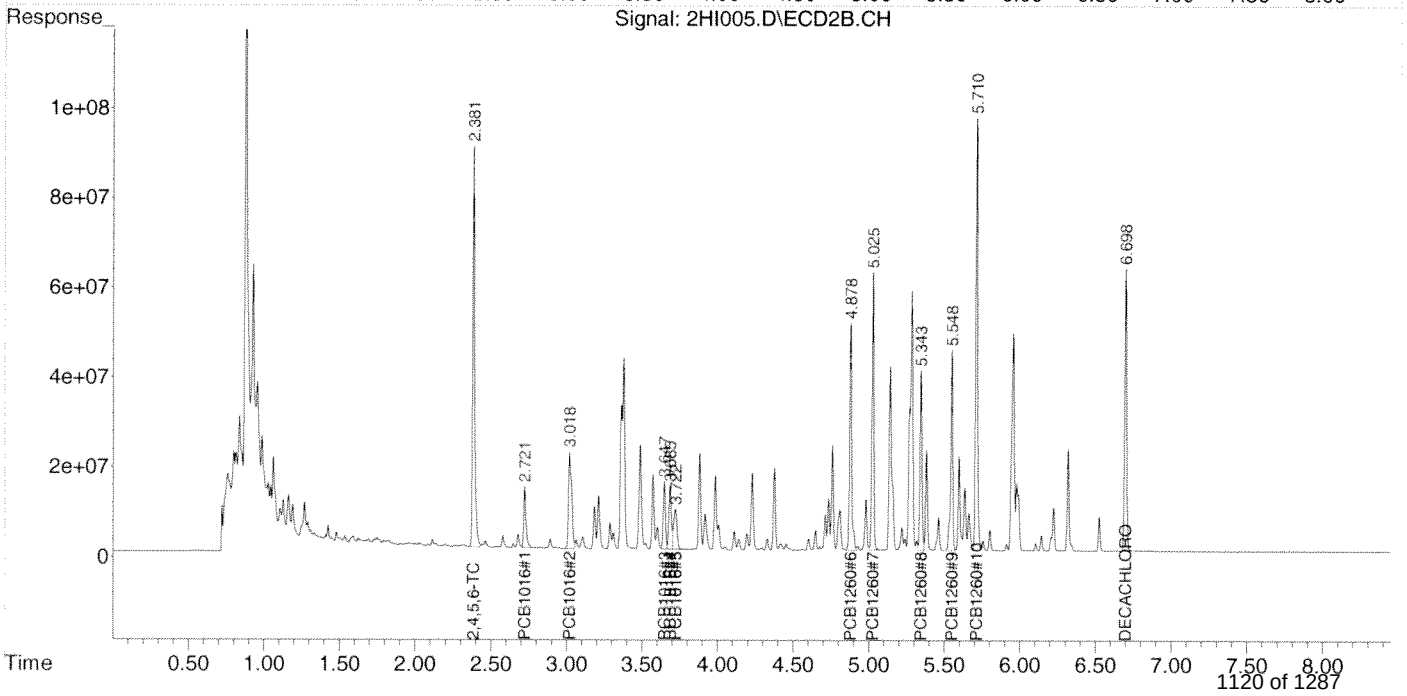
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:06
Operator : JJB
Sample : 4H13024-BS1
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:16:38 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:18
Operator : JJB
Sample : 4H13024-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:27:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.412	2.381	1464.2E6	789.1E6	0.0859	0.1058	
2)	PCB1016#1	2.670	2.721	238.3E6	138.8E6	0.7384	0.9710	#
3)	PCB1016#2	2.934	3.018	543.5E6	306.3E6	0.8829	1.0711	
4)	PCB1016#3	3.302	3.647	756.1E6	154.0E6	0.9253	1.2349	#
5)	PCB1016#4	3.410	3.685	502.5E6	156.8E6	1.0039	1.2233	
6)	PCB1016#5	3.462	3.721	305.5E6	133.9E6	1.0053	1.0179	
7)	PCB1260#6	4.739	4.878	812.9E6	491.6E6	1.0846	1.3710	#
8)	PCB1260#7	4.941	5.026	1298.0E6	532.2E6	1.2839	1.3543	
9)	PCB1260#8	5.227	5.343	640.7E6	356.7E6	1.0035	1.1938	
10)	PCB1260#9	5.402	5.548	698.2E6	418.5E6	1.0635	1.2843	
11)	PCB1260#10	5.610	5.711	1572.6E6	836.7E6	1.0294	1.3121	#
12)	DECACHLOR...	6.509	6.699	1028.4E6	574.8E6	0.1012	0.1171	

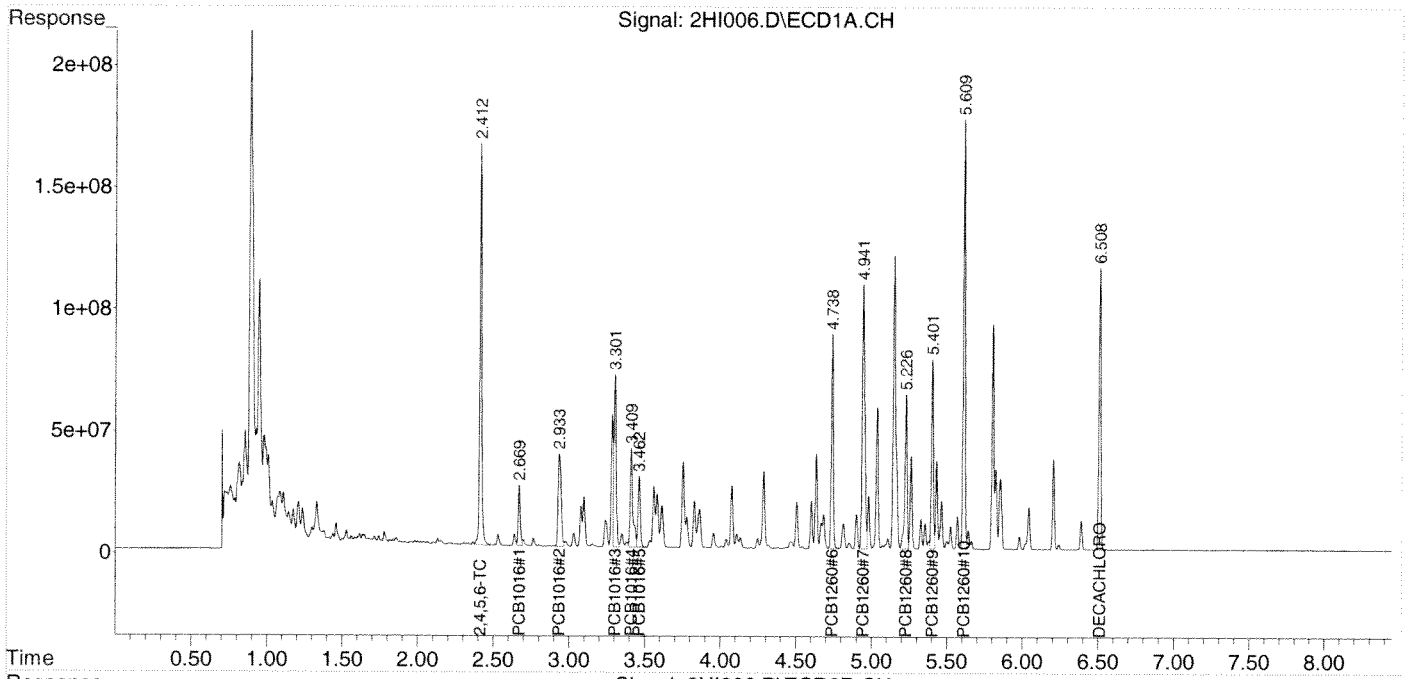
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

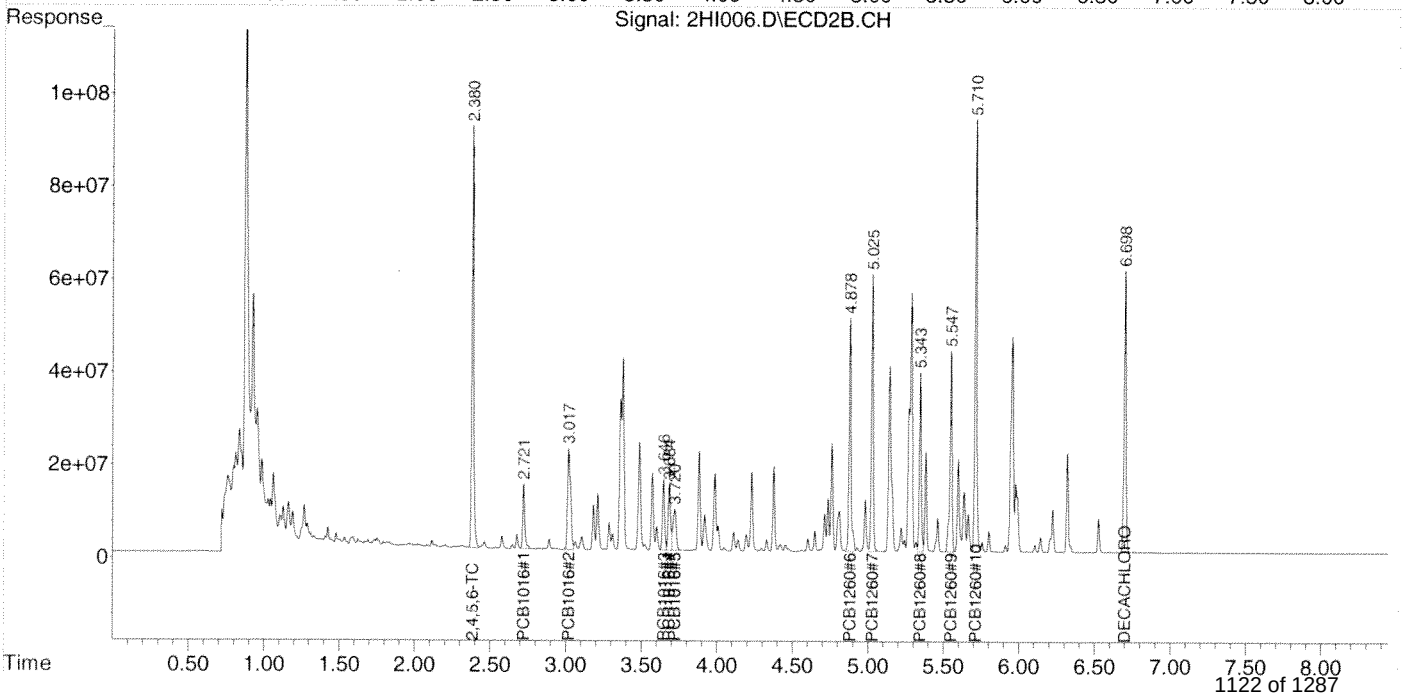
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI006.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:18
Operator : JJB
Sample : 4H13024-BSD1
Misc :
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:27:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:30
Operator : JJB
Sample : A404270-05RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:39:31 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.413	2.382	2075.2E6	1081.9E6	0.1217	0.1451	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.740	4.878	9046701	4246587	0.0121	0.0118	
8)	PCB1260#7	4.942	5.026	50052304	24957511	0.0495	0.0635	#
9)	PCB1260#8	5.228	5.344	32226038	17421474	0.0505	0.0583	
10)	PCB1260#9	5.402	5.549	18828944	10904348	0.0287	0.0335	
11)	PCB1260#10	5.614	5.712	84393215	21080860	0.0552	0.0331	#
12)	DECACHLOR...	6.509	6.699	1360.7E6	777.6E6	0.1338	0.1584	

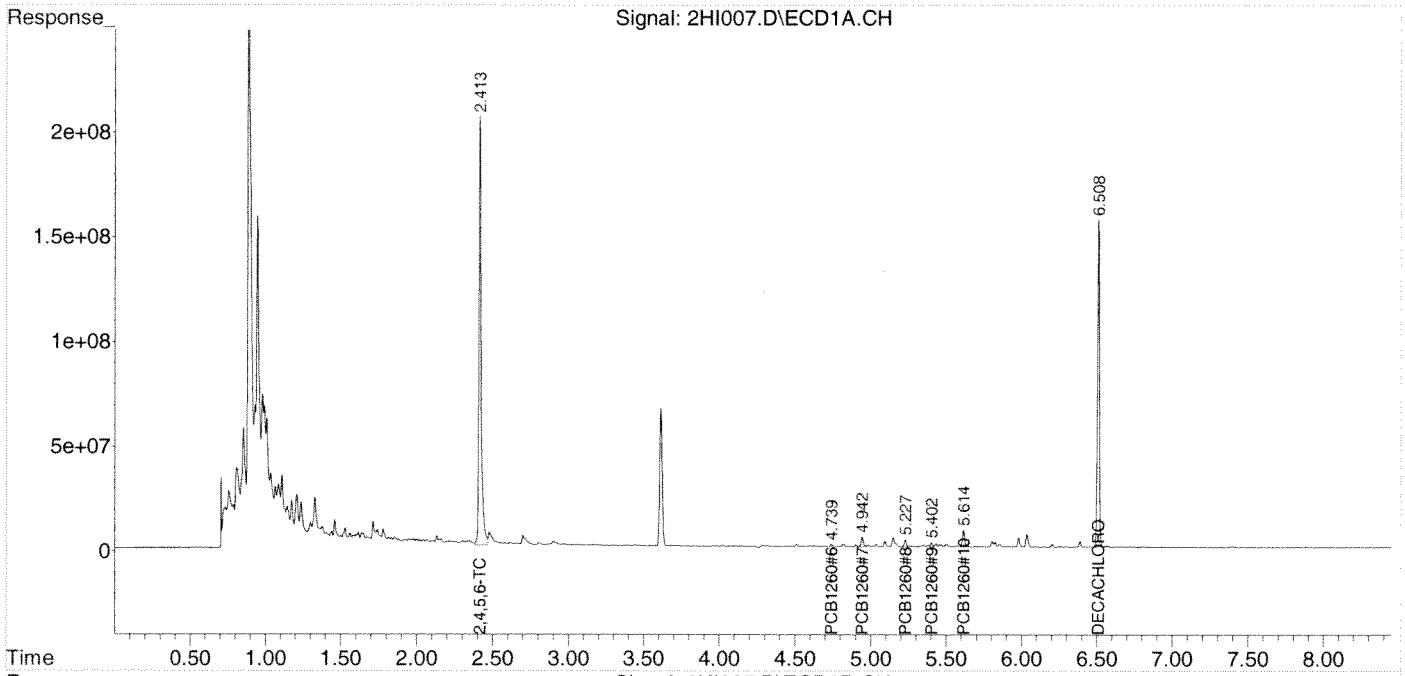
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

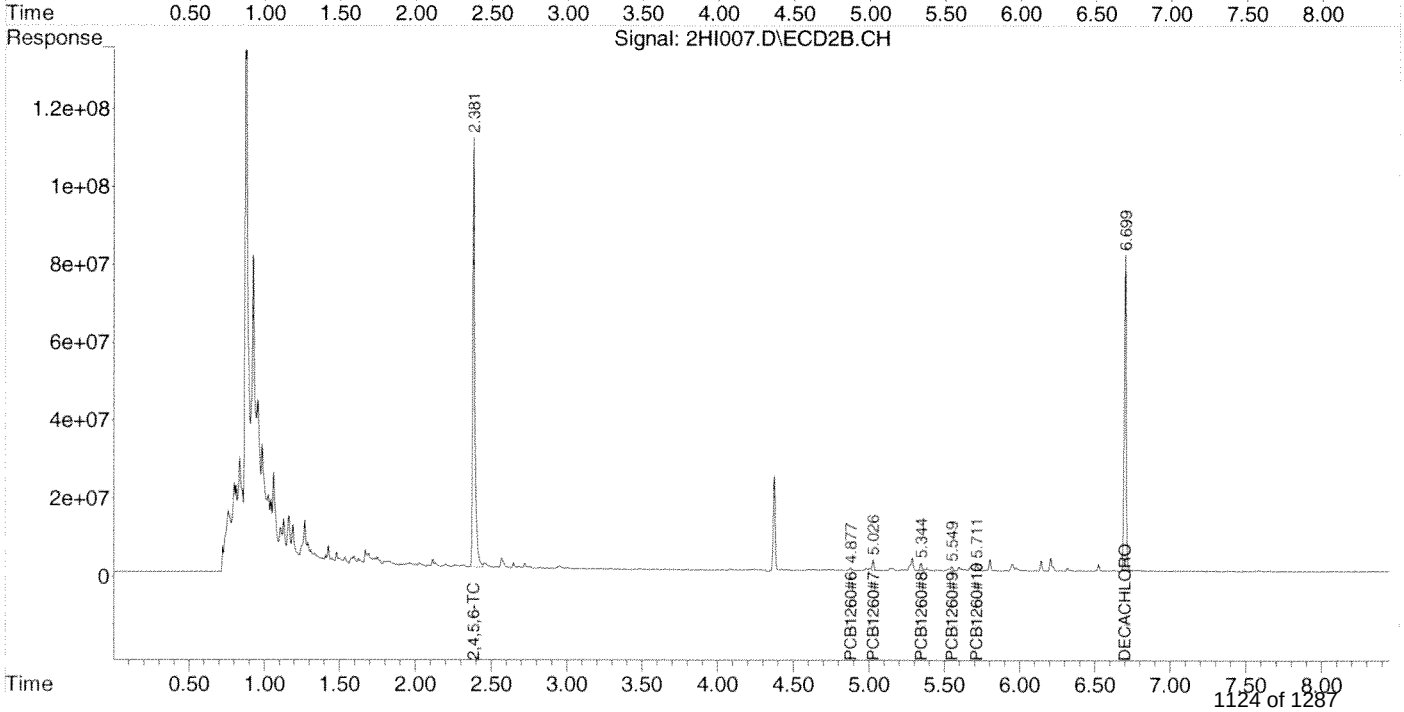
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:30
Operator : JJB
Sample : A404270-05RE1
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 10:39:31 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:42
Operator : JJB
Sample : A404270-09RE1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:50:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.414	2.382	1952.8E6	1047.3E6	0.1145	0.1405	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.741	4.879	10324199	5825642	0.0138	0.0162	
8)	PCB1260#7	4.943	5.027	50308723	26353759	0.0498	0.0671	#
9)	PCB1260#8	5.228	5.346	28312704	23140524	0.0443	0.0775	#
10)	PCB1260#9	5.403	5.550	27280115	7661637	0.0416	0.0235	#
11)	PCB1260#10	5.614	5.712	75361706	20961807	0.0493	0.0329	#
12)	DECACHLOR...	6.510	6.700	1324.1E6	752.2E6	0.1302	0.1532	

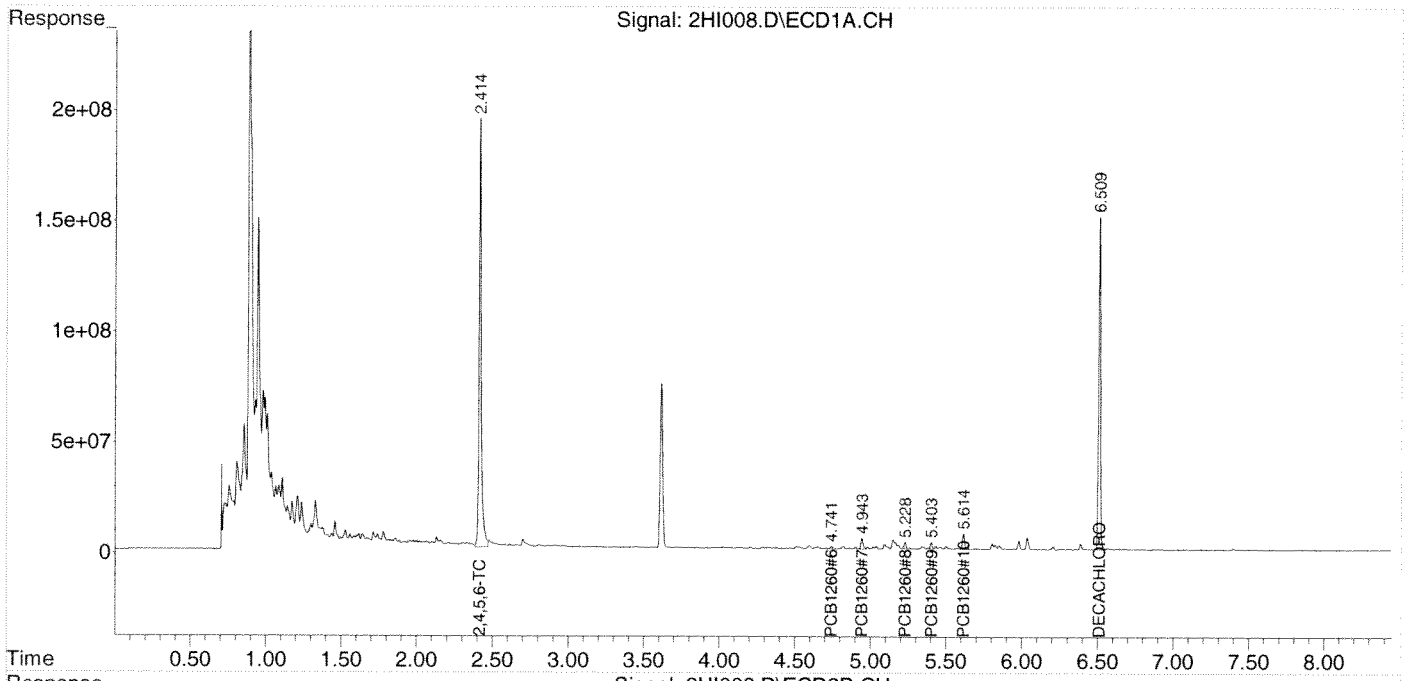
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

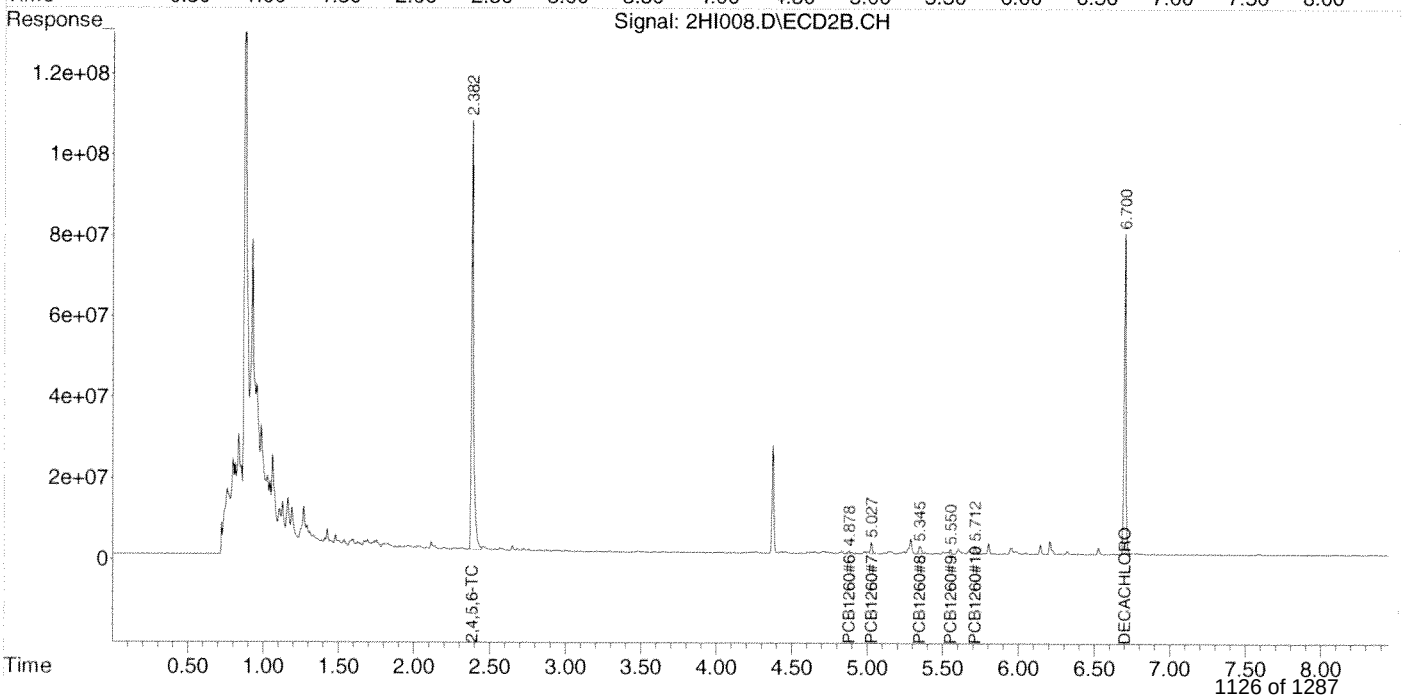
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:42
Operator : JJB
Sample : A404270-09RE1
Misc :
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:50:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:54
Operator : JJB
Sample : A404270-19RE1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:50:39 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.413	2.382	1887.1E6	1016.5E6	0.1107	0.1363
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d
7)	PCB1260#6	4.740	0.000	5676052	0	0.0076	N.D. #
8)	PCB1260#7	4.942	5.027	35332175	18199943	0.0349	0.0463 #
9)	PCB1260#8	5.228	5.344	20768733	12581535	0.0325	0.0421 #
10)	PCB1260#9	5.402	5.549	12016228	7046478	0.0183	0.0216
11)	PCB1260#10	5.614	5.712	52879632	14973974	0.0346	0.0235 #
12)	DECACHLOR...	6.509	6.699	1286.3E6	727.7E6	0.1265	0.1482

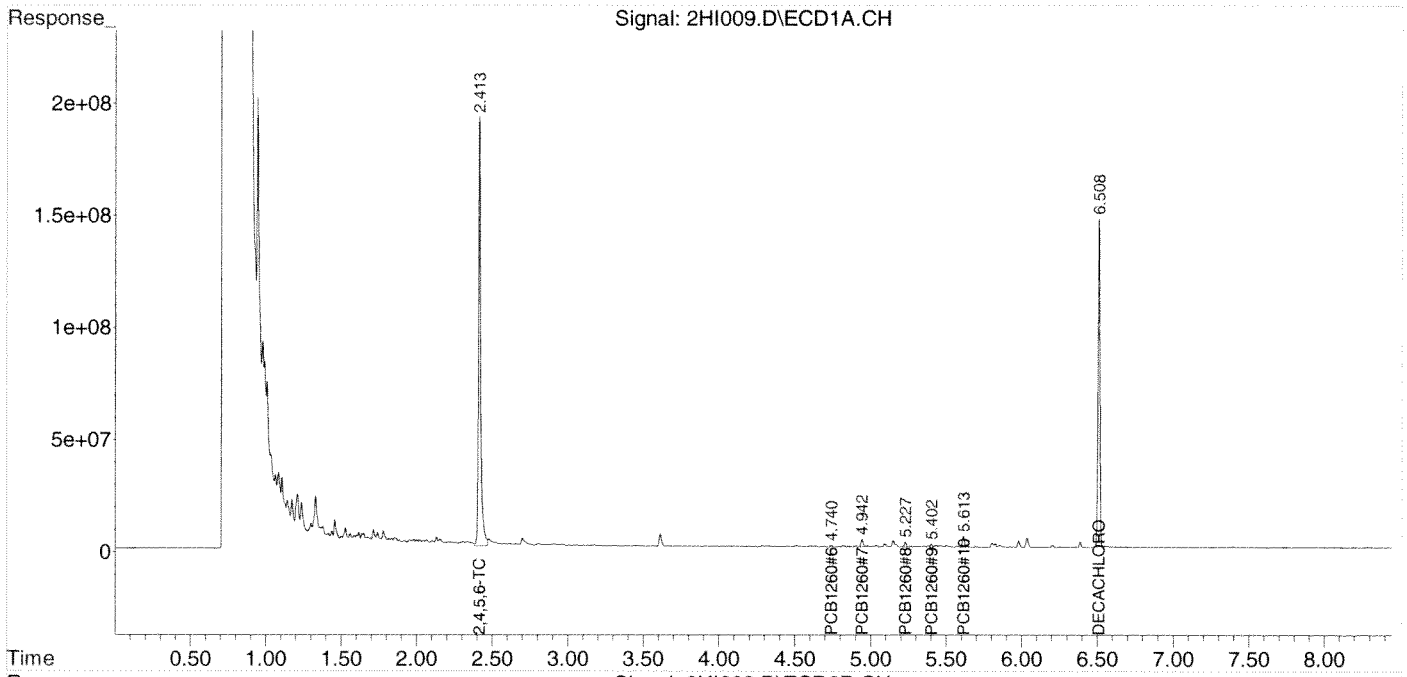
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

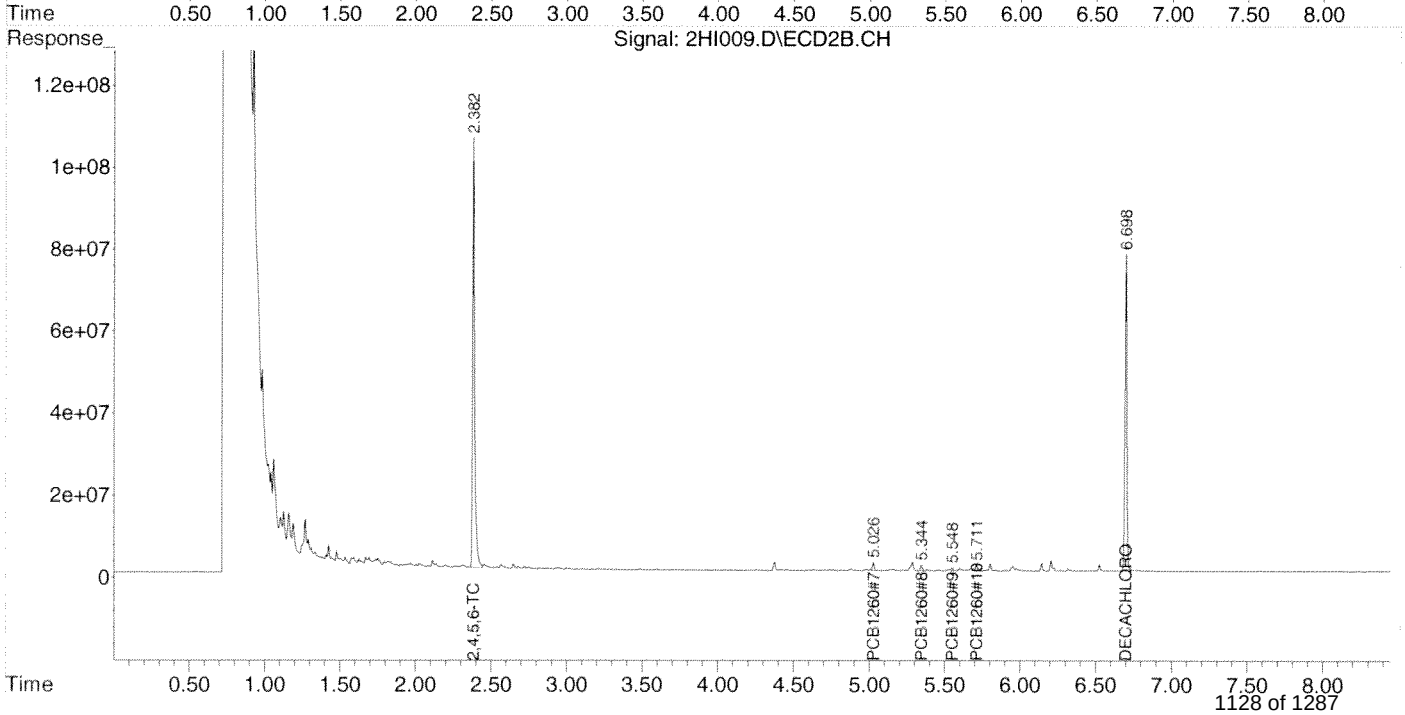
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 10:54
Operator : JJB
Sample : A404270-19RE1
Misc :
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:50:39 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:06
Operator : JJB
Sample : A404270-20RE1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.413	2.382	2028.8E6	1065.9E6	0.1190	0.1430	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.740	4.879	13740437	4853785	0.0183	0.0135	#
8)	PCB1260#7	4.943	5.027	59507303	31069453	0.0589	0.0791	#
9)	PCB1260#8	5.228	5.344	39963697	20961430	0.0626	0.0702	
10)	PCB1260#9	5.402	5.549	21174285	11774681	0.0323	0.0361	
11)	PCB1260#10	5.613	5.712	72049315	24441052	0.0472	0.0383	
12)	DECACHLOR...	6.508	6.698	1417.3E6	804.9E6	0.1394	0.1639	

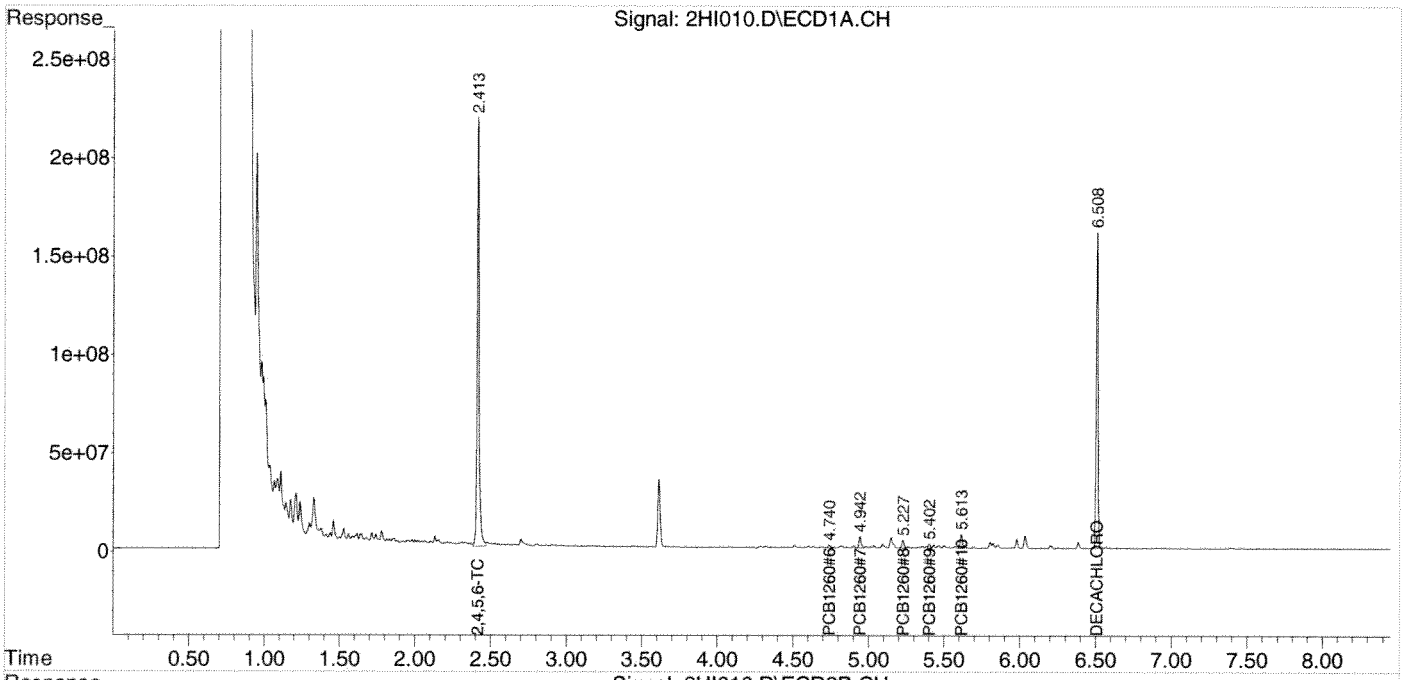
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

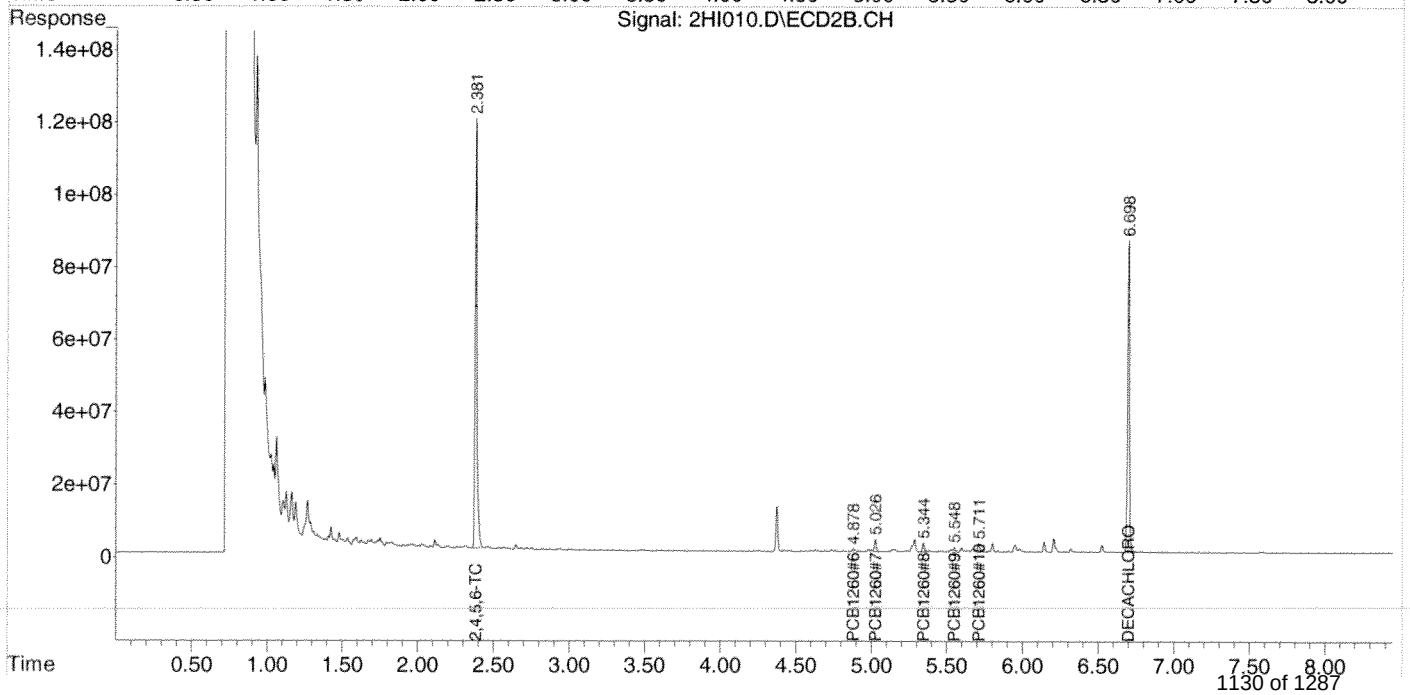
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI010.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:06
Operator : JJB
Sample : A404270-20RE1
Misc :
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:05 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:18
Operator : JJB
Sample : A404270-~~25~~RE1 27 8/14/14
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.413	2.382	1704.0E6	927.0E6	0.0999	0.1244	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.739	4.878	102.2E6	57635202	0.1364	0.1607	
8)	PCB1260#7	4.941	5.026	408.0E6	204.0E6	0.4036	0.5192	#
9)	PCB1260#8	5.227	5.343	316.9E6	182.4E6	0.4963	0.6105	
10)	PCB1260#9	5.402	5.548	168.9E6	93095654	0.2572	0.2857	
11)	PCB1260#10	5.610	5.711	345.7E6	195.5E6	0.2263	0.3066	#
12)	DECACHLOR...	6.508	6.698	1233.5E6	704.3E6	0.1213	0.1434	

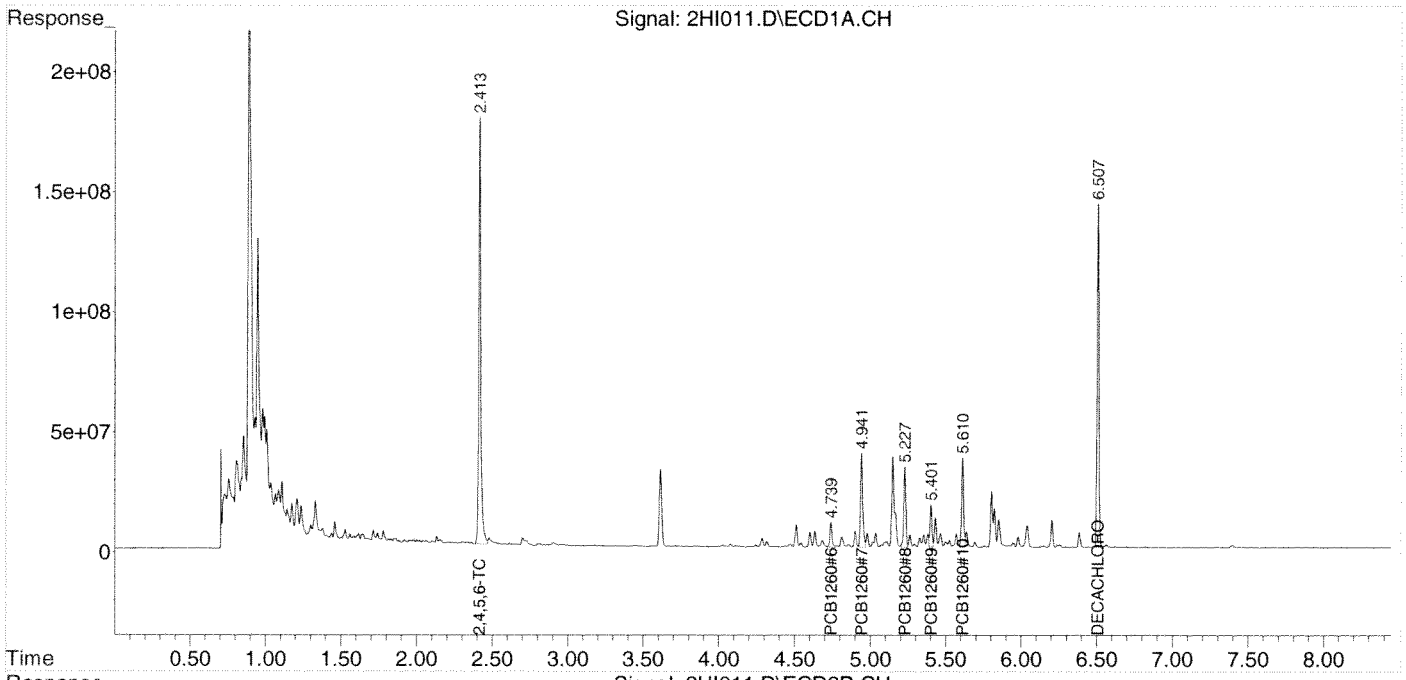
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

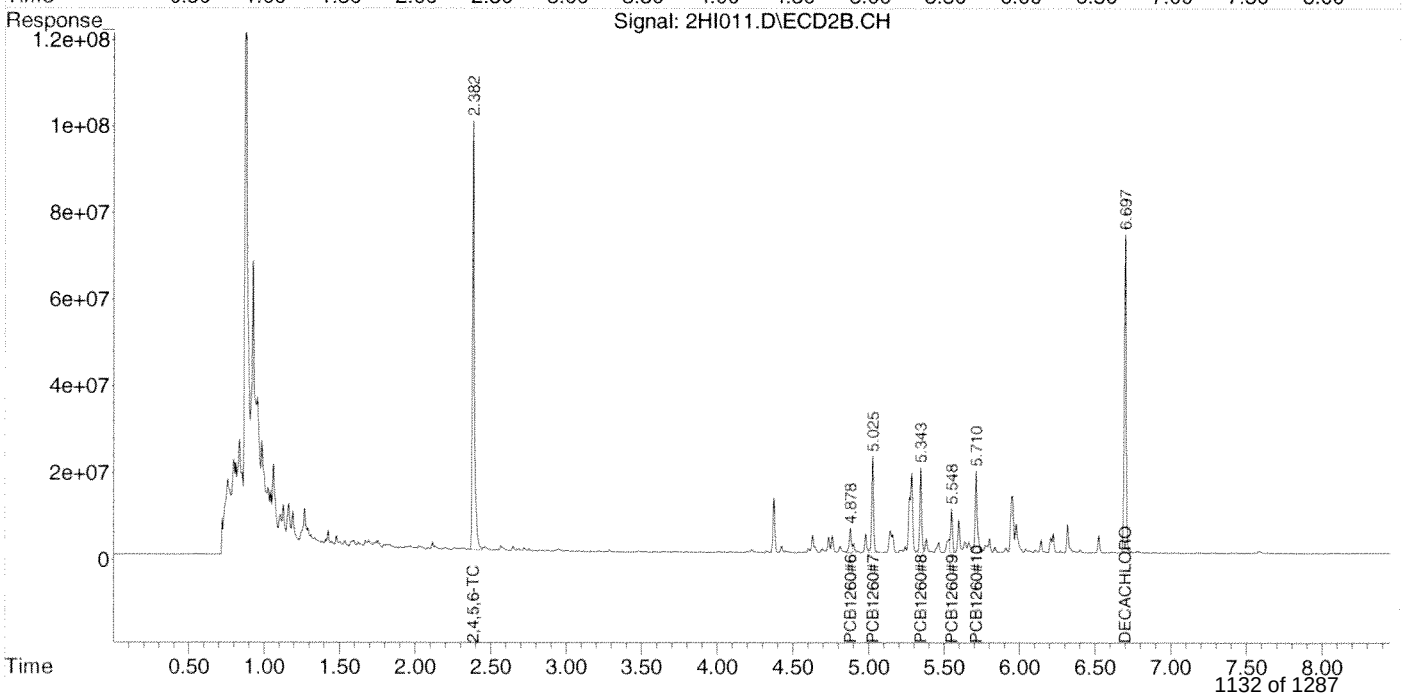
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:18
Operator : JJB
Sample : A404270-~~25~~RE1 27 8/14/14
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:21 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:18
Operator : JJB
Sample : A404270-~~25~~RE1 27 8/14/14
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:10 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.413f	2.382f	1785.4E6	959.9E6	0.1066	0.1209	
2)	PCB1254#1	4.078	4.229	22099608	9163453	0.0452	0.0347	
3)	PCB1254#2	4.286	4.375	51430995	119.3E6	0.0601	0.4178	#
4)	PCB1254#3	4.511	4.647	101.6E6	10621273	0.2028	0.0453	#
5)	PCB1254#4	4.602	4.735	70613617	32915017	0.0828	0.0830	
6)	PCB1254#5	4.812	5.026	57903189	193.4E6	0.0870	1.0673	#
7)	DECACHLOR...	6.508	6.698	1235.0E6	706.7E6	0.1165	0.1349	

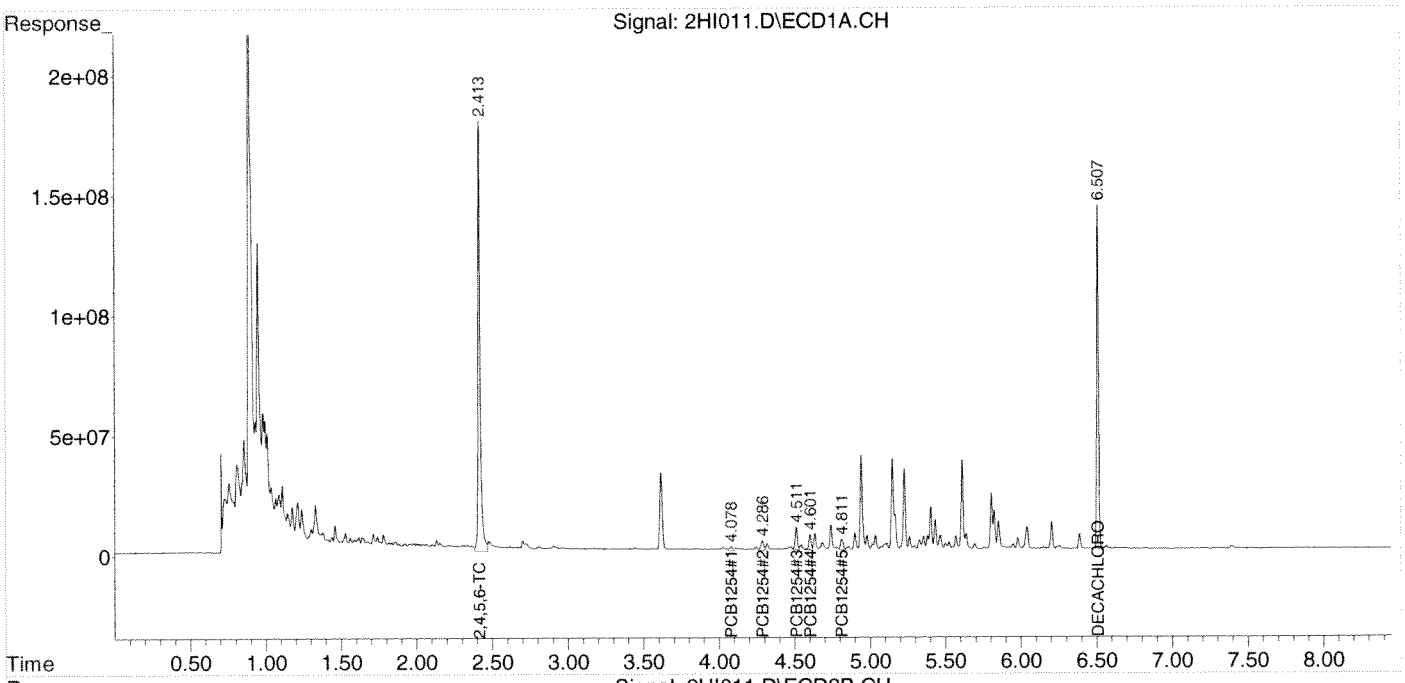
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

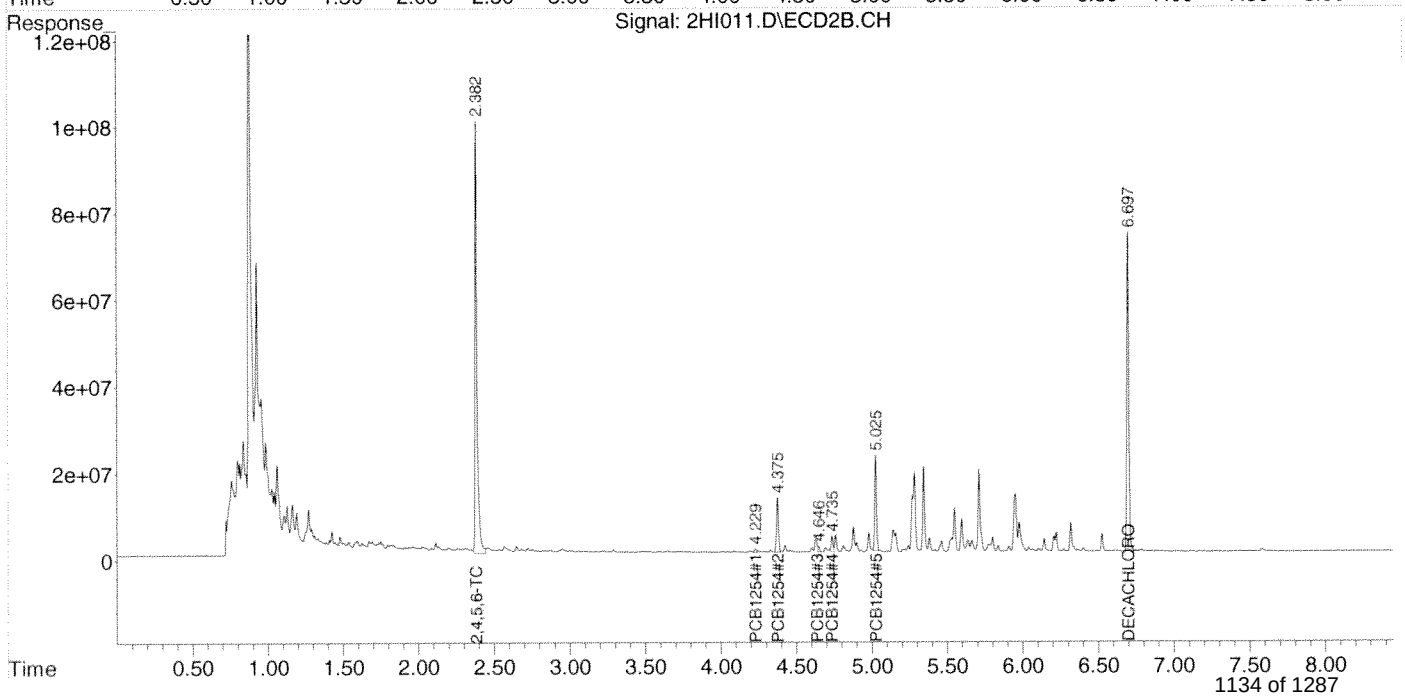
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI011.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:18
Operator : JJB
Sample : A404270-~~25~~ 27 RE1 8/14/14
Misc :
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:10 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:30
Operator : JJB
Sample : A404270-~~27~~25RE1 8/14/14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:47 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.414	2.382	1952.5E6	1040.1E6	0.1145	0.1395	
2)	PCB1016#1	0.000	0.000	0	0	N.D. d	N.D. d	
3)	PCB1016#2	0.000	0.000	0	0	N.D. d	N.D. d	
4)	PCB1016#3	0.000	0.000	0	0	N.D. d	N.D. d	
5)	PCB1016#4	0.000	0.000	0	0	N.D. d	N.D. d	
6)	PCB1016#5	0.000	0.000	0	0	N.D. d	N.D. d	
7)	PCB1260#6	4.741	4.880	23249418	14618403	0.0310	0.0408	#
8)	PCB1260#7	4.943	5.028	95299885	46116596	0.0943	0.1174	
9)	PCB1260#8	5.229	5.345	52070554	28853390	0.0815	0.0966	
10)	PCB1260#9	5.403	5.550	33892473	18647497	0.0516	0.0572	
11)	PCB1260#10	5.614	5.712	105.9E6	44822597	0.0693	0.0703	
12)	DECACHLOR...	6.510	6.700	1315.7E6	754.6E6	0.1294	0.1537	

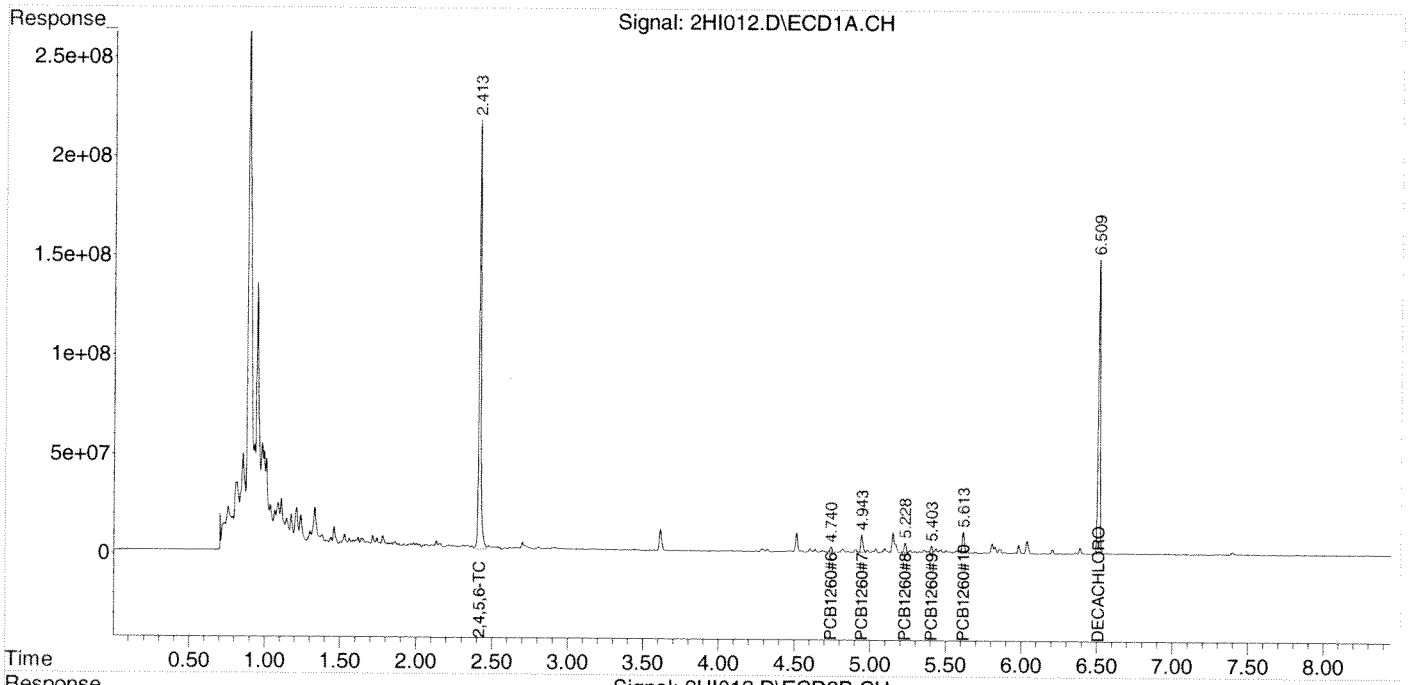
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

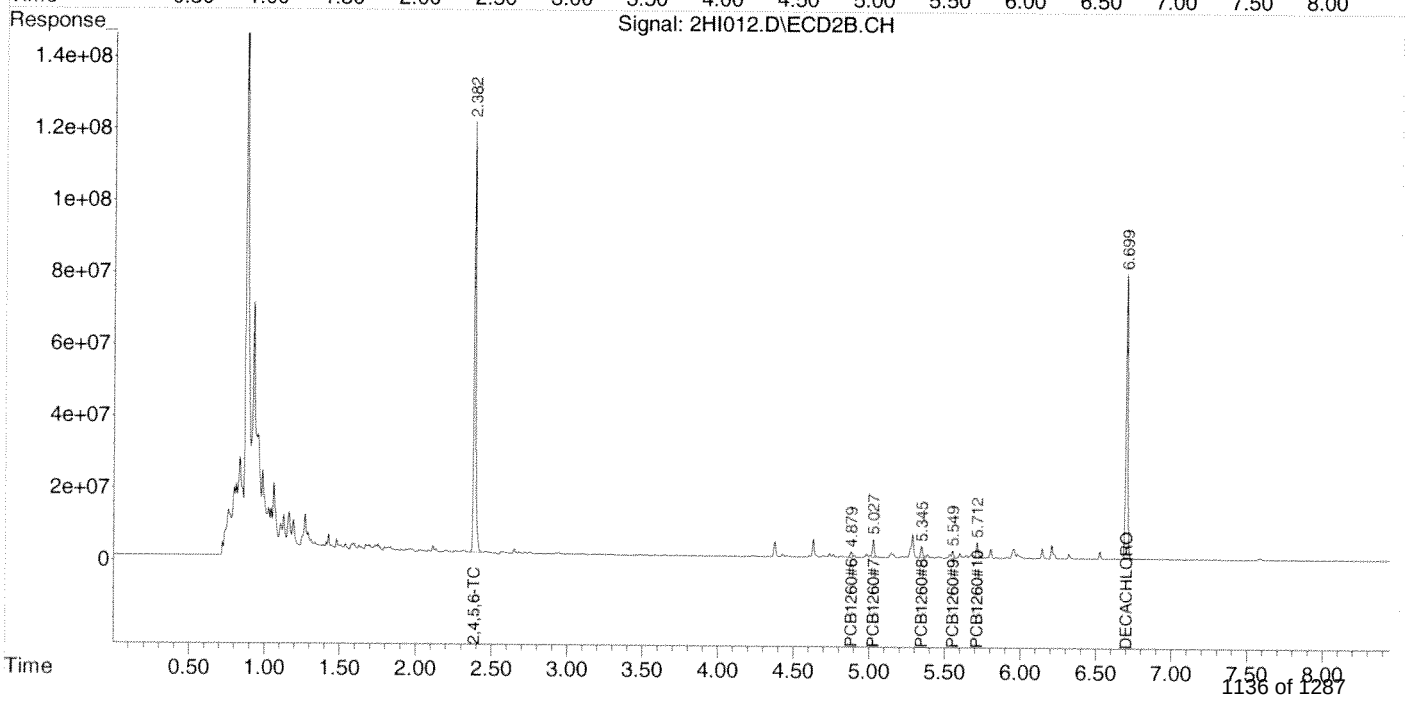
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI012.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:30
Operator : JJB
Sample : A404270-~~27~~25RE1 9 8/14/14
Misc :
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:51:47 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:42
Operator : JJB
Sample : AA30071-CCV2
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:52:04 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.420	2.388	1864.4E6	957.7E6	0.1093	0.1285	
2)	PCB1016#1	2.677	2.727	306.4E6	156.0E6	0.9491	1.0917	
3)	PCB1016#2	2.940	3.022	604.9E6	329.1E6	0.9826	1.1510	
4)	PCB1016#3	3.307	3.651	813.3E6	151.4E6	0.9954	1.2139	
5)	PCB1016#4	3.414	3.689	519.4E6	156.3E6	1.0377	1.2192	
6)	PCB1016#5	3.467	3.725	312.6E6	134.6E6	1.0289	1.0227	
7)	PCB1260#6	4.740	4.880	772.0E6	459.7E6	1.0300	1.2821	
8)	PCB1260#7	4.943	5.027	1170.9E6	507.2E6	1.1582	1.2906	
9)	PCB1260#8	5.228	5.344	705.1E6	401.5E6	1.1043	1.3438	
10)	PCB1260#9	5.403	5.548	781.2E6	440.9E6	1.1899	1.3529	
11)	PCB1260#10	5.611	5.711	1718.4E6	911.0E6	1.1249	1.4286	#
12)	DECACHLOR...	6.509	6.699	1075.5E6	613.0E6	0.1058	0.1248	

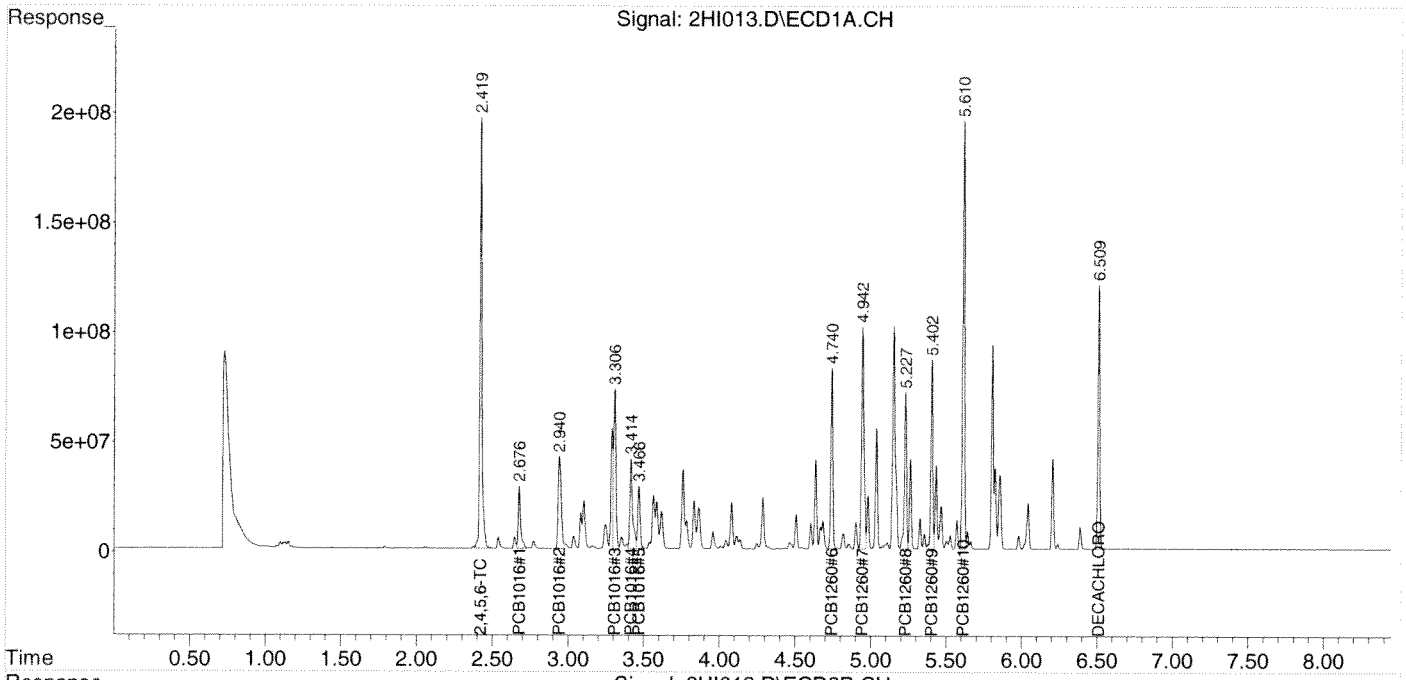
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

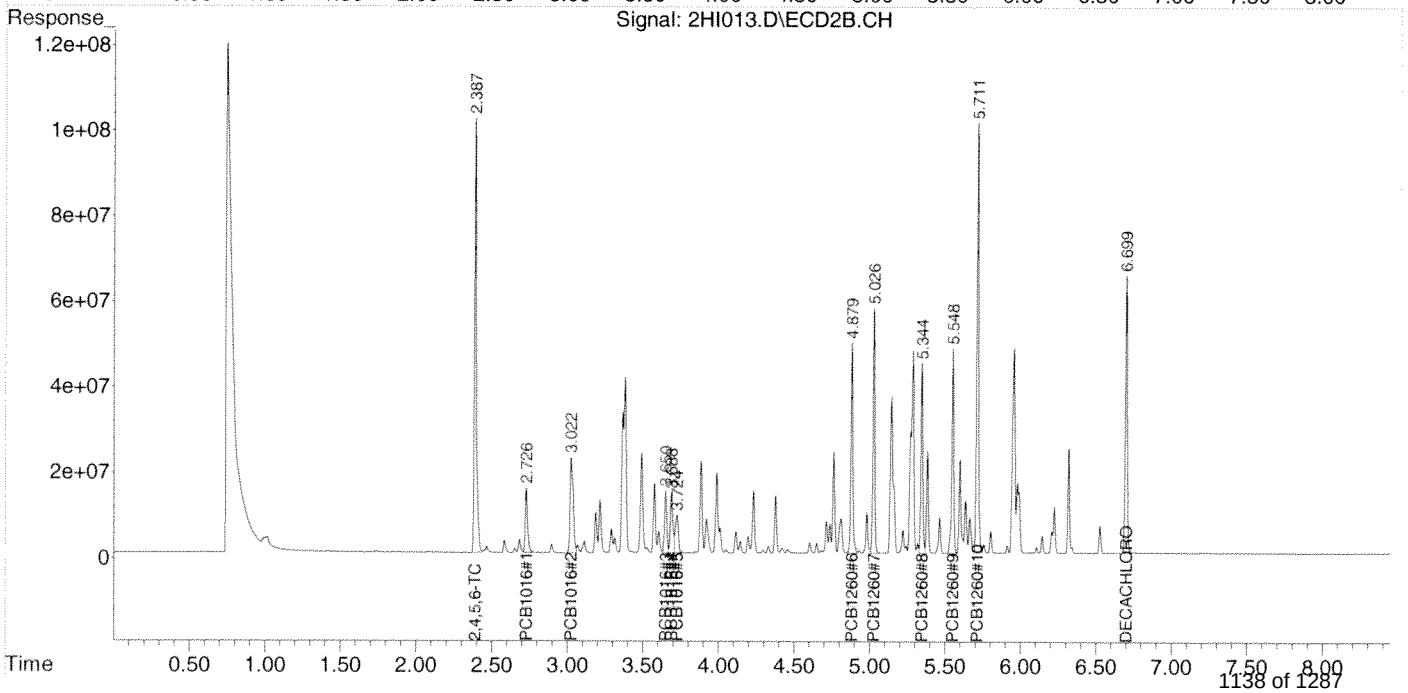
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI013.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:42
Operator : JJB
Sample : AA30071-CCV2
Misc :
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 11:52:04 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 14 08:54:49 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:54
Operator : JJB
Sample : AA30071-ARC2
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:13 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.420	2.387	1981.5E6	1026.9E6	0.1184	0.1293
2)	PCB1254#1	4.080	4.231	553.2E6	349.2E6	1.1303	1.3241
3)	PCB1254#2	4.287	4.378	994.0E6	396.0E6	1.1622	1.3864
4)	PCB1254#3	4.510	4.649	605.7E6	309.2E6	1.2092	1.3192
5)	PCB1254#4	4.604	4.737	1062.0E6	575.2E6	1.2458	1.4509
6)	PCB1254#5	4.812	5.027	753.2E6	254.1E6	1.1313	1.4024
7)	DECACHLOR...	6.510	6.699	1197.3E6	686.3E6	0.1129	0.1310

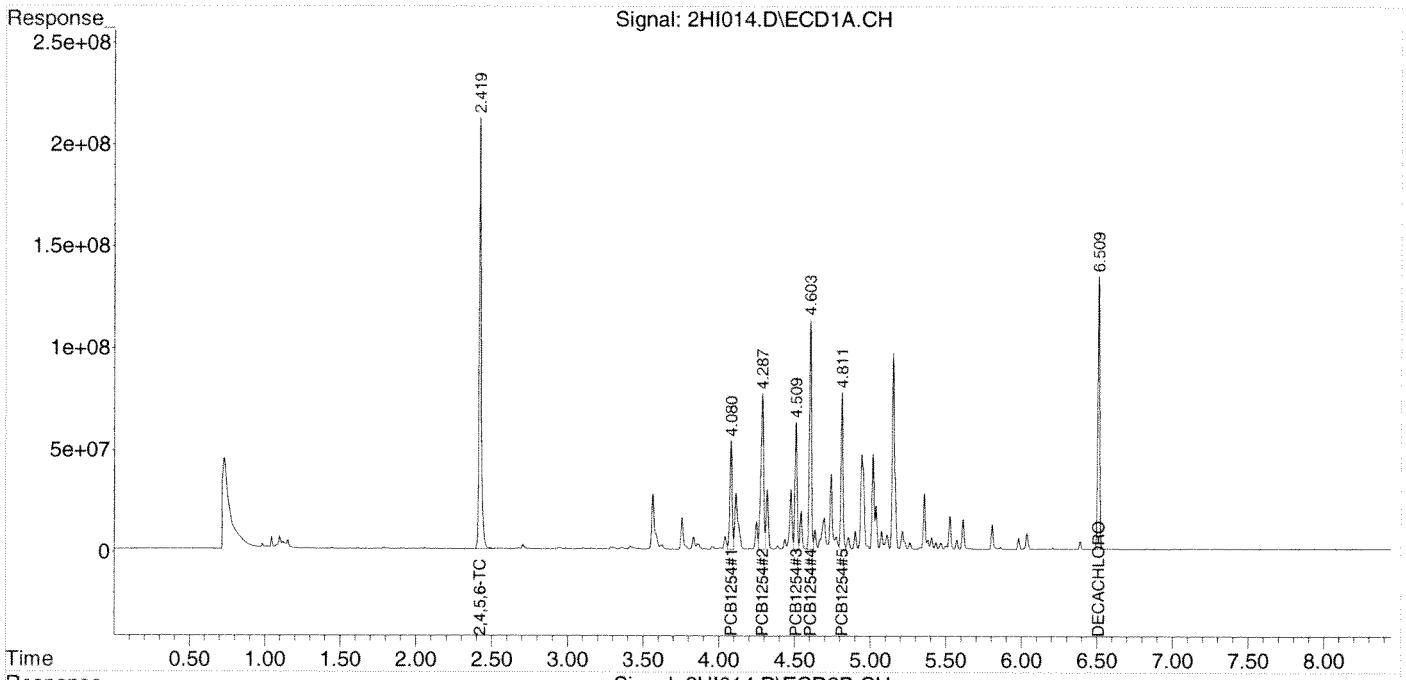
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

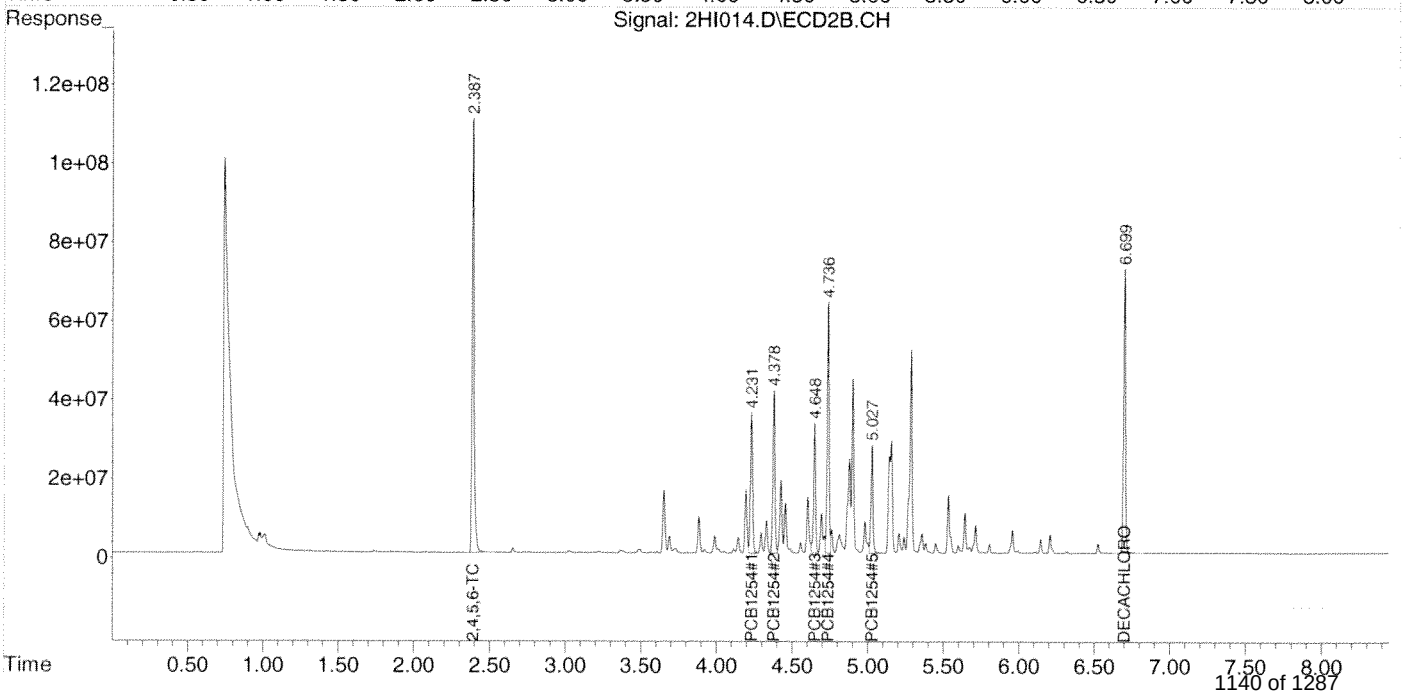
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HI14\
Data File : 2HI014.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Aug 2014 11:54
Operator : JJB
Sample : AA30071-ARC2
Misc :
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 14 12:22:13 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Thu Aug 14 09:20:59 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA29960

Instrument: OSVGCECD2

Calibration ID: 1408030

Printed: 8/7/2014 6:04:22PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
AA29960-CAL1	QC		1		A4H0075			PCB 1016 / 1016
AA29960-CAL2	QC		2		A4H0074			
AA29960-CAL3	QC		3		A4H0073			
AA29960-CAL4	QC		4		A4H0072			
AA29960-CAL5	QC		5		A4H0071			
AA29960-CAL6	QC		6		A4H0070			
AA29960-SCV1	QC		7		A4H0076			

Samples Loaded By Date

Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB2Hb14.M
Title : PCB SOP SVGC-07; INST OSVGCECD2
Last Update : Thu Aug 07 16:58:16 2014
Response Via : Initial Calibration

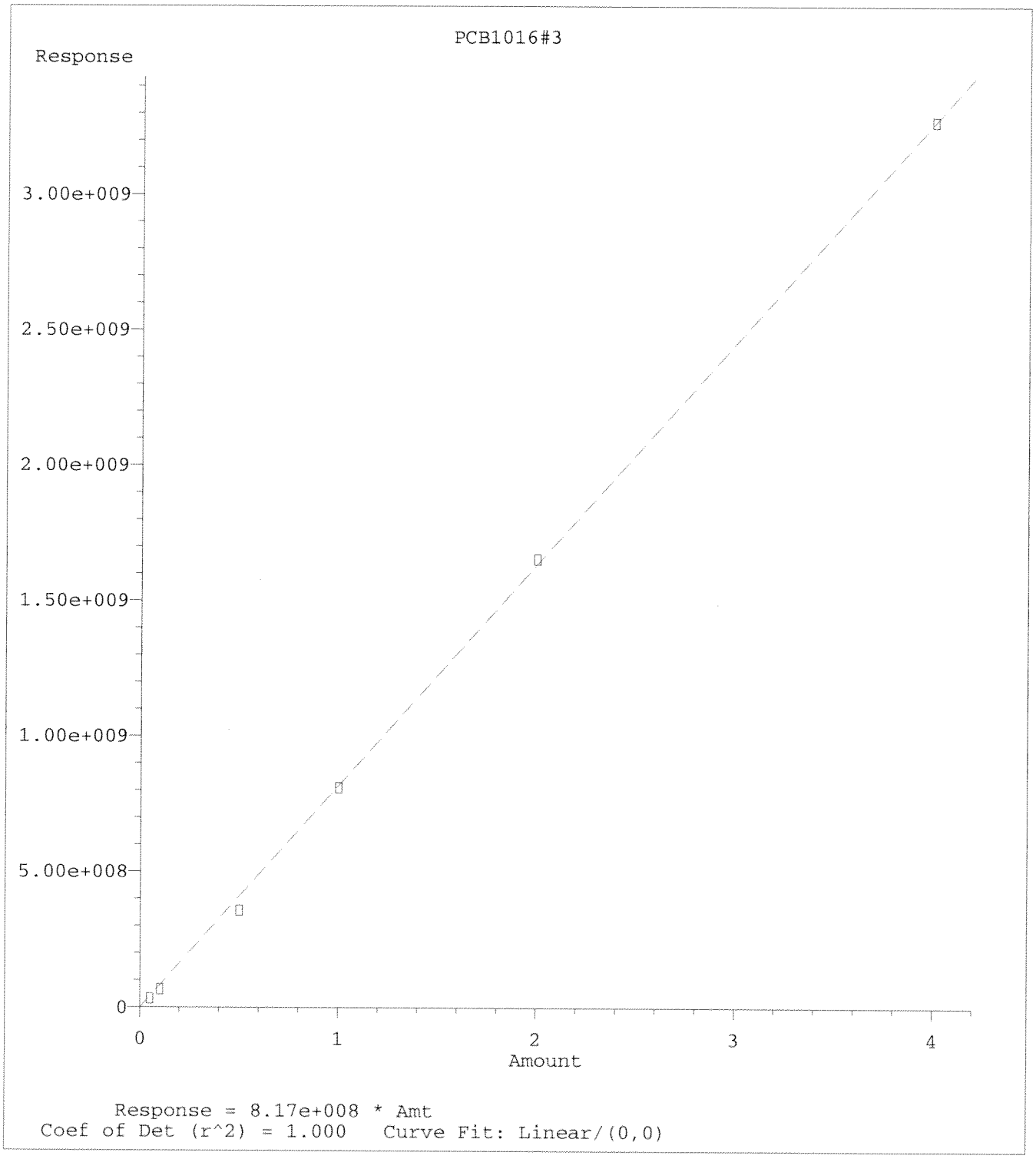
Calibration Files
CAL1 =2HB002.D CAL2 =2HB003.D CAL3 =2HB004.D
CAL4 =2HB005.D CAL5 =2HB006.D CAL6 =2HB007.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	15.216	15.335	16.514	17.673	19.058	18.528	17.054	E9	9.53
2)	PCB1016#1	3.376	3.252	3.027	3.144	3.277	3.290	3.228	E8	3.83
3)	PCB1016#2	6.695	6.390	5.750	6.068	6.104	5.928	6.156	E8	5.50
4)	PCB1016#3	6.626	6.670	7.131	8.087	8.266	8.170	7.492	E8	10.28
5)	PCB1016#4	4.959	4.601	4.742	4.990	5.430	5.311	5.005	E8	6.37
6)	PCB1016#5	2.772	2.733	2.915	3.130	3.333	3.349	3.039	E8	8.97
7)	PCB1260#6	5.828	6.493	6.819	7.267	7.780	7.450	6.939	E8	10.23
8)	PCB1260#7	0.910	0.905	0.982	1.064	1.122	1.084	1.011	E9	9.13
9)	PCB1260#8	5.742	6.079	6.152	6.500	7.081	6.758	6.385	E8	7.67
10)	PCB1260#9	6.264	6.265	6.183	6.472	7.272	6.933	6.565	E8	6.71
11)	PCB1260#10	1.218	1.294	1.370	1.398	1.611	1.518	1.401	E9	10.28
12)	DECACHLOROBIP...	9.811	9.727	9.258	10.627	11.019	10.556	10.166	E9	6.58

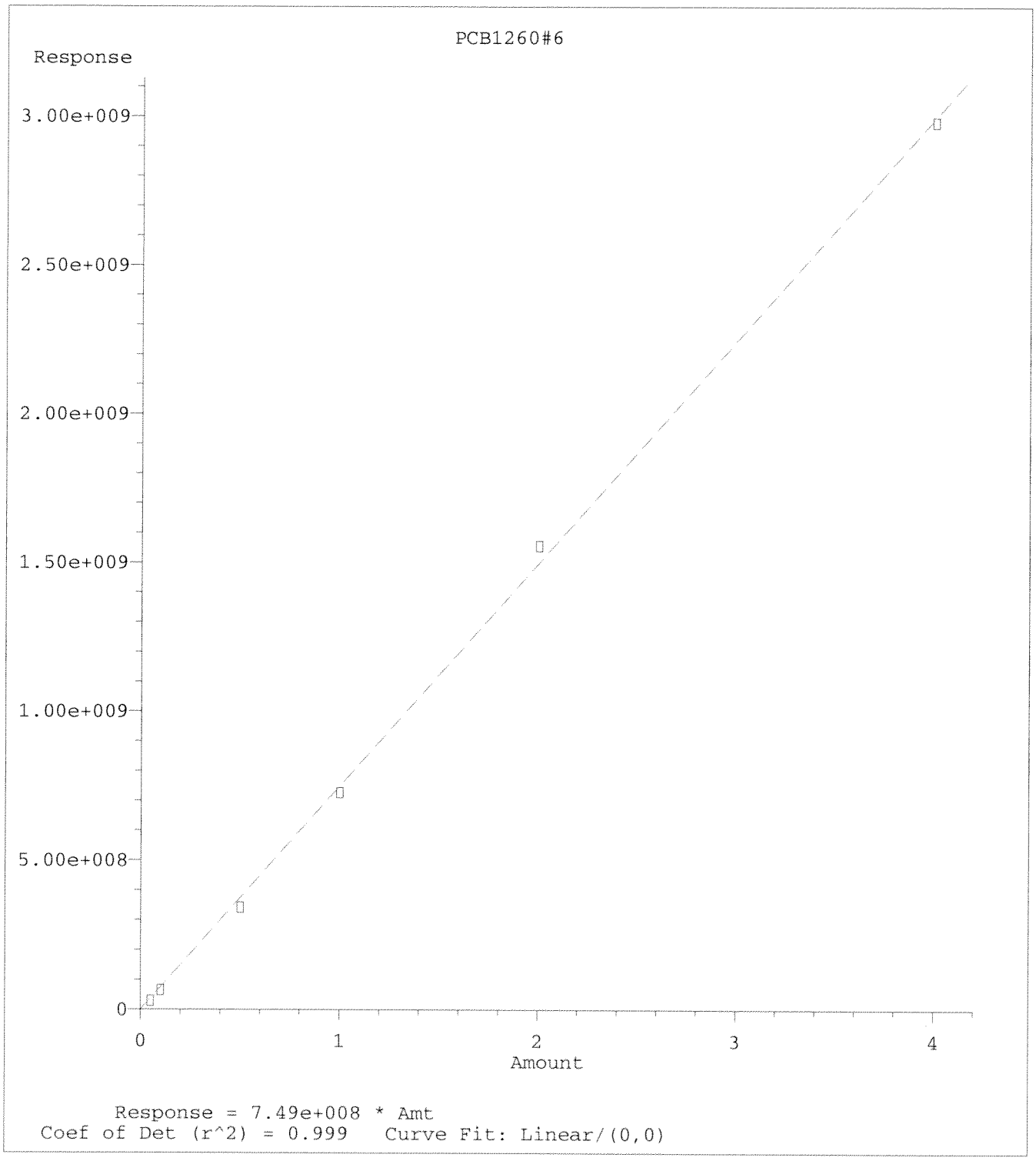
Signal #2 Calibration Files
CAL1 =2HB002.D CAL2 =2HB003.D CAL3 =2HB004.D
CAL4 =2HB005.D CAL5 =2HB006.D CAL6 =2HB007.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	6.517	6.829	7.292	7.813	8.289	7.990	7.455	E9	9.31
2)	PCB1016#1	1.992	1.722	1.381	1.375	1.447	1.429	1.557	E8	15.95
3)	PCB1016#2	3.138	3.122	2.583	2.665	2.855	2.794	2.860	E8	8.05
4)	PCB1016#3	1.319	1.307	1.174	1.201	1.259	1.224	1.247	E8	4.66
5)	PCB1016#4	1.328	1.346	1.212	1.238	1.300	1.269	1.282	E8	4.05
6)	PCB1016#5	1.392	1.375	1.273	1.252	1.306	1.296	1.316	E8	4.25
7)	PCB1260#6	3.624	3.536	3.394	3.582	3.810	3.569	3.586	E8	3.77
8)	PCB1260#7	3.983	3.900	3.641	4.003	4.120	3.932	3.930	E8	4.08
9)	PCB1260#8	3.002	2.963	2.800	3.007	3.180	2.976	2.988	E8	4.06
10)	PCB1260#9	3.203	3.160	3.047	3.305	3.529	3.307	3.259	E8	5.05
11)	PCB1260#10	5.961	6.109	6.088	6.784	6.961	6.359	6.377	E8	6.41
12)	DECACHLOROBIP...	4.889	5.081	4.472	5.053	5.145	4.823	4.910	E9	5.02

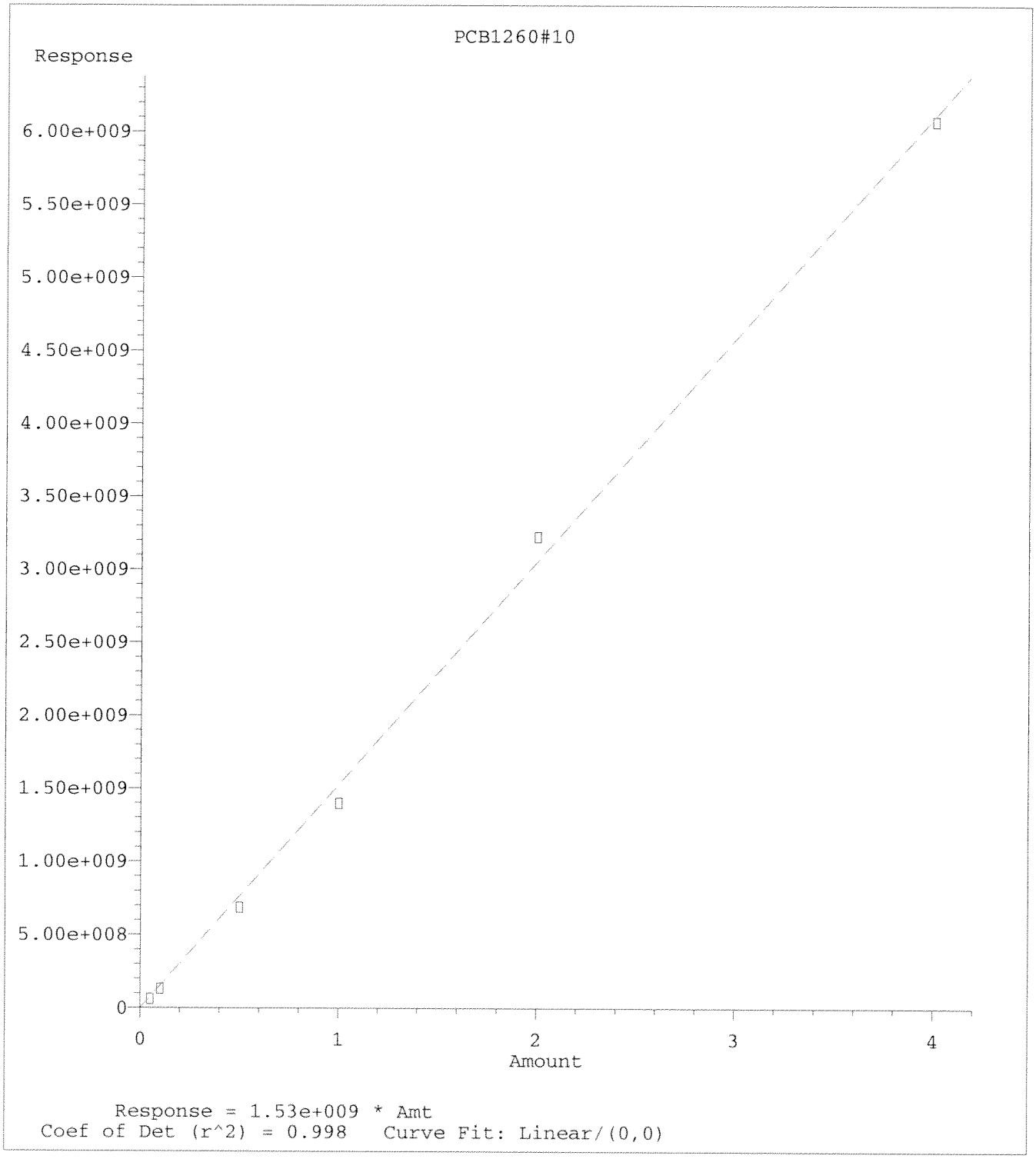
(#) = Out of Range



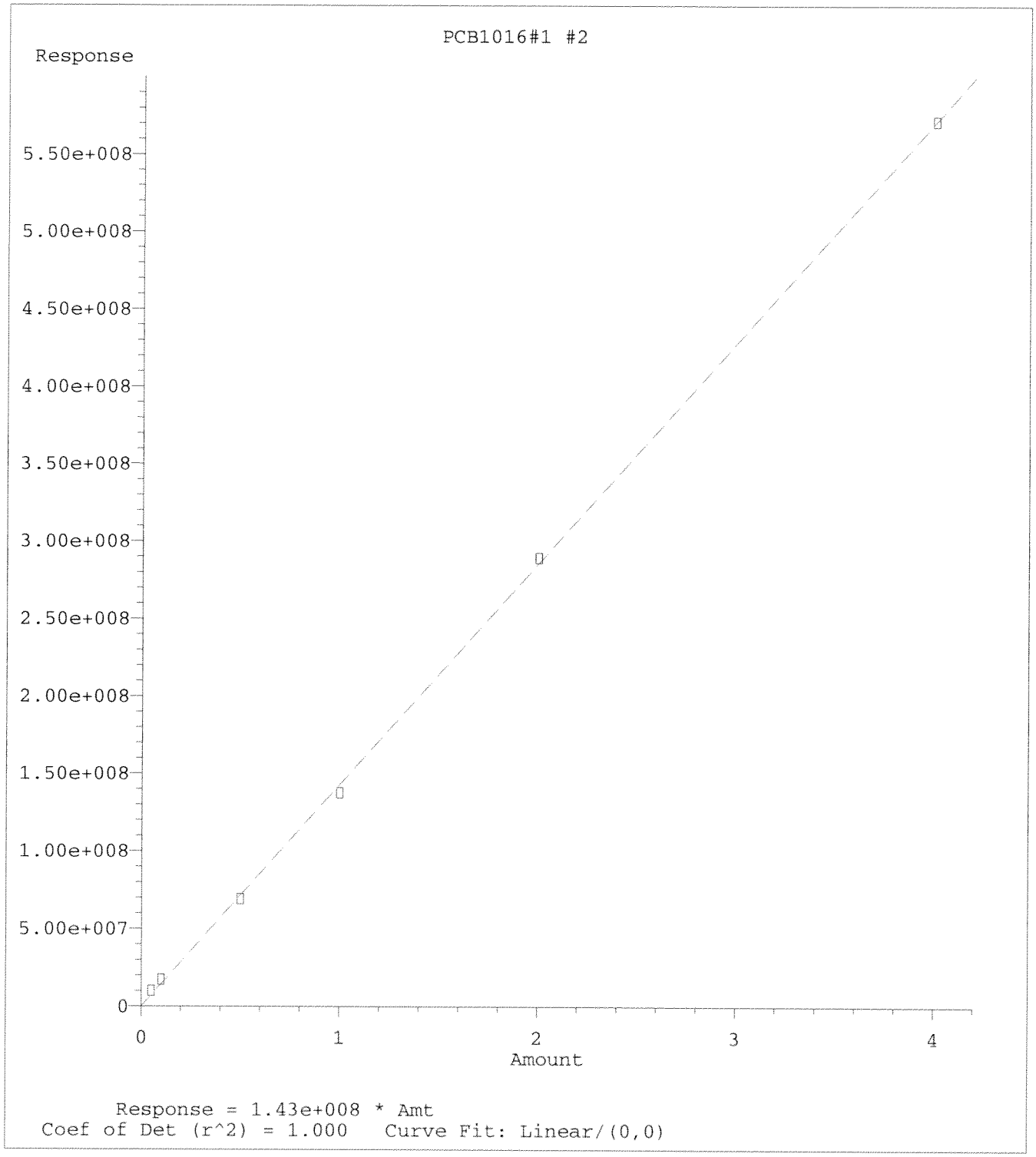
Method Name: Z:\2\METHODS\PCB2Hb14.M
Calibration Table Last Updated: Thu Aug 07 16:58:16 2014



Method Name: Z:\2\METHODS\PCB2Hb14.M
Calibration Table Last Updated: Thu Aug 07 17:09:05 2014



Method Name: Z:\2\METHODS\PCB2Hb14.M
Calibration Table Last Updated: Thu Aug 07 17:09:21 2014



Method Name: Z:\2\METHODS\PCB2Hb14.M
Calibration Table Last Updated: Thu Aug 07 17:09:36 2014

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 2:58 pm
Operator : RC
Sample : AA29960-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:03 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.449	2.418	76080500	32584597	0.0045	0.0044
2)	PCB1016#1	2.708	2.761	16882421	9957572	0.0523	0.0639
3)	PCB1016#2	2.974	3.059	33473632	15688398	0.0544	0.0549
4)	PCB1016#3	3.341	3.691	33130625	6593003	0.0442	0.0529
5)	PCB1016#4	3.450	3.729	24794545	6638354	0.0495	0.0518
6)	PCB1016#5	3.502	3.767	13858613	6960905	0.0456	0.0529
7)	PCB1260#6	4.776	4.917	29142111	18120197	0.0420	0.0505
8)	PCB1260#7	4.977	5.063	45514567	19913378	0.0450	0.0507
9)	PCB1260#8	5.261	5.380	28710085	15008580	0.0450	0.0502
10)	PCB1260#9	5.436	5.584	31322234	16016003	0.0477	0.0491
11)	PCB1260#10	5.643	5.746	60879484	29803889	0.0434	0.0467
12)	DECACHLOR...	6.545	6.742	49053198	24446405	0.0048	0.0050

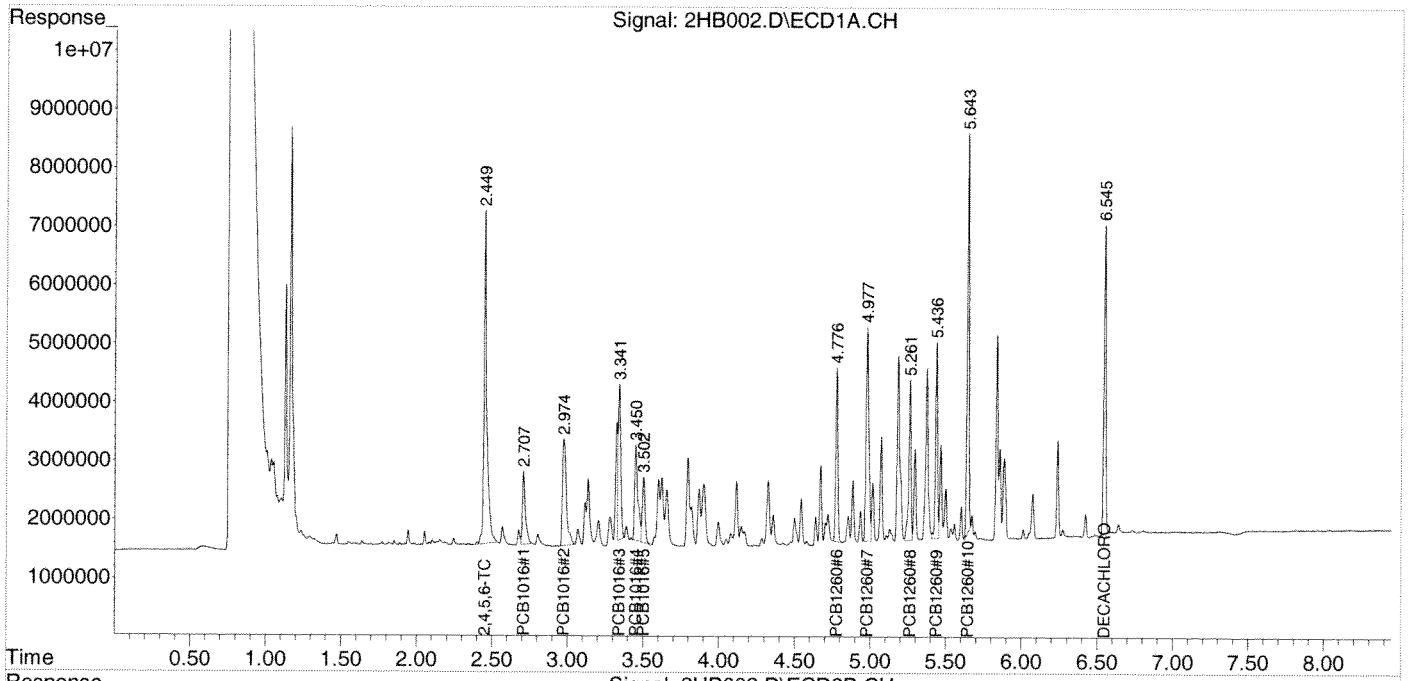
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

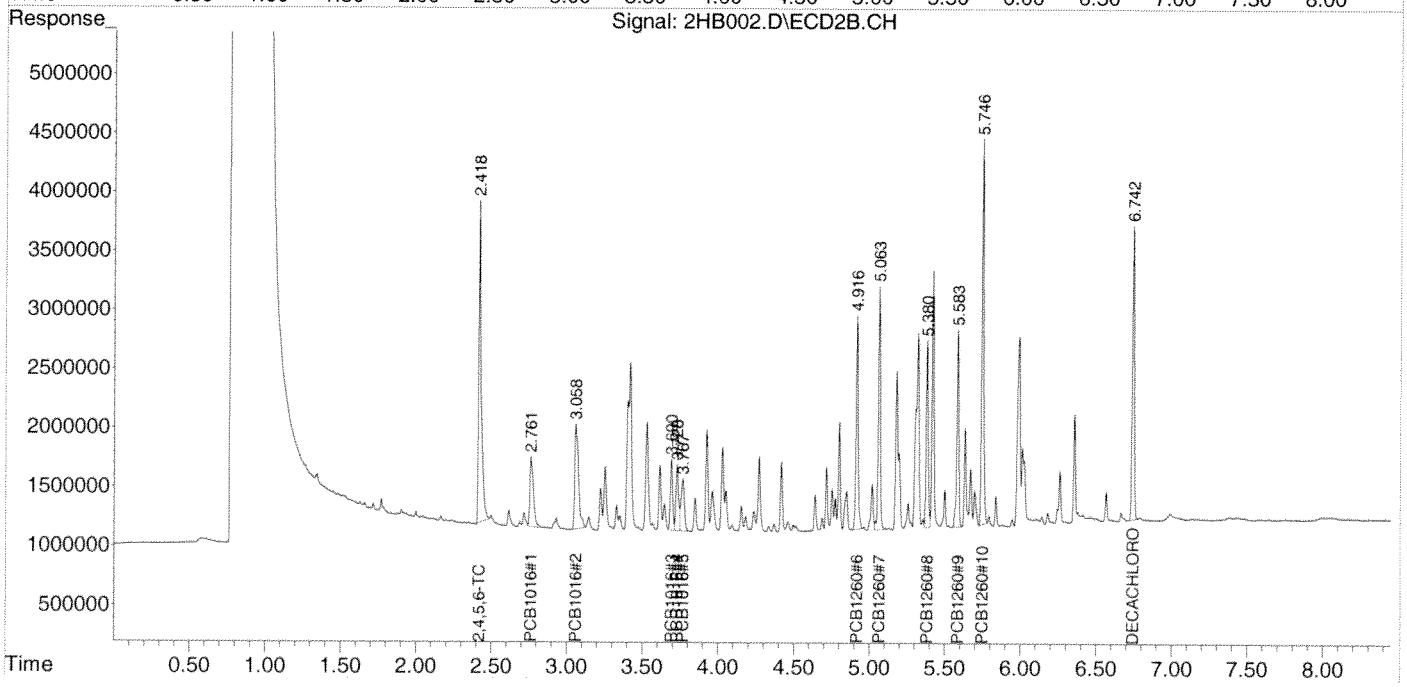
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB002.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 2:58 pm
Operator : RC
Sample : AA29960-CAL1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:03 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:10 pm
Operator : RC
Sample : AA29960-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:07 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.450	2.419	153.4E6	68293570	0.0090	0.0092
2)	PCB1016#1	2.708	2.762	32519859	17219664	0.1008	0.1106
3)	PCB1016#2	2.977	3.060	63898431	31223846	0.1038	0.1092
4)	PCB1016#3	3.340	3.692	66704989	13070533	0.0890	0.1048
5)	PCB1016#4	3.450	3.730	46013234	13462393	0.0919	0.1050
6)	PCB1016#5	3.502	3.768	27332006	13746779	0.0900	0.1045
7)	PCB1260#6	4.775	4.916	64925875	35361499	0.0936	0.0986
8)	PCB1260#7	4.976	5.063	90465027	38996226	0.0895	0.0992
9)	PCB1260#8	5.260	5.380	60788190	29628015	0.0952	0.0992
10)	PCB1260#9	5.435	5.584	62652744	31604993	0.0954	0.0970
11)	PCB1260#10	5.642	5.746	129.4E6	61090687	0.0923	0.0958
12)	DECACHLOR...	6.542	6.739	97272218	50810985	0.0096	0.0103

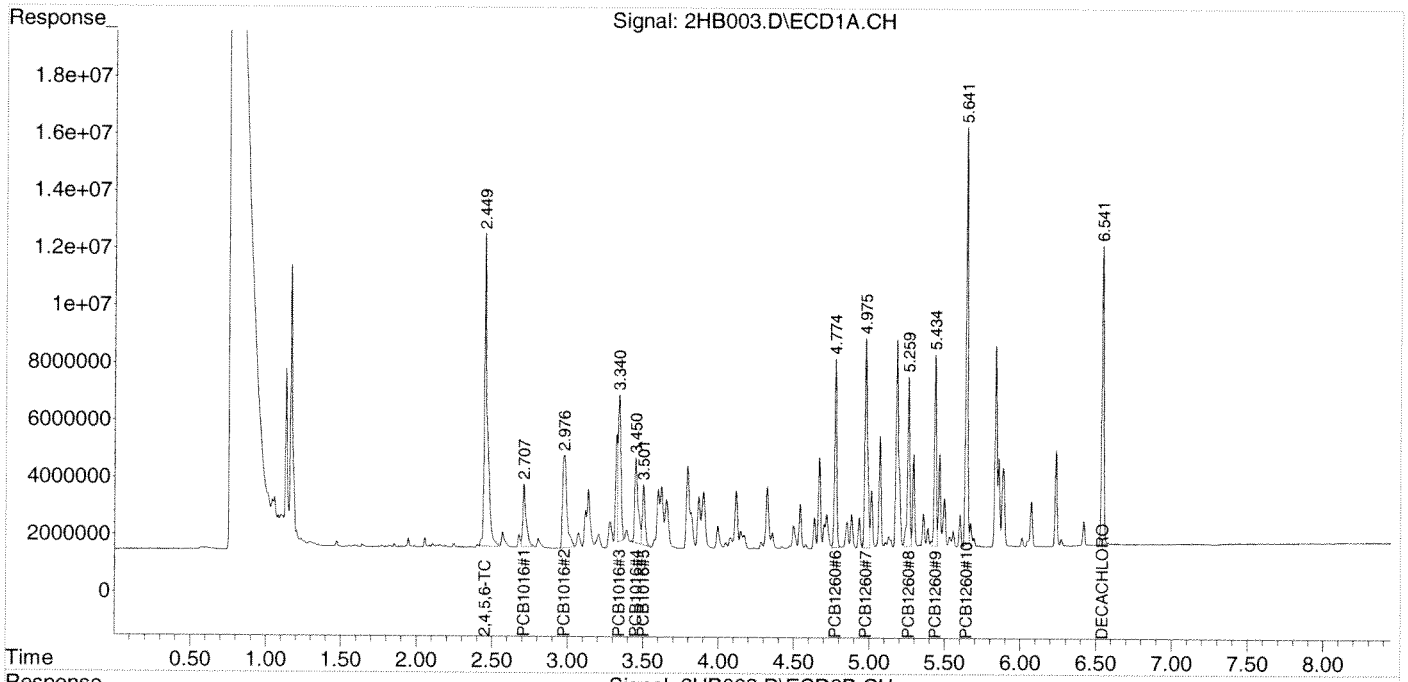
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

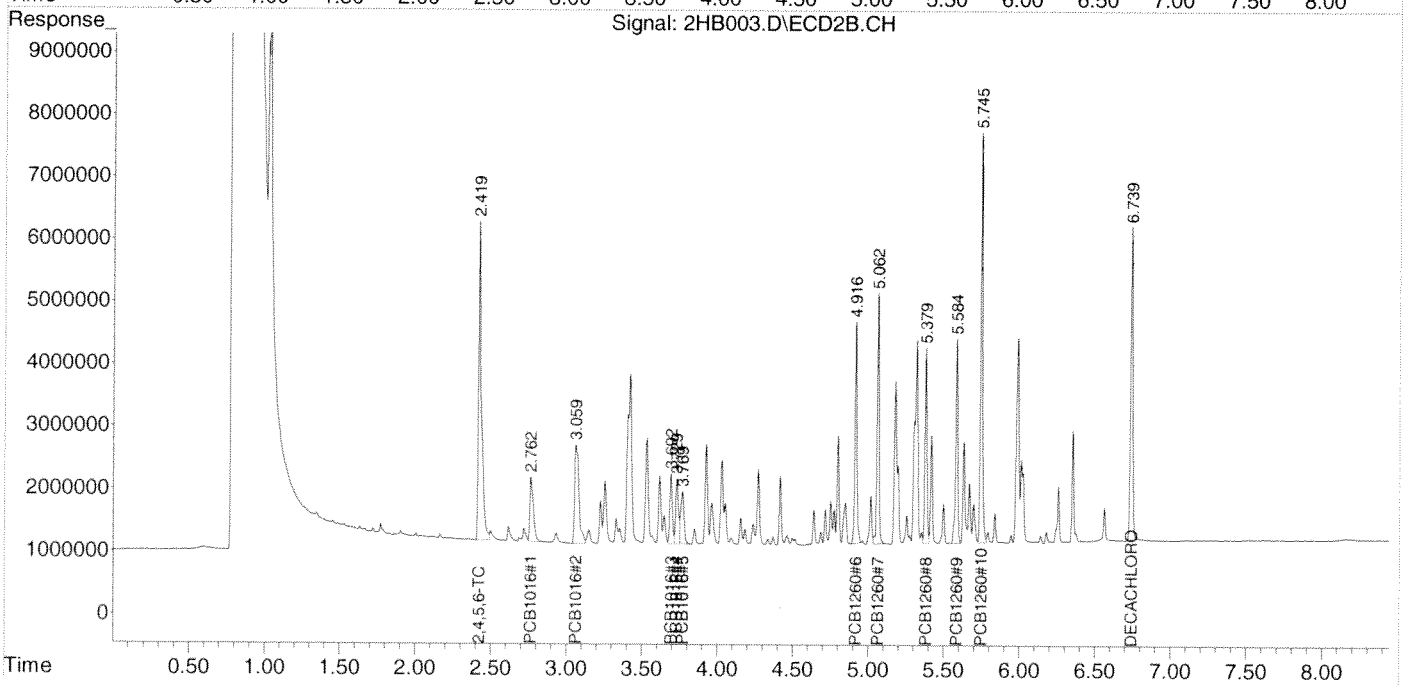
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB003.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:10 pm
Operator : RC
Sample : AA29960-CAL2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:07 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:22 pm
Operator : RC
Sample : AA29960-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:11 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.450	2.420	825.7E6	364.6E6	0.0484	0.0489
2)	PCB1016#1	2.708	2.762	151.4E6	69048477	0.4690	0.4433
3)	PCB1016#2	2.974	3.061	287.5E6	129.2E6	0.4670	0.4517
4)	PCB1016#3	3.341	3.692	356.6E6	58679244	0.4759	0.4705
5)	PCB1016#4	3.450	3.730	237.1E6	60601484	0.4737	0.4726
6)	PCB1016#5	3.503	3.769	145.7E6	63644142	0.4796	0.4837
7)	PCB1260#6	4.775	4.918	341.0E6	169.7E6	0.4914	0.4733
8)	PCB1260#7	4.976	5.064	490.9E6	182.0E6	0.4856	0.4633
9)	PCB1260#8	5.260	5.381	307.6E6	140.0E6	0.4817	0.4685
10)	PCB1260#9	5.435	5.585	309.1E6	152.4E6	0.4709	0.4675
11)	PCB1260#10	5.642	5.747	685.0E6	304.4E6	0.4889	0.4773
12)	DECACHLOR...	6.539	6.738	462.9E6	223.6E6	0.0455	0.0455

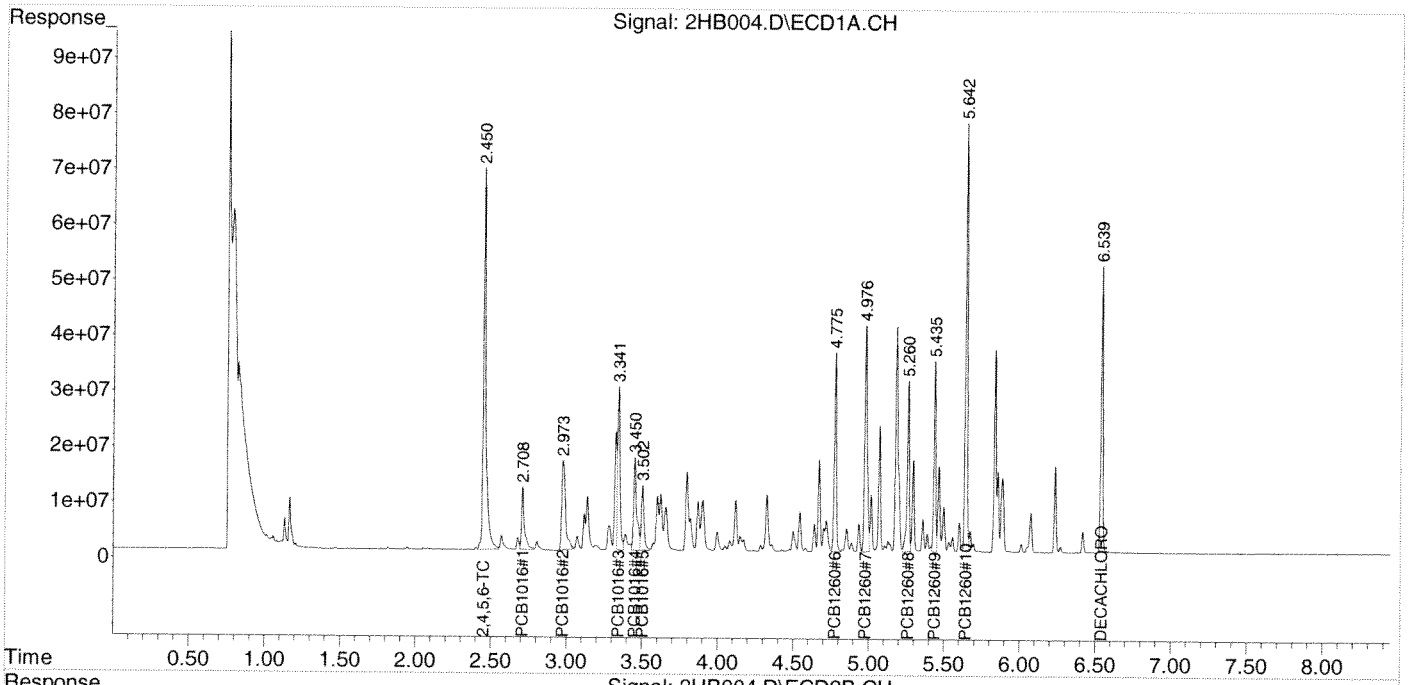
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

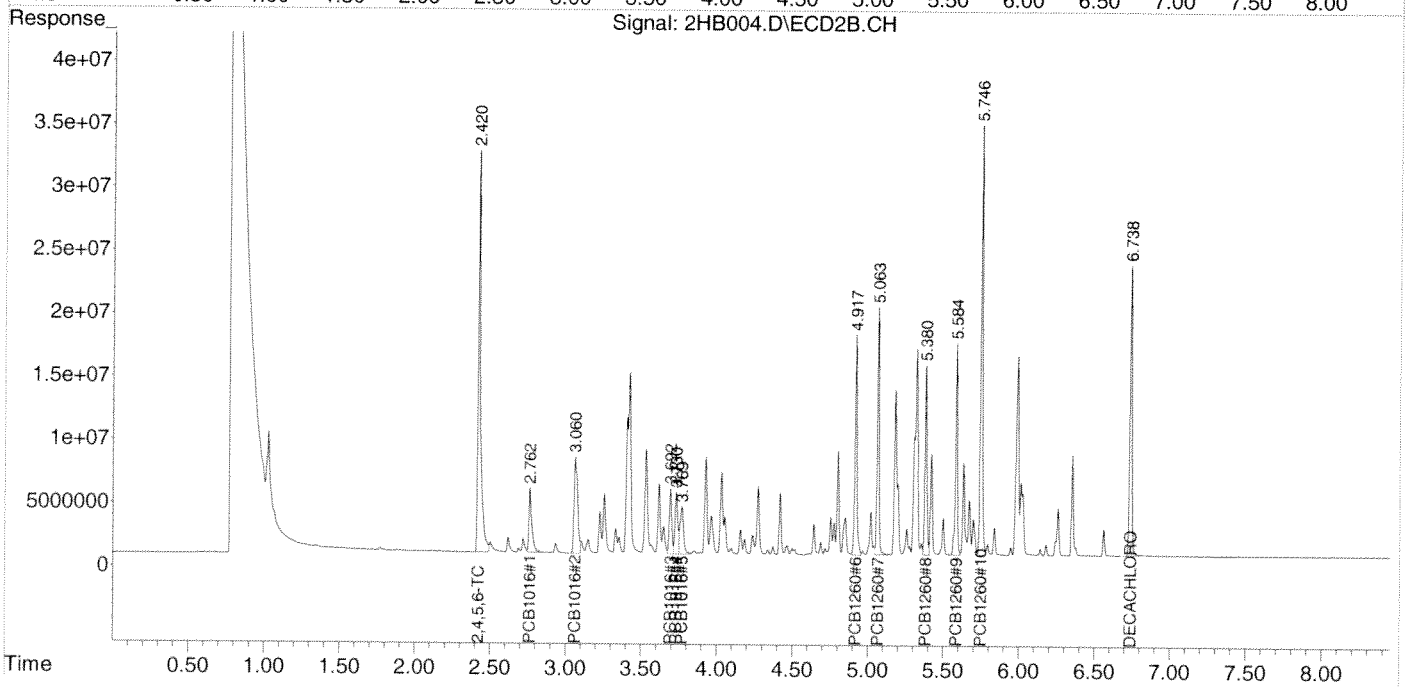
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB004.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:22 pm
Operator : RC
Sample : AA29960-CAL3
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:11 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:35 pm
Operator : RC
Sample : AA29960-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:15 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.451	2.421	1767.3E6	781.3E6	0.1036	0.1048
2)	PCB1016#1	2.709	2.763	314.4E6	137.5E6	0.9739	0.8830
3)	PCB1016#2	2.979	3.062	606.8E6	266.5E6	0.9857	0.9319
4)	PCB1016#3	3.342	3.693	808.7E6	120.1E6	1.0795	0.9627
5)	PCB1016#4	3.451	3.731	499.0E6	123.8E6	0.9969	0.9659
6)	PCB1016#5	3.504	3.769	313.0E6	125.2E6	1.0300	0.9518
7)	PCB1260#6	4.775	4.917	726.7E6	358.2E6	1.0472	0.9988
8)	PCB1260#7	4.976	5.063	1063.6E6	400.3E6	1.0520	1.0187
9)	PCB1260#8	5.260	5.380	650.0E6	300.7E6	1.0179	1.0064
10)	PCB1260#9	5.434	5.584	647.2E6	330.5E6	0.9859	1.0142
11)	PCB1260#10	5.642	5.746	1397.8E6	678.4E6	0.9975	1.0639
12)	DECACHLOR...	6.539	6.738	1062.7E6	505.3E6	0.1045	0.1029

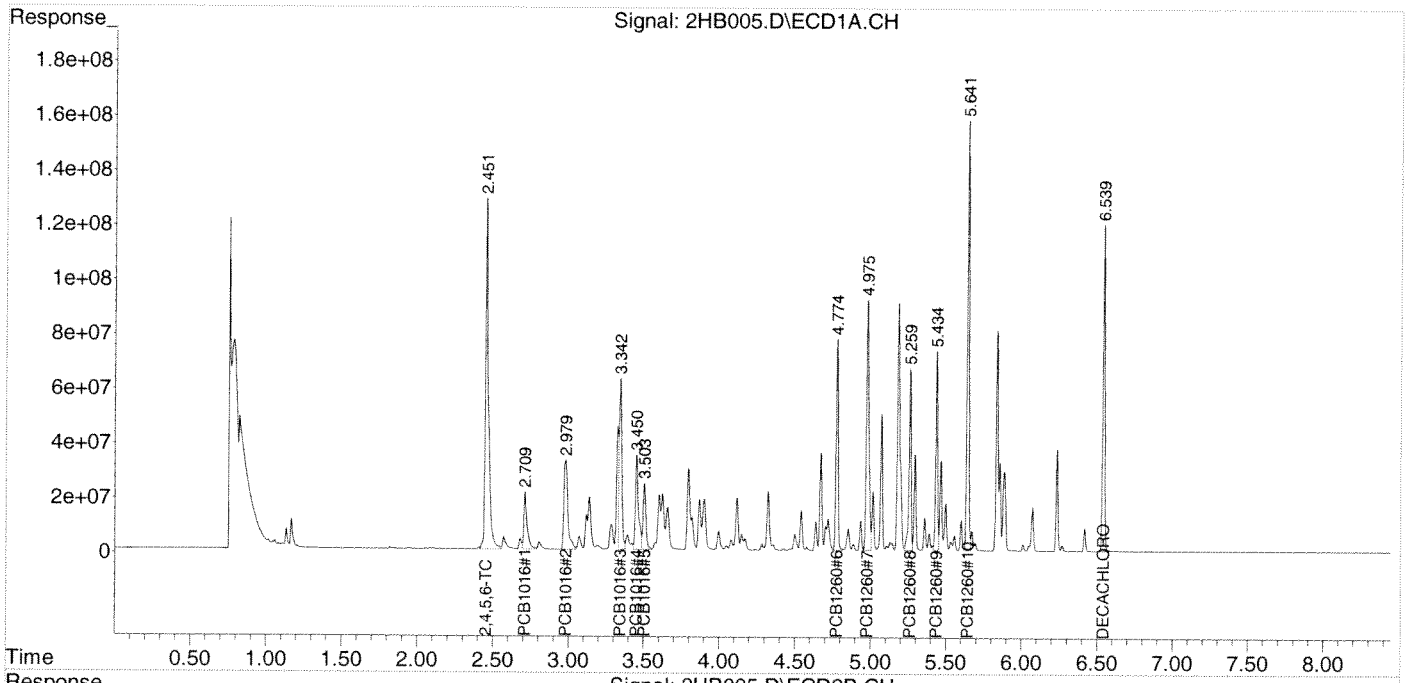
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

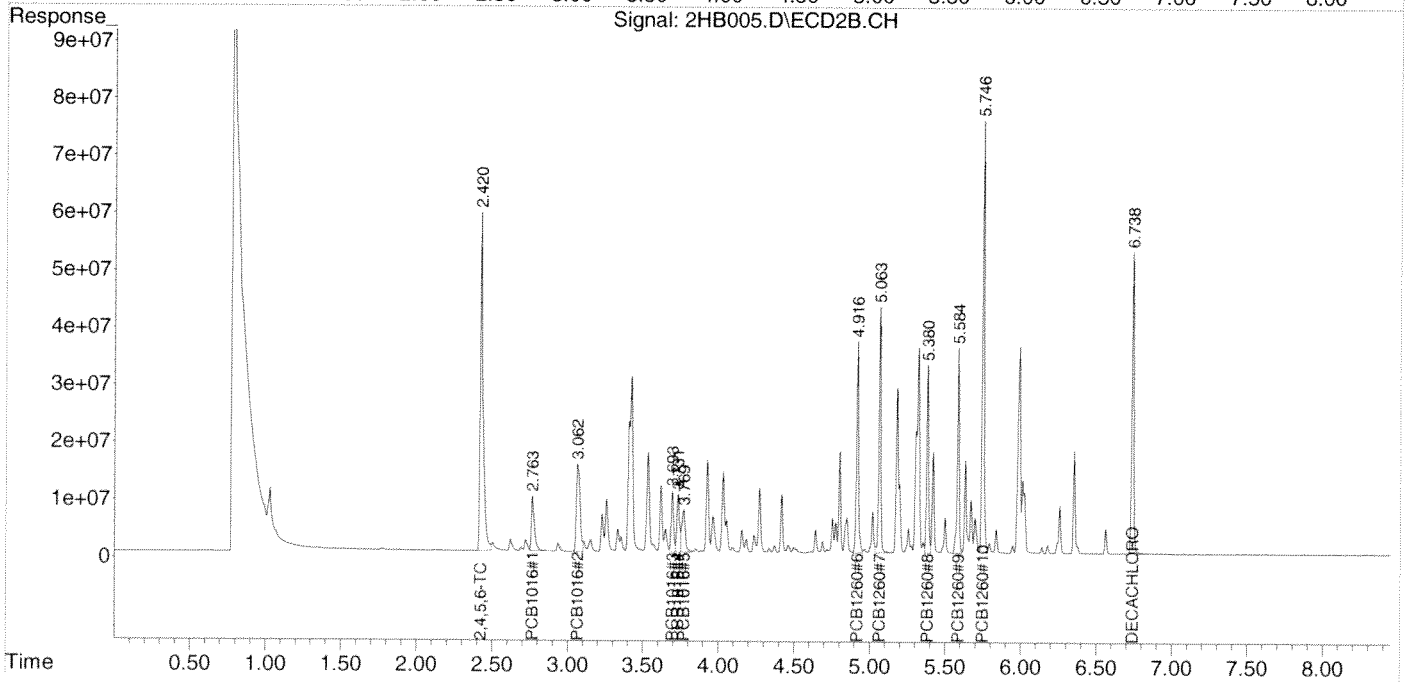
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB005.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:35 pm
Operator : RC
Sample : AA29960-CAL4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:15 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:59 pm
Operator : RC
Sample : AA29960-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:23 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.452	2.422	7411.2E6	3195.8E6	0.4346	0.4287
2)	PCB1016#1	2.709	2.764	1316.0E6	571.4E6	4.0772	3.6688
3)	PCB1016#2	2.975	3.062	2371.2E6	1117.5E6	3.8520	3.9081
4)	PCB1016#3	3.343	3.694	3267.9E6	489.8E6	4.3620	3.9273
5)	PCB1016#4	3.452	3.732	2124.2E6	507.5E6	4.2438	3.9577
6)	PCB1016#5	3.504	3.769	1339.5E6	518.5E6	4.4083	3.9405
7)	PCB1260#6	4.774	4.917	2979.8E6	1427.6E6	4.2940	3.9813
8)	PCB1260#7	4.975	5.063	4334.4E6	1572.8E6	4.2873	4.0022
9)	PCB1260#8	5.259	5.381	2703.3E6	1190.4E6	4.2337	3.9843
10)	PCB1260#9	5.434	5.584	2773.3E6	1322.8E6	4.2243	4.0592
11)	PCB1260#10	5.641	5.746	6070.7E6	2543.6E6	4.3322	3.9886
12)	DECACHLOR...	6.539	6.738	4222.4E6	1929.1E6	0.4153	0.3928

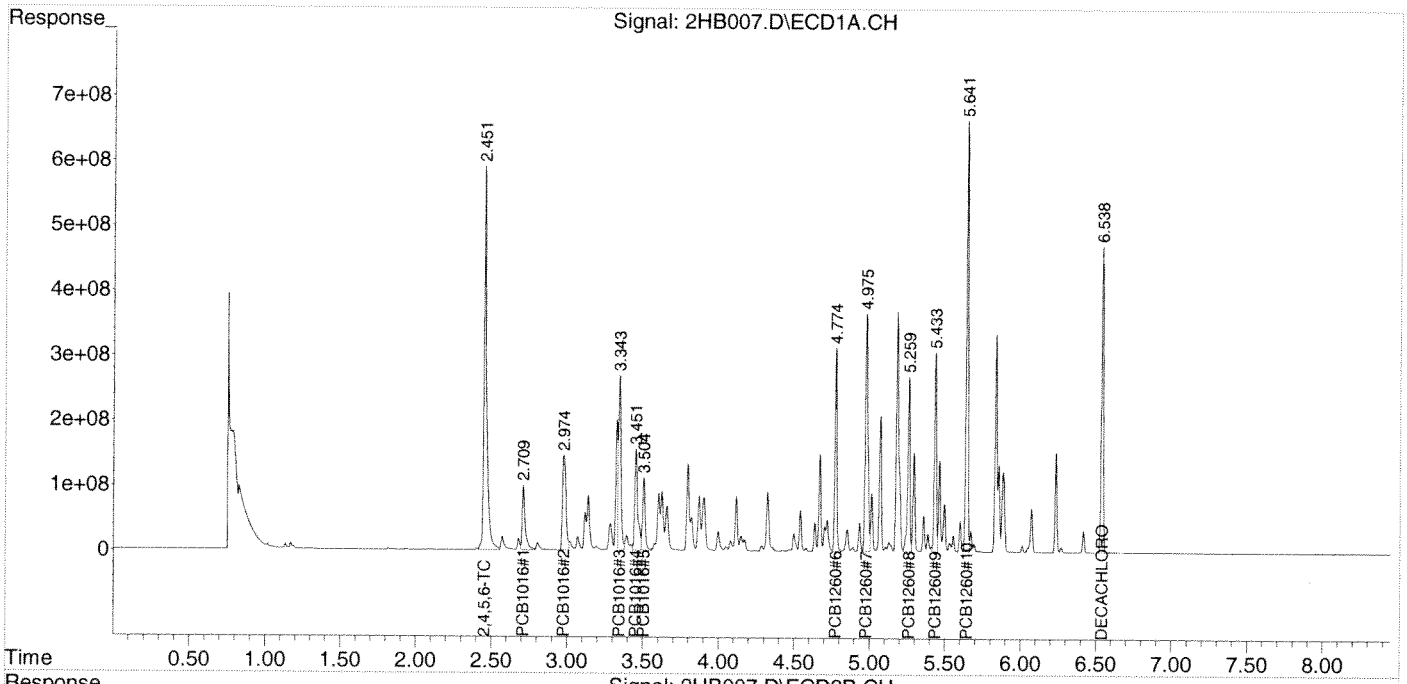
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

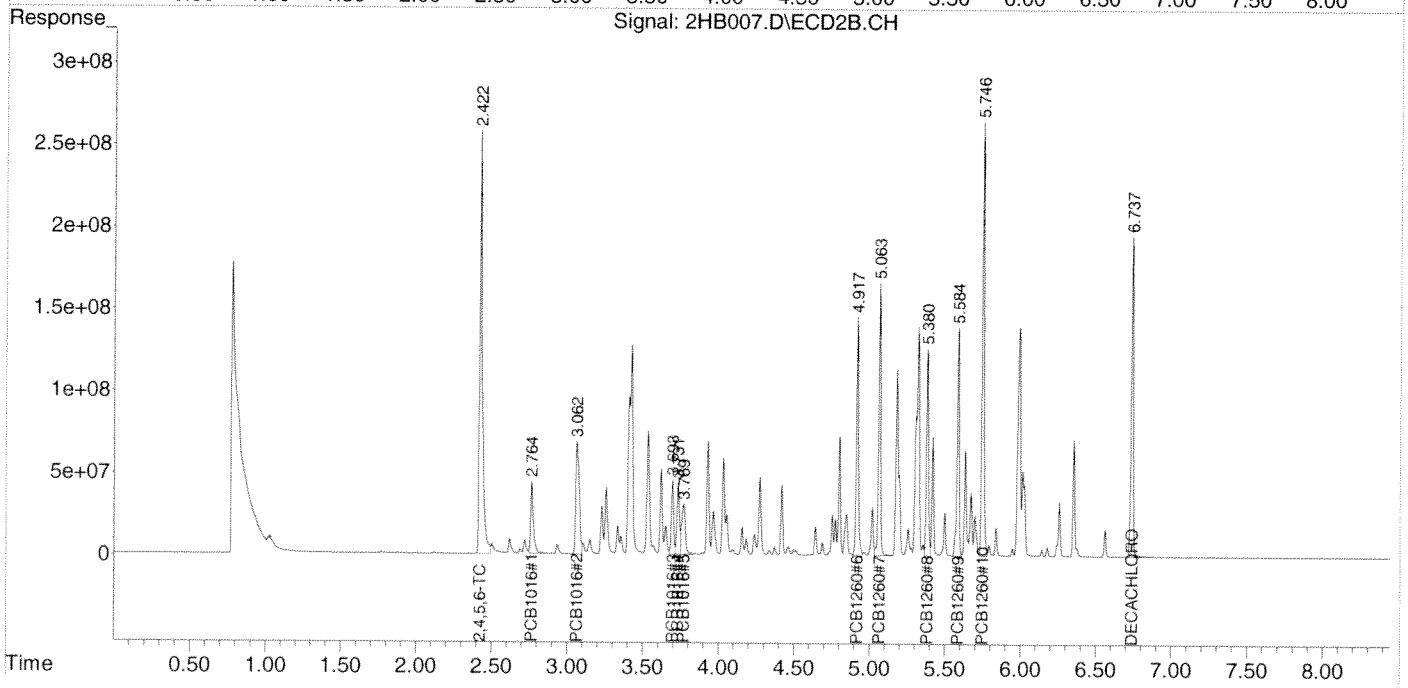
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB007.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 3:59 pm
Operator : RC
Sample : AA29960-CAL6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 16:54:23 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 16:53:17 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Data Path : Z:\2\DATA\2HB14\
Data File : 2HB008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 5:32 pm
Operator : RC
Sample : AA29960-SCV1
Misc : AA29933-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 17:45:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

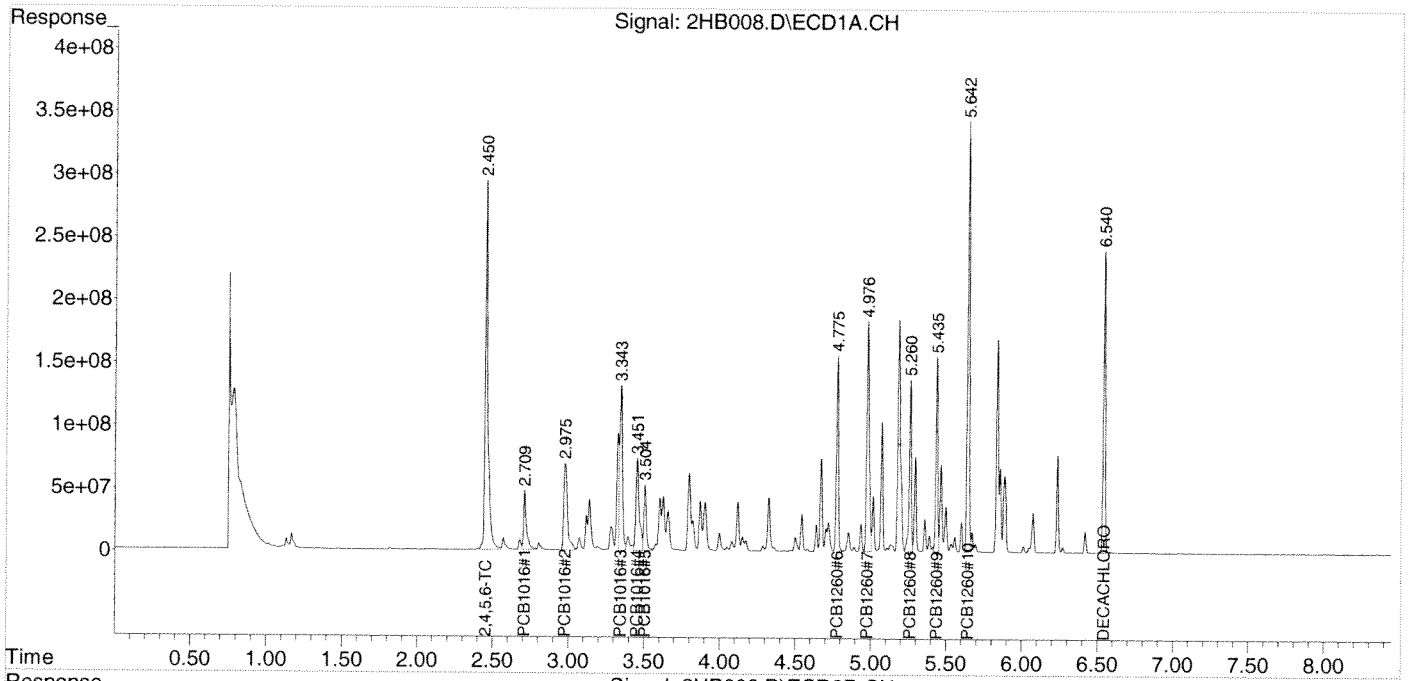
	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.451	2.421	3633.1E6	1592.8E6	0.2130	0.2137
2)	PCB1016#1	2.709	2.763	628.6E6	272.9E6	1.9476	1.9097
3)	PCB1016#2	2.975	3.061	1222.6E6	532.5E6	1.9861	1.8620
4)	PCB1016#3	3.343	3.694	1642.1E6	238.4E6	2.0098	1.9117
5)	PCB1016#4	3.452	3.732	1017.0E6	248.0E6	2.0319	1.9338
6)	PCB1016#5	3.504	3.770	647.5E6	243.5E6	2.1309	1.8508
7)	PCB1260#6	4.775	4.918	1475.2E6	711.3E6	1.9683	1.9838
8)	PCB1260#7	4.976	5.064	2138.9E6	797.3E6	2.1156	2.0289
9)	PCB1260#8	5.261	5.381	1344.1E6	598.1E6	2.1051	2.0018
10)	PCB1260#9	5.435	5.585	1379.3E6	662.5E6	2.1009	2.0330
11)	PCB1260#10	5.642	5.747	3090.6E6	1336.1E6	2.0230	2.0952
12)	DECACHLOR...	6.541	6.740	2131.6E6	991.6E6	0.2097	0.2019

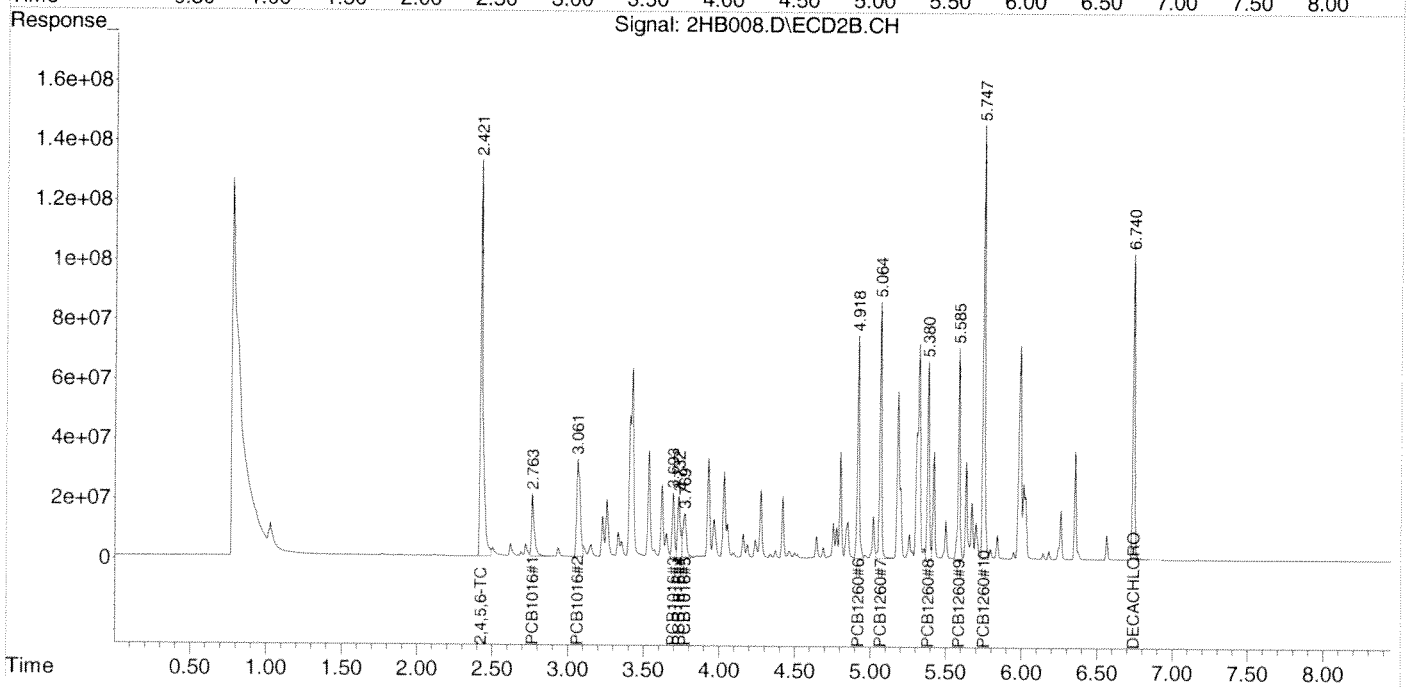
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\2\DATA\2HB14\
Data File : 2HB008.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Aug 2014 5:32 pm
Operator : RC
Sample : AA29960-SCV1
Misc : AA29933-CCV1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 07 17:45:55 2014
Quant Method : Z:\2\METHODS\PCB2Hb14.M
Quant Title : PCB SOP SVGC-07; INST OSVGCECD2
QLast Update : Thu Aug 07 17:09:50 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ANALYSIS SEQUENCE

AA29932

Instrument: OSVGCECD2

Calibration ID: 1408015

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client
AA29932-CAL1	QC		1		A4B0246		
AA29932-CAL2	QC		2		A4B0243		
AA29932-CAL3	QC		3		A4B0242		
AA29932-CAL4	QC		4		A4B0240		
AA29932-CAL5	QC		5		A4B0239		
AA29932-CAL6	QC		6		A4B0238		
AA29932-SCV1	QC		7		A4B0248		

Samples Loaded By Date Data Processed By Date

Response Factor Report HP G1530A

Method Path : Z:\2\METHODS\
Method File : PCB1254HA14.M
Title : PCB; INST OSVGCECD2
Last Update : Wed Aug 06 21:13:27 2014
Response Via : Initial Calibration

Calibration Files
CAL1 =2HA040.D CAL2 =2HA041.D CAL3 =2HA042.D
CAL4 =2HA043.D CAL5 =2HA044.D CAL6 =2HA045.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	14.638	12.207	16.976	17.959	18.547	20.124	16.742	E9	17.15
2)	PCB1254#1	4.808	5.003	4.506	4.724	4.894	5.431	4.895	E8	6.38
3)	PCB1254#2	8.151	8.582	7.949	8.404	8.702	9.524	8.552	E8	6.44
4)	PCB1254#3	4.620	4.933	4.646	4.961	5.206	5.691	5.009	E8	7.96
5)	PCB1254#4	7.653	8.354	7.992	8.564	8.957	9.627	8.525	E8	8.26
6)	PCB1254#5	7.855	6.713	5.784	6.162	6.480	6.950	6.658	E8	10.75
7)	DECACHLOROBIP...	12.273	11.001	9.040	9.526	10.604	11.188	10.605	E9	11.07

Signal #2 Calibration Files
CAL1 =2HA040.D CAL2 =2HA041.D CAL3 =2HA042.D
CAL4 =2HA043.D CAL5 =2HA044.D CAL6 =2HA045.D

	Compound	CAL1	CAL2	CAL3	CAL4	CAL5	CAL6	Avg		%RSD
1)	2,4,5,6-TCMX	6.829	7.409	7.913	8.327	8.534	8.633	7.941	E9	8.90
2)	PCB1254#1	2.567	2.713	2.483	2.575	2.660	2.826	2.637	E8	4.62
3)	PCB1254#2	2.838	2.981	2.653	2.769	2.863	3.033	2.856	E8	4.86
4)	PCB1254#3	2.815	2.455	2.047	2.116	2.243	2.385	2.344	E8	11.86
5)	PCB1254#4	3.803	4.022	3.701	3.928	4.084	4.249	3.965	E8	4.99
6)	PCB1254#5	1.844	1.897	1.660	1.737	1.823	1.912	1.812	E8	5.36
7)	DECACHLOROBIP...	6.606	5.654	4.455	4.603	5.022	5.103	5.241	E9	15.09

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA040.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:29
Operator : JJB
Sample : AA29932-CAL1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:51 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.455	2.425	73189857	34145961	0.0100	0.0035	#
2)	PCB1254#1	4.121	4.276	24040873	12834358	0.0690	0.0326	#
3)	PCB1254#2	4.327	4.422	40754824	14190193	0.0682	0.0315	#
4)	PCB1254#3	4.549	4.691	23098283	14077089	0.0683	0.0397	#
5)	PCB1254#4	4.642	4.779	38263938	19014791	0.0676	0.0292	#
6)	PCB1254#5	4.848	5.067	39276285	9221072	0.0990	0.0312	#
7)	DECACHLOR...	6.540	6.740	61363640	33030847	0.0129	0.0054	#

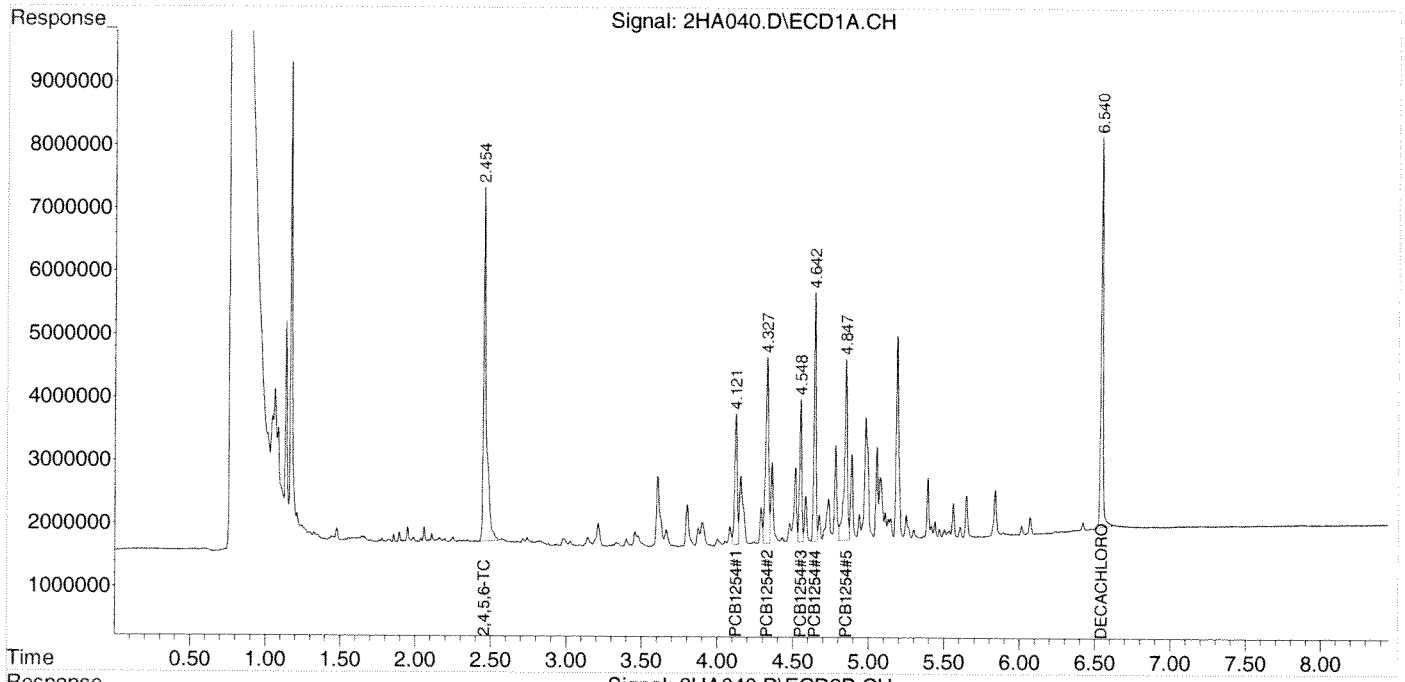
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

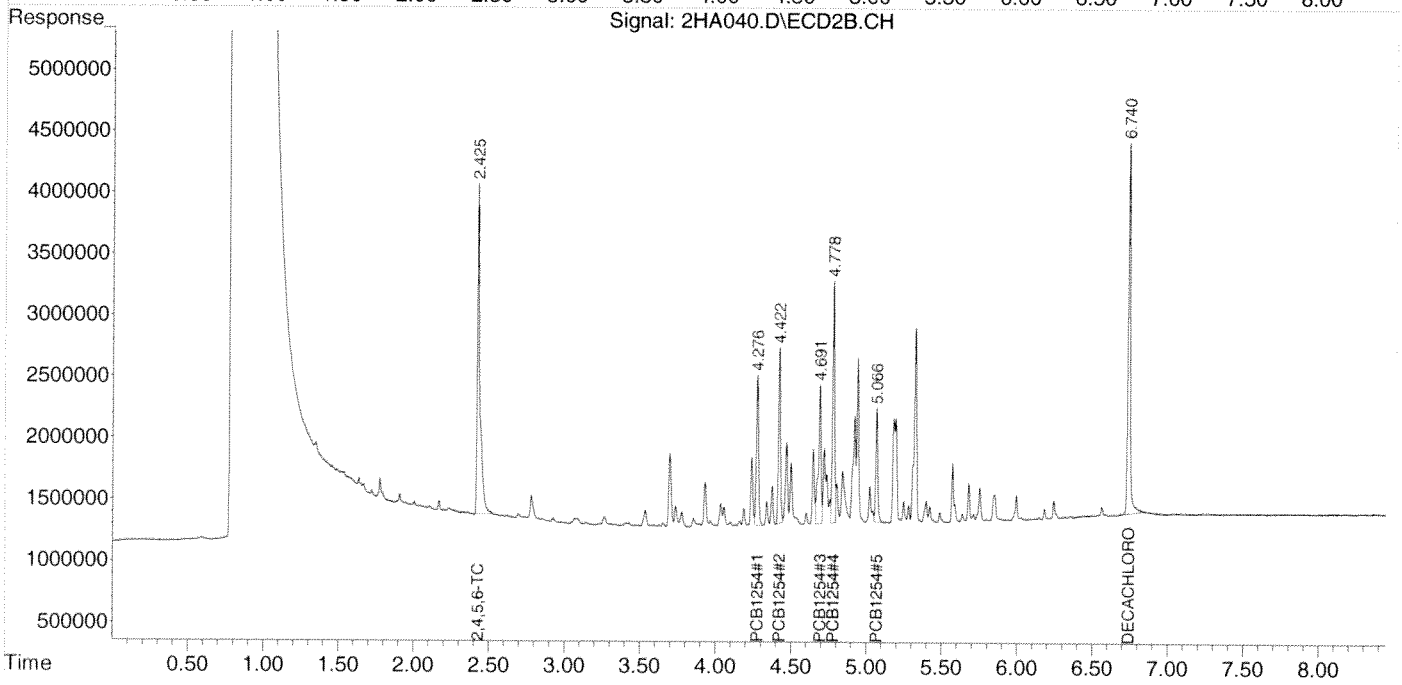
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA040.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:29
Operator : JJB
Sample : AA29932-CAL1
Misc :
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:51 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA041.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:41
Operator : JJB
Sample : AA29932-CAL2
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:54 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.455	2.425	122.1E6	74094308	0.0167	0.0076	#
2)	PCB1254#1	4.120	4.276	50032005	27126920	0.1435	0.0690	#
3)	PCB1254#2	4.326	4.422	85824619	29814974	0.1436	0.0662	#
4)	PCB1254#3	4.548	4.691	49325911	24550402	0.1459	0.0693	#
5)	PCB1254#4	4.641	4.778	83538251	40224823	0.1475	0.0618	#
6)	PCB1254#5	4.847	5.067	67131857	18967860	0.1691	0.0641	#
7)	DECACHLOR...	6.539	6.740	110.0E6	56543263	0.0230	0.0092	#

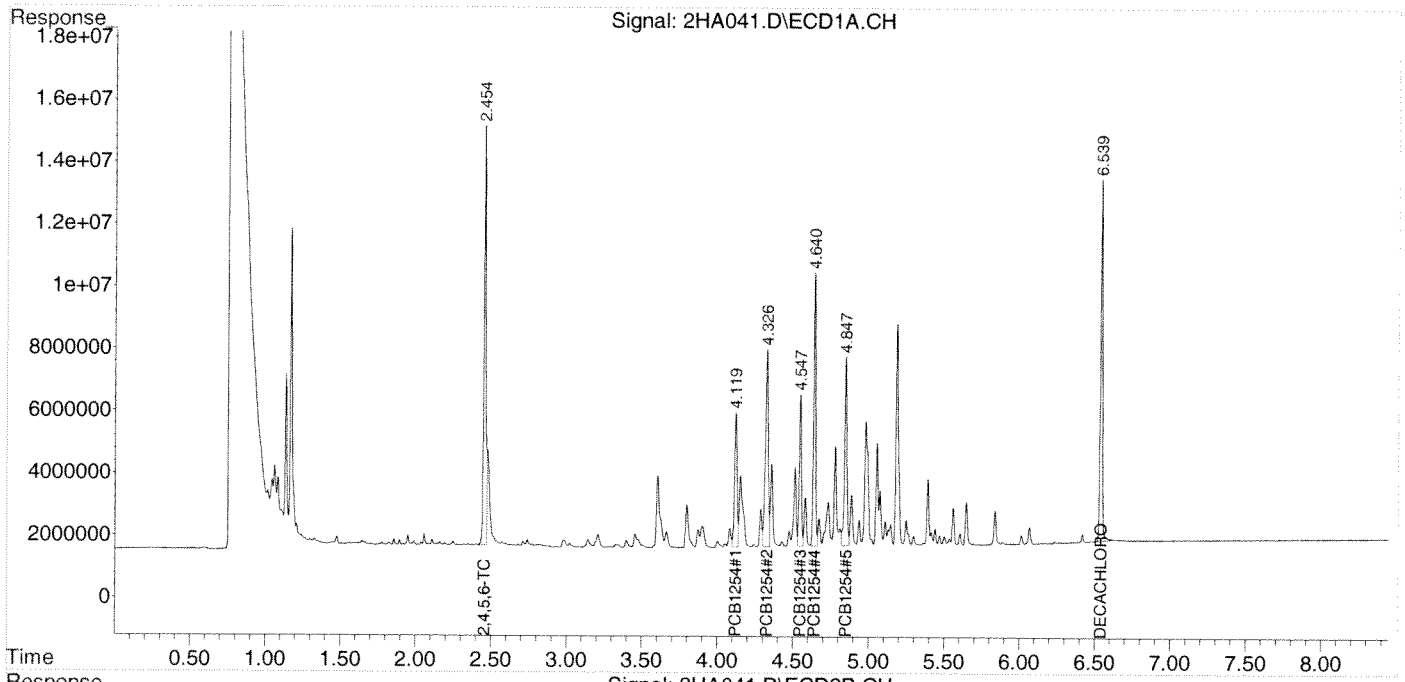
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

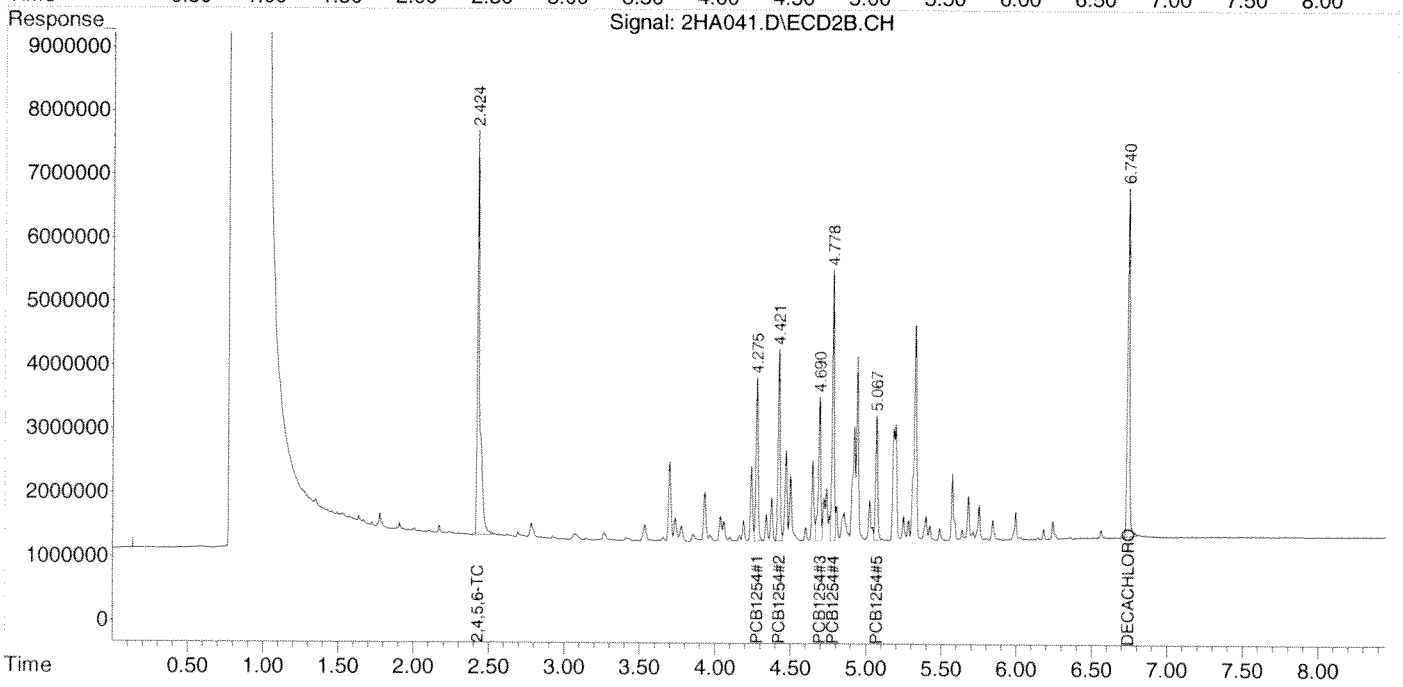
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA041.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:41
Operator : JJB
Sample : AA29932-CAL2
Misc :
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:54 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:53
Operator : JJB
Sample : AA29932-CAL3
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:57 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.455	2.425	848.8E6	395.7E6	0.1161	0.0406	#
2)	PCB1254#1	4.121	4.276	225.3E6	124.2E6	0.6462	0.3157	#
3)	PCB1254#2	4.327	4.422	397.5E6	132.6E6	0.6652	0.2945	#
4)	PCB1254#3	4.549	4.692	232.3E6	102.4E6	0.6872	0.2888	#
5)	PCB1254#4	4.642	4.779	399.6E6	185.1E6	0.7056	0.2843	#
6)	PCB1254#5	4.848	5.067	289.2E6	82999153	0.7287	0.2804	#
7)	DECACHLOR...	6.540	6.741	452.0E6	222.8E6	0.0947	0.0364	#

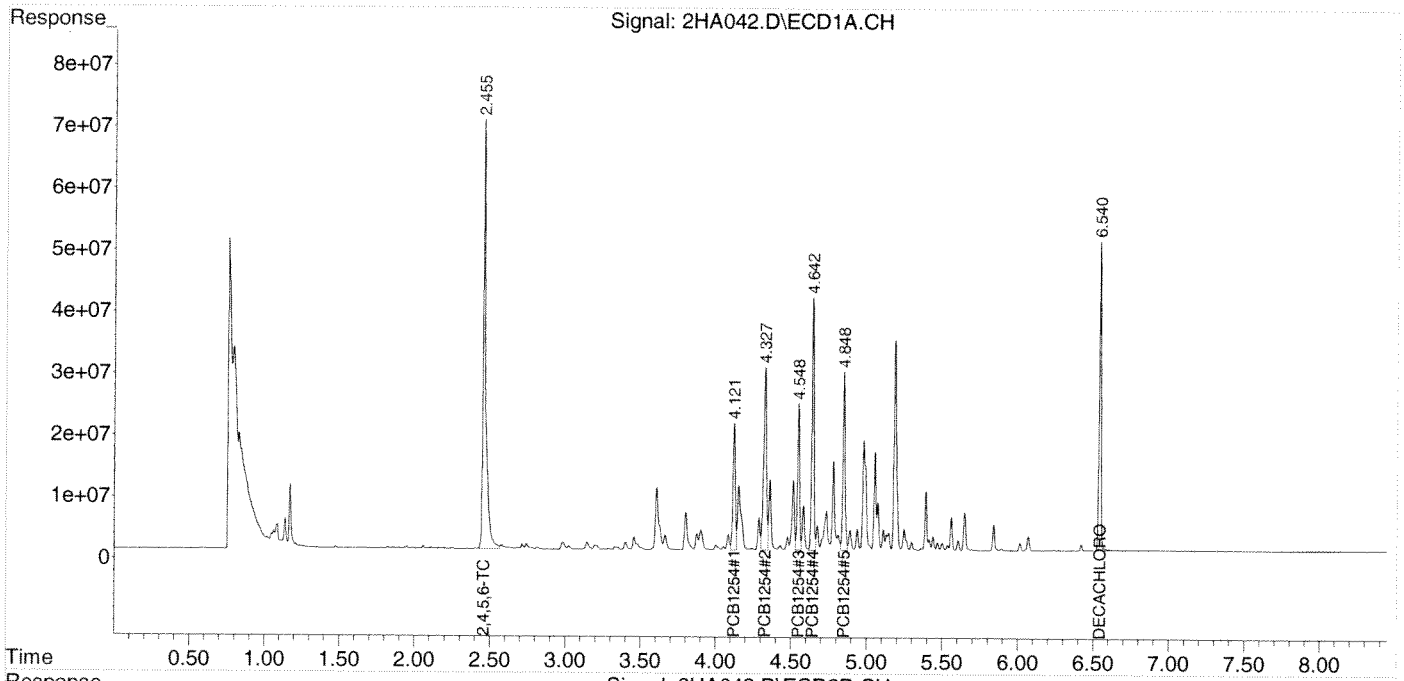
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

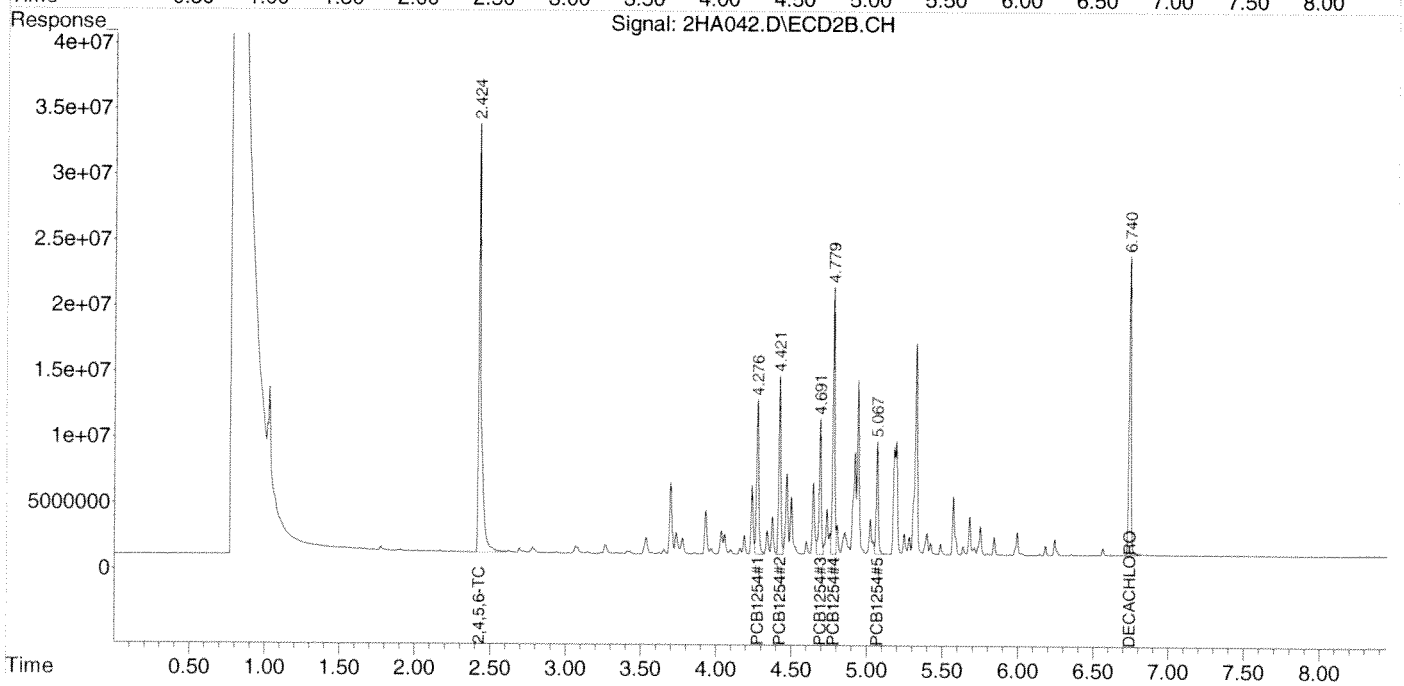
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 17:53
Operator : JJB
Sample : AA29932-CAL3
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:08:57 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:06
Operator : JJB
Sample : AA29932-CAL4
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:00 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.455	2.426	1795.9E6	832.7E6	0.2457	0.0855	#
2)	PCB1254#1	4.121	4.276	472.4E6	257.5E6	1.3551	0.6548	#
3)	PCB1254#2	4.327	4.422	840.4E6	276.9E6	1.4065	0.6149	#
4)	PCB1254#3	4.549	4.691	496.1E6	211.6E6	1.4676	0.5970	#
5)	PCB1254#4	4.642	4.779	856.4E6	392.8E6	1.5121	0.6033	#
6)	PCB1254#5	4.848	5.067	616.2E6	173.7E6	1.5524	0.5867	#
7)	DECACHLOR...	6.540	6.740	952.6E6	460.3E6	0.1995	0.0751	#

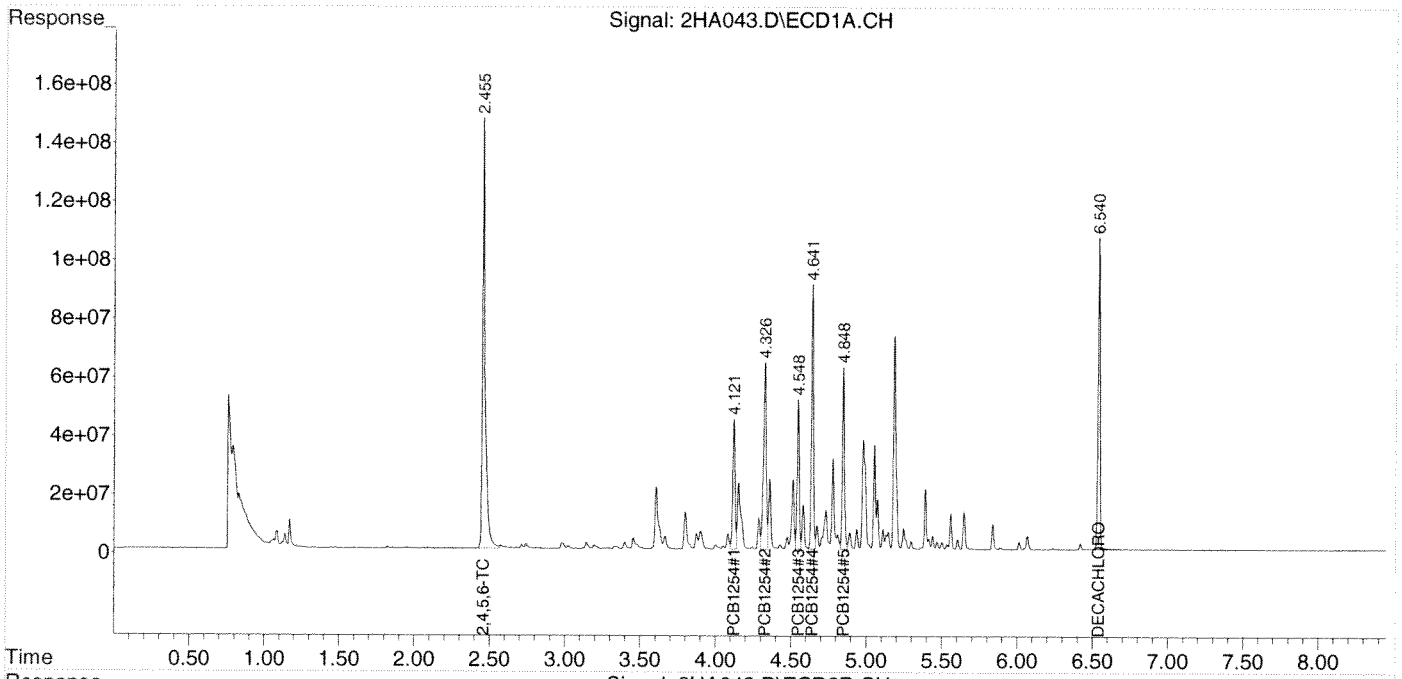
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

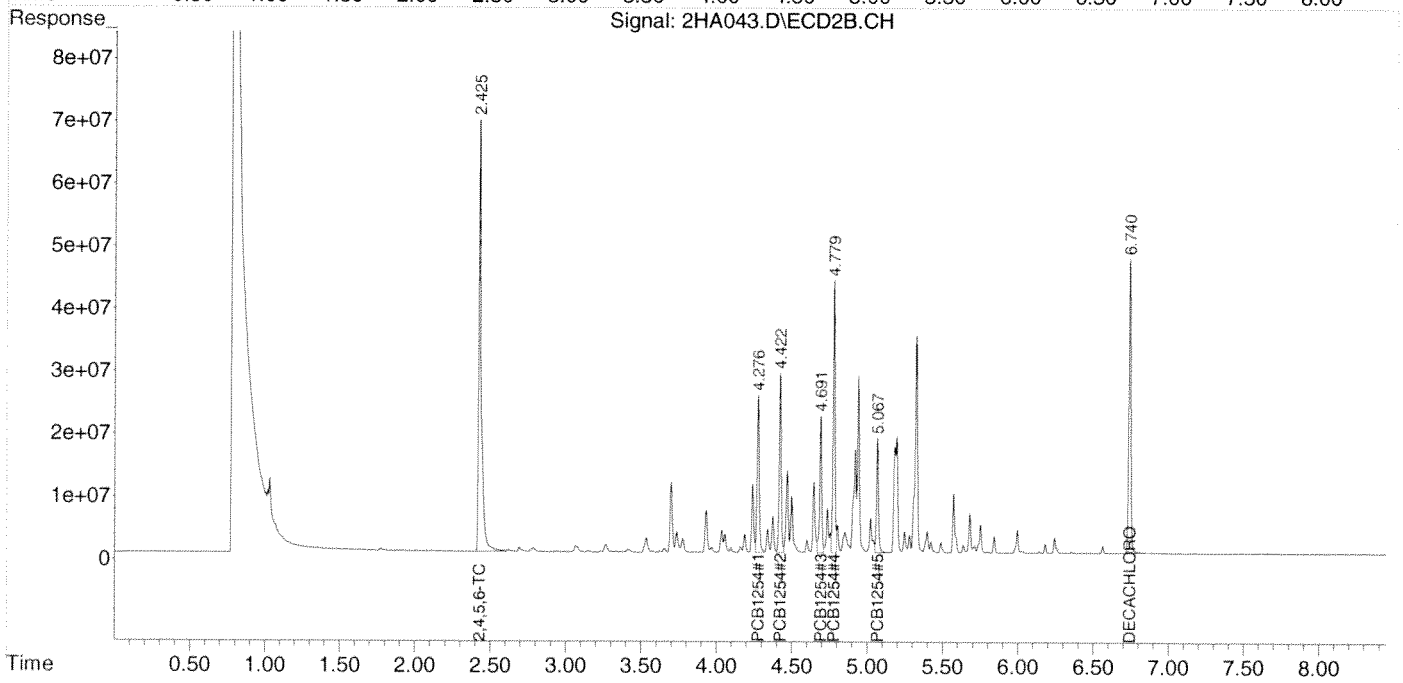
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA043.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:06
Operator : JJB
Sample : AA29932-CAL4
Misc :
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:00 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:18
Operator : JJB
Sample : AA29932-CAL5
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:03 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.456	2.426	3709.4E6	1706.7E6	0.5074	0.1752	#
2)	PCB1254#1	4.122	4.277	978.9E6	531.9E6	2.8078	1.3528	#
3)	PCB1254#2	4.327	4.422	1740.4E6	572.6E6	2.9129	1.2714	#
4)	PCB1254#3	4.549	4.692	1041.2E6	448.6E6	3.0803	1.2655	#
5)	PCB1254#4	4.642	4.779	1791.4E6	816.7E6	3.1629	1.2545	#
6)	PCB1254#5	4.848	5.068	1296.1E6	364.5E6	3.2654	1.2317	#
7)	DECACHLOR...	6.540	6.740	2120.8E6	1004.5E6	0.4441	0.1640	#

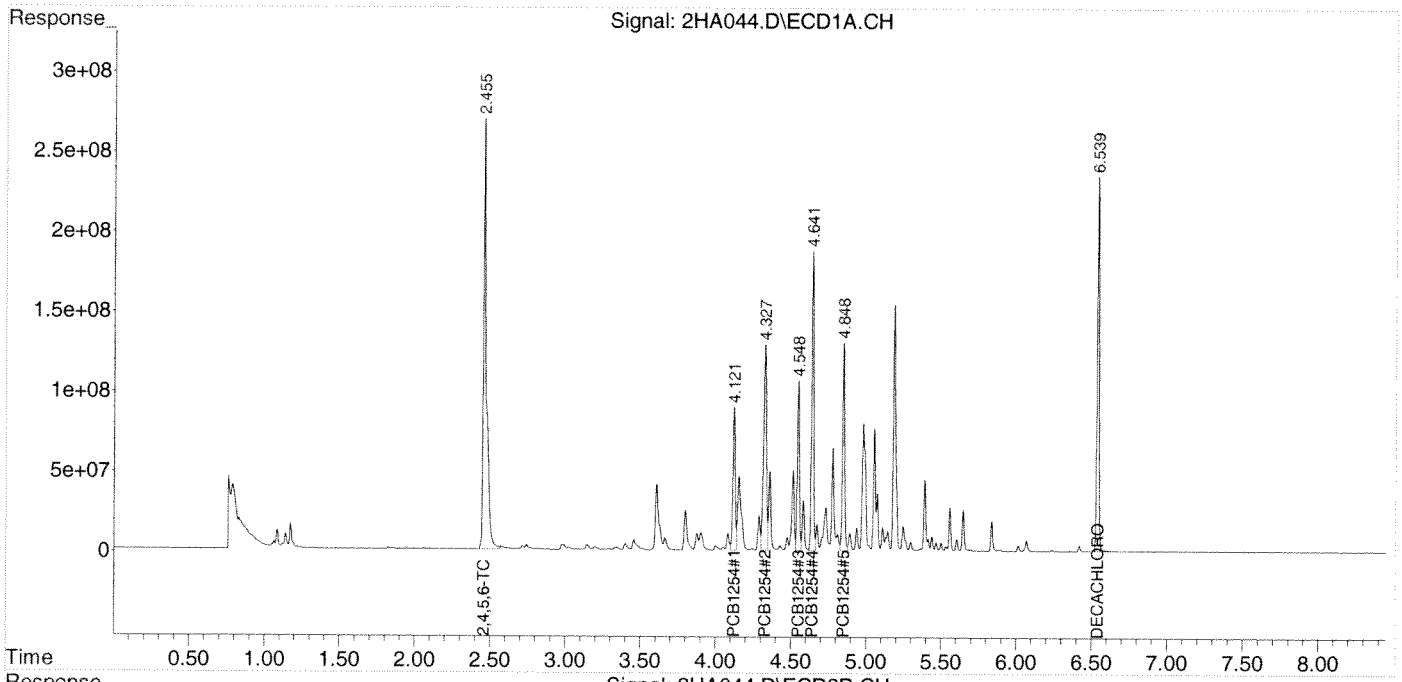
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

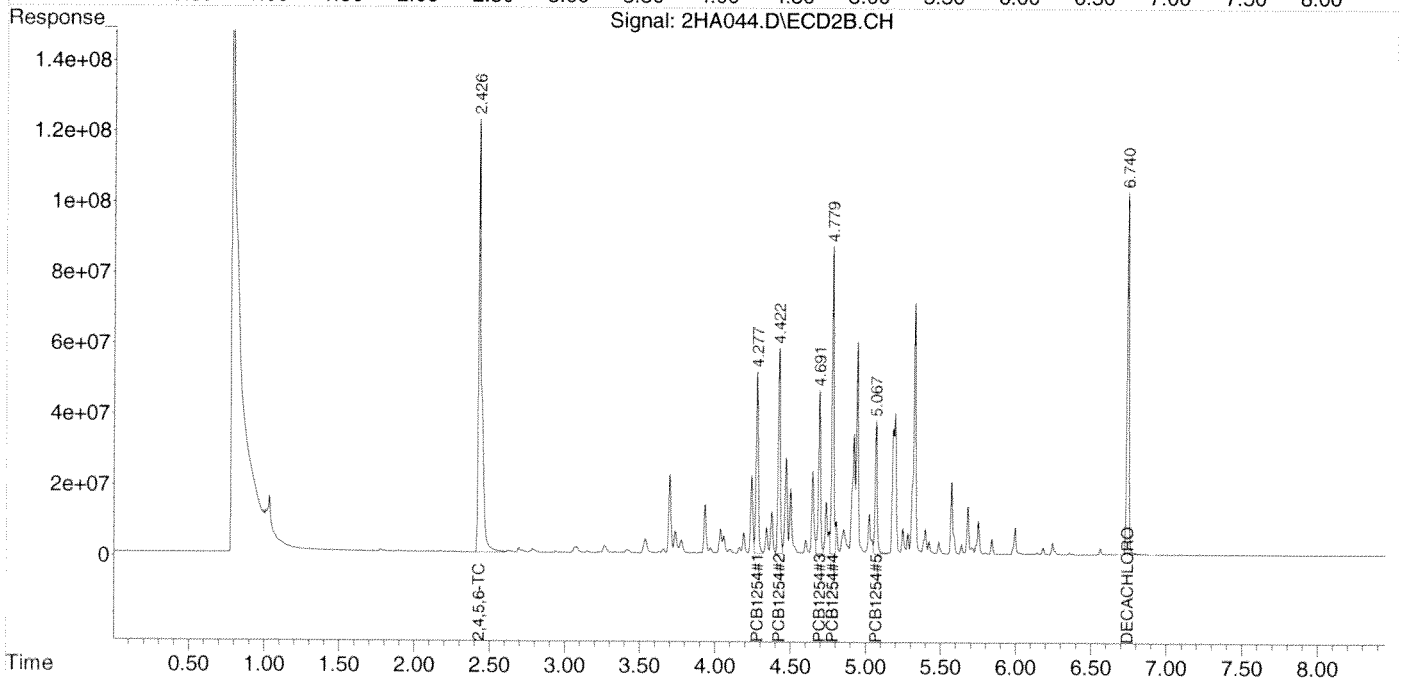
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA044.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:18
Operator : JJB
Sample : AA29932-CAL5
Misc :
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:03 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:30
Operator : JJB
Sample : AA29932-CAL6
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:06 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL	
	Target Compounds							
1)	2,4,5,6-TCMX	2.454	2.425	8049.4E6	3453.2E6	1.1011	0.3546	#
2)	PCB1254#1	4.120	4.275	2172.6E6	1130.3E6	6.2317	2.8745	#
3)	PCB1254#2	4.326	4.421	3809.7E6	1213.0E6	6.3760	2.6936	#
4)	PCB1254#3	4.547	4.690	2276.6E6	954.1E6	6.7348	2.6916	#
5)	PCB1254#4	4.640	4.778	3851.0E6	1699.8E6	6.7992	2.6109	#
6)	PCB1254#5	4.847	5.066	2780.2E6	765.0E6	7.0046	2.5846	#
7)	DECACHLOR...	6.540	6.740	4475.3E6	2041.3E6	0.9372	0.3332	#

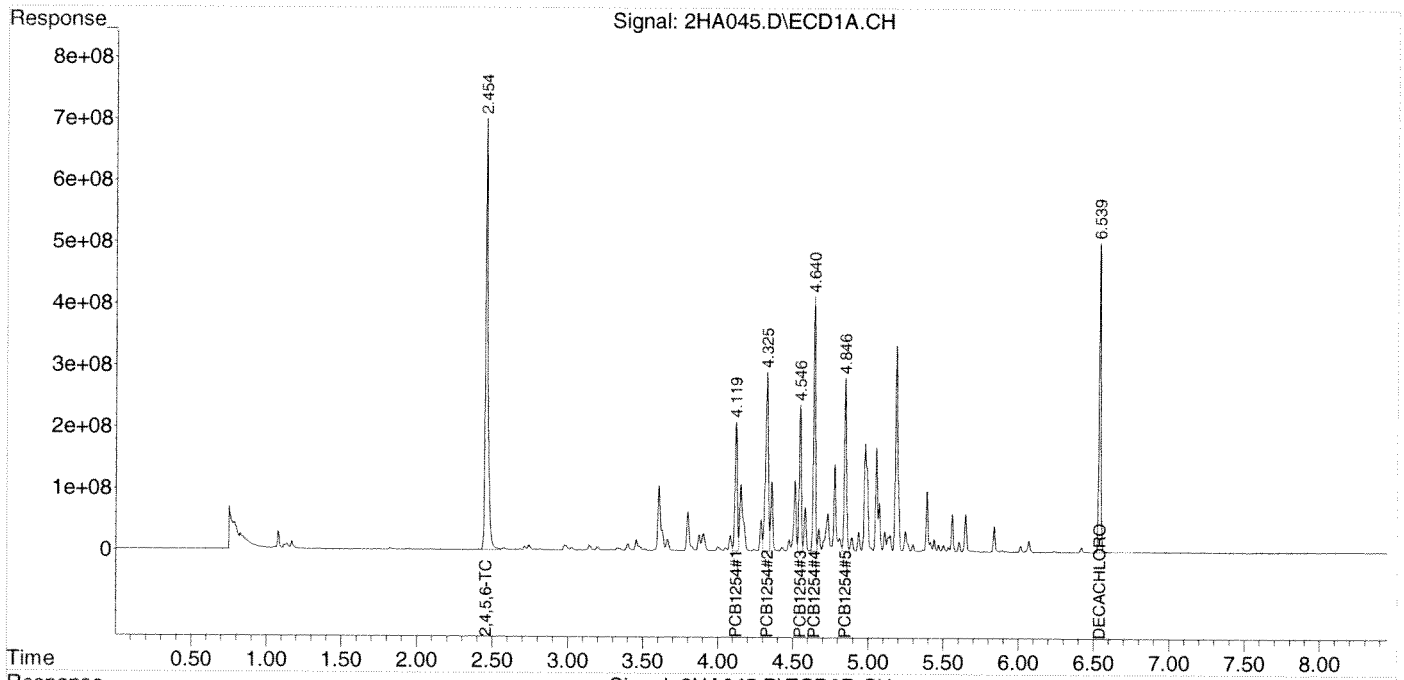
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

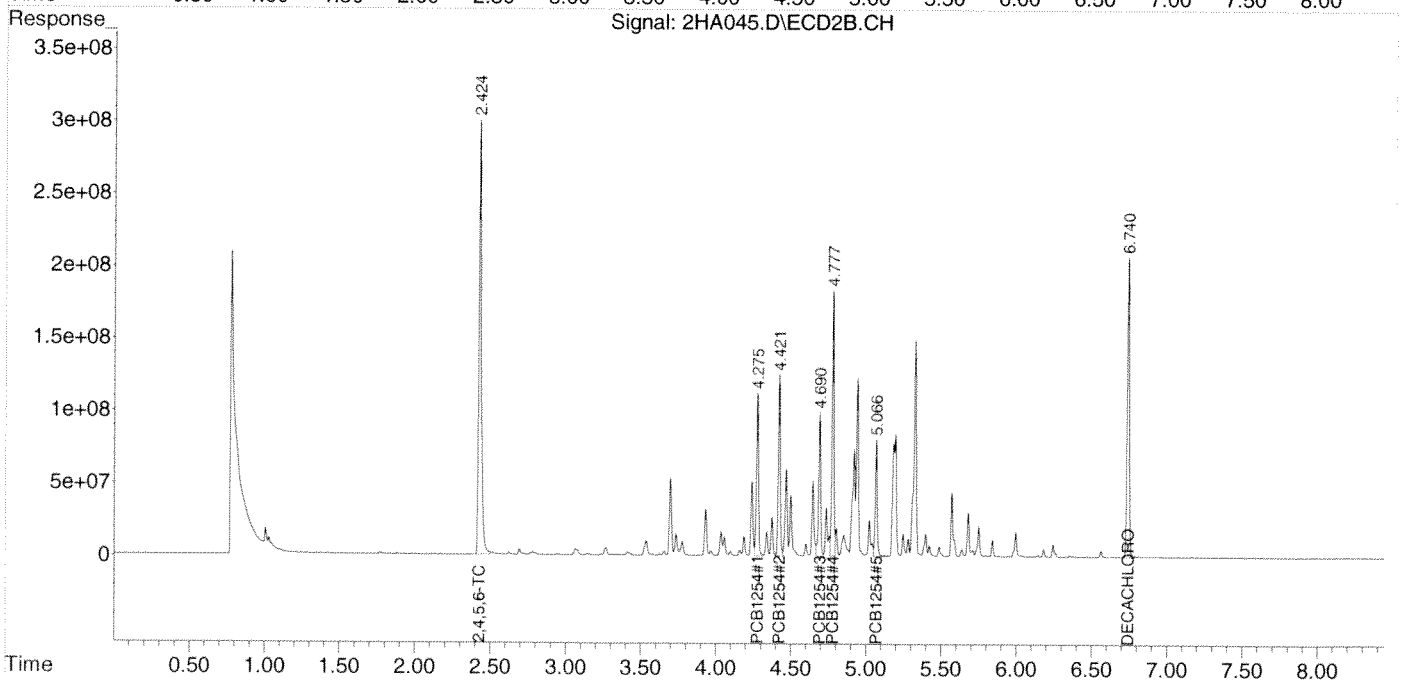
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA045.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:30
Operator : JJB
Sample : AA29932-CAL6
Misc :
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:09:06 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:08:28 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:42
Operator : JJB
Sample : AA29932-SCV1
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:14:10 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/mL	ug/mL
	Target Compounds						
1)	2,4,5,6-TCMX	2.456	2.426	4118.5E6	1881.0E6	0.2460	0.2369
2)	PCB1254#1	4.121	4.276	967.2E6	523.8E6	1.9760	1.9862
3)	PCB1254#2	4.327	4.422	1713.2E6	556.3E6	2.0033	1.9477
4)	PCB1254#3	4.548	4.691	1017.3E6	435.4E6	2.0307	1.8578
5)	PCB1254#4	4.641	4.778	1738.2E6	784.7E6	2.0390	1.9793
6)	PCB1254#5	4.848	5.067	1252.4E6	352.6E6	1.8811	1.9460
7)	DECACHLOR...	6.539	6.739	2194.6E6	1027.9E6	0.2069	0.1961

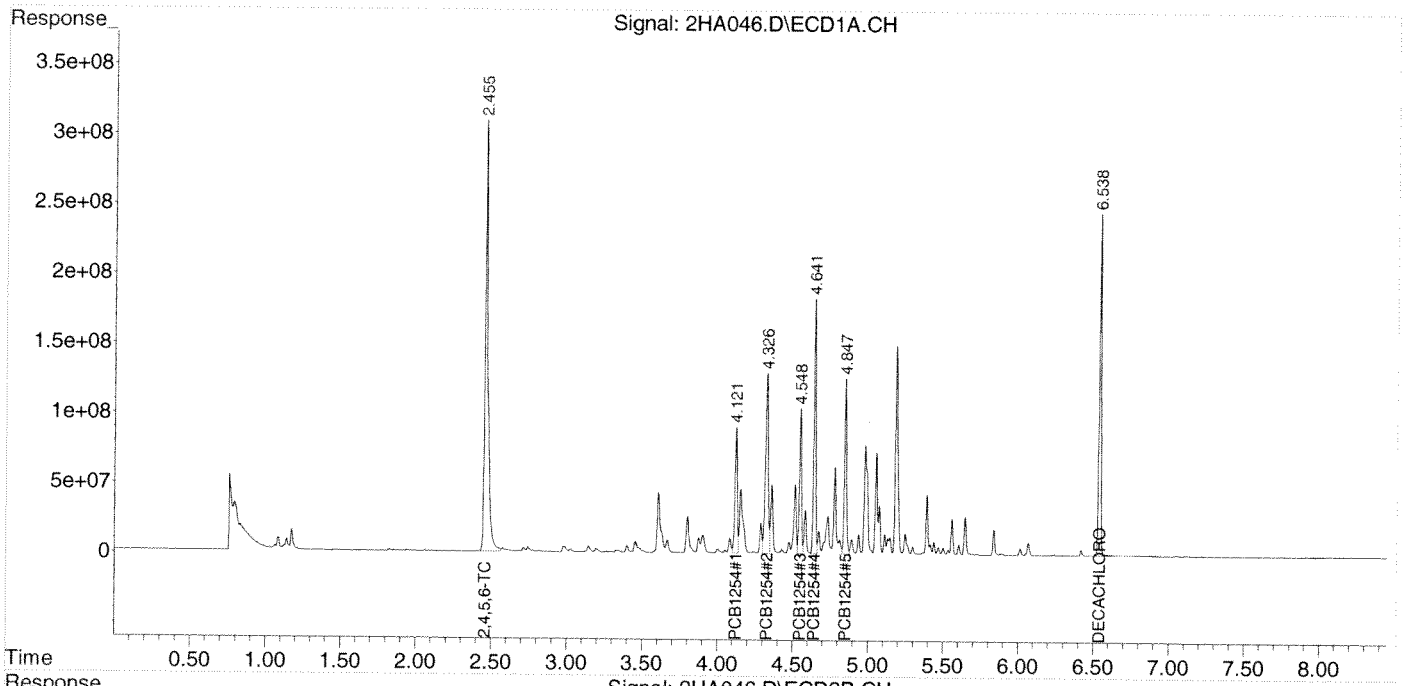
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

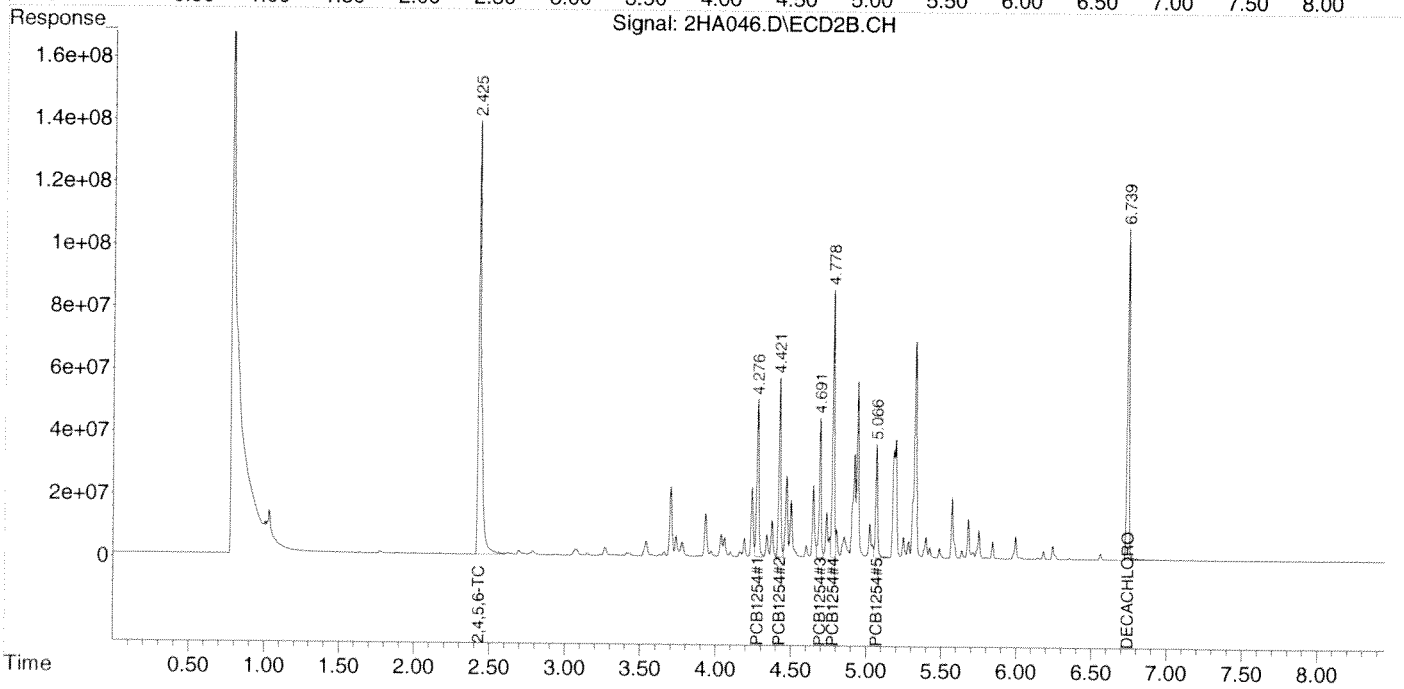
Quantitation Report (QT Reviewed)

Data Path : Z:\2\DATA\2HA14\
Data File : 2HA046.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Aug 2014 18:42
Operator : JJB
Sample : AA29932-SCV1
Misc :
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 06 21:14:10 2014
Quant Method : Z:\2\METHODS\PCB1254HA14.M
Quant Title : PCB; INST OSVGCECD2
QLast Update : Wed Aug 06 21:13:27 2014
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





ENCO Jacksonville

SDG: A404270-CTO0017

CLASS: 25_METALS - TOT

METHOD: EPA 6010C

ANALYSES DATA PACKAGE COVER PAGE

EPA 6010C

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Client Sample Id:	Lab Sample Id:
A404270-01 (TR-5TH-CSW01-0814)	B403655-01
A404270-02 (TR-5TH-CSW02-0814)	B403655-02
A404270-03 (TR-5TH-CSW03-0814)	B403655-03
A404270-04 (TR-5TH-CSW04-0814)	B403655-04
A404270-05 (TR-5TH-CSW05-0814)	B403655-05
A404270-06 (TR-5TH-CSW06-0814)	B403655-06
A404270-07 (TR-5TH-CSW07-0814)	B403655-07
A404270-08 (TR-5TH-CSW07D-0814)	B403655-08
A404270-09 (TR-5TH-CSW08-0814)	B403655-09
A404270-10 (TR-5TH-CSW09-0814)	B403655-10
A404270-11 (TR-5TH-CSW010-0814)	B403655-11
A404270-12 (TR-5TH-CSW11-0814)	B403655-12
A404270-13 (TR-5TH-CSW11D-0814)	B403655-13
A404270-14 (TR-5TH-CSW12-0814)	B403655-14
A404270-15 (TR-5TH-CSW13-0814)	B403655-15
A404270-16 (TR-5TH-CSW14-0814)	B403655-16
A404270-18 (TR-5TH-CSW15-0814)	B403655-17
A404270-19 (TR-5TH-CSF01-0814)	B403655-18
A404270-20 (TR-5TH-CSF02-0814)	B403655-19
A404270-21 (TR-5TH-CSF03-0814)	B403655-20
A404270-22 (TR-5TH-CSF04-0814)	B403655-21
A404270-23 (TR-5TH-CSF05-0814)	B403655-22
A404270-24 (TR-5TH-CSF05D-0814)	B403655-23
A404270-25 (TR-5TH-CSF06-0814)	B403655-24
A404270-26 (TR-5TH-CSF07-0814)	B403655-25
A404270-27 (TR-5TH-CSF08-0814)	B403655-26
A404270-28 (TR-5TH-CSF09-0814)	B403655-27
A404270-29 (TR-5TH-CS-EB-080114)	B403655-28

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-01 (TR-5TH-CSW01-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-01
File ID: 080714a-021
Sampled: 08/01/14 12:10
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 10:44
Solids: 81.79
Preparation: EPA 3050B
Initial/Final: 0.72 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<3.40	1	U	0.481	3.40	6.79	EPA 6010C
7440-38-2	Arsenic	4.84	1		0.605	1.70	3.40	EPA 6010C
7440-48-4	Cobalt	3.57	1		0.122	0.425	0.849	EPA 6010C
7439-89-6	Iron	8750	1		0.425	4.25	8.49	EPA 6010C
7439-92-1	Lead	5.52	1		0.187	1.70	3.40	EPA 6010C
7440-66-6	Zinc	20.6	1		0.442	0.849	1.70	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-02 (TR-5TH-CSW02-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-02
File ID: 080714a-024
Sampled: 08/01/14 12:15
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 10:51
Solids: 78.60
Preparation: EPA 3050B
Initial/Final: 0.96 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.54	1	U	0.360	2.54	5.09	EPA 6010C
7440-38-2	Arsenic	1.81	1	J	0.453	1.27	2.54	EPA 6010C
7440-48-4	Cobalt	1.44	1		0.0916	0.318	0.636	EPA 6010C
7439-89-6	Iron	3550	1		0.318	3.18	6.36	EPA 6010C
7439-92-1	Lead	11.6	1		0.140	1.27	2.54	EPA 6010C
7440-66-6	Zinc	27.4	1		0.331	0.636	1.27	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-03 (TR-5TH-CSW03-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-03
File ID: 080714a-025
Sampled: 08/01/14 12:20
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 10:53
Solids: 77.99
Preparation: EPA 3050B
Initial/Final: 0.83 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<3.09	1	U	0.437	3.09	6.18	EPA 6010C
7440-38-2	Arsenic	4.43	1		0.550	1.54	3.09	EPA 6010C
7440-48-4	Cobalt	3.28	1		0.111	0.386	0.772	EPA 6010C
7439-89-6	Iron	7590	1		0.386	3.86	7.72	EPA 6010C
7439-92-1	Lead	6.33	1		0.170	1.54	3.09	EPA 6010C
7440-66-6	Zinc	21.4	1		0.402	0.772	1.54	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-04 (TR-5TH-CSW04-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-04
File ID: 080714a-026
Sampled: 08/01/14 12:30
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 10:55
Solids: 85.57
Preparation: EPA 3050B
Initial/Final: 0.73 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<3.20	1	U	0.453	3.20	6.40	EPA 6010C
7440-38-2	Arsenic	<1.60	1	U	0.570	1.60	3.20	EPA 6010C
7440-48-4	Cobalt	0.129	1	J	0.115	0.400	0.800	EPA 6010C
7439-89-6	Iron	675	1		0.400	4.00	8.00	EPA 6010C
7439-92-1	Lead	1.87	1	J	0.176	1.60	3.20	EPA 6010C
7440-66-6	Zinc	1.83	1		0.416	0.800	1.60	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-05 (TR-5TH-CSW05-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-05
File ID: 080714a-027
Sampled: 08/01/14 12:35
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 10:58
Solids: 99.26
Preparation: EPA 3050B
Initial/Final: 0.71 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.84	1	U	0.402	2.84	5.68	EPA 6010C
7440-38-2	Arsenic	<1.42	1	U	0.505	1.42	2.84	EPA 6010C
7440-48-4	Cobalt	<0.355	1	U	0.102	0.355	0.709	EPA 6010C
7439-89-6	Iron	379	1		0.355	3.55	7.09	EPA 6010C
7439-92-1	Lead	0.733	1	J	0.156	1.42	2.84	EPA 6010C
7440-66-6	Zinc	0.850	1	J	0.369	0.709	1.42	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-06 (TR-5TH-CSW06-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-06
File ID: 080714a-028
Sampled: 08/01/14 12:40
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:01
Solids: 94.63
Preparation: EPA 3050B
Initial/Final: 0.86 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.46	1	U	0.348	2.46	4.92	EPA 6010C
7440-38-2	Arsenic	1.18	1	J	0.437	1.23	2.46	EPA 6010C
7440-48-4	Cobalt	0.608	1	J	0.0885	0.307	0.614	EPA 6010C
7439-89-6	Iron	2200	1		0.307	3.07	6.14	EPA 6010C
7439-92-1	Lead	6.73	1		0.135	1.23	2.46	EPA 6010C
7440-66-6	Zinc	12.5	1		0.319	0.614	1.23	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-07 (TR-5TH-CSW07-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-07
File ID: 080714a-029
Sampled: 08/01/14 12:50
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:03
Solids: 90.23
Preparation: EPA 3050B
Initial/Final: 0.87 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.55	1	U	0.361	2.55	5.10	EPA 6010C
7440-38-2	Arsenic	1.48	1	J	0.454	1.27	2.55	EPA 6010C
7440-48-4	Cobalt	1.03	1		0.0917	0.318	0.637	EPA 6010C
7439-89-6	Iron	2870	1		0.318	3.18	6.37	EPA 6010C
7439-92-1	Lead	9.36	1		0.140	1.27	2.55	EPA 6010C
7440-66-6	Zinc	15.5	1		0.331	0.637	1.27	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-08
(TR-5TH-CSW07D-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-08
File ID: 080714a-030
Sampled: 08/01/14 12:50
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:05
Solids: 98.35
Preparation: EPA 3050B
Initial/Final: 0.82 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.48	1	U	0.351	2.48	4.96	EPA 6010C
7440-38-2	Arsenic	1.15	1	J	0.441	1.24	2.48	EPA 6010C
7440-48-4	Cobalt	0.768	1		0.0893	0.310	0.620	EPA 6010C
7439-89-6	Iron	2190	1		0.310	3.10	6.20	EPA 6010C
7439-92-1	Lead	8.47	1		0.136	1.24	2.48	EPA 6010C
7440-66-6	Zinc	10.2	1		0.322	0.620	1.24	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-09 (TR-5TH-CSW08-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-09
File ID: 080714a-031
Sampled: 08/01/14 12:55
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:07
Solids: 99.50
Preparation: EPA 3050B
Initial/Final: 0.79 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.54	1	U	0.360	2.54	5.09	EPA 6010C
7440-38-2	Arsenic	<1.27	1	U	0.453	1.27	2.54	EPA 6010C
7440-48-4	Cobalt	<0.318	1	U	0.0916	0.318	0.636	EPA 6010C
7439-89-6	Iron	505	1		0.318	3.18	6.36	EPA 6010C
7439-92-1	Lead	2.03	1	J	0.140	1.27	2.54	EPA 6010C
7440-66-6	Zinc	1.22	1	J	0.331	0.636	1.27	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-10 (TR-5TH-CSW09-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-10
File ID: 080714a-032
Sampled: 08/01/14 13:00
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:10
Solids: 98.90
Preparation: EPA 3050B
Initial/Final: 0.79 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.56	1	U	0.362	2.56	5.12	EPA 6010C
7440-38-2	Arsenic	<1.28	1	U	0.456	1.28	2.56	EPA 6010C
7440-48-4	Cobalt	0.161	1	J	0.0922	0.320	0.640	EPA 6010C
7439-89-6	Iron	662	1		0.320	3.20	6.40	EPA 6010C
7439-92-1	Lead	3.44	1		0.141	1.28	2.56	EPA 6010C
7440-66-6	Zinc	2.95	1		0.333	0.640	1.28	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-11
(TR-5TH-CSW010-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-11
File ID: 080714a-033
Sampled: 08/01/14 11:30
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:13
Solids: 96.48
Preparation: EPA 3050B
Initial/Final: 0.81 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.56	1	UQ	0.362	2.56	5.12	EPA 6010C
7440-38-2	Arsenic	2.16	1	J	0.456	1.28	2.56	EPA 6010C
7440-48-4	Cobalt	2.09	1		0.0921	0.320	0.640	EPA 6010C
7439-89-6	Iron	5140	1	Q	0.320	3.20	6.40	EPA 6010C
7439-92-1	Lead	15.7	1		0.141	1.28	2.56	EPA 6010C
7440-66-6	Zinc	25.1	1		0.333	0.640	1.28	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-12 (TR-5TH-CSW11-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-12
File ID: 080714a-036
Sampled: 08/01/14 11:35
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:20
Solids: 99.47
Preparation: EPA 3050B
Initial/Final: 0.74 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.72	1	U	0.384	2.72	5.43	EPA 6010C
7440-38-2	Arsenic	<1.36	1	U	0.484	1.36	2.72	EPA 6010C
7440-48-4	Cobalt	0.170	1	J	0.0978	0.340	0.679	EPA 6010C
7439-89-6	Iron	796	1		0.340	3.40	6.79	EPA 6010C
7439-92-1	Lead	3.45	1		0.149	1.36	2.72	EPA 6010C
7440-66-6	Zinc	2.30	1		0.353	0.679	1.36	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-13
(TR-5TH-CSW11D-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-13
File ID: 080714a-037
Sampled: 08/01/14 11:35
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:23
Solids: 98.87
Preparation: EPA 3050B
Initial/Final: 0.82 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.47	1	U	0.349	2.47	4.93	EPA 6010C
7440-38-2	Arsenic	0.645	1	J	0.439	1.23	2.47	EPA 6010C
7440-48-4	Cobalt	0.0999	1	J	0.0888	0.308	0.617	EPA 6010C
7439-89-6	Iron	536	1		0.308	3.08	6.17	EPA 6010C
7439-92-1	Lead	2.12	1	J	0.136	1.23	2.47	EPA 6010C
7440-66-6	Zinc	1.42	1		0.321	0.617	1.23	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-14 (TR-5TH-CSW12-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-14
File ID: 080714a-038
Sampled: 08/01/14 11:40
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:25
Solids: 96.57
Preparation: EPA 3050B
Initial/Final: 0.77 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	0.458	1	J	0.381	2.69	5.38	EPA 6010C
7440-38-2	Arsenic	0.544	1	J	0.479	1.34	2.69	EPA 6010C
7440-48-4	Cobalt	0.887	1		0.0968	0.336	0.672	EPA 6010C
7439-89-6	Iron	779	1		0.336	3.36	6.72	EPA 6010C
7439-92-1	Lead	6.82	1		0.148	1.34	2.69	EPA 6010C
7440-66-6	Zinc	8.44	1		0.350	0.672	1.34	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-15 (TR-5TH-CSW13-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-15
File ID: 080714a-039
Sampled: 08/01/14 11:45
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:28
Solids: 99.63
Preparation: EPA 3050B
Initial/Final: 0.89 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.26	1	U	0.319	2.26	4.51	EPA 6010C
7440-38-2	Arsenic	<1.13	1	U	0.401	1.13	2.26	EPA 6010C
7440-48-4	Cobalt	0.0841	1	J	0.0812	0.282	0.564	EPA 6010C
7439-89-6	Iron	412	1		0.282	2.82	5.64	EPA 6010C
7439-92-1	Lead	12.1	1		0.124	1.13	2.26	EPA 6010C
7440-66-6	Zinc	1.96	1		0.293	0.564	1.13	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-16 (TR-5TH-CSW14-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-16
File ID: 080714a-040
Sampled: 08/01/14 11:50
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:31
Solids: 79.56
Preparation: EPA 3050B
Initial/Final: 0.86 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.92	1	U	0.414	2.92	5.85	EPA 6010C
7440-38-2	Arsenic	5.10	1		0.520	1.46	2.92	EPA 6010C
7440-48-4	Cobalt	3.67	1		0.105	0.365	0.731	EPA 6010C
7439-89-6	Iron	7770	1		0.365	3.65	7.31	EPA 6010C
7439-92-1	Lead	4.96	1		0.161	1.46	2.92	EPA 6010C
7440-66-6	Zinc	22.4	1		0.380	0.731	1.46	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-18 (TR-5TH-CSW15-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-17
File ID: 080714a-041
Sampled: 08/01/14 12:00
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:33
Solids: 78.92
Preparation: EPA 3050B
Initial/Final: 0.92 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.53	1	U	0.359	2.53	5.07	EPA 6010C
7440-38-2	Arsenic	4.31	1		0.451	1.27	2.53	EPA 6010C
7440-48-4	Cobalt	3.87	1		0.0912	0.317	0.634	EPA 6010C
7439-89-6	Iron	9250	1		0.317	3.17	6.34	EPA 6010C
7439-92-1	Lead	7.26	1		0.139	1.27	2.53	EPA 6010C
7440-66-6	Zinc	24.1	1		0.329	0.634	1.27	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-19 (TR-5TH-CSF01-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-18
File ID: 080714a-042
Sampled: 08/01/14 13:10
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:35
Solids: 94.31
Preparation: EPA 3050B
Initial/Final: 0.75 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.83	1	U	0.400	2.83	5.66	EPA 6010C
7440-38-2	Arsenic	<1.41	1	U	0.503	1.41	2.83	EPA 6010C
7440-48-4	Cobalt	<0.353	1	U	0.102	0.353	0.707	EPA 6010C
7439-89-6	Iron	425	1		0.353	3.53	7.07	EPA 6010C
7439-92-1	Lead	1.62	1	J	0.156	1.41	2.83	EPA 6010C
7440-66-6	Zinc	1.36	1	J	0.368	0.707	1.41	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-20 (TR-5TH-CSF02-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-19
File ID: 080714a-043
Sampled: 08/01/14 13:15
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:38
Solids: 99.47
Preparation: EPA 3050B
Initial/Final: 0.93 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.01	1	U	0.285	2.01	4.02	EPA 6010C
7440-38-2	Arsenic	0.571	1	J	0.358	1.01	2.01	EPA 6010C
7440-48-4	Cobalt	0.0935	1	J	0.0724	0.251	0.503	EPA 6010C
7439-89-6	Iron	517	1		0.251	2.51	5.03	EPA 6010C
7439-92-1	Lead	2.16	1		0.111	1.01	2.01	EPA 6010C
7440-66-6	Zinc	1.45	1		0.261	0.503	1.01	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-21 (TR-5TH-CSF03-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-20
File ID: 080714a-044
Sampled: 08/01/14 13:20
Prepared: 08/06/14 09:00
Analyzed: 08/07/14 11:41
Solids: 93.31
Preparation: EPA 3050B
Initial/Final: 0.91 g / 50 mL
Batch: 4H06003
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.14	1	U	0.303	2.14	4.29	EPA 6010C
7440-38-2	Arsenic	1.12	1	J	0.382	1.07	2.14	EPA 6010C
7440-48-4	Cobalt	0.738	1		0.0772	0.268	0.536	EPA 6010C
7439-89-6	Iron	1650	1		0.268	2.68	5.36	EPA 6010C
7439-92-1	Lead	2.16	1		0.118	1.07	2.14	EPA 6010C
7440-66-6	Zinc	8.32	1		0.279	0.536	1.07	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-22 (TR-5TH-CSF04-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-21
File ID: 080714a-052
Sampled: 08/01/14 13:30
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:00
Solids: 80.44
Preparation: EPA 3050B
Initial/Final: 0.77 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<3.23	1	U	0.457	3.23	6.46	EPA 6010C
7440-38-2	Arsenic	2.69	1	J	0.575	1.61	3.23	EPA 6010C
7440-48-4	Cobalt	2.62	1		0.116	0.404	0.807	EPA 6010C
7439-89-6	Iron	5850	1		0.404	4.04	8.07	EPA 6010C
7439-92-1	Lead	10.7	1		0.178	1.61	3.23	EPA 6010C
7440-66-6	Zinc	20.6	1		0.420	0.807	1.61	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-23 (TR-5TH-CSF05-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-22
File ID: 080714a-053
Sampled: 08/01/14 13:35
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:02
Solids: 98.80
Preparation: EPA 3050B
Initial/Final: 0.75 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.70	1	U	0.382	2.70	5.40	EPA 6010C
7440-38-2	Arsenic	0.721	1	J	0.480	1.35	2.70	EPA 6010C
7440-48-4	Cobalt	0.289	1	J	0.0972	0.337	0.675	EPA 6010C
7439-89-6	Iron	1760	1		0.337	3.37	6.75	EPA 6010C
7439-92-1	Lead	22.3	1		0.148	1.35	2.70	EPA 6010C
7440-66-6	Zinc	10.0	1		0.351	0.675	1.35	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-24 (TR-5TH-CSF05D-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-23
File ID: 080714a-054
Sampled: 08/01/14 13:35
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:05
Solids: 98.30
Preparation: EPA 3050B
Initial/Final: 0.85 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.39	1	U	0.339	2.39	4.79	EPA 6010C
7440-38-2	Arsenic	1.06	1	J	0.426	1.20	2.39	EPA 6010C
7440-48-4	Cobalt	1.04	1		0.0862	0.299	0.598	EPA 6010C
7439-89-6	Iron	2570	1		0.299	2.99	5.98	EPA 6010C
7439-92-1	Lead	10.8	1		0.132	1.20	2.39	EPA 6010C
7440-66-6	Zinc	15.9	1		0.311	0.598	1.20	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-25 (TR-5TH-CSF06-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-24
File ID: 080714a-055
Sampled: 08/01/14 13:45
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:07
Solids: 95.10
Preparation: EPA 3050B
Initial/Final: 0.68 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<3.09	1	U	0.438	3.09	6.19	EPA 6010C
7440-38-2	Arsenic	1.48	1	J	0.551	1.55	3.09	EPA 6010C
7440-48-4	Cobalt	1.08	1		0.111	0.387	0.773	EPA 6010C
7439-89-6	Iron	2920	1		0.387	3.87	7.73	EPA 6010C
7439-92-1	Lead	9.15	1		0.170	1.55	3.09	EPA 6010C
7440-66-6	Zinc	20.2	1		0.402	0.773	1.55	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-26 (TR-5TH-CSF07-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-25
File ID: 080714a-056
Sampled: 08/01/14 13:50
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:09
Solids: 98.50
Preparation: EPA 3050B
Initial/Final: 0.97 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.03	1	U	0.287	2.03	4.06	EPA 6010C
7440-38-2	Arsenic	0.486	1	J	0.361	1.02	2.03	EPA 6010C
7440-48-4	Cobalt	0.145	1	J	0.0731	0.254	0.508	EPA 6010C
7439-89-6	Iron	657	1		0.254	2.54	5.08	EPA 6010C
7439-92-1	Lead	2.01	1	J	0.112	1.02	2.03	EPA 6010C
7440-66-6	Zinc	1.68	1		0.264	0.508	1.02	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-27 (TR-5TH-CSF08-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-26
File ID: 080714a-057
Sampled: 08/01/14 14:00
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:12
Solids: 98.33
Preparation: EPA 3050B
Initial/Final: 0.79 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.57	1	U	0.364	2.57	5.15	EPA 6010C
7440-38-2	Arsenic	0.673	1	J	0.458	1.29	2.57	EPA 6010C
7440-48-4	Cobalt	0.329	1	J	0.0927	0.322	0.644	EPA 6010C
7439-89-6	Iron	1050	1		0.322	3.22	6.44	EPA 6010C
7439-92-1	Lead	7.58	1		0.142	1.29	2.57	EPA 6010C
7440-66-6	Zinc	6.97	1		0.335	0.644	1.29	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-28 (TR-5TH-CSF09-0814)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil
Laboratory ID: B403655-27
File ID: 080714a-060
Sampled: 08/01/14 14:05
Prepared: 08/06/14 09:02
Analyzed: 08/07/14 12:19
Solids: 99.25
Preparation: EPA 3050B
Initial/Final: 0.74 g / 50 mL
Batch: 4H06004
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<2.72	1	U	0.385	2.72	5.45	EPA 6010C
7440-38-2	Arsenic	<1.36	1	U	0.485	1.36	2.72	EPA 6010C
7440-48-4	Cobalt	0.129	1	J	0.0980	0.340	0.681	EPA 6010C
7439-89-6	Iron	689	1	Q	0.340	3.40	6.81	EPA 6010C
7439-92-1	Lead	2.07	1	J	0.150	1.36	2.72	EPA 6010C
7440-66-6	Zinc	1.68	1		0.354	0.681	1.36	EPA 6010C

INORGANIC ANALYSIS DATA SHEET

EPA 6010C

A404270-29
(TR-5TH-CS-EB-080114)

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Water
Laboratory ID: B403655-28
File ID: 080714a-015
Sampled: 08/01/14 21:00
Prepared: 08/06/14 09:04
Analyzed: 08/07/14 10:30
Solids: 0.00
Preparation: EPA 3005A
Initial/Final: 50 mL / 50 mL
Batch: 4H06006
Sequence: BA15922
Calibration: 1408002
Instrument: JMICP2

CAS NO.	Analyte	Concentration (ug/L)	Dilution Factor	Q	DL	LOD	LOQ	Method
7440-36-0	Antimony	<20.0	1	U	5.65	20.0	40.0	EPA 6010C
7440-38-2	Arsenic	<20.0	1	U	7.12	20.0	40.0	EPA 6010C
7440-48-4	Cobalt	<5.00	1	U	1.60	5.00	10.0	EPA 6010C
7439-89-6	Iron	9.68	1	J	5.60	50.0	100	EPA 6010C
7439-92-1	Lead	<20.0	1	U	2.20	20.0	40.0	EPA 6010C
7440-66-6	Zinc	<10.0	1	U	5.20	10.0	20.0	EPA 6010C

PREPARATION BATCH SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville SDG: A404270-CTO0017

Client: ENCO Orlando Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06003 Batch Matrix: Soil Preparation: EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06003-BLK1	080714a-017	08/06/14 09:00	
LCS	4H06003-BS1	080714a-018	08/06/14 09:00	
A404270-11 (TR-5TH-CSW010-0814)	4H06003-MS1	080714a-019	08/06/14 09:00	
A404270-11 (TR-5TH-CSW010-0814)	4H06003-MSD1	080714a-020	08/06/14 09:00	
A404270-11 (TR-5TH-CSW010-0814)	4H06003-PS1	080714a-077	08/06/14 09:00	
A404270-01 (TR-5TH-CSW01-0814)	B403655-01	080714a-021	08/06/14 09:00	
A404270-02 (TR-5TH-CSW02-0814)	B403655-02	080714a-024	08/06/14 09:00	
A404270-03 (TR-5TH-CSW03-0814)	B403655-03	080714a-025	08/06/14 09:00	
A404270-04 (TR-5TH-CSW04-0814)	B403655-04	080714a-026	08/06/14 09:00	
A404270-05 (TR-5TH-CSW05-0814)	B403655-05	080714a-027	08/06/14 09:00	
A404270-06 (TR-5TH-CSW06-0814)	B403655-06	080714a-028	08/06/14 09:00	
A404270-07 (TR-5TH-CSW07-0814)	B403655-07	080714a-029	08/06/14 09:00	
A404270-08 (TR-5TH-CSW07D-0814)	B403655-08	080714a-030	08/06/14 09:00	
A404270-09 (TR-5TH-CSW08-0814)	B403655-09	080714a-031	08/06/14 09:00	
A404270-10 (TR-5TH-CSW09-0814)	B403655-10	080714a-032	08/06/14 09:00	
A404270-11 (TR-5TH-CSW010-0814)	B403655-11	080714a-033	08/06/14 09:00	
A404270-12 (TR-5TH-CSW11-0814)	B403655-12	080714a-036	08/06/14 09:00	
A404270-13 (TR-5TH-CSW11D-0814)	B403655-13	080714a-037	08/06/14 09:00	
A404270-14 (TR-5TH-CSW12-0814)	B403655-14	080714a-038	08/06/14 09:00	
A404270-15 (TR-5TH-CSW13-0814)	B403655-15	080714a-039	08/06/14 09:00	
A404270-16 (TR-5TH-CSW14-0814)	B403655-16	080714a-040	08/06/14 09:00	
A404270-18 (TR-5TH-CSW15-0814)	B403655-17	080714a-041	08/06/14 09:00	
A404270-19 (TR-5TH-CSF01-0814)	B403655-18	080714a-042	08/06/14 09:00	

PREPARATION BATCH SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06003 Batch Matrix: Soil Preparation: EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
A404270-20 (TR-5TH-CSF02-0814)	B403655-19	080714a-043	08/06/14 09:00	
A404270-21 (TR-5TH-CSF03-0814)	B403655-20	080714a-044	08/06/14 09:00	

PREPARATION BATCH SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville SDG: A404270-CTO0017

Client: ENCO Orlando Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06004 Batch Matrix: Soil Preparation: EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06004-BLK1	080714a-048	08/06/14 09:02	
LCS	4H06004-BS1	080714a-049	08/06/14 09:02	
A404270-28 (TR-5TH-CSF09-0814)	4H06004-MS1	080714a-050	08/06/14 09:02	
A404270-28 (TR-5TH-CSF09-0814)	4H06004-MSD1	080714a-051	08/06/14 09:02	
A404270-28 (TR-5TH-CSF09-0814)	4H06004-PS1	080714a-078	08/06/14 09:02	
A404270-22 (TR-5TH-CSF04-0814)	B403655-21	080714a-052	08/06/14 09:02	
A404270-23 (TR-5TH-CSF05-0814)	B403655-22	080714a-053	08/06/14 09:02	
A404270-24 (TR-5TH-CSF05D-0814)	B403655-23	080714a-054	08/06/14 09:02	
A404270-25 (TR-5TH-CSF06-0814)	B403655-24	080714a-055	08/06/14 09:02	
A404270-26 (TR-5TH-CSF07-0814)	B403655-25	080714a-056	08/06/14 09:02	
A404270-27 (TR-5TH-CSF08-0814)	B403655-26	080714a-057	08/06/14 09:02	
A404270-28 (TR-5TH-CSF09-0814)	B403655-27	080714a-060	08/06/14 09:02	

PREPARATION BATCH SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville SDG: A404270-CTO0017

Client: ENCO Orlando Project: CTO-0017 Towers Road Disposal-5th St.

Batch: 4H06006 Batch Matrix: Water Preparation: EPA 3005A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
Blank	4H06006-BLK1	080714a-012	08/06/14 09:04	
LCS	4H06006-BS1	080714a-013	08/06/14 09:04	
LCS Dup	4H06006-BSD1	080714a-014	08/06/14 09:04	
A404270-29 (TR-5TH-CS-EB-080114)	B403655-28	080714a-015	08/06/14 09:04	

METHOD BLANK DATA SHEET
EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06003-BLK1	File ID:	080714a-017
Prepared:	08/06/14 09:00	Preparation:	EPA 3050B	Initial/Final:	0.53 g / 50 mL
Analyzed:	08/07/14 10:36	Instrument:	JMICP2		
Batch:	4H06003	Sequence:	BA15922	Calibration:	1408002

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
7440-36-0	Antimony	0.632	J
7440-38-2	Arsenic	<1.89	U
7440-48-4	Cobalt	<0.472	U
7439-89-6	Iron	1.21	J
7439-92-1	Lead	<1.89	U
7440-66-6	Zinc	<0.943	U

METHOD BLANK DATA SHEET
EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Soil	Laboratory ID:	4H06004-BLK1	File ID:	080714a-048
Prepared:	08/06/14 09:02	Preparation:	EPA 3050B	Initial/Final:	0.51 g / 50 mL
Analyzed:	08/07/14 11:51	Instrument:	JMICP2		
Batch:	4H06004	Sequence:	BA15922	Calibration:	1408002

CAS NO.	COMPOUND	CONC. (mg/kg wet)	Q
7440-36-0	Antimony	<3.92	U
7440-38-2	Arsenic	<1.96	U
7440-48-4	Cobalt	<0.490	U
7439-89-6	Iron	0.989	J
7439-92-1	Lead	<1.96	U
7440-66-6	Zinc	<0.980	U

METHOD BLANK DATA SHEET
EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.

Matrix:	Water	Laboratory ID:	4H06006-BLK1	File ID:	080714a-012
Prepared:	08/06/14 09:04	Preparation:	EPA 3005A	Initial/Final:	50 mL / 50 mL
Analyzed:	08/07/14 10:23	Instrument:	JMICP2		
Batch:	4H06006	Sequence:	BA15922	Calibration:	1408002

CAS NO.	COMPOUND	CONC. (ug/L)	Q
7440-36-0	Antimony	<20.0	U
7440-38-2	Arsenic	<20.0	U
7440-48-4	Cobalt	<5.00	U
7439-89-6	Iron	<50.0	U
7439-92-1	Lead	<20.0	U
7440-66-6	Zinc	<10.0	U

LCS / LCS DUPLICATE RECOVERY

EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06003	Laboratory ID:	4H06003-BS1
Preparation:	EPA 3050B	Initial/Final:	0.52 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
Antimony	48.1	46.2	96	80 - 120
Arsenic	48.1	46.2	96	80 - 120
Cobalt	48.1	46.1	96	80 - 120
Iron	240	230	96	80 - 120
Lead	48.1	47.5	99	80 - 120
Zinc	48.1	47.2	98	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06004	Laboratory ID:	4H06004-BS1
Preparation:	EPA 3050B	Initial/Final:	0.53 g / 50 mL

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	LCS % REC. #	QC LIMITS REC.
Antimony	47.2	46.0	98	80 - 120
Arsenic	47.2	46.0	97	80 - 120
Cobalt	47.2	46.4	98	80 - 120
Iron	236	232	98	80 - 120
Lead	47.2	47.3	100	80 - 120
Zinc	47.2	47.0	100	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6010C

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Water		
Batch:	4H06006	Laboratory ID:	4H06006-BS1
Preparation:	EPA 3005A	Initial/Final:	50 mL / 50 mL

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC. #	QC LIMITS REC.
Antimony	500	482	96	80 - 120
Arsenic	500	481	96	80 - 120
Cobalt	500	480	96	80 - 120
Iron	2500	2390	96	80 - 120
Lead	500	493	99	80 - 120
Zinc	500	493	99	80 - 120

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Antimony	500	486	97	0.9	20	80 - 120
Arsenic	500	483	97	0.3	20	80 - 120
Cobalt	500	485	97	1	20	80 - 120
Iron	2500	2420	97	1	20	80 - 120
Lead	500	495	99	0.5	20	80 - 120
Zinc	500	499	100	1	20	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 6010C

A404270-11
(TR-5TH-CSW010-0814)

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06003	Laboratory ID:	4H06003-MS1
Preparation:	EPA 3050B	Initial/Final:	0.56 g / 50 mL

Source Sample Name: A404270-11 (TR-5TH-CSW010-0814)

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
Antimony	46.3	ND	21.2	46 *	80 - 120
Arsenic	46.3	2.16	44.6	92	80 - 120
Cobalt	46.3	2.09	44.7	92	80 - 120
Iron	231	5140	5420	118	80 - 120
Lead	46.3	15.7	58.0	91	80 - 120
Zinc	46.3	25.1	69.9	97	80 - 120

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Antimony	47.1	23.1	49 *	9	20	80 - 120
Arsenic	47.1	46.2	94	4	20	80 - 120
Cobalt	47.1	46.5	94	4	20	80 - 120
Iron	236	5140	-2 *	5	20	80 - 120
Lead	47.1	61.4	97	6	20	80 - 120
Zinc	47.1	67.3	90	4	20	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

EPA 6010C

A404270-28 (TR-5TH-CSF09-0814)

Laboratory:	ENCO Jacksonville	SDG:	A404270-CTO0017
Client:	ENCO Orlando	Project:	CTO-0017 Towers Road Disposal-5th St.
Matrix:	Soil		
Batch:	4H06004	Laboratory ID:	4H06004-MS1
Preparation:	EPA 3050B	Initial/Final:	0.68 g / 50 mL

Source Sample Name: A404270-28 (TR-5TH-CSF09-0814)

COMPOUND	SPIKE ADDED (mg/kg dry)	SAMPLE CONCENTRATION (mg/kg dry)	MS CONCENTRATION (mg/kg dry)	MS % REC. #	QC LIMITS REC.
Antimony	37.0	ND	29.8	80	80 - 120
Arsenic	37.0	ND	35.3	95	80 - 120
Cobalt	37.0	0.129	36.1	97	80 - 120
Iron	185	689	942	137 *	80 - 120
Lead	37.0	2.07	38.6	99	80 - 120
Zinc	37.0	1.68	38.4	99	80 - 120

COMPOUND	SPIKE ADDED (mg/kg dry)	MSD CONCENTRATION (mg/kg dry)	MSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Antimony	35.5	28.4	80	5	20	80 - 120
Arsenic	35.5	33.5	94	5	20	80 - 120
Cobalt	35.5	34.5	97	5	20	80 - 120
Iron	177	920	131 *	2	20	80 - 120
Lead	35.5	37.0	98	4	20	80 - 120
Zinc	35.5	36.9	99	4	20	80 - 120

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

EPA 6010C

A404270-11 (TR-5TH-CSW010-0814)

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil

Laboratory ID: 4H06003-PS1

Batch: 4H06003

Lab Source ID: B403655-11

Preparation: EPA 3050B

Initial/Final: 0.00324 g / 10 mL

Source Sample Name: A404270-11 (TR-5TH-CSW010-0814)

% Solids: 96.48

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/L)	Sample Result (SR) (mg/L)	Spike Added (SA) (mg/L)	%R
Antimony	80 - 120	0.434	-7.72E-5	0.500	87
Lead	80 - 120	0.483	0.00490	0.500	96

* Values outside of QC limits

POST DIGEST SPIKE SAMPLE RECOVERY

EPA 6010C

A404270-28 (TR-5TH-CSF09-0814)

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Matrix: Soil

Laboratory ID: 4H06004-PS1

Batch: 4H06004

Lab Source ID: B403655-27

Preparation: EPA 3050B

Initial/Final: 0.0148 g / 10 mL

Source Sample Name: A404270-28 (TR-5TH-CSF09-0814)

% Solids: 99.25

Analyte	Control Limit %R	Spike Sample Result (SSR) (mg/L)	Sample Result (SR) (mg/L)	Spike Added (SA) (mg/L)	%R
Iron	80 - 120	3.38	1.01	2.50	95

* Values outside of QC limits

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: BA15922
Instrument: JMICP2
Calibration: 1408002

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	BA15922-CAL1	080714a-001	08/07/14 09:47
Cal Standard	BA15922-CAL2	080714a-002	08/07/14 09:49
Instrument RL Check	BA15922-CRL1	080714a-004	08/07/14 09:59
Secondary Cal Check	BA15922-SCV1	080714a-005	08/07/14 10:02
High Cal Check	BA15922-HCV1	080714a-007	08/07/14 10:07
Interference Check A	BA15922-IFA1	080714a-007	08/07/14 10:07
Interference Check B	BA15922-IFB1	080714a-008	08/07/14 10:09
Initial Cal Check	BA15922-ICV1	080714a-010	08/07/14 10:14
Initial Cal Blank	BA15922-ICB1	080714a-011	08/07/14 10:18
Blank	4H06006-BLK1	080714a-012	08/07/14 10:23
LCS	4H06006-BS1	080714a-013	08/07/14 10:26
LCS Dup	4H06006-BSD1	080714a-014	08/07/14 10:28
A404270-29 (TR-5TH-CS-EB-080114)	B403655-28	080714a-015	08/07/14 10:30
Blank	4H06003-BLK1	080714a-017	08/07/14 10:36
LCS	4H06003-BS1	080714a-018	08/07/14 10:38
A404270-11 (TR-5TH-CSW010-0814)	4H06003-MS1	080714a-019	08/07/14 10:41
A404270-11 (TR-5TH-CSW010-0814)	4H06003-MSD1	080714a-020	08/07/14 10:42
A404270-01 (TR-5TH-CSW01-0814)	B403655-01	080714a-021	08/07/14 10:44
Calibration Check	BA15922-CCV1	080714a-022	08/07/14 10:46
Calibration Blank	BA15922-CCB1	080714a-023	08/07/14 10:48
A404270-02 (TR-5TH-CSW02-0814)	B403655-02	080714a-024	08/07/14 10:51
A404270-03 (TR-5TH-CSW03-0814)	B403655-03	080714a-025	08/07/14 10:53
A404270-04 (TR-5TH-CSW04-0814)	B403655-04	080714a-026	08/07/14 10:55
A404270-05 (TR-5TH-CSW05-0814)	B403655-05	080714a-027	08/07/14 10:58
A404270-06 (TR-5TH-CSW06-0814)	B403655-06	080714a-028	08/07/14 11:01
A404270-07 (TR-5TH-CSW07-0814)	B403655-07	080714a-029	08/07/14 11:03
A404270-08 (TR-5TH-CSW07D-0814)	B403655-08	080714a-030	08/07/14 11:05

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: BA15922
Instrument: JMICP2
Calibration: 1408002

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
A404270-09 (TR-5TH-CSW08-0814)	B403655-09	080714a-031	08/07/14 11:07
A404270-10 (TR-5TH-CSW09-0814)	B403655-10	080714a-032	08/07/14 11:10
A404270-11 (TR-5TH-CSW010-0814)	B403655-11	080714a-033	08/07/14 11:13
Calibration Check	BA15922-CCV2	080714a-034	08/07/14 11:15
Calibration Blank	BA15922-CCB2	080714a-035	08/07/14 11:17
A404270-12 (TR-5TH-CSW11-0814)	B403655-12	080714a-036	08/07/14 11:20
A404270-13 (TR-5TH-CSW11D-0814)	B403655-13	080714a-037	08/07/14 11:23
A404270-14 (TR-5TH-CSW12-0814)	B403655-14	080714a-038	08/07/14 11:25
A404270-15 (TR-5TH-CSW13-0814)	B403655-15	080714a-039	08/07/14 11:28
A404270-16 (TR-5TH-CSW14-0814)	B403655-16	080714a-040	08/07/14 11:31
A404270-18 (TR-5TH-CSW15-0814)	B403655-17	080714a-041	08/07/14 11:33
A404270-19 (TR-5TH-CSF01-0814)	B403655-18	080714a-042	08/07/14 11:35
A404270-20 (TR-5TH-CSF02-0814)	B403655-19	080714a-043	08/07/14 11:38
A404270-21 (TR-5TH-CSF03-0814)	B403655-20	080714a-044	08/07/14 11:41
Calibration Check	BA15922-CCV3	080714a-046	08/07/14 11:46
Calibration Blank	BA15922-CCB3	080714a-047	08/07/14 11:48
Blank	4H06004-BLK1	080714a-048	08/07/14 11:51
LCS	4H06004-BS1	080714a-049	08/07/14 11:54
A404270-28 (TR-5TH-CSF09-0814)	4H06004-MS1	080714a-050	08/07/14 11:56
A404270-28 (TR-5TH-CSF09-0814)	4H06004-MSD1	080714a-051	08/07/14 11:58
A404270-22 (TR-5TH-CSF04-0814)	B403655-21	080714a-052	08/07/14 12:00
A404270-23 (TR-5TH-CSF05-0814)	B403655-22	080714a-053	08/07/14 12:02
A404270-24 (TR-5TH-CSF05D-0814)	B403655-23	080714a-054	08/07/14 12:05
A404270-25 (TR-5TH-CSF06-0814)	B403655-24	080714a-055	08/07/14 12:07

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.
Sequence: BA15922
Instrument: JMICP2
Calibration: 1408002

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
A404270-26 (TR-5TH-CSF07-0814)	B403655-25	080714a-056	08/07/14 12:09
A404270-27 (TR-5TH-CSF08-0814)	B403655-26	080714a-057	08/07/14 12:12
Calibration Check	BA15922-CCV4	080714a-058	08/07/14 12:14
Calibration Blank	BA15922-CCB4	080714a-059	08/07/14 12:17
A404270-28 (TR-5TH-CSF09-0814)	B403655-27	080714a-060	08/07/14 12:19
Calibration Check	BA15922-CCV5	080714a-070	08/07/14 12:45
Calibration Blank	BA15922-CCB5	080714a-071	08/07/14 12:47
A404270-11 (TR-5TH-CSW010-0814)	4H06003-PS1	080714a-077	08/07/14 13:04
A404270-28 (TR-5TH-CSF09-0814)	4H06004-PS1	080714a-078	08/07/14 13:07
Calibration Check	BA15922-CCV6	080714a-079	08/07/14 13:10
Calibration Blank	BA15922-CCB6	080714a-080	08/07/14 13:12

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Instrument ID: JMICP2
Calibration: 1408002
Control Limt: +/- 10.00%
Sequence: BA15922

Lab Sample ID	Analyte	True	Found	%R	Units	Method
BA15922-ICV1	Antimony	0.500	0.489	98	mg/L	EPA 6010C
	Arsenic	0.500	0.488	98	mg/L	EPA 6010C
	Cobalt	0.500	0.487	97	mg/L	EPA 6010C
	Iron	2.50	2.45	98	mg/L	EPA 6010C
	Lead	0.500	0.494	99	mg/L	EPA 6010C
	Zinc	0.500	0.490	98	mg/L	EPA 6010C
BA15922-CCV1	Antimony	0.500	0.491	98	mg/L	EPA 6010C
	Arsenic	0.500	0.483	97	mg/L	EPA 6010C
	Cobalt	0.500	0.480	96	mg/L	EPA 6010C
	Iron	2.50	2.45	98	mg/L	EPA 6010C
	Lead	0.500	0.491	98	mg/L	EPA 6010C
	Zinc	0.500	0.486	97	mg/L	EPA 6010C
BA15922-CCV2	Antimony	0.500	0.488	98	mg/L	EPA 6010C
	Arsenic	0.500	0.485	97	mg/L	EPA 6010C
	Cobalt	0.500	0.485	97	mg/L	EPA 6010C
	Iron	2.50	2.46	98	mg/L	EPA 6010C
	Lead	0.500	0.494	99	mg/L	EPA 6010C
	Zinc	0.500	0.491	98	mg/L	EPA 6010C
BA15922-CCV3	Antimony	0.500	0.496	99	mg/L	EPA 6010C
	Arsenic	0.500	0.492	98	mg/L	EPA 6010C
	Cobalt	0.500	0.490	98	mg/L	EPA 6010C
	Iron	2.50	2.45	98	mg/L	EPA 6010C
	Lead	0.500	0.498	100	mg/L	EPA 6010C
	Zinc	0.500	0.494	99	mg/L	EPA 6010C
BA15922-CCV4	Antimony	0.500	0.489	98	mg/L	EPA 6010C
	Arsenic	0.500	0.487	97	mg/L	EPA 6010C
	Cobalt	0.500	0.487	97	mg/L	EPA 6010C
	Iron	2.50	2.45	98	mg/L	EPA 6010C
	Lead	0.500	0.490	98	mg/L	EPA 6010C
	Zinc	0.500	0.487	97	mg/L	EPA 6010C
BA15922-CCV5	Antimony	0.500	0.488	98	mg/L	EPA 6010C
	Arsenic	0.500	0.484	97	mg/L	EPA 6010C
	Cobalt	0.500	0.491	98	mg/L	EPA 6010C
	Iron	2.50	2.45	98	mg/L	EPA 6010C
	Lead	0.500	0.491	98	mg/L	EPA 6010C
	Zinc	0.500	0.486	97	mg/L	EPA 6010C
BA15922-CCV6	Antimony	0.500	0.489	98	mg/L	EPA 6010C

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.

Instrument ID: JMICP2
Calibration: 1408002
Control Limt: +/- 10.00%
Sequence: BA15922

Lab Sample ID	Analyte	True	Found	%R	Units	Method
BA15922-CCV6	Arsenic	0.500	0.487	97	mg/L	EPA 6010C
	Cobalt	0.500	0.491	98	mg/L	EPA 6010C
	Iron	2.50	2.46	98	mg/L	EPA 6010C
	Lead	0.500	0.489	98	mg/L	EPA 6010C
	Zinc	0.500	0.484	97	mg/L	EPA 6010C

* Values outside of QC limits

BLANKS
EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.
Instrument ID: JMICP2
Sequence: BA15922
Calibration: 1408002

Lab Sample ID	Analyte	Found	LOQ	Units	C	Method
BA15922-ICB1	Antimony	0.00256	0.0400	mg/L		EPA 6010C
	Arsenic	8.67E-5	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000189	0.0100	mg/L		EPA 6010C
	Iron	0.0103	0.100	mg/L		EPA 6010C
	Lead	0.000428	0.0400	mg/L		EPA 6010C
	Zinc	-0.000350	0.0200	mg/L		EPA 6010C
4H06006-BLK1	Antimony	1.97	40.0	ug/L		EPA 6010C
	Arsenic	2.32	40.0	ug/L		EPA 6010C
	Cobalt	-0.701	10.0	ug/L		EPA 6010C
	Iron	5.48	100	ug/L		EPA 6010C
	Lead	-0.952	40.0	ug/L		EPA 6010C
	Zinc	-0.0443	20.0	ug/L		EPA 6010C
4H06003-BLK1	Antimony	0.632	7.55	mg/kg wet		EPA 6010C
	Arsenic	0.310	3.77	mg/kg wet		EPA 6010C
	Cobalt	0.00283	0.943	mg/kg wet		EPA 6010C
	Iron	1.21	9.43	mg/kg wet		EPA 6010C
	Lead	-0.00939	3.77	mg/kg wet		EPA 6010C
	Zinc	0.0570	1.89	mg/kg wet		EPA 6010C
BA15922-CCB1	Antimony	0.00297	0.0400	mg/L		EPA 6010C
	Arsenic	0.000658	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000315	0.0100	mg/L		EPA 6010C
	Iron	0.0124	0.100	mg/L		EPA 6010C
	Lead	-0.000570	0.0400	mg/L		EPA 6010C
	Zinc	-0.000613	0.0200	mg/L		EPA 6010C
BA15922-CCB2	Antimony	0.000544	0.0400	mg/L		EPA 6010C
	Arsenic	0.00195	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000626	0.0100	mg/L		EPA 6010C
	Iron	0.0140	0.100	mg/L		EPA 6010C
	Lead	-0.00191	0.0400	mg/L		EPA 6010C
	Zinc	-0.00106	0.0200	mg/L		EPA 6010C
BA15922-CCB3	Antimony	0.00251	0.0400	mg/L		EPA 6010C
	Arsenic	0.000438	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000378	0.0100	mg/L		EPA 6010C

BLANKS
EPA 6010C

Laboratory: ENCO Jacksonville
SDG: A404270-CTO0017
Client: ENCO Orlando
Project: CTO-0017 Towers Road Disposal-5th St.
Instrument ID: JMICP2
Sequence: BA15922
Calibration: 1408002

Lab Sample ID	Analyte	Found	LOQ	Units	C	Method
BA15922-CCB3	Iron	0.00882	0.100	mg/L		EPA 6010C
	Lead	-0.00103	0.0400	mg/L		EPA 6010C
	Zinc	-0.00141	0.0200	mg/L		EPA 6010C
4H06004-BLK1	Antimony	0.403	7.84	mg/kg wet		EPA 6010C
	Arsenic	0.433	3.92	mg/kg wet		EPA 6010C
	Cobalt	0.0109	0.980	mg/kg wet		EPA 6010C
	Iron	0.989	9.80	mg/kg wet		EPA 6010C
	Lead	-0.0975	3.92	mg/kg wet		EPA 6010C
	Zinc	-0.0779	1.96	mg/kg wet		EPA 6010C
BA15922-CCB4	Antimony	0.00308	0.0400	mg/L		EPA 6010C
	Arsenic	0.00421	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000543	0.0100	mg/L		EPA 6010C
	Iron	0.00895	0.100	mg/L		EPA 6010C
	Lead	0.000138	0.0400	mg/L		EPA 6010C
	Zinc	-0.00142	0.0200	mg/L		EPA 6010C
BA15922-CCB5	Antimony	0.00202	0.0400	mg/L		EPA 6010C
	Arsenic	0.000797	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000619	0.0100	mg/L		EPA 6010C
	Iron	0.00542	0.100	mg/L		EPA 6010C
	Lead	-0.000170	0.0400	mg/L		EPA 6010C
	Zinc	-0.00160	0.0200	mg/L		EPA 6010C
BA15922-CCB6	Antimony	0.00445	0.0400	mg/L		EPA 6010C
	Arsenic	5.28E-5	0.0400	mg/L		EPA 6010C
	Cobalt	-0.000148	0.0100	mg/L		EPA 6010C
	Iron	0.0113	0.100	mg/L		EPA 6010C
	Lead	-0.000311	0.0400	mg/L		EPA 6010C
	Zinc	-0.00172	0.0200	mg/L		EPA 6010C

ICP INTERFERENCE CHECK SAMPLE

EPA 6010C

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Instrument ID: JMICP2

Sequence: BA15922

Calibration: 1408002

Lab Sample ID	Analyte	True	Found	%R	Units
BA15922-IFA1	Antimony		0.01		mg/L
	Arsenic		0.02		mg/L
	Cobalt		0.00		mg/L
	Iron	200	182.53	91	mg/L
	Lead		0.02		mg/L
	Zinc		0.00		mg/L
BA15922-IFB1	Antimony	1.00	1.02	102	mg/L
	Arsenic	1.00	1.02	102	mg/L
	Cobalt	1.00	0.87	87	mg/L
	Iron	201	179.85	89	mg/L
	Lead	1.00	0.95	95	mg/L
	Zinc	1.00	0.91	91	mg/L

* Values outside of QC limits

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 6010C

Laboratory: ENCO Jacksonville
Client: ENCO Orlando
Calibration: 1408002
Sequence: BA15922

SDG: A404270-CTO0017
Project: CTO-0017 Towers Road Disposal-5th St.
Laboratory ID: BA15922-SCV1
Standard ID: B4E0126

ANALYTE	EXPECTED (mg/L)	FOUND (mg/L)	% DRIFT	QC LIMIT
Antimony	0.500	0.494	-1.2	10.00
Arsenic	0.500	0.489	-2.1	10.00
Cobalt	0.500	0.481	-3.8	10.00
Iron	2.50	2.46	-1.5	10.00
Lead	0.500	0.502	0.3	10.00
Zinc	0.500	0.499	-0.1	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6010C

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Calibration: 1408002

Laboratory ID: BA15922-HCV1

Sequence: BA15922

Standard ID: B4G0052

ANALYTE	EXPECTED (mg/L)	FOUND (mg/L)	% DRIFT	QC LIMIT
Iron	200	183	-8.7	10.00

* Values outside of QC limits

CRDL STANDARD

EPA 6010C

Laboratory: ENCO Jacksonville

SDG: A404270-CTO0017

Client: ENCO Orlando

Project: CTO-0017 Towers Road Disposal-5th St.

Instrument ID: JMICP2

Sequence: BA15922

Calibration: 1408002

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
BA15922-CRL1	Antimony	0.0400	0.0369	92	mg/L	80 - 120
	Arsenic	0.0100	0.00989	99	mg/L	80 - 120
	Cobalt	0.0100	0.00985	98	mg/L	80 - 120
	Iron	0.0500	0.0497	99	mg/L	80 - 120
	Lead	0.0100	0.00918	92	mg/L	80 - 120
	Zinc	0.0100	0.00932	93	mg/L	80 - 120

* Values outside of QC limits

Mean Data

ID: CAL1 **Seq. No.:** 1 **A/S Pos:** 1

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 09:48:16

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,981.4	[0.00]	1,008.54	%				0.58 %
Y 324.227A	1,745,275.9	[0.00]	5,075.75	%				0.29 %
Ag 328.068	-619.4	[0.00]	88.51	mg/L				14.29 %
Al 308.215	75.5	[0.00]	6.36	mg/L				8.42 %
As 188.979	9.3	[0.00]	3.31	mg/L				35.58 %
Ba 233.527	675.1	[0.00]	5.53	mg/L				0.82 %
Be 313.107	-8,989.1	[0.00]	64.64	mg/L				0.72 %
B 208.959	98.5	[0.00]	9.39	mg/L				9.53 %
Ca 317.933	894.9	[0.00]	23.76	mg/L				2.65 %
Cd 226.502	269.4	[0.00]	10.81	mg/L				4.01 %
Co 228.616	642.7	[0.00]	12.58	mg/L				1.96 %
Cr 267.716	-47.7	[0.00]	14.07	mg/L				29.49 %
Cu 324.754	4,096.5	[0.00]	5.22	mg/L				0.13 %
Fe 273.955	-392.4	[0.00]	12.46	mg/L				3.17 %
K 766.491R	941.8	[0.00]	65.51	mg/L				6.96 %
Li 670.781R	-456.6	[0.00]	41.51	mg/L				9.09 %
Mg 279.079R	-157.4	[0.00]	11.38	mg/L				7.23 %
Mn 257.610	-62.9	[0.00]	8.34	mg/L				13.25 %
Mo 202.030	96.3	[0.00]	5.12	mg/L				5.32 %
Na 589.592R	1,973.1	[0.00]	45.86	mg/L				2.32 %
Ni 231.604	-220.9	[0.00]	2.85	mg/L				1.29 %
Pb 220.353	38.7	[0.00]	12.56	mg/L				32.47 %
Sb 206.833	56.3	[0.00]	2.50	mg/L				4.44 %
Se 196.026	-53.8	[0.00]	4.75	mg/L				8.84 %
Sn 189.933	277.6	[0.00]	2.45	mg/L				0.88 %
Sr 421.539R	322.4	[0.00]	47.26	mg/L				14.66 %
Ti 337.280	184.8	[0.00]	30.24	mg/L				16.37 %
Tl 190.800	-254.7	[0.00]	6.32	mg/L				2.48 %
V 292.402	51.2	[0.00]	42.97	mg/L				83.88 %
Zn 206.191	-105.0	[0.00]	5.90	mg/L				5.63 %

Mean Data

ID: CAL2 **Seq. No.:** 2 **A/S Pos:** 2

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 09:50:35

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	167,052.9	96.02	617.94	%				0.37 %
Y 324.227A	1,662,897.6	95.28	1,836.58	%				0.11 %
Ag 328.068	235,338.4	[1.00]	192.35	mg/L				0.08 %
Al 308.215	6,373.8	[10]	65.27	mg/L				1.02 %
As 188.979	1,690.7	[1.00]	10.80	mg/L				0.64 %
Ba 233.527	100,083.4	[1.00]	48.39	mg/L				0.05 %
Be 313.107	464,921.4	[0.1]	554.85	mg/L				0.12 %
B 208.959	43,228.5	[5.00]	27.39	mg/L				0.06 %
Ca 317.933	131,115.2	[10.00]	1,017.95	mg/L				0.78 %
Cd 226.502	12,045.2	[0.1]	63.78	mg/L				0.53 %
Co 228.616	45,549.0	[1.00]	76.16	mg/L				0.17 %
Cr 267.716	135,749.1	[1.00]	161.95	mg/L				0.12 %
Cu 324.754	291,470.1	[1.00]	511.20	mg/L				0.18 %
Fe 273.955	117,899.7	[5.0]	90.39	mg/L				0.08 %
K 766.491R	141,107.6	[50.00]	103.88	mg/L				0.07 %
Li 670.781R	77,160.8	[1.00]	136.33	mg/L				0.18 %
Mg 279.079R	8,630.2	[10.00]	89.59	mg/L				1.04 %
Mn 257.610	748,903.5	[1.00]	799.34	mg/L				0.11 %
Mo 202.030	14,683.1	[1.00]	53.50	mg/L				0.36 %

Na 589.592R	420,105.3	[50.0]	367.68	mg/L	0.09 %
Ni 231.604	44,014.1	[1.00]	63.38	mg/L	0.14 %
Pb 220.353	8,790.8	[1.00]	40.43	mg/L	0.46 %
Sb 206.833	2,804.6	[1.00]	19.52	mg/L	0.70 %
Se 196.026	2,910.1	[1.00]	7.80	mg/L	0.27 %
Sn 189.933	7,184.6	[1.00]	27.25	mg/L	0.38 %
Sr 421.539R	563,112.7	[1.00]	52.08	mg/L	0.01 %
Ti 337.280	339,653.5	[0.50]	283.20	mg/L	0.08 %
Tl 190.800	2,131.4	[1.00]	12.41	mg/L	0.58 %
V 292.402	252,087.9	[1.00]	174.98	mg/L	0.07 %
Zn 206.191	45,011.6	[1.00]	58.11	mg/L	0.13 %

Mean Data

ID: QCS-LOW **Seq. No.:** 4 **A/S Pos:** 6

2014/08/07 10:02:30 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:00:55

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	176,225.1	101.3	1.23	%				1.22 %
Y 324.227A	1,739,590.9	99.67	0.360	%				0.36 %
Ag 328.068	2,236.7	0.0096	0.00020	mg/L	0.0096			2.13 %
2014/08/07 10:02:29 QC value within limits for Ag 328.068 Recovery = 96.08%								
Al 308.215	132.4	0.208	0.0093	mg/L	0.208			4.48 %
2014/08/07 10:02:29 QC value within limits for Al 308.215 Recovery = 103.79%								
As 188.979	16.7	0.0099	0.00304	mg/L	0.0099			30.69 %
2014/08/07 10:02:29 QC value within limits for As 188.979 Recovery = 98.93%								
Ba 233.527	1,026.9	0.0103	0.00042	mg/L	0.0103			4.11 %
2014/08/07 10:02:29 QC value within limits for Ba 233.527 Recovery = 102.55%								
Be 313.107	4,711.5	0.0010	0.00001	mg/L	0.0010			0.86 %
2014/08/07 10:02:29 QC value within limits for Be 313.107 Recovery = 101.17%								
B 208.959	453.9	0.0519	0.00143	mg/L	0.0519			2.76 %
2014/08/07 10:02:29 QC value within limits for B 208.959 Recovery = 103.84%								
Ca 317.933	6,546.4	0.4993	0.00609	mg/L	0.4993			1.22 %
2014/08/07 10:02:29 QC value within limits for Ca 317.933 Recovery = 99.86%								
Cd 226.502	120.4	0.0010	0.00003	mg/L	0.0010			3.05 %
2014/08/07 10:02:29 QC value within limits for Cd 226.502 Recovery = 99.88%								
Co 228.616	448.9	0.0098	0.00032	mg/L	0.0098			3.20 %
2014/08/07 10:02:29 QC value within limits for Co 228.616 Recovery = 98.45%								
Cr 267.716	1,385.0	0.0102	0.00065	mg/L	0.0102			6.40 %
2014/08/07 10:02:29 QC value within limits for Cr 267.716 Recovery = 102.03%								
Cu 324.754	2,918.8	0.0100	0.00060	mg/L	0.0100			5.98 %
2014/08/07 10:02:29 QC value within limits for Cu 324.754 Recovery = 100.40%								
Fe 273.955	1,177.7	0.0497	0.00248	mg/L	0.0497			4.99 %
2014/08/07 10:02:29 QC value within limits for Fe 273.955 Recovery = 99.39%								
K 766.491R	1,343.9	0.476	0.0093	mg/L	0.476			1.96 %
2014/08/07 10:02:29 QC value within limits for K 766.491R Recovery = 95.19%								
Li 670.781R	1,704.2	0.022	0.0010	mg/L	0.022			4.58 %
2014/08/07 10:02:29 QC value within limits for Li 670.781R Recovery = 110.43%								
Mg 279.079R	449.0	0.520	0.0061	mg/L	0.520			1.18 %
2014/08/07 10:02:29 QC value within limits for Mg 279.079R Recovery = 104.05%								
Mn 257.610	8,026.3	0.0107	0.00019	mg/L	0.0107			1.81 %
2014/08/07 10:02:29 QC value within limits for Mn 257.610 Recovery = 107.17%								
Mo 202.030	136.0	0.0093	0.00072	mg/L	0.0093			7.76 %
2014/08/07 10:02:29 QC value within limits for Mo 202.030 Recovery = 92.56%								
Na 589.592R	4,414.8	0.525	0.0159	mg/L	0.525			3.03 %
2014/08/07 10:02:29 QC value within limits for Na 589.592R Recovery = 105.09%								
Ni 231.604	444.5	0.0101	0.00043	mg/L	0.0101			4.28 %
2014/08/07 10:02:29 QC value within limits for Ni 231.604 Recovery = 100.92%								
Pb 220.353	80.2	0.0092	0.00117	mg/L	0.0092			12.74 %
2014/08/07 10:02:29 QC value within limits for Pb 220.353 Recovery = 91.80%								
Sb 206.833	102.0	0.0369	0.00078	mg/L	0.0369			2.10 %
2014/08/07 10:02:29 QC value within limits for Sb 206.833 Recovery = 92.23%								

Se 196.026	124.0	0.0426	0.00114	mg/L	0.0426		2.68 %
2014/08/07 10:02:29 QC value within limits for Se 196.026 Recovery = 106.59%							
Sn 189.933	287.1	0.0399	0.00218	mg/L	0.0399		5.45 %
2014/08/07 10:02:29 QC value within limits for Sn 189.933 Recovery = 99.75%							
Sr 421.539R	28,362.0	0.0504	0.00023	mg/L	0.0504		0.46 %
2014/08/07 10:02:29 QC value within limits for Sr 421.539R Recovery = 100.73%							
Ti 337.280	3,377.3	0.0050	0.00004	mg/L	0.0050		0.86 %
2014/08/07 10:02:29 QC value within limits for Ti 337.280 Recovery = 99.48%							
Tl 190.800	41.7	0.0197	0.00336	mg/L	0.0197		17.03 %
2014/08/07 10:02:29 QC value within limits for Tl 190.800 Recovery = 98.63%							
V 292.402	2,531.1	0.0102	0.00031	mg/L	0.0102		3.08 %
2014/08/07 10:02:29 QC value within limits for V 292.402 Recovery = 101.54%							
Zn 206.191	418.1	0.0093	0.00034	mg/L	0.0093		3.62 %
2014/08/07 10:02:29 QC value within limits for Zn 206.191 Recovery = 93.19%							

Mean Data

ID: QCS-1 **Seq. No.:** 5 **A/S Pos:** 5

2014/08/07 10:04:32 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:03:14

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	171,132.0	98.36	0.502	%				0.51 %
Y 324.227A	1,703,574.5	97.61	0.505	%				0.52 %
Ag 328.068	116,451.9	0.4999	0.00338	mg/L	0.4999			0.68 %
2014/08/07 10:04:31 QC value within limits for Ag 328.068 Recovery = 99.98%								
Al 308.215	3,182.6	4.98	0.022	mg/L	4.98			0.44 %
2014/08/07 10:04:31 QC value within limits for Al 308.215 Recovery = 99.64%								
As 188.979	825.2	0.4895	0.00610	mg/L	0.4895			1.25 %
2014/08/07 10:04:31 QC value within limits for As 188.979 Recovery = 97.89%								
Ba 233.527	49,717.9	0.4965	0.00431	mg/L	0.4965			0.87 %
2014/08/07 10:04:31 QC value within limits for Ba 233.527 Recovery = 99.30%								
Be 313.107	228,209.4	0.0490	0.00005	mg/L	0.0490			0.10 %
2014/08/07 10:04:31 QC value within limits for Be 313.107 Recovery = 97.95%								
B 208.959	20,910.8	2.388	0.0202	mg/L	2.388			0.85 %
2014/08/07 10:04:31 QC value within limits for B 208.959 Recovery = 95.53%								
Ca 317.933	64,118.8	4.890	0.0466	mg/L	4.890			0.95 %
2014/08/07 10:04:31 QC value within limits for Ca 317.933 Recovery = 97.81%								
Cd 226.502	6,007.0	0.0499	0.00027	mg/L	0.0499			0.55 %
2014/08/07 10:04:31 QC value within limits for Cd 226.502 Recovery = 99.78%								
Co 228.616	21,920.1	0.4809	0.00334	mg/L	0.4809			0.69 %
2014/08/07 10:04:31 QC value within limits for Co 228.616 Recovery = 96.18%								
Cr 267.716	67,852.7	0.4999	0.00366	mg/L	0.4999			0.73 %
2014/08/07 10:04:31 QC value within limits for Cr 267.716 Recovery = 99.97%								
Cu 324.754	144,533.9	0.4963	0.00342	mg/L	0.4963			0.69 %
2014/08/07 10:04:31 QC value within limits for Cu 324.754 Recovery = 99.25%								
Fe 273.955	58,330.0	2.462	0.0160	mg/L	2.462			0.65 %
2014/08/07 10:04:31 QC value within limits for Fe 273.955 Recovery = 98.46%								
K 766.491R	68,763.4	24.4	0.04	mg/L	24.4			0.15 %
2014/08/07 10:04:31 QC value within limits for K 766.491R Recovery = 97.45%								
Li 670.781R	38,210.0	0.495	0.0015	mg/L	0.495			0.30 %
2014/08/07 10:04:31 QC value within limits for Li 670.781R Recovery = 99.04%								
Mg 279.079R	4,297.6	4.98	0.027	mg/L	4.98			0.55 %
2014/08/07 10:04:31 QC value within limits for Mg 279.079R Recovery = 99.60%								
Mn 257.610	373,646.9	0.4989	0.00038	mg/L	0.4989			0.08 %
2014/08/07 10:04:31 QC value within limits for Mn 257.610 Recovery = 99.79%								
Mo 202.030	7,165.0	0.4881	0.00264	mg/L	0.4881			0.54 %
2014/08/07 10:04:31 QC value within limits for Mo 202.030 Recovery = 97.61%								
Na 589.592R	208,230.7	24.8	0.01	mg/L	24.8			0.06 %
2014/08/07 10:04:31 QC value within limits for Na 589.592R Recovery = 99.13%								
Ni 231.604	21,867.6	0.4965	0.00173	mg/L	0.4965			0.35 %
2014/08/07 10:04:31 QC value within limits for Ni 231.604 Recovery = 99.31%								
Pb 220.353	4,391.1	0.5015	0.00288	mg/L	0.5015			0.57 %

2014/08/07 10:04:31 QC value within limits for Pb 220.353 Recovery = 100.30%

Sb 206.833	1,377.0	0.4938	0.00565	mg/L	0.4938	1.14 %

2014/08/07 10:04:31 QC value within limits for Sb 206.833 Recovery = 98.76%

Se 196.026	1,422.8	0.4898	0.00511	mg/L	0.4898	1.04 %

2014/08/07 10:04:31 QC value within limits for Se 196.026 Recovery = 97.95%

Sn 189.933	3,567.0	0.4954	0.00243	mg/L	0.4954	0.49 %

2014/08/07 10:04:31 QC value within limits for Sn 189.933 Recovery = 99.09%

Sr 421.539R	280,442.2	0.4980	0.00078	mg/L	0.4980	0.16 %

2014/08/07 10:04:31 QC value within limits for Sr 421.539R Recovery = 99.60%

Ti 337.280	166,067.6	0.2446	0.00186	mg/L	0.2446	0.76 %

2014/08/07 10:04:31 QC value within limits for Ti 337.280 Recovery = 97.83%

Tl 190.800	1,083.6	0.5125	0.00115	mg/L	0.5125	0.22 %

2014/08/07 10:04:31 QC value within limits for Tl 190.800 Recovery = 102.49%

V 292.402	123,694.1	0.4965	0.00413	mg/L	0.4965	0.83 %

2014/08/07 10:04:31 QC value within limits for V 292.402 Recovery = 99.31%

Zn 206.191	22,418.4	0.4994	0.00279	mg/L	0.4994	0.56 %

2014/08/07 10:04:31 QC value within limits for Zn 206.191 Recovery = 99.89%

Mean Data

ID: ICS_A **Seq. No.:** 7 **A/S Pos:** 7

2014/08/07 10:09:24 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:08:13

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	159,147.7	91.47	0.248	%				0.27 %
Y 324.227A	1,522,694.4	87.25	0.662	%				0.76 %
Ag 328.068	-2,151.7	0.0003	0.00034	mg/L	0.0003			124.57 %

2014/08/07 10:09:23 QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215	320,975.6	504	0.7	mg/L	504			0.14 %

2014/08/07 10:09:23 QC value within limits for Al 308.215 Recovery = 100.72%

As 188.979	1.0	0.0185	0.00366	mg/L	0.0185			19.76 %

2014/08/07 10:09:23 QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527	2,401.8	0.0034	0.00021	mg/L	0.0034			6.06 %

2014/08/07 10:09:23 QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107	-972.5	0.0005	0.00001	mg/L	0.0005			2.01 %

2014/08/07 10:09:23 QC value within limits for Be 313.107 Recovery = Not calculated

B 208.959	147.3	0.0163	0.00255	mg/L	0.0163			15.68 %

2014/08/07 10:09:23 QC value within limits for B 208.959 Recovery = Not calculated

Ca 317.933	6,248,572.8	476.6	1.33	mg/L	476.6			0.28 %

2014/08/07 10:09:23 QC value within limits for Ca 317.933 Recovery = 95.31%

Cd 226.502	1,771.4	0.0001	0.00015	mg/L	0.0001			101.14 %

2014/08/07 10:09:23 QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616	712.6	-0.0024	0.00026	mg/L	-0.0024			10.90 %

2014/08/07 10:09:23 QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716	-360.6	0.0019	0.00022	mg/L	0.0019			11.06 %

2014/08/07 10:09:23 QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.754	-3,130.1	0.0023	0.00035	mg/L	0.0023			15.39 %

2014/08/07 10:09:23 QC value within limits for Cu 324.754 Recovery = Not calculated

Fe 273.955	4,303,951.5	182.5	0.16	mg/L	182.5			0.09 %

2014/08/07 10:09:23 QC value within limits for Fe 273.955 Recovery = 91.26%

K 766.491R	696.1	0.034	0.0321	mg/L	0.034			94.15 %

2014/08/07 10:09:23 QC value within limits for K 766.491R Recovery = Not calculated

Li 670.781R	247.2	0.003	0.0011	mg/L	0.003			35.59 %

2014/08/07 10:09:23 QC value within limits for Li 670.781R Recovery = Not calculated

Mg 279.079R	407,411.3	472	1.1	mg/L	472			0.23 %

2014/08/07 10:09:23 QC value within limits for Mg 279.079R Recovery = 94.42%

Mn 257.610	1,247.9	0.0017	0.00005	mg/L	0.0017			2.96 %

2014/08/07 10:09:23 QC value within limits for Mn 257.610 Recovery = Not calculated

2014/08/07 10:09:23 Saturated outside survey window (code 6)

Mo 202.030	180.2	0.0044	0.00100	mg/L	0.0044			22.40 %

2014/08/07 10:09:23 QC value within limits for Mo 202.030 Recovery = Not calculated

Na 589.592R	94.2	0.011	0.0041	mg/L	0.011			36.25 %

2014/08/07 10:09:23 QC value within limits for Na 589.592R Recovery = Not calculated

Ni 231.604	-156.0	-0.0036	0.00028	mg/L	-0.0036	7.80 %

2014/08/07 10:09:23 QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	-547.2	0.0164	0.00097	mg/L	0.0164	5.91 %

2014/08/07 10:09:23 QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	91.8	0.0098	0.00293	mg/L	0.0098	29.99 %

2014/08/07 10:09:23 QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	-341.2	-0.0042	0.00506	mg/L	-0.0042	120.02 %

2014/08/07 10:09:23 QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.933	676.5	-0.0082	0.00209	mg/L	-0.0082	25.58 %

2014/08/07 10:09:23 QC value within limits for Sn 189.933 Recovery = Not calculated

Sr 421.539R	1,464.0	0.0026	0.00002	mg/L	0.0026	0.90 %

2014/08/07 10:09:23 QC value within limits for Sr 421.539R Recovery = Not calculated

Ti 337.280	276.8	0.0004	0.00011	mg/L	0.0004	26.72 %

2014/08/07 10:09:23 QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	-613.3	0.0036	0.00508	mg/L	0.0036	141.48 %

2014/08/07 10:09:23 QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	-3,183.3	0.0005	0.00009	mg/L	0.0005	16.78 %

2014/08/07 10:09:23 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-647.7	-0.0014	0.00034	mg/L	-0.0014	24.45 %

2014/08/07 10:09:23 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: ICS_B **Seq. No.:** 8 **A/S Pos:** 4

2014/08/07 10:11:28 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** : **Date:** 2014/08/07 10:10:11

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	157,873.1	90.74	0.135	%				0.15 %
Y 324.227A	1,530,343.9	87.68	0.365	%				0.42 %
Ag 328.068	247,181.5	1.070	0.0124	mg/L	1.070			1.16 %

2014/08/07 10:11:26 QC value within limits for Ag 328.068 Recovery = 106.96%

Al 308.215	323,333.8	507	0.2	mg/L	507	0.03 %

2014/08/07 10:11:26 QC value within limits for Al 308.215 Recovery = 101.45%

As 188.979	1,686.9	1.018	0.0084	mg/L	1.018	0.82 %

2014/08/07 10:11:26 QC value within limits for As 188.979 Recovery = 101.79%

Ba 233.527	99,969.3	0.9786	0.00936	mg/L	0.9786	0.96 %

2014/08/07 10:11:26 QC value within limits for Ba 233.527 Recovery = 97.86%

Be 313.107	4,553,225.0	0.9796	0.00028	mg/L	0.9796	0.03 %

2014/08/07 10:11:26 QC value within limits for Be 313.107 Recovery = 97.96%

B 208.959	8,952.4	0.9751	0.00543	mg/L	0.9751	0.56 %

2014/08/07 10:11:26 QC value within limits for B 208.959 Recovery = 97.51%

Ca 317.933	6,275,737.6	478.6	1.75	mg/L	478.6	0.37 %

2014/08/07 10:11:26 QC value within limits for Ca 317.933 Recovery = 95.73%

Cd 226.502	112,965.4	0.9237	0.01100	mg/L	0.9237	1.19 %

2014/08/07 10:11:26 QC value within limits for Cd 226.502 Recovery = 92.37%

Co 228.616	40,309.2	0.8659	0.00978	mg/L	0.8659	1.13 %

2014/08/07 10:11:26 QC value within limits for Co 228.616 Recovery = 86.59%

Cr 267.716	130,079.7	0.9627	0.00952	mg/L	0.9627	0.99 %

2014/08/07 10:11:26 QC value within limits for Cr 267.716 Recovery = 96.27%

Cu 324.754	294,302.3	1.024	0.0115	mg/L	1.024	1.13 %

2014/08/07 10:11:26 QC value within limits for Cu 324.754 Recovery = 102.38%

Fe 273.955	4,241,323.5	179.8	0.09	mg/L	179.8	0.05 %

2014/08/07 10:11:26 QC value within limits for Fe 273.955 Recovery = 89.92%

K 766.491R	32,251.6	11.2	0.01	mg/L	11.2	0.07 %

2014/08/07 10:11:26 QC value within limits for K 766.491R Recovery = 112.15%

Li 670.781R	81,838.6	1.06	0.003	mg/L	1.06	0.27 %

2014/08/07 10:11:26 QC value within limits for Li 670.781R Recovery = 106.06%

Mg 279.079R	407,775.2	473	0.3	mg/L	473	0.06 %

2014/08/07 10:11:26 QC value within limits for Mg 279.079R Recovery = 94.50%

Mn 257.610	716,424.5	0.9566	0.00996	mg/L	0.9566	1.04 %

2014/08/07 10:11:26 QC value within limits for Mn 257.610 Recovery = 95.66%

Mo 202.030	14,287.4	0.9655	0.00447	mg/L	0.9655		0.46 %
2014/08/07 10:11:26 QC value within limits for Mo 202.030 Recovery = 96.55%							
Na 589.592R	457,808.0	54.5	0.03	mg/L	54.5		0.05 %
2014/08/07 10:11:26 QC value within limits for Na 589.592R Recovery = 108.97%							
Ni 231.604	38,401.0	0.8719	0.00833	mg/L	0.8719		0.96 %
2014/08/07 10:11:26 QC value within limits for Ni 231.604 Recovery = 87.19%							
Pb 220.353	7,596.5	0.9461	0.00243	mg/L	0.9461		0.26 %
2014/08/07 10:11:26 QC value within limits for Pb 220.353 Recovery = 94.61%							
Sb 206.833	2,905.5	1.019	0.0096	mg/L	1.019		0.94 %
2014/08/07 10:11:26 QC value within limits for Sb 206.833 Recovery = 101.89%							
Se 196.026	2,540.8	0.9845	0.00389	mg/L	0.9845		0.39 %
2014/08/07 10:11:26 QC value within limits for Se 196.026 Recovery = 98.45%							
Sn 189.933	7,206.8	0.9001	0.00408	mg/L	0.9001		0.45 %
2014/08/07 10:11:26 QC value within limits for Sn 189.933 Recovery = 90.01%							
Sr 421.539R	581,073.7	1.032	0.0013	mg/L	1.032		0.12 %
2014/08/07 10:11:26 QC value within limits for Sr 421.539R Recovery = 103.19%							
Ti 337.280	661,643.8	0.9742	0.00923	mg/L	0.9742		0.95 %
2014/08/07 10:11:26 QC value within limits for Ti 337.280 Recovery = 97.42%							
Tl 190.800	1,329.2	0.9161	0.00249	mg/L	0.9161		0.27 %
2014/08/07 10:11:26 QC value within limits for Tl 190.800 Recovery = 91.61%							
V 292.402	248,199.3	1.008	0.0100	mg/L	1.008		0.99 %
2014/08/07 10:11:26 QC value within limits for V 292.402 Recovery = 100.81%							
Zn 206.191	40,323.8	0.9113	0.01122	mg/L	0.9113		1.23 %
2014/08/07 10:11:26 QC value within limits for Zn 206.191 Recovery = 91.13%							

Mean Data

ID: CVS **Seq. No.:** 10 **A/S Pos:** 3

2014/08/07 10:16:25 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:15:07

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,634.7	99.23	0.502	%				0.51 %
Y 324.227A	1,721,058.7	98.61	0.361	%				0.37 %
Ag 328.068	114,987.5	0.4936	0.00537	mg/L	0.4936			1.09 %
2014/08/07 10:16:24 QC value within limits for Ag 328.068 Recovery = 98.72%								
Al 308.215	3,159.9	4.95	0.027	mg/L	4.95			0.54 %
2014/08/07 10:16:24 QC value within limits for Al 308.215 Recovery = 98.92%								
As 188.979	823.5	0.4884	0.00454	mg/L	0.4884			0.93 %
2014/08/07 10:16:24 QC value within limits for As 188.979 Recovery = 97.67%								
Ba 233.527	49,043.4	0.4898	0.00605	mg/L	0.4898			1.23 %
2014/08/07 10:16:24 QC value within limits for Ba 233.527 Recovery = 97.95%								
Be 313.107	226,036.8	0.0485	0.00005	mg/L	0.0485			0.11 %
2014/08/07 10:16:24 QC value within limits for Be 313.107 Recovery = 97.01%								
B 208.959	20,886.2	2.386	0.0369	mg/L	2.386			1.54 %
2014/08/07 10:16:24 QC value within limits for B 208.959 Recovery = 95.42%								
Ca 317.933	64,374.3	4.910	0.0310	mg/L	4.910			0.63 %
2014/08/07 10:16:24 QC value within limits for Ca 317.933 Recovery = 98.19%								
Cd 226.502	5,844.5	0.0485	0.00022	mg/L	0.0485			0.46 %
2014/08/07 10:16:24 QC value within limits for Cd 226.502 Recovery = 97.08%								
Co 228.616	22,217.6	0.4875	0.00575	mg/L	0.4875			1.18 %
2014/08/07 10:16:24 QC value within limits for Co 228.616 Recovery = 97.49%								
Cr 267.716	66,379.4	0.4890	0.00481	mg/L	0.4890			0.98 %
2014/08/07 10:16:24 QC value within limits for Cr 267.716 Recovery = 97.80%								
Cu 324.754	141,909.2	0.4873	0.00516	mg/L	0.4873			1.06 %
2014/08/07 10:16:24 QC value within limits for Cu 324.754 Recovery = 97.45%								
Fe 273.955	57,954.6	2.446	0.0256	mg/L	2.446			1.05 %
2014/08/07 10:16:24 QC value within limits for Fe 273.955 Recovery = 97.83%								
K 766.491R	68,424.4	24.2	0.05	mg/L	24.2			0.20 %
2014/08/07 10:16:24 QC value within limits for K 766.491R Recovery = 96.97%								
Li 670.781R	38,078.3	0.493	0.0013	mg/L	0.493			0.26 %
2014/08/07 10:16:24 QC value within limits for Li 670.781R Recovery = 98.70%								
Mg 279.079R	4,267.3	4.94	0.021	mg/L	4.94			0.42 %

2014/08/07 10:16:24 QC value within limits for Mg 279.079R Recovery = 98.89%

Mn 257.610	366,856.4	0.4899	0.00045	mg/L	0.4899	0.09 %

2014/08/07 10:16:24 QC value within limits for Mn 257.610 Recovery = 97.97%

Mo 202.030	7,151.6	0.4872	0.00096	mg/L	0.4872	0.20 %

2014/08/07 10:16:24 QC value within limits for Mo 202.030 Recovery = 97.43%

Na 589.592R	205,598.3	24.5	0.01	mg/L	24.5	0.05 %

2014/08/07 10:16:24 QC value within limits for Na 589.592R Recovery = 97.88%

Ni 231.604	21,443.7	0.4869	0.00498	mg/L	0.4869	1.02 %

2014/08/07 10:16:24 QC value within limits for Ni 231.604 Recovery = 97.38%

Pb 220.353	4,324.8	0.4940	0.00148	mg/L	0.4940	0.30 %

2014/08/07 10:16:24 QC value within limits for Pb 220.353 Recovery = 98.80%

Sb 206.833	1,363.4	0.4890	0.00019	mg/L	0.4890	0.04 %

2014/08/07 10:16:24 QC value within limits for Sb 206.833 Recovery = 97.79%

Se 196.026	1,408.5	0.4848	0.00287	mg/L	0.4848	0.59 %

2014/08/07 10:16:24 QC value within limits for Se 196.026 Recovery = 96.97%

Sn 189.933	3,517.5	0.4886	0.00288	mg/L	0.4886	0.59 %

2014/08/07 10:16:24 QC value within limits for Sn 189.933 Recovery = 97.71%

Sr 421.539R	276,448.3	0.4909	0.00073	mg/L	0.4909	0.15 %

2014/08/07 10:16:24 QC value within limits for Sr 421.539R Recovery = 98.19%

Ti 337.280	163,972.5	0.2415	0.00194	mg/L	0.2415	0.80 %

2014/08/07 10:16:24 QC value within limits for Ti 337.280 Recovery = 96.60%

Tl 190.800	1,057.5	0.5002	0.00158	mg/L	0.5002	0.32 %

2014/08/07 10:16:24 QC value within limits for Tl 190.800 Recovery = 100.04%

V 292.402	122,173.7	0.4905	0.00531	mg/L	0.4905	1.08 %

2014/08/07 10:16:24 QC value within limits for V 292.402 Recovery = 98.09%

Zn 206.191	21,998.4	0.4901	0.00503	mg/L	0.4901	1.03 %

2014/08/07 10:16:24 QC value within limits for Zn 206.191 Recovery = 98.01%

Mean Data

ID: BLK **Seq. No.:** 11 **A/S Pos:** 1

2014/08/07 10:20:51 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** : **Date:** 2014/08/07 10:19:15

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,643.7	101.0	0.60	%				0.59 %
Y 324.227A	1,766,479.6	101.2	0.57	%				0.56 %
Ag 328.068	70.9	0.0003	0.00023	mg/L	0.0003			77.59 %

2014/08/07 10:20:50 QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215	8.1	0.013	0.0056	mg/L	0.013			44.50 %

2014/08/07 10:20:50 QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979	0.2	0.0001	0.00288	mg/L	0.0001			3,322.75 %

2014/08/07 10:20:50 QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527	-9.8	-0.0001	0.00006	mg/L	-0.0001			60.96 %

2014/08/07 10:20:50 QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107	186.3	0.0000	0.00001	mg/L	0.0000			19.36 %

2014/08/07 10:20:50 QC value within limits for Be 313.107 Recovery = Not calculated

B 208.959	77.0	0.0087	0.00040	mg/L	0.0087			4.55 %

2014/08/07 10:20:50 QC value within limits for B 208.959 Recovery = Not calculated

Ca 317.933	77.1	0.0059	0.00049	mg/L	0.0059			8.27 %

2014/08/07 10:20:50 QC value within limits for Ca 317.933 Recovery = Not calculated

Cd 226.502	-4.6	0.0000	0.00008	mg/L	0.0000			207.35 %

2014/08/07 10:20:50 QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616	-8.7	-0.0002	0.00006	mg/L	-0.0002			30.64 %

2014/08/07 10:20:50 QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716	17.0	0.0001	0.00012	mg/L	0.0001			92.59 %

2014/08/07 10:20:50 QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.754	25.6	0.0001	0.00017	mg/L	0.0001			200.75 %

2014/08/07 10:20:50 QC value within limits for Cu 324.754 Recovery = Not calculated

Fe 273.955	242.4	0.0103	0.00023	mg/L	0.0103			2.24 %

2014/08/07 10:20:50 QC value within limits for Fe 273.955 Recovery = Not calculated

K 766.491R	27.8	0.010	0.0542	mg/L	0.010			549.86 %

2014/08/07 10:20:50 QC value within limits for K 766.491R Recovery = Not calculated

Li 670.781R	130.0	0.002	0.0005	mg/L	0.002	31.63 %
2014/08/07 10:20:50 QC value within limits for Li 670.781R Recovery = Not calculated						
Mg 279.079R	9.2	0.011	0.0026	mg/L	0.011	24.51 %
2014/08/07 10:20:50 QC value within limits for Mg 279.079R Recovery = Not calculated						
Mn 257.610	72.3	0.0001	0.00003	mg/L	0.0001	31.68 %
2014/08/07 10:20:50 QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.030	41.6	0.0028	0.00064	mg/L	0.0028	22.58 %
2014/08/07 10:20:50 QC value within limits for Mo 202.030 Recovery = Not calculated						
Na 589.592R	54.1	0.006	0.0099	mg/L	0.006	153.32 %
2014/08/07 10:20:50 QC value within limits for Na 589.592R Recovery = Not calculated						
Ni 231.604	2.3	0.0001	0.00030	mg/L	0.0001	591.94 %
2014/08/07 10:20:50 QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353	3.7	0.0004	0.00088	mg/L	0.0004	205.74 %
2014/08/07 10:20:50 QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.833	7.2	0.0026	0.00180	mg/L	0.0026	70.30 %
2014/08/07 10:20:50 QC value within limits for Sb 206.833 Recovery = Not calculated						
Se 196.026	12.1	0.0042	0.00196	mg/L	0.0042	47.27 %
2014/08/07 10:20:50 QC value within limits for Se 196.026 Recovery = Not calculated						
Sn 189.933	-4.1	-0.0006	0.00065	mg/L	-0.0006	111.67 %
2014/08/07 10:20:50 QC value within limits for Sn 189.933 Recovery = Not calculated						
Sr 421.539R	-26.9	0.0000	0.00014	mg/L	0.0000	292.21 %
2014/08/07 10:20:50 QC value within limits for Sr 421.539R Recovery = Not calculated						
Ti 337.280	27.3	0.0000	0.00024	mg/L	0.0000	583.18 %
2014/08/07 10:20:50 QC value within limits for Ti 337.280 Recovery = Not calculated						
Tl 190.800	5.3	0.0025	0.00073	mg/L	0.0025	28.79 %
2014/08/07 10:20:50 QC value within limits for Tl 190.800 Recovery = Not calculated						
V 292.402	3.7	0.0000	0.00010	mg/L	0.0000	245.41 %
2014/08/07 10:20:50 QC value within limits for V 292.402 Recovery = Not calculated						
Zn 206.191	-15.8	-0.0003	0.00011	mg/L	-0.0003	32.53 %
2014/08/07 10:20:50 QC value within limits for Zn 206.191 Recovery = Not calculated						

Mean Data

ID: 4H06006-blk1 **Seq. No.:** 12 **A/S Pos:** 401

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:24:34

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	178,388.4	102.5	0.59	%			%	0.57 %
Y 324.227A	1,805,183.2	103.4	0.31	%			%	0.30 %
Ag 328.068	123.8	0.0005	0.00021	mg/L	0.0005	0.00021	mg/L	39.24 %
Al 308.215	8.1	0.013	0.0056	mg/L	0.013	0.0056	mg/L	43.93 %
As 188.979	3.9	0.0023	0.00388	mg/L	0.0023	0.00388	mg/L	167.44 %
Ba 233.527	-39.9	-0.0004	0.00004	mg/L	-0.0004	0.00004	mg/L	10.18 %
Be 313.107	359.6	0.0001	0.00004	mg/L	0.0001	0.00004	mg/L	49.36 %
B 208.959	25.8	0.0031	0.00045	mg/L	0.0031	0.00045	mg/L	14.77 %
Ca 317.933	53.9	0.0041	0.00114	mg/L	0.0041	0.00114	mg/L	27.87 %
Cd 226.502	-15.9	-0.0001	0.00003	mg/L	-0.0001	0.00003	mg/L	26.30 %
Co 228.616	-31.9	-0.0007	0.00016	mg/L	-0.0007	0.00016	mg/L	22.62 %
Cr 267.716	16.5	0.0001	0.00001	mg/L	0.0001	0.00001	mg/L	9.17 %
Cu 324.754	-338.9	-0.0012	0.00035	mg/L	-0.0012	0.00035	mg/L	30.26 %
Fe 273.955	129.2	0.0055	0.00055	mg/L	0.0055	0.00055	mg/L	10.12 %
K 766.491R	-52.5	-0.019	0.0211	mg/L	-0.019	0.0211	mg/L	113.36 %
Li 670.781R	180.2	0.002	0.0012	mg/L	0.002	0.0012	mg/L	49.40 %
Mg 279.079R	3.4	0.004	0.0108	mg/L	0.004	0.0108	mg/L	273.96 %
Mn 257.610	7.9	0.0000	0.00003	mg/L	0.0000	0.00003	mg/L	249.13 %
Mo 202.030	-14.8	-0.0010	0.00022	mg/L	-0.0010	0.00022	mg/L	21.78 %
Na 589.592R	-204.5	-0.024	0.0106	mg/L	-0.024	0.0106	mg/L	43.62 %
Ni 231.604	21.7	0.0005	0.00027	mg/L	0.0005	0.00027	mg/L	55.68 %
Pb 220.353	-8.4	-0.0010	0.00060	mg/L	-0.0010	0.00060	mg/L	63.15 %
Sb 206.833	5.6	0.0020	0.00245	mg/L	0.0020	0.00245	mg/L	124.31 %
Se 196.026	4.5	0.0016	0.00326	mg/L	0.0016	0.00326	mg/L	208.31 %
Sn 189.933	-18.3	-0.0025	0.00045	mg/L	-0.0025	0.00045	mg/L	17.65 %

Sr 421.539R	-59.2	-0.0001	0.00014	mg/L	-0.0001	0.00014	mg/L	137.82	%
Ti 337.280	-125.6	-0.0002	0.00019	mg/L	-0.0002	0.00019	mg/L	100.94	%
Tl 190.800	16.4	0.0077	0.00337	mg/L	0.0077	0.00337	mg/L	43.98	%
V 292.402	-7.8	0.0000	0.00012	mg/L	0.0000	0.00012	mg/L	309.46	%
Zn 206.191	-2.0	0.0000	0.00010	mg/L	0.0000	0.00010	mg/L	224.22	%

Mean Data

ID: 4H06006-bs1 **Seq. No.:** 13 **A/S Pos:** 402

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:26:52

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	177,049.2	101.8	0.37	%			%	0.37	%
Y 324.227A	1,743,379.3	99.89	0.784	%			%	0.79	%
Ag 328.068	22,497.2	0.1005	0.00112	mg/L	0.1005	0.00112	mg/L	1.11	%
Al 308.215	3,089.1	4.84	0.002	mg/L	4.84	0.002	mg/L	0.04	%
As 188.979	811.4	0.4813	0.00827	mg/L	0.4813	0.00827	mg/L	1.72	%
Ba 233.527	48,420.9	0.4836	0.00708	mg/L	0.4836	0.00708	mg/L	1.46	%
Be 313.107	226,558.2	0.0486	0.00015	mg/L	0.0486	0.00015	mg/L	0.31	%
B 208.959	20,652.0	2.359	0.0409	mg/L	2.359	0.0409	mg/L	1.73	%
Ca 317.933	62,730.0	4.784	0.0130	mg/L	4.784	0.0130	mg/L	0.27	%
Cd 226.502	5,897.3	0.0490	0.00042	mg/L	0.0490	0.00042	mg/L	0.86	%
Co 228.616	21,880.1	0.4800	0.00654	mg/L	0.4800	0.00654	mg/L	1.36	%
Cr 267.716	65,490.2	0.4825	0.00629	mg/L	0.4825	0.00629	mg/L	1.30	%
Cu 324.754	141,422.0	0.4856	0.00710	mg/L	0.4856	0.00710	mg/L	1.46	%
Fe 273.955	56,623.3	2.389	0.0353	mg/L	2.389	0.0353	mg/L	1.48	%
K 766.491R	67,328.6	23.9	0.04	mg/L	23.9	0.04	mg/L	0.16	%
Li 670.781R	37,519.9	0.486	0.0024	mg/L	0.486	0.0024	mg/L	0.49	%
Mg 279.079R	4,159.9	4.82	0.020	mg/L	4.82	0.020	mg/L	0.42	%
Mn 257.610	363,388.5	0.4852	0.00189	mg/L	0.4852	0.00189	mg/L	0.39	%
Mo 202.030	6,912.3	0.4709	0.00291	mg/L	0.4709	0.00291	mg/L	0.62	%
Na 589.592R	201,783.7	24.0	0.02	mg/L	24.0	0.02	mg/L	0.09	%
Ni 231.604	21,284.8	0.4833	0.00755	mg/L	0.4833	0.00755	mg/L	1.56	%
Pb 220.353	4,313.5	0.4926	0.00322	mg/L	0.4926	0.00322	mg/L	0.65	%
Sb 206.833	1,343.4	0.4817	0.00095	mg/L	0.4817	0.00095	mg/L	0.20	%
Se 196.026	1,405.6	0.4838	0.00579	mg/L	0.4838	0.00579	mg/L	1.20	%
Sn 189.933	3,413.2	0.4741	0.00443	mg/L	0.4741	0.00443	mg/L	0.93	%
Sr 421.539R	273,962.9	0.4865	0.00031	mg/L	0.4865	0.00031	mg/L	0.06	%
Ti 337.280	160,753.5	0.2367	0.00309	mg/L	0.2367	0.00309	mg/L	1.31	%
Tl 190.800	1,045.7	0.4945	0.00402	mg/L	0.4945	0.00402	mg/L	0.81	%
V 292.402	120,307.2	0.4829	0.00646	mg/L	0.4829	0.00646	mg/L	1.34	%
Zn 206.191	22,116.8	0.4927	0.00758	mg/L	0.4927	0.00758	mg/L	1.54	%

Mean Data

ID: 4H06006-bsd1 **Seq. No.:** 14 **A/S Pos:** 403

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:28:53

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,371.3	100.2	0.49	%			%	0.49	%
Y 324.227A	1,726,564.7	98.93	0.357	%			%	0.36	%
Ag 328.068	22,752.6	0.1017	0.00063	mg/L	0.1017	0.00063	mg/L	0.62	%
Al 308.215	3,097.6	4.85	0.047	mg/L	4.85	0.047	mg/L	0.98	%
As 188.979	813.8	0.4827	0.00239	mg/L	0.4827	0.00239	mg/L	0.50	%
Ba 233.527	48,866.9	0.4880	0.00230	mg/L	0.4880	0.00230	mg/L	0.47	%
Be 313.107	227,553.0	0.0488	0.00009	mg/L	0.0488	0.00009	mg/L	0.18	%
B 208.959	21,091.6	2.410	0.0186	mg/L	2.410	0.0186	mg/L	0.77	%
Ca 317.933	63,327.2	4.830	0.0629	mg/L	4.830	0.0629	mg/L	1.30	%
Cd 226.502	5,914.5	0.0491	0.00007	mg/L	0.0491	0.00007	mg/L	0.14	%
Co 228.616	22,102.3	0.4849	0.00293	mg/L	0.4849	0.00293	mg/L	0.60	%
Cr 267.716	66,140.2	0.4873	0.00258	mg/L	0.4873	0.00258	mg/L	0.53	%
Cu 324.754	142,936.5	0.4908	0.00220	mg/L	0.4908	0.00220	mg/L	0.45	%
Fe 273.955	57,277.9	2.417	0.0115	mg/L	2.417	0.0115	mg/L	0.48	%

K 766.491R	67,831.4	24.0	0.13	mg/L	24.0	0.13	mg/L	0.53 %
Li 670.781R	37,948.6	0.492	0.0021	mg/L	0.492	0.0021	mg/L	0.43 %
Mg 279.079R	4,200.3	4.87	0.038	mg/L	4.87	0.038	mg/L	0.78 %
Mn 257.610	364,430.9	0.4866	0.00105	mg/L	0.4866	0.00105	mg/L	0.22 %
Mo 202.030	7,040.6	0.4796	0.00033	mg/L	0.4796	0.00033	mg/L	0.07 %
Na 589.592R	205,367.5	24.4	0.12	mg/L	24.4	0.12	mg/L	0.48 %
Ni 231.604	21,553.3	0.4894	0.00196	mg/L	0.4894	0.00196	mg/L	0.40 %
Pb 220.353	4,333.9	0.4950	0.00183	mg/L	0.4950	0.00183	mg/L	0.37 %
Sb 206.833	1,355.6	0.4861	0.00167	mg/L	0.4861	0.00167	mg/L	0.34 %
Se 196.026	1,408.8	0.4849	0.00131	mg/L	0.4849	0.00131	mg/L	0.27 %
Sn 189.933	3,444.6	0.4784	0.00102	mg/L	0.4784	0.00102	mg/L	0.21 %
Sr 421.539R	277,662.5	0.4931	0.00258	mg/L	0.4931	0.00258	mg/L	0.52 %
Ti 337.280	162,652.3	0.2395	0.00093	mg/L	0.2395	0.00093	mg/L	0.39 %
Tl 190.800	1,057.2	0.5000	0.00260	mg/L	0.5000	0.00260	mg/L	0.52 %
V 292.402	121,515.0	0.4878	0.00290	mg/L	0.4878	0.00290	mg/L	0.59 %
Zn 206.191	22,403.3	0.4991	0.00357	mg/L	0.4991	0.00357	mg/L	0.72 %

Mean Data

ID: b403655-28 **Seq. No.:** 15 **A/S Pos:** 404

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:31:30

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	177,502.4	102.0	0.97	%			%	0.95 %
Y 324.227A	1,754,338.6	100.5	1.04	%			%	1.04 %
Ag 328.068	127.2	0.0005	0.00019	mg/L	0.0005	0.00019	mg/L	34.26 %
Al 308.215	3.5	0.005	0.0081	mg/L	0.005	0.0081	mg/L	150.78 %
As 188.979	-0.3	-0.0002	0.00269	mg/L	-0.0002	0.00269	mg/L	1,348.06 %
Ba 233.527	47.7	0.0005	0.00012	mg/L	0.0005	0.00012	mg/L	25.62 %
Be 313.107	341.0	0.0001	0.00003	mg/L	0.0001	0.00003	mg/L	41.72 %
B 208.959	144.5	0.0164	0.00143	mg/L	0.0164	0.00143	mg/L	8.72 %
Ca 317.933	598.3	0.0456	0.00154	mg/L	0.0456	0.00154	mg/L	3.37 %
Cd 226.502	-13.0	-0.0001	0.00007	mg/L	-0.0001	0.00007	mg/L	64.27 %
Co 228.616	-13.9	-0.0003	0.00025	mg/L	-0.0003	0.00025	mg/L	81.65 %
Cr 267.716	13.0	0.0001	0.00011	mg/L	0.0001	0.00011	mg/L	115.80 %
Cu 324.754	-86.1	-0.0003	0.00054	mg/L	-0.0003	0.00054	mg/L	179.60 %
Fe 273.955	228.2	0.0097	0.00068	mg/L	0.0097	0.00068	mg/L	7.08 %
K 766.491R	79.2	0.028	0.0226	mg/L	0.028	0.0226	mg/L	80.57 %
Li 670.781R	231.0	0.003	0.0006	mg/L	0.003	0.0006	mg/L	19.64 %
Mg 279.079R	9.3	0.011	0.0033	mg/L	0.011	0.0033	mg/L	30.24 %
Mn 257.610	376.6	0.0005	0.00003	mg/L	0.0005	0.00003	mg/L	5.62 %
Mo 202.030	77.7	0.0053	0.00058	mg/L	0.0053	0.00058	mg/L	10.96 %
Na 589.592R	2,158.6	0.257	0.0078	mg/L	0.257	0.0078	mg/L	3.05 %
Ni 231.604	24.1	0.0005	0.00017	mg/L	0.0005	0.00017	mg/L	31.64 %
Pb 220.353	-4.6	-0.0005	0.00068	mg/L	-0.0005	0.00068	mg/L	132.78 %
Sb 206.833	5.6	0.0020	0.00278	mg/L	0.0020	0.00278	mg/L	139.43 %
Se 196.026	16.6	0.0057	0.00197	mg/L	0.0057	0.00197	mg/L	34.44 %
Sn 189.933	7.3	0.0010	0.00169	mg/L	0.0010	0.00169	mg/L	166.83 %
Sr 421.539R	514.9	0.0009	0.00015	mg/L	0.0009	0.00015	mg/L	15.97 %
Ti 337.280	83.9	0.0001	0.00010	mg/L	0.0001	0.00010	mg/L	83.50 %
Tl 190.800	12.6	0.0060	0.00129	mg/L	0.0060	0.00129	mg/L	21.48 %
V 292.402	38.4	0.0002	0.00017	mg/L	0.0002	0.00017	mg/L	85.97 %
Zn 206.191	1.6	0.0000	0.00008	mg/L	0.0000	0.00008	mg/L	230.06 %

Mean Data

ID: 4H06003-blk1 **Seq. No.:** 17 **A/S Pos:** 406

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:37:18

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,260.1	99.01	1.252	%			%	1.26 %
Y 324.227A	1,742,460.1	99.84	0.208	%			%	0.21 %
Ag 328.068	26.5	0.0001	0.00042	mg/L	0.0001	0.00042	mg/L	363.98 %

Al 308.215	4.1	0.006	0.0102	mg/L	0.006	0.0102	mg/L	159.05 %
As 188.979	5.5	0.0033	0.00131	mg/L	0.0033	0.00131	mg/L	39.85 %
Ba 233.527	23.6	0.0002	0.00008	mg/L	0.0002	0.00008	mg/L	34.93 %
Be 313.107	44.0	0.0000	0.00002	mg/L	0.0000	0.00002	mg/L	264.02 %
B 208.959	85.9	0.0099	0.00113	mg/L	0.0099	0.00113	mg/L	11.38 %
Ca 317.933	375.2	0.0286	0.00241	mg/L	0.0286	0.00241	mg/L	8.41 %
Cd 226.502	-7.6	-0.0001	0.00004	mg/L	-0.0001	0.00004	mg/L	62.65 %
Co 228.616	1.4	0.0000	0.00021	mg/L	0.0000	0.00021	mg/L	717.30 %
Cr 267.716	19.4	0.0001	0.00006	mg/L	0.0001	0.00006	mg/L	43.72 %
Cu 324.754	198.2	0.0007	0.00050	mg/L	0.0007	0.00050	mg/L	74.09 %
Fe 273.955	303.6	0.0129	0.00065	mg/L	0.0129	0.00065	mg/L	5.08 %
K 766.491R	-58.5	-0.021	0.0576	mg/L	-0.021	0.0576	mg/L	277.92 %
Li 670.781R	94.0	0.001	0.0013	mg/L	0.001	0.0013	mg/L	106.39 %
Mg 279.079R	1.4	0.002	0.0032	mg/L	0.002	0.0032	mg/L	200.62 %
Mn 257.610	359.8	0.0005	0.00003	mg/L	0.0005	0.00003	mg/L	5.39 %
Mo 202.030	13.2	0.0009	0.00199	mg/L	0.0009	0.00199	mg/L	221.83 %
Na 589.592R	-148.6	-0.018	0.0090	mg/L	-0.018	0.0090	mg/L	50.64 %
Ni 231.604	9.0	0.0002	0.00020	mg/L	0.0002	0.00020	mg/L	99.34 %
Pb 220.353	-0.9	-0.0001	0.00079	mg/L	-0.0001	0.00079	mg/L	795.24 %
Sb 206.833	18.2	0.0067	0.00244	mg/L	0.0067	0.00244	mg/L	36.41 %
Se 196.026	12.6	0.0043	0.00186	mg/L	0.0043	0.00186	mg/L	42.97 %
Sn 189.933	88.8	0.0124	0.00139	mg/L	0.0124	0.00139	mg/L	11.21 %
Sr 421.539R	-57.3	-0.0001	0.00013	mg/L	-0.0001	0.00013	mg/L	125.01 %
Ti 337.280	30.0	0.0000	0.00008	mg/L	0.0000	0.00008	mg/L	172.57 %
Tl 190.800	-1.4	-0.0007	0.00168	mg/L	-0.0007	0.00168	mg/L	257.05 %
V 292.402	23.8	0.0001	0.00033	mg/L	0.0001	0.00033	mg/L	322.78 %
Zn 206.191	27.2	0.0006	0.00022	mg/L	0.0006	0.00022	mg/L	35.90 %

Mean Data

ID: 4H06003-bs1 **Seq. No.:** 18 **A/S Pos:** 407

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:39:36

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	168,815.5	97.03	0.592	%			%	0.61 %
Y 324.227A	1,689,986.0	96.83	0.577	%			%	0.60 %
Ag 328.068	21,909.2	0.0980	0.00064	mg/L	0.0980	0.00064	mg/L	0.66 %
Al 308.215	3,088.6	4.83	0.034	mg/L	4.83	0.034	mg/L	0.71 %
As 188.979	810.8	0.4809	0.00482	mg/L	0.4809	0.00482	mg/L	1.00 %
Ba 233.527	48,467.3	0.4840	0.00170	mg/L	0.4840	0.00170	mg/L	0.35 %
Be 313.107	223,618.5	0.0480	0.00001	mg/L	0.0480	0.00001	mg/L	0.03 %
B 208.959	20,011.2	2.285	0.0130	mg/L	2.285	0.0130	mg/L	0.57 %
Ca 317.933	63,783.9	4.865	0.0400	mg/L	4.865	0.0400	mg/L	0.82 %
Cd 226.502	5,880.8	0.0488	0.00031	mg/L	0.0488	0.00031	mg/L	0.63 %
Co 228.616	21,845.2	0.4793	0.00152	mg/L	0.4793	0.00152	mg/L	0.32 %
Cr 267.716	65,737.9	0.4843	0.00173	mg/L	0.4843	0.00173	mg/L	0.36 %
Cu 324.754	141,155.6	0.4847	0.00224	mg/L	0.4847	0.00224	mg/L	0.46 %
Fe 273.955	56,721.3	2.394	0.0090	mg/L	2.394	0.0090	mg/L	0.38 %
K 766.491R	66,678.6	23.6	0.06	mg/L	23.6	0.06	mg/L	0.26 %
Li 670.781R	37,756.4	0.489	0.0011	mg/L	0.489	0.0011	mg/L	0.22 %
Mg 279.079R	4,214.8	4.88	0.011	mg/L	4.88	0.011	mg/L	0.24 %
Mn 257.610	365,795.1	0.4884	0.00169	mg/L	0.4884	0.00169	mg/L	0.35 %
Mo 202.030	7,100.9	0.4837	0.00244	mg/L	0.4837	0.00244	mg/L	0.51 %
Na 589.592R	202,550.1	24.1	0.05	mg/L	24.1	0.05	mg/L	0.20 %
Ni 231.604	21,185.8	0.4811	0.00188	mg/L	0.4811	0.00188	mg/L	0.39 %
Pb 220.353	4,327.1	0.4942	0.00199	mg/L	0.4942	0.00199	mg/L	0.40 %
Sb 206.833	1,338.6	0.4803	0.00016	mg/L	0.4803	0.00016	mg/L	0.03 %
Se 196.026	1,383.3	0.4762	0.00730	mg/L	0.4762	0.00730	mg/L	1.53 %
Sn 189.933	3,555.8	0.4939	0.00184	mg/L	0.4939	0.00184	mg/L	0.37 %
Sr 421.539R	274,226.7	0.4870	0.00015	mg/L	0.4870	0.00015	mg/L	0.03 %
Ti 337.280	161,441.2	0.2378	0.00071	mg/L	0.2378	0.00071	mg/L	0.30 %
Tl 190.800	1,022.3	0.4836	0.00202	mg/L	0.4836	0.00202	mg/L	0.42 %

V 292.402	120,681.5	0.4845	0.00201	mg/L	0.4845	0.00201	mg/L	0.41 %
Zn 206.191	22,015.9	0.4904	0.00143	mg/L	0.4904	0.00143	mg/L	0.29 %

Mean Data

ID: 4H06003-ms1 **Seq. No.:** 19 **A/S Pos:** 408

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:41:39

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	169,299.5	97.31	0.582	%			%	0.60 %
Y 324.227A	1,724,831.5	98.83	0.725	%			%	0.73 %
Ag 328.068	19,903.9	0.0934	0.00057	mg/L	0.0934	0.00057	mg/L	0.61 %
Al 308.215	60,745.9	95.3	0.10	mg/L	95.3	0.10	mg/L	0.11 %
As 188.979	780.5	0.4817	0.00286	mg/L	0.4817	0.00286	mg/L	0.59 %
Ba 233.527	75,719.6	0.7500	0.00152	mg/L	0.7500	0.00152	mg/L	0.20 %
Be 313.107	233,720.5	0.0486	0.00018	mg/L	0.0486	0.00018	mg/L	0.37 %
B 208.959	18,904.1	2.158	0.0131	mg/L	2.158	0.0131	mg/L	0.61 %
Ca 317.933	126,218.9	9.627	0.0103	mg/L	9.627	0.0103	mg/L	0.11 %
Cd 226.502	6,208.2	0.0469	0.00020	mg/L	0.0469	0.00020	mg/L	0.42 %
Co 228.616	22,469.7	0.4828	0.00240	mg/L	0.4828	0.00240	mg/L	0.50 %
Cr 267.716	81,268.9	0.5996	0.00074	mg/L	0.5996	0.00074	mg/L	0.12 %
Cu 324.754	163,429.3	0.5617	0.00142	mg/L	0.5617	0.00142	mg/L	0.25 %
Fe 273.955	1,380,093.1	58.51	0.100	mg/L	58.51	0.100	mg/L	0.17 %
K 766.491R	79,027.2	28.0	0.01	mg/L	28.0	0.01	mg/L	0.05 %
Li 670.781R	41,919.7	0.543	0.0015	mg/L	0.543	0.0015	mg/L	0.28 %
Mg 279.079R	16,427.3	19.0	0.04	mg/L	19.0	0.04	mg/L	0.21 %
Mn 257.610	1,051,785.3	1.404	0.0028	mg/L	1.404	0.0028	mg/L	0.20 %
Mo 202.030	6,690.3	0.4560	0.00253	mg/L	0.4560	0.00253	mg/L	0.55 %
Na 589.592R	206,647.5	24.6	0.13	mg/L	24.6	0.13	mg/L	0.52 %
Ni 231.604	23,084.1	0.5242	0.00287	mg/L	0.5242	0.00287	mg/L	0.55 %
Pb 220.353	5,378.3	0.6264	0.00323	mg/L	0.6264	0.00323	mg/L	0.52 %
Sb 206.833	656.3	0.2294	0.00409	mg/L	0.2294	0.00409	mg/L	1.78 %
Se 196.026	1,253.9	0.4595	0.00437	mg/L	0.4595	0.00437	mg/L	0.95 %
Sn 189.933	3,280.6	0.4438	0.00281	mg/L	0.4438	0.00281	mg/L	0.63 %
Sr 421.539R	303,057.6	0.5382	0.00335	mg/L	0.5382	0.00335	mg/L	0.62 %
Ti 337.280	2,143,933.7	3.156	0.0040	mg/L	3.156	0.0040	mg/L	0.13 %
Tl 190.800	840.8	0.4434	0.00600	mg/L	0.4434	0.00600	mg/L	1.35 %
V 292.402	145,047.4	0.5822	0.00144	mg/L	0.5822	0.00144	mg/L	0.25 %
Zn 206.191	33,813.4	0.7552	0.00399	mg/L	0.7552	0.00399	mg/L	0.53 %

Mean Data

ID: 4H06003-msd1 **Seq. No.:** 20 **A/S Pos:** 409

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:43:35

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	169,120.4	97.21	0.906	%			%	0.93 %
Y 324.227A	1,734,292.3	99.37	0.441	%			%	0.44 %
Ag 328.068	20,561.8	0.0961	0.00024	mg/L	0.0961	0.00024	mg/L	0.25 %
Al 308.215	57,183.0	89.7	0.02	mg/L	89.7	0.02	mg/L	0.02 %
As 188.979	797.1	0.4906	0.00219	mg/L	0.4906	0.00219	mg/L	0.45 %
Ba 233.527	73,692.2	0.7302	0.00141	mg/L	0.7302	0.00141	mg/L	0.19 %
Be 313.107	239,298.0	0.0498	0.00009	mg/L	0.0498	0.00009	mg/L	0.17 %
B 208.959	19,535.2	2.230	0.0055	mg/L	2.230	0.0055	mg/L	0.24 %
Ca 317.933	118,077.1	9.006	0.0109	mg/L	9.006	0.0109	mg/L	0.12 %
Cd 226.502	6,293.4	0.0479	0.00012	mg/L	0.0479	0.00012	mg/L	0.26 %
Co 228.616	22,934.4	0.4934	0.00140	mg/L	0.4934	0.00140	mg/L	0.28 %
Cr 267.716	82,589.3	0.6094	0.00106	mg/L	0.6094	0.00106	mg/L	0.17 %
Cu 324.754	164,006.6	0.5638	0.00178	mg/L	0.5638	0.00178	mg/L	0.32 %
Fe 273.955	1,286,082.5	54.53	0.076	mg/L	54.53	0.076	mg/L	0.14 %
K 766.491R	80,549.3	28.5	0.03	mg/L	28.5	0.03	mg/L	0.10 %
Li 670.781R	42,898.4	0.556	0.0010	mg/L	0.556	0.0010	mg/L	0.18 %
Mg 279.079R	15,889.0	18.4	0.04	mg/L	18.4	0.04	mg/L	0.21 %

Mn 257.610	943,612.3	1.260	0.0013	mg/L	1.260	0.0013	mg/L	0.10 %
Mo 202.030	6,898.5	0.4701	0.00101	mg/L	0.4701	0.00101	mg/L	0.22 %
Na 589.592R	209,863.6	25.0	0.13	mg/L	25.0	0.13	mg/L	0.53 %
Ni 231.604	23,414.3	0.5317	0.00122	mg/L	0.5317	0.00122	mg/L	0.23 %
Pb 220.353	5,609.2	0.6520	0.00237	mg/L	0.6520	0.00237	mg/L	0.36 %
Sb 206.833	699.3	0.2454	0.00243	mg/L	0.2454	0.00243	mg/L	0.99 %
Se 196.026	1,282.0	0.4674	0.00307	mg/L	0.4674	0.00307	mg/L	0.66 %
Sn 189.933	3,411.9	0.4629	0.00112	mg/L	0.4629	0.00112	mg/L	0.24 %
Sr 421.539R	303,887.3	0.5397	0.00281	mg/L	0.5397	0.00281	mg/L	0.52 %
Ti 337.280	2,114,935.2	3.113	0.0029	mg/L	3.113	0.0029	mg/L	0.09 %
Tl 190.800	878.6	0.4580	0.00146	mg/L	0.4580	0.00146	mg/L	0.32 %
V 292.402	147,301.3	0.5910	0.00063	mg/L	0.5910	0.00063	mg/L	0.11 %
Zn 206.191	31,959.7	0.7139	0.00231	mg/L	0.7139	0.00231	mg/L	0.32 %

Mean Data

ID: b403655-01 **Seq. No.:** 21 **A/S Pos:** 410

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:45:25

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,576.7	99.77	0.467	%			%	0.47 %
Y 324.227A	1,846,530.8	105.8	1.36	%			%	1.29 %
Ag 328.068	-2,020.8	-0.0007	0.00025	mg/L	-0.0007	0.00025	mg/L	34.58 %
Al 308.215	125,483.0	197	0.3	mg/L	197	0.3	mg/L	0.14 %
As 188.979	32.1	0.0570	0.00358	mg/L	0.0570	0.00358	mg/L	6.28 %
Ba 233.527	66,697.7	0.6548	0.00613	mg/L	0.6548	0.00613	mg/L	0.94 %
Be 313.107	37,387.1	0.0040	0.00010	mg/L	0.0040	0.00010	mg/L	2.42 %
B 208.959	336.0	0.0385	0.00411	mg/L	0.0385	0.00411	mg/L	10.66 %
Ca 317.933	157,181.9	11.99	0.020	mg/L	11.99	0.020	mg/L	0.16 %
Cd 226.502	943.9	-0.0013	0.00011	mg/L	-0.0013	0.00011	mg/L	8.49 %
Co 228.616	2,953.7	0.0420	0.00097	mg/L	0.0420	0.00097	mg/L	2.31 %
Cr 267.716	34,017.0	0.2525	0.00206	mg/L	0.2525	0.00206	mg/L	0.81 %
Cu 324.754	22,741.9	0.0807	0.00156	mg/L	0.0807	0.00156	mg/L	1.93 %
Fe 273.955	2,429,404.9	103.0	0.45	mg/L	103.0	0.45	mg/L	0.43 %
K 766.491R	21,982.8	7.78	0.024	mg/L	7.78	0.024	mg/L	0.31 %
Li 670.781R	7,871.9	0.102	0.0010	mg/L	0.102	0.0010	mg/L	0.98 %
Mg 279.079R	22,306.1	25.8	0.05	mg/L	25.8	0.05	mg/L	0.19 %
Mn 257.610	1,066,272.7	1.424	0.0063	mg/L	1.424	0.0063	mg/L	0.45 %
Mo 202.030	78.5	0.0057	0.00066	mg/L	0.0057	0.00066	mg/L	11.73 %
Na 589.592R	6,746.7	0.803	0.0032	mg/L	0.803	0.0032	mg/L	0.40 %
Ni 231.604	5,064.6	0.1150	0.00086	mg/L	0.1150	0.00086	mg/L	0.75 %
Pb 220.353	318.0	0.0650	0.00078	mg/L	0.0650	0.00078	mg/L	1.20 %
Sb 206.833	3.9	-0.0112	0.00292	mg/L	-0.0112	0.00292	mg/L	26.12 %
Se 196.026	-145.3	0.0043	0.00326	mg/L	0.0043	0.00326	mg/L	75.81 %
Sn 189.933	213.5	0.0039	0.00100	mg/L	0.0039	0.00100	mg/L	25.27 %
Sr 421.539R	101,610.1	0.1804	0.00024	mg/L	0.1804	0.00024	mg/L	0.13 %
Ti 337.280	5,002,991.7	7.365	0.0246	mg/L	7.365	0.0246	mg/L	0.33 %
Tl 190.800	-227.6	-0.0177	0.00716	mg/L	-0.0177	0.00716	mg/L	40.47 %
V 292.402	62,007.7	0.2462	0.00182	mg/L	0.2462	0.00182	mg/L	0.74 %
Zn 206.191	10,642.8	0.2421	0.00254	mg/L	0.2421	0.00254	mg/L	1.05 %

Mean Data

ID: CVS **Seq. No.:** 22 **A/S Pos:** 3

2014/08/07 10:48:46 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:47:28

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,328.5	100.8	0.83	%				0.83 %
Y 324.227A	1,739,462.3	99.67	0.576	%				0.58 %
Ag 328.068	114,194.4	0.4902	0.00318	mg/L	0.4902			0.65 %
2014/08/07 10:48:45 QC value within limits for Ag 328.068 Recovery = 98.04%								
Al 308.215	3,146.2	4.92	0.044	mg/L	4.92			0.89 %
2014/08/07 10:48:45 QC value within limits for Al 308.215 Recovery = 98.49%								

As 188.979	814.1	0.4828	0.00360	mg/L	0.4828	0.75 %
2014/08/07 10:48:45 QC value within limits for As 188.979 Recovery = 96.56%						
Ba 233.527	48,644.8	0.4858	0.00298	mg/L	0.4858	0.61 %
2014/08/07 10:48:45 QC value within limits for Ba 233.527 Recovery = 97.16%						
Be 313.107	222,117.5	0.0477	0.00006	mg/L	0.0477	0.12 %
2014/08/07 10:48:45 QC value within limits for Be 313.107 Recovery = 95.32%						
B 208.959	20,754.7	2.370	0.0238	mg/L	2.370	1.00 %
2014/08/07 10:48:45 QC value within limits for B 208.959 Recovery = 94.81%						
Ca 317.933	62,947.7	4.801	0.0933	mg/L	4.801	1.94 %
2014/08/07 10:48:45 QC value within limits for Ca 317.933 Recovery = 96.02%						
Cd 226.502	5,800.8	0.0482	0.00036	mg/L	0.0482	0.75 %
2014/08/07 10:48:45 QC value within limits for Cd 226.502 Recovery = 96.34%						
Co 228.616	21,892.5	0.4803	0.00281	mg/L	0.4803	0.59 %
2014/08/07 10:48:45 QC value within limits for Co 228.616 Recovery = 96.06%						
Cr 267.716	65,645.4	0.4836	0.00265	mg/L	0.4836	0.55 %
2014/08/07 10:48:45 QC value within limits for Cr 267.716 Recovery = 96.72%						
Cu 324.754	140,592.5	0.4827	0.00309	mg/L	0.4827	0.64 %
2014/08/07 10:48:45 QC value within limits for Cu 324.754 Recovery = 96.55%						
Fe 273.955	58,076.7	2.451	0.0058	mg/L	2.451	0.24 %
2014/08/07 10:48:45 QC value within limits for Fe 273.955 Recovery = 98.04%						
K 766.491R	67,484.6	23.9	0.09	mg/L	23.9	0.37 %
2014/08/07 10:48:45 QC value within limits for K 766.491R Recovery = 95.64%						
Li 670.781R	37,549.2	0.487	0.0010	mg/L	0.487	0.20 %
2014/08/07 10:48:45 QC value within limits for Li 670.781R Recovery = 97.33%						
Mg 279.079R	4,199.4	4.87	0.079	mg/L	4.87	1.62 %
2014/08/07 10:48:45 QC value within limits for Mg 279.079R Recovery = 97.32%						
Mn 257.610	361,380.8	0.4825	0.00066	mg/L	0.4825	0.14 %
2014/08/07 10:48:45 QC value within limits for Mn 257.610 Recovery = 96.51%						
Mo 202.030	7,159.7	0.4877	0.00362	mg/L	0.4877	0.74 %
2014/08/07 10:48:45 QC value within limits for Mo 202.030 Recovery = 97.54%						
Na 589.592R	203,666.6	24.2	0.03	mg/L	24.2	0.12 %
2014/08/07 10:48:45 QC value within limits for Na 589.592R Recovery = 96.96%						
Ni 231.604	21,155.1	0.4804	0.00396	mg/L	0.4804	0.82 %
2014/08/07 10:48:45 QC value within limits for Ni 231.604 Recovery = 96.07%						
Pb 220.353	4,301.3	0.4913	0.00429	mg/L	0.4913	0.87 %
2014/08/07 10:48:45 QC value within limits for Pb 220.353 Recovery = 98.26%						
Sb 206.833	1,368.5	0.4908	0.00107	mg/L	0.4908	0.22 %
2014/08/07 10:48:45 QC value within limits for Sb 206.833 Recovery = 98.16%						
Se 196.026	1,393.4	0.4797	0.00523	mg/L	0.4797	1.09 %
2014/08/07 10:48:45 QC value within limits for Se 196.026 Recovery = 95.93%						
Sn 189.933	3,501.5	0.4863	0.00322	mg/L	0.4863	0.66 %
2014/08/07 10:48:45 QC value within limits for Sn 189.933 Recovery = 97.27%						
Sr 421.539R	273,513.4	0.4857	0.00099	mg/L	0.4857	0.20 %
2014/08/07 10:48:45 QC value within limits for Sr 421.539R Recovery = 97.14%						
Ti 337.280	166,612.1	0.2454	0.00153	mg/L	0.2454	0.62 %
2014/08/07 10:48:45 QC value within limits for Ti 337.280 Recovery = 98.15%						
Tl 190.800	1,041.7	0.4928	0.00089	mg/L	0.4928	0.18 %
2014/08/07 10:48:45 QC value within limits for Tl 190.800 Recovery = 98.57%						
V 292.402	120,805.4	0.4850	0.00307	mg/L	0.4850	0.63 %
2014/08/07 10:48:45 QC value within limits for V 292.402 Recovery = 97.01%						
Zn 206.191	21,826.0	0.4862	0.00354	mg/L	0.4862	0.73 %
2014/08/07 10:48:45 QC value within limits for Zn 206.191 Recovery = 97.24%						

Mean Data

ID: BLK **Seq. No.:** 23 **A/S Pos:** 1

2014/08/07 10:51:41 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:50:05

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	178,281.9	102.5	0.20	%				0.20 %
Y 324.227A	1,767,808.7	101.3	0.03	%				0.03 %
Ag 328.068	245.2	0.0010	0.00027	mg/L	0.0010			25.91 %

2014/08/07 10:51:40 QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215	6.2	0.010	0.0049	mg/L	0.010	50.99 %

2014/08/07 10:51:40 QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979	1.1	0.0007	0.00408	mg/L	0.0007	620.22 %

2014/08/07 10:51:40 QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527	-0.9	0.0000	0.00014	mg/L	0.0000	1,405.55 %

2014/08/07 10:51:40 QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107	226.5	0.0000	0.00004	mg/L	0.0000	76.74 %

2014/08/07 10:51:40 QC value within limits for Be 313.107 Recovery = Not calculated

B 208.959	157.2	0.0180	0.00085	mg/L	0.0180	4.74 %

2014/08/07 10:51:40 QC value within limits for B 208.959 Recovery = Not calculated

Ca 317.933	43.5	0.0033	0.00545	mg/L	0.0033	164.50 %

2014/08/07 10:51:40 QC value within limits for Ca 317.933 Recovery = Not calculated

Cd 226.502	-15.8	-0.0001	0.00007	mg/L	-0.0001	49.53 %

2014/08/07 10:51:40 QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616	-14.3	-0.0003	0.00002	mg/L	-0.0003	7.91 %

2014/08/07 10:51:40 QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716	-2.0	0.0000	0.00007	mg/L	0.0000	473.88 %

2014/08/07 10:51:40 QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.754	12.4	0.0000	0.00009	mg/L	0.0000	219.40 %

2014/08/07 10:51:40 QC value within limits for Cu 324.754 Recovery = Not calculated

Fe 273.955	292.9	0.0124	0.00053	mg/L	0.0124	4.23 %

2014/08/07 10:51:40 QC value within limits for Fe 273.955 Recovery = Not calculated

K 766.491R	55.1	0.020	0.0198	mg/L	0.020	101.20 %

2014/08/07 10:51:40 QC value within limits for K 766.491R Recovery = Not calculated

Li 670.781R	215.0	0.003	0.0012	mg/L	0.003	42.56 %

2014/08/07 10:51:40 QC value within limits for Li 670.781R Recovery = Not calculated

Mg 279.079R	10.9	0.013	0.0029	mg/L	0.013	22.89 %

2014/08/07 10:51:40 QC value within limits for Mg 279.079R Recovery = Not calculated

Mn 257.610	179.2	0.0002	0.00004	mg/L	0.0002	18.58 %

2014/08/07 10:51:40 QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.030	41.9	0.0029	0.00022	mg/L	0.0029	7.58 %

2014/08/07 10:51:40 QC value within limits for Mo 202.030 Recovery = Not calculated

Na 589.592R	137.1	0.016	0.0247	mg/L	0.016	151.52 %

2014/08/07 10:51:40 QC value within limits for Na 589.592R Recovery = Not calculated

Ni 231.604	5.8	0.0001	0.00029	mg/L	0.0001	219.68 %

2014/08/07 10:51:40 QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	-5.1	-0.0006	0.00162	mg/L	-0.0006	284.26 %

2014/08/07 10:51:40 QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	8.3	0.0030	0.00293	mg/L	0.0030	98.83 %

2014/08/07 10:51:40 QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	15.2	0.0052	0.00063	mg/L	0.0052	11.99 %

2014/08/07 10:51:40 QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.933	-1.2	-0.0002	0.00033	mg/L	-0.0002	198.87 %

2014/08/07 10:51:40 QC value within limits for Sn 189.933 Recovery = Not calculated

Sr 421.539R	-21.5	0.0000	0.00005	mg/L	0.0000	130.23 %

2014/08/07 10:51:40 QC value within limits for Sr 421.539R Recovery = Not calculated

Ti 337.280	470.3	0.0007	0.00016	mg/L	0.0007	23.33 %

2014/08/07 10:51:40 QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	4.1	0.0020	0.00090	mg/L	0.0020	45.61 %

2014/08/07 10:51:40 QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	-30.2	-0.0001	0.00020	mg/L	-0.0001	212.51 %

2014/08/07 10:51:40 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-27.6	-0.0006	0.00014	mg/L	-0.0006	22.13 %

2014/08/07 10:51:40 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: b403655-02 **Seq. No.:** 24 **A/S Pos:** 411

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:52:29

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD

Y 371.029R	169,287.2	97.30	0.406	%			%	0.42	%
Y 324.227A	1,693,023.8	97.01	0.744	%			%	0.77	%
Ag 328.068	-885.6	0.0002	0.00018	mg/L	0.0002	0.00018	mg/L	100.70	%
Al 308.215	46,348.4	72.7	0.07	mg/L	72.7	0.07	mg/L	0.10	%
As 188.979	25.6	0.0273	0.00582	mg/L	0.0273	0.00582	mg/L	21.31	%
Ba 233.527	34,948.0	0.3431	0.00140	mg/L	0.3431	0.00140	mg/L	0.41	%
Be 313.107	17,567.7	0.0031	0.00005	mg/L	0.0031	0.00005	mg/L	1.51	%
B 208.959	268.2	0.0302	0.00044	mg/L	0.0302	0.00044	mg/L	1.47	%
Ca 317.933	2,243,646.2	171.1	1.10	mg/L	171.1	1.10	mg/L	0.65	%
Cd 226.502	801.7	0.0022	0.00007	mg/L	0.0022	0.00007	mg/L	3.20	%
Co 228.616	1,354.7	0.0218	0.00036	mg/L	0.0218	0.00036	mg/L	1.65	%
Cr 267.716	13,652.8	0.1015	0.00031	mg/L	0.1015	0.00031	mg/L	0.30	%
Cu 324.754	23,127.7	0.0815	0.00052	mg/L	0.0815	0.00052	mg/L	0.63	%
Fe 273.955	1,264,986.1	53.64	0.116	mg/L	53.64	0.116	mg/L	0.22	%
K 766.491R	16,563.0	5.81	0.006	mg/L	5.81	0.006	mg/L	0.10	%
Li 670.781R	12,833.9	0.166	0.0003	mg/L	0.166	0.0003	mg/L	0.21	%
Mg 279.079R	60,118.6	69.7	0.07	mg/L	69.7	0.07	mg/L	0.10	%
Mn 257.610	594,681.4	0.7941	0.00184	mg/L	0.7941	0.00184	mg/L	0.23	%
Mo 202.030	197.5	0.0109	0.00068	mg/L	0.0109	0.00068	mg/L	6.18	%
Na 589.592R	3,353.0	0.399	0.0053	mg/L	0.399	0.0053	mg/L	1.34	%
Ni 231.604	1,996.7	0.0453	0.00037	mg/L	0.0453	0.00037	mg/L	0.82	%
Pb 220.353	1,458.2	0.1756	0.00082	mg/L	0.1756	0.00082	mg/L	0.47	%
Sb 206.833	39.2	0.0042	0.00236	mg/L	0.0042	0.00236	mg/L	56.10	%
Se 196.026	-70.8	0.0011	0.00395	mg/L	0.0011	0.00395	mg/L	371.36	%
Sn 189.933	320.0	0.0214	0.00020	mg/L	0.0214	0.00020	mg/L	0.95	%
Sr 421.539R	249,011.3	0.4422	0.00009	mg/L	0.4422	0.00009	mg/L	0.02	%
Ti 337.280	1,067,497.8	1.571	0.0033	mg/L	1.571	0.0033	mg/L	0.21	%
Tl 190.800	-140.7	-0.0148	0.00629	mg/L	-0.0148	0.00629	mg/L	42.45	%
V 292.402	28,517.3	0.1157	0.00059	mg/L	0.1157	0.00059	mg/L	0.51	%
Zn 206.191	18,526.4	0.4137	0.00188	mg/L	0.4137	0.00188	mg/L	0.46	%

Mean Data

ID: b403655-03 **Seq. No.:** 25 **A/S Pos:** 412

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:54:19

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	181,595.0	104.4	0.89	%			%	0.85	%
Y 324.227A	1,891,861.0	108.4	0.42	%			%	0.39	%
Ag 328.068	-1,653.5	0.0004	0.00046	mg/L	0.0004	0.00046	mg/L	106.15	%
Al 308.215	165,329.9	259	0.4	mg/L	259	0.4	mg/L	0.14	%
As 188.979	40.4	0.0573	0.00069	mg/L	0.0573	0.00069	mg/L	1.21	%
Ba 233.527	81,501.6	0.8033	0.00480	mg/L	0.8033	0.00480	mg/L	0.60	%
Be 313.107	44,797.6	0.0059	0.00002	mg/L	0.0059	0.00002	mg/L	0.35	%
B 208.959	254.6	0.0292	0.00147	mg/L	0.0292	0.00147	mg/L	5.02	%
Ca 317.933	207,884.1	15.86	0.015	mg/L	15.86	0.015	mg/L	0.10	%
Cd 226.502	935.8	-0.0011	0.00009	mg/L	-0.0011	0.00009	mg/L	8.11	%
Co 228.616	2,941.1	0.0425	0.00019	mg/L	0.0425	0.00019	mg/L	0.44	%
Cr 267.716	41,431.7	0.3071	0.00152	mg/L	0.3071	0.00152	mg/L	0.49	%
Cu 324.754	37,206.9	0.1304	0.00083	mg/L	0.1304	0.00083	mg/L	0.64	%
Fe 273.955	2,316,337.1	98.23	0.057	mg/L	98.23	0.057	mg/L	0.06	%
K 766.491R	28,559.0	10.1	0.03	mg/L	10.1	0.03	mg/L	0.26	%
Li 670.781R	8,972.4	0.116	0.0013	mg/L	0.116	0.0013	mg/L	1.13	%
Mg 279.079R	27,384.4	31.7	0.07	mg/L	31.7	0.07	mg/L	0.21	%
Mn 257.610	877,918.4	1.172	0.0005	mg/L	1.172	0.0005	mg/L	0.04	%
Mo 202.030	61.0	0.0043	0.00041	mg/L	0.0043	0.00041	mg/L	9.60	%
Na 589.592R	4,669.6	0.556	0.0134	mg/L	0.556	0.0134	mg/L	2.41	%
Ni 231.604	6,434.0	0.1461	0.00057	mg/L	0.1461	0.00057	mg/L	0.39	%
Pb 220.353	366.9	0.0820	0.00137	mg/L	0.0820	0.00137	mg/L	1.68	%
Sb 206.833	5.3	-0.0110	0.00268	mg/L	-0.0110	0.00268	mg/L	24.32	%
Se 196.026	-165.8	0.0016	0.00193	mg/L	0.0016	0.00193	mg/L	120.63	%
Sn 189.933	278.1	0.0047	0.00236	mg/L	0.0047	0.00236	mg/L	49.61	%

Sr 421.539R	106,587.7	0.1893	0.00019	mg/L	0.1893	0.00019	mg/L	0.10	%
Ti 337.280	4,707,012.0	6.929	0.0033	mg/L	6.929	0.0033	mg/L	0.05	%
Tl 190.800	-262.7	-0.0120	0.00472	mg/L	-0.0120	0.00472	mg/L	39.46	%
V 292.402	58,101.2	0.2311	0.00131	mg/L	0.2311	0.00131	mg/L	0.57	%
Zn 206.191	12,133.3	0.2770	0.00068	mg/L	0.2770	0.00068	mg/L	0.25	%

Mean Data

ID: b403655-04 **Seq. No.:** 26 **A/S Pos:** 413

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:56:55

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	173,482.0	99.71	0.179	%			%	0.18	%
Y 324.227A	1,762,319.8	101.0	0.39	%			%	0.39	%
Ag 328.068	-49.1	0.0005	0.00040	mg/L	0.0005	0.00040	mg/L	78.91	%
Al 308.215	5,369.5	8.42	0.022	mg/L	8.42	0.022	mg/L	0.26	%
As 188.979	5.6	0.0065	0.00364	mg/L	0.0065	0.00364	mg/L	55.76	%
Ba 233.527	4,606.5	0.0451	0.00161	mg/L	0.0451	0.00161	mg/L	3.56	%
Be 313.107	2,416.5	0.0002	0.00004	mg/L	0.0002	0.00004	mg/L	14.78	%
B 208.959	124.8	0.0143	0.00101	mg/L	0.0143	0.00101	mg/L	7.02	%
Ca 317.933	17,571.1	1.340	0.0020	mg/L	1.340	0.0020	mg/L	0.15	%
Cd 226.502	86.5	0.0000	0.00008	mg/L	0.0000	0.00008	mg/L	1,036.57	%
Co 228.616	147.2	0.0016	0.00025	mg/L	0.0016	0.00025	mg/L	15.21	%
Cr 267.716	3,266.5	0.0242	0.00094	mg/L	0.0242	0.00094	mg/L	3.90	%
Cu 324.754	2,264.0	0.0079	0.00035	mg/L	0.0079	0.00035	mg/L	4.43	%
Fe 273.955	198,937.1	8.436	0.0870	mg/L	8.436	0.0870	mg/L	1.03	%
K 766.491R	2,170.2	0.768	0.0363	mg/L	0.768	0.0363	mg/L	4.72	%
Li 670.781R	413.7	0.005	0.0014	mg/L	0.005	0.0014	mg/L	25.46	%
Mg 279.079R	814.9	0.944	0.0037	mg/L	0.944	0.0037	mg/L	0.39	%
Mn 257.610	78,444.3	0.1047	0.00068	mg/L	0.1047	0.00068	mg/L	0.65	%
Mo 202.030	28.6	0.0020	0.00070	mg/L	0.0020	0.00070	mg/L	35.80	%
Na 589.592R	987.6	0.118	0.0089	mg/L	0.118	0.0089	mg/L	7.57	%
Ni 231.604	205.2	0.0047	0.00009	mg/L	0.0047	0.00009	mg/L	1.99	%
Pb 220.353	197.1	0.0234	0.00040	mg/L	0.0234	0.00040	mg/L	1.71	%
Sb 206.833	9.7	0.0025	0.00195	mg/L	0.0025	0.00195	mg/L	77.50	%
Se 196.026	0.9	0.0040	0.00301	mg/L	0.0040	0.00301	mg/L	74.68	%
Sn 189.933	81.6	0.0102	0.00157	mg/L	0.0102	0.00157	mg/L	15.40	%
Sr 421.539R	8,810.2	0.0156	0.00003	mg/L	0.0156	0.00003	mg/L	0.20	%
Ti 337.280	339,681.1	0.5000	0.00354	mg/L	0.5000	0.00354	mg/L	0.71	%
Tl 190.800	-15.9	-0.0026	0.00416	mg/L	-0.0026	0.00416	mg/L	157.20	%
V 292.402	6,862.7	0.0274	0.00046	mg/L	0.0274	0.00046	mg/L	1.69	%
Zn 206.191	1,017.5	0.0229	0.00080	mg/L	0.0229	0.00080	mg/L	3.48	%

Mean Data

ID: b403655-05 **Seq. No.:** 27 **A/S Pos:** 414

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 10:59:49

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	175,293.2	100.8	0.44	%			%	0.43	%
Y 324.227A	1,767,806.3	101.3	0.18	%			%	0.18	%
Ag 328.068	31.3	0.0006	0.00017	mg/L	0.0006	0.00017	mg/L	31.07	%
Al 308.215	3,146.1	4.94	0.021	mg/L	4.94	0.021	mg/L	0.42	%
As 188.979	3.8	0.0043	0.00303	mg/L	0.0043	0.00303	mg/L	70.98	%
Ba 233.527	2,948.8	0.0289	0.00104	mg/L	0.0289	0.00104	mg/L	3.60	%
Be 313.107	1,476.7	0.0001	0.00002	mg/L	0.0001	0.00002	mg/L	13.35	%
B 208.959	98.2	0.0113	0.00052	mg/L	0.0113	0.00052	mg/L	4.59	%
Ca 317.933	10,595.8	0.8081	0.00501	mg/L	0.8081	0.00501	mg/L	0.62	%
Cd 226.502	40.5	-0.0001	0.00012	mg/L	-0.0001	0.00012	mg/L	104.92	%
Co 228.616	89.9	0.0010	0.00023	mg/L	0.0010	0.00023	mg/L	24.14	%
Cr 267.716	1,944.8	0.0144	0.00054	mg/L	0.0144	0.00054	mg/L	3.75	%
Cu 324.754	1,091.3	0.0038	0.00036	mg/L	0.0038	0.00036	mg/L	9.41	%
Fe 273.955	125,806.9	5.335	0.0729	mg/L	5.335	0.0729	mg/L	1.37	%

K 766.491R	1,303.2	0.461	0.0194	mg/L	0.461	0.0194	mg/L	4.20 %
Li 670.781R	275.8	0.004	0.0003	mg/L	0.004	0.0003	mg/L	9.57 %
Mg 279.079R	583.2	0.676	0.0066	mg/L	0.676	0.0066	mg/L	0.98 %
Mn 257.610	27,087.8	0.0362	0.00052	mg/L	0.0362	0.00052	mg/L	1.43 %
Mo 202.030	5.5	0.0004	0.00014	mg/L	0.0004	0.00014	mg/L	37.74 %
Na 589.592R	612.7	0.073	0.0105	mg/L	0.073	0.0105	mg/L	14.36 %
Ni 231.604	137.4	0.0031	0.00012	mg/L	0.0031	0.00012	mg/L	3.94 %
Pb 220.353	85.9	0.0103	0.00186	mg/L	0.0103	0.00186	mg/L	17.97 %
Sb 206.833	2.1	0.0002	0.00196	mg/L	0.0002	0.00196	mg/L	920.06 %
Se 196.026	2.8	0.0033	0.00120	mg/L	0.0033	0.00120	mg/L	36.30 %
Sn 189.933	81.1	0.0106	0.00048	mg/L	0.0106	0.00048	mg/L	4.55 %
Sr 421.539R	5,289.5	0.0094	0.00016	mg/L	0.0094	0.00016	mg/L	1.67 %
Ti 337.280	209,205.6	0.3080	0.00244	mg/L	0.3080	0.00244	mg/L	0.79 %
Tl 190.800	-11.4	-0.0023	0.00156	mg/L	-0.0023	0.00156	mg/L	66.62 %
V 292.402	3,654.2	0.0146	0.00038	mg/L	0.0146	0.00038	mg/L	2.60 %
Zn 206.191	531.7	0.0120	0.00039	mg/L	0.0120	0.00039	mg/L	3.24 %

Mean Data

ID: b403655-06 **Seq. No.:** 28 **A/S Pos:** 415

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:02:07

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,114.7	100.7	0.18	%			%	0.18 %
Y 324.227A	1,778,969.5	101.9	0.82	%			%	0.80 %
Ag 328.068	-666.0	-0.0001	0.00022	mg/L	-0.0001	0.00022	mg/L	275.07 %
Al 308.215	23,936.2	37.6	0.23	mg/L	37.6	0.23	mg/L	0.62 %
As 188.979	12.3	0.0192	0.00336	mg/L	0.0192	0.00336	mg/L	17.44 %
Ba 233.527	21,816.5	0.2139	0.00103	mg/L	0.2139	0.00103	mg/L	0.48 %
Be 313.107	8,367.5	0.0010	0.00002	mg/L	0.0010	0.00002	mg/L	2.14 %
B 208.959	140.6	0.0160	0.00057	mg/L	0.0160	0.00057	mg/L	3.57 %
Ca 317.933	52,891.3	4.034	0.0313	mg/L	4.034	0.0313	mg/L	0.77 %
Cd 226.502	353.4	0.0001	0.00006	mg/L	0.0001	0.00006	mg/L	109.61 %
Co 228.616	710.5	0.0099	0.00019	mg/L	0.0099	0.00019	mg/L	1.90 %
Cr 267.716	9,886.1	0.0736	0.00078	mg/L	0.0736	0.00078	mg/L	1.06 %
Cu 324.754	16,901.1	0.0581	0.00061	mg/L	0.0581	0.00061	mg/L	1.04 %
Fe 273.955	845,503.7	35.85	0.087	mg/L	35.85	0.087	mg/L	0.24 %
K 766.491R	8,256.7	2.92	0.023	mg/L	2.92	0.023	mg/L	0.77 %
Li 670.781R	1,885.1	0.024	0.0008	mg/L	0.024	0.0008	mg/L	3.14 %
Mg 279.079R	5,599.0	6.49	0.075	mg/L	6.49	0.075	mg/L	1.16 %
Mn 257.610	257,436.9	0.3438	0.00254	mg/L	0.3438	0.00254	mg/L	0.74 %
Mo 202.030	50.7	0.0035	0.00006	mg/L	0.0035	0.00006	mg/L	1.79 %
Na 589.592R	4,040.3	0.481	0.0128	mg/L	0.481	0.0128	mg/L	2.66 %
Ni 231.604	1,291.9	0.0293	0.00045	mg/L	0.0293	0.00045	mg/L	1.52 %
Pb 220.353	923.1	0.1095	0.00177	mg/L	0.1095	0.00177	mg/L	1.62 %
Sb 206.833	11.4	-0.0001	0.00030	mg/L	-0.0001	0.00030	mg/L	496.30 %
Se 196.026	-37.9	0.0031	0.00071	mg/L	0.0031	0.00071	mg/L	22.85 %
Sn 189.933	103.5	0.0093	0.00077	mg/L	0.0093	0.00077	mg/L	8.25 %
Sr 421.539R	33,479.2	0.0595	0.00008	mg/L	0.0595	0.00008	mg/L	0.14 %
Ti 337.280	1,044,239.7	1.537	0.0031	mg/L	1.537	0.0031	mg/L	0.20 %
Tl 190.800	-60.0	-0.0052	0.00471	mg/L	-0.0052	0.00471	mg/L	90.34 %
V 292.402	21,908.8	0.0881	0.00029	mg/L	0.0881	0.00029	mg/L	0.33 %
Zn 206.191	9,111.8	0.2036	0.00239	mg/L	0.2036	0.00239	mg/L	1.18 %

Mean Data

ID: b403655-07 **Seq. No.:** 29 **A/S Pos:** 416

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:04:07

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	174,352.0	100.2	1.14	%			%	1.13 %
Y 324.227A	1,783,867.6	102.2	0.90	%			%	0.88 %
Ag 328.068	-861.7	-0.0001	0.00019	mg/L	-0.0001	0.00019	mg/L	130.66 %

Al 308.215	34,358.4	53.9	0.60	mg/L	53.9	0.60	mg/L	1.11 %
As 188.979	13.1	0.0232	0.00298	mg/L	0.0232	0.00298	mg/L	12.88 %
Ba 233.527	27,525.7	0.2700	0.00189	mg/L	0.2700	0.00189	mg/L	0.70 %
Be 313.107	12,201.2	0.0014	0.00001	mg/L	0.0014	0.00001	mg/L	0.73 %
B 208.959	152.5	0.0174	0.00126	mg/L	0.0174	0.00126	mg/L	7.25 %
Ca 317.933	67,477.5	5.146	0.0579	mg/L	5.146	0.0579	mg/L	1.13 %
Cd 226.502	454.6	0.0001	0.00010	mg/L	0.0001	0.00010	mg/L	126.72 %
Co 228.616	1,090.8	0.0162	0.00039	mg/L	0.0162	0.00039	mg/L	2.43 %
Cr 267.716	13,488.2	0.1002	0.00077	mg/L	0.1002	0.00077	mg/L	0.77 %
Cu 324.754	22,976.7	0.0792	0.00101	mg/L	0.0792	0.00101	mg/L	1.28 %
Fe 273.955	1,063,164.2	45.08	0.040	mg/L	45.08	0.040	mg/L	0.09 %
K 766.491R	11,096.4	3.93	0.027	mg/L	3.93	0.027	mg/L	0.70 %
Li 670.781R	2,651.3	0.034	0.0006	mg/L	0.034	0.0006	mg/L	1.70 %
Mg 279.079R	8,228.5	9.53	0.080	mg/L	9.53	0.080	mg/L	0.84 %
Mn 257.610	430,383.3	0.5747	0.00054	mg/L	0.5747	0.00054	mg/L	0.09 %
Mo 202.030	50.6	0.0036	0.00042	mg/L	0.0036	0.00042	mg/L	11.65 %
Na 589.592R	4,719.7	0.562	0.0074	mg/L	0.562	0.0074	mg/L	1.32 %
Ni 231.604	1,866.0	0.0424	0.00028	mg/L	0.0424	0.00028	mg/L	0.65 %
Pb 220.353	1,232.2	0.1470	0.00067	mg/L	0.1470	0.00067	mg/L	0.45 %
Sb 206.833	3.6	-0.0040	0.00285	mg/L	-0.0040	0.00285	mg/L	71.84 %
Se 196.026	-53.7	0.0023	0.00512	mg/L	0.0023	0.00512	mg/L	221.57 %
Sn 189.933	124.0	0.0100	0.00030	mg/L	0.0100	0.00030	mg/L	2.98 %
Sr 421.539R	40,649.6	0.0722	0.00094	mg/L	0.0722	0.00094	mg/L	1.30 %
Ti 337.280	1,500,658.9	2.209	0.0017	mg/L	2.209	0.0017	mg/L	0.08 %
Tl 190.800	-79.2	-0.0069	0.00329	mg/L	-0.0069	0.00329	mg/L	47.52 %
V 292.402	28,987.4	0.1162	0.00106	mg/L	0.1162	0.00106	mg/L	0.92 %
Zn 206.191	10,891.2	0.2436	0.00271	mg/L	0.2436	0.00271	mg/L	1.11 %

Mean Data

ID: b403655-08 **Seq. No.:** 30 **A/S Pos:** 417

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:06:08

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,331.8	99.63	0.167	%			%	0.17 %
Y 324.227A	1,779,026.2	101.9	0.04	%			%	0.04 %
Ag 328.068	-558.5	0.0004	0.00012	mg/L	0.0004	0.00012	mg/L	31.93 %
Al 308.215	26,806.2	42.1	0.20	mg/L	42.1	0.20	mg/L	0.48 %
As 188.979	10.8	0.0185	0.00294	mg/L	0.0185	0.00294	mg/L	15.87 %
Ba 233.527	22,345.1	0.2193	0.00030	mg/L	0.2193	0.00030	mg/L	0.14 %
Be 313.107	9,270.0	0.0010	0.00004	mg/L	0.0010	0.00004	mg/L	3.64 %
B 208.959	127.5	0.0146	0.00028	mg/L	0.0146	0.00028	mg/L	1.94 %
Ca 317.933	57,955.9	4.420	0.0216	mg/L	4.420	0.0216	mg/L	0.49 %
Cd 226.502	360.2	0.0001	0.00012	mg/L	0.0001	0.00012	mg/L	128.16 %
Co 228.616	841.7	0.0124	0.00026	mg/L	0.0124	0.00026	mg/L	2.09 %
Cr 267.716	10,573.2	0.0786	0.00084	mg/L	0.0786	0.00084	mg/L	1.07 %
Cu 324.754	13,715.9	0.0473	0.00044	mg/L	0.0473	0.00044	mg/L	0.93 %
Fe 273.955	832,978.8	35.32	0.038	mg/L	35.32	0.038	mg/L	0.11 %
K 766.491R	8,286.8	2.93	0.027	mg/L	2.93	0.027	mg/L	0.93 %
Li 670.781R	2,048.4	0.027	0.0018	mg/L	0.027	0.0018	mg/L	6.62 %
Mg 279.079R	6,171.5	7.15	0.077	mg/L	7.15	0.077	mg/L	1.08 %
Mn 257.610	351,745.4	0.4697	0.00030	mg/L	0.4697	0.00030	mg/L	0.06 %
Mo 202.030	42.0	0.0030	0.00060	mg/L	0.0030	0.00060	mg/L	20.20 %
Na 589.592R	3,853.9	0.459	0.0188	mg/L	0.459	0.0188	mg/L	4.11 %
Ni 231.604	1,450.7	0.0329	0.00020	mg/L	0.0329	0.00020	mg/L	0.60 %
Pb 220.353	1,154.1	0.1366	0.00135	mg/L	0.1366	0.00135	mg/L	0.99 %
Sb 206.833	8.5	-0.0011	0.00110	mg/L	-0.0011	0.00110	mg/L	105.10 %
Se 196.026	-36.1	0.0038	0.00136	mg/L	0.0038	0.00136	mg/L	35.29 %
Sn 189.933	111.9	0.0099	0.00046	mg/L	0.0099	0.00046	mg/L	4.63 %
Sr 421.539R	35,485.8	0.0630	0.00008	mg/L	0.0630	0.00008	mg/L	0.12 %
Ti 337.280	1,180,192.4	1.737	0.0044	mg/L	1.737	0.0044	mg/L	0.26 %
Tl 190.800	-64.4	-0.0067	0.00139	mg/L	-0.0067	0.00139	mg/L	20.81 %

V 292.402	22,882.8	0.0917	0.00034	mg/L	0.0917	0.00034	mg/L	0.38	%
Zn 206.191	7,317.0	0.1638	0.00032	mg/L	0.1638	0.00032	mg/L	0.20	%

Mean Data

ID: b403655-09 **Seq. No.:** 31 **A/S Pos:** 418

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:08:45

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,578.1	100.3	0.95	%			%	0.95	%
Y 324.227A	1,768,967.6	101.4	0.57	%			%	0.56	%
Ag 328.068	-8.0	0.0006	0.00053	mg/L	0.0006	0.00053	mg/L	83.66	%
Al 308.215	4,501.1	7.06	0.071	mg/L	7.06	0.071	mg/L	1.00	%
As 188.979	4.2	0.0055	0.00471	mg/L	0.0055	0.00471	mg/L	86.35	%
Ba 233.527	4,604.0	0.0451	0.00120	mg/L	0.0451	0.00120	mg/L	2.67	%
Be 313.107	2,240.3	0.0002	0.00003	mg/L	0.0002	0.00003	mg/L	12.81	%
B 208.959	74.2	0.0085	0.00020	mg/L	0.0085	0.00020	mg/L	2.30	%
Ca 317.933	12,737.4	0.9715	0.01044	mg/L	0.9715	0.01044	mg/L	1.08	%
Cd 226.502	62.8	-0.0001	0.00007	mg/L	-0.0001	0.00007	mg/L	52.91	%
Co 228.616	128.8	0.0014	0.00005	mg/L	0.0014	0.00005	mg/L	3.53	%
Cr 267.716	2,932.4	0.0218	0.00082	mg/L	0.0218	0.00082	mg/L	3.75	%
Cu 324.754	1,527.7	0.0053	0.00030	mg/L	0.0053	0.00030	mg/L	5.69	%
Fe 273.955	187,219.6	7.939	0.0346	mg/L	7.939	0.0346	mg/L	0.44	%
K 766.491R	1,896.2	0.671	0.0236	mg/L	0.671	0.0236	mg/L	3.52	%
Li 670.781R	385.9	0.005	0.0008	mg/L	0.005	0.0008	mg/L	15.94	%
Mg 279.079R	757.4	0.878	0.0133	mg/L	0.878	0.0133	mg/L	1.51	%
Mn 257.610	66,218.5	0.0884	0.00038	mg/L	0.0884	0.00038	mg/L	0.43	%
Mo 202.030	15.9	0.0011	0.00036	mg/L	0.0011	0.00036	mg/L	32.79	%
Na 589.592R	773.1	0.092	0.0116	mg/L	0.092	0.0116	mg/L	12.55	%
Ni 231.604	203.5	0.0046	0.00026	mg/L	0.0046	0.00026	mg/L	5.62	%
Pb 220.353	274.2	0.0320	0.00043	mg/L	0.0320	0.00043	mg/L	1.33	%
Sb 206.833	0.0	-0.0009	0.00160	mg/L	-0.0009	0.00160	mg/L	183.25	%
Se 196.026	0.3	0.0035	0.00195	mg/L	0.0035	0.00195	mg/L	55.12	%
Sn 189.933	70.3	0.0088	0.00090	mg/L	0.0088	0.00090	mg/L	10.25	%
Sr 421.539R	7,032.1	0.0125	0.00012	mg/L	0.0125	0.00012	mg/L	0.94	%
Ti 337.280	306,377.9	0.4510	0.00211	mg/L	0.4510	0.00211	mg/L	0.47	%
Tl 190.800	-9.2	0.0000	0.00163	mg/L	0.0000	0.00163	mg/L	3,373.34	%
V 292.402	6,286.4	0.0251	0.00058	mg/L	0.0251	0.00058	mg/L	2.29	%
Zn 206.191	852.6	0.0192	0.00060	mg/L	0.0192	0.00060	mg/L	3.15	%

Mean Data

ID: b403655-10 **Seq. No.:** 32 **A/S Pos:** 419

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:11:39

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,847.0	100.5	0.77	%			%	0.77	%
Y 324.227A	1,769,859.2	101.4	0.96	%			%	0.95	%
Ag 328.068	-103.4	0.0005	0.00062	mg/L	0.0005	0.00062	mg/L	127.16	%
Al 308.215	6,615.0	10.4	0.06	mg/L	10.4	0.06	mg/L	0.59	%
As 188.979	3.9	0.0060	0.00054	mg/L	0.0060	0.00054	mg/L	8.96	%
Ba 233.527	7,260.9	0.0714	0.00186	mg/L	0.0714	0.00186	mg/L	2.60	%
Be 313.107	2,825.9	0.0003	0.00004	mg/L	0.0003	0.00004	mg/L	15.09	%
B 208.959	93.3	0.0107	0.00033	mg/L	0.0107	0.00033	mg/L	3.05	%
Ca 317.933	40,649.4	3.100	0.0252	mg/L	3.100	0.0252	mg/L	0.81	%
Cd 226.502	119.0	0.0001	0.00009	mg/L	0.0001	0.00009	mg/L	78.07	%
Co 228.616	204.5	0.0025	0.00010	mg/L	0.0025	0.00010	mg/L	3.90	%
Cr 267.716	4,079.4	0.0300	0.00114	mg/L	0.0300	0.00114	mg/L	3.81	%
Cu 324.754	2,992.1	0.0104	0.00041	mg/L	0.0104	0.00041	mg/L	3.90	%
Fe 273.955	243,929.5	10.34	0.079	mg/L	10.34	0.079	mg/L	0.76	%
K 766.491R	2,853.5	1.01	0.014	mg/L	1.01	0.014	mg/L	1.40	%
Li 670.781R	519.1	0.007	0.0011	mg/L	0.007	0.0011	mg/L	16.81	%
Mg 279.079R	1,267.8	1.47	0.016	mg/L	1.47	0.016	mg/L	1.12	%

Mn 257.610	442,062.4	0.5903	0.00348	mg/L	0.5903	0.00348	mg/L	0.59	%
Mo 202.030	18.3	0.0014	0.00026	mg/L	0.0014	0.00026	mg/L	18.87	%
Na 589.592R	1,484.8	0.177	0.0124	mg/L	0.177	0.0124	mg/L	7.04	%
Ni 231.604	337.3	0.0077	0.00021	mg/L	0.0077	0.00021	mg/L	2.70	%
Pb 220.353	461.4	0.0537	0.00157	mg/L	0.0537	0.00157	mg/L	2.93	%
Sb 206.833	7.6	0.0015	0.00231	mg/L	0.0015	0.00231	mg/L	152.03	%
Se 196.026	0.8	0.0044	0.00223	mg/L	0.0044	0.00223	mg/L	50.57	%
Sn 189.933	90.2	0.0110	0.00111	mg/L	0.0110	0.00111	mg/L	10.12	%
Sr 421.539R	17,930.5	0.0318	0.00010	mg/L	0.0318	0.00010	mg/L	0.32	%
Ti 337.280	411,154.5	0.6053	0.00505	mg/L	0.6053	0.00505	mg/L	0.83	%
Tl 190.800	-16.9	-0.0028	0.00283	mg/L	-0.0028	0.00283	mg/L	102.40	%
V 292.402	9,638.1	0.0384	0.00036	mg/L	0.0384	0.00036	mg/L	0.95	%
Zn 206.191	2,058.7	0.0461	0.00143	mg/L	0.0461	0.00143	mg/L	3.11	%

Mean Data

ID: b403655-11 **Seq. No.:** 33 **A/S Pos:** 420

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:13:53

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	176,059.2	101.2	0.37	%			%	0.36	%
Y 324.227A	1,815,066.1	104.0	0.32	%			%	0.31	%
Ag 328.068	-1,464.1	-0.0003	0.00041	mg/L	-0.0003	0.00041	mg/L	159.79	%
Al 308.215	79,724.6	125	0.3	mg/L	125	0.3	mg/L	0.22	%
As 188.979	12.0	0.0337	0.00155	mg/L	0.0337	0.00155	mg/L	4.61	%
Ba 233.527	41,901.1	0.4096	0.00082	mg/L	0.4096	0.00082	mg/L	0.20	%
Be 313.107	23,515.3	0.0029	0.00001	mg/L	0.0029	0.00001	mg/L	0.36	%
B 208.959	155.1	0.0178	0.00054	mg/L	0.0178	0.00054	mg/L	3.04	%
Ca 317.933	87,129.1	6.645	0.0070	mg/L	6.645	0.0070	mg/L	0.10	%
Cd 226.502	919.5	0.0010	0.00001	mg/L	0.0010	0.00001	mg/L	1.38	%
Co 228.616	2,138.4	0.0327	0.00032	mg/L	0.0327	0.00032	mg/L	0.98	%
Cr 267.716	26,322.3	0.1953	0.00073	mg/L	0.1953	0.00073	mg/L	0.37	%
Cu 324.754	43,601.4	0.1504	0.00052	mg/L	0.1504	0.00052	mg/L	0.34	%
Fe 273.955	1,895,068.4	80.36	0.140	mg/L	80.36	0.140	mg/L	0.17	%
K 766.491R	17,711.4	6.27	0.046	mg/L	6.27	0.046	mg/L	0.74	%
Li 670.781R	5,920.1	0.077	0.0017	mg/L	0.077	0.0017	mg/L	2.23	%
Mg 279.079R	17,942.1	20.8	0.04	mg/L	20.8	0.04	mg/L	0.20	%
Mn 257.610	988,965.6	1.321	0.0020	mg/L	1.321	0.0020	mg/L	0.15	%
Mo 202.030	39.4	0.0030	0.00008	mg/L	0.0030	0.00008	mg/L	2.71	%
Na 589.592R	6,460.4	0.769	0.0102	mg/L	0.769	0.0102	mg/L	1.33	%
Ni 231.604	4,078.9	0.0926	0.00068	mg/L	0.0926	0.00068	mg/L	0.73	%
Pb 220.353	2,000.7	0.2450	0.00258	mg/L	0.2450	0.00258	mg/L	1.05	%
Sb 206.833	16.6	-0.0039	0.00175	mg/L	-0.0039	0.00175	mg/L	45.36	%
Se 196.026	-107.5	0.0025	0.00088	mg/L	0.0025	0.00088	mg/L	35.14	%
Sn 189.933	174.1	0.0079	0.00084	mg/L	0.0079	0.00084	mg/L	10.64	%
Sr 421.539R	44,225.1	0.0785	0.00008	mg/L	0.0785	0.00008	mg/L	0.10	%
Ti 337.280	2,746,593.2	4.043	0.0032	mg/L	4.043	0.0032	mg/L	0.08	%
Tl 190.800	-161.6	-0.0124	0.00825	mg/L	-0.0124	0.00825	mg/L	66.43	%
V 292.402	44,085.2	0.1769	0.00029	mg/L	0.1769	0.00029	mg/L	0.16	%
Zn 206.191	17,460.7	0.3916	0.00181	mg/L	0.3916	0.00181	mg/L	0.46	%

Mean Data

ID: CVS **Seq. No.:** 34 **A/S Pos:** 3

2014/08/07 11:17:07 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:15:49

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,203.4	100.1	0.41	%				0.41	%
Y 324.227A	1,735,251.5	99.43	0.253	%				0.25	%
Ag 328.068	114,703.3	0.4924	0.00391	mg/L	0.4924			0.79	%
2014/08/07 11:17:06 QC value within limits for Ag 328.068 Recovery = 98.48%									
Al 308.215	3,145.3	4.92	0.037	mg/L	4.92			0.74	%
2014/08/07 11:17:06 QC value within limits for Al 308.215 Recovery = 98.46%									

As 188.979	817.3	0.4847	0.00303	mg/L	0.4847	0.63 %
2014/08/07 11:17:06 QC value within limits for As 188.979 Recovery = 96.94%						
Ba 233.527	49,098.0	0.4903	0.00312	mg/L	0.4903	0.64 %
2014/08/07 11:17:06 QC value within limits for Ba 233.527 Recovery = 98.06%						
Be 313.107	224,886.9	0.0483	0.00001	mg/L	0.0483	0.02 %
2014/08/07 11:17:06 QC value within limits for Be 313.107 Recovery = 96.51%						
B 208.959	20,723.4	2.367	0.0118	mg/L	2.367	0.50 %
2014/08/07 11:17:06 QC value within limits for B 208.959 Recovery = 94.66%						
Ca 317.933	63,058.2	4.809	0.0350	mg/L	4.809	0.73 %
2014/08/07 11:17:06 QC value within limits for Ca 317.933 Recovery = 96.19%						
Cd 226.502	5,809.6	0.0482	0.00042	mg/L	0.0482	0.88 %
2014/08/07 11:17:06 QC value within limits for Cd 226.502 Recovery = 96.49%						
Co 228.616	22,097.8	0.4848	0.00423	mg/L	0.4848	0.87 %
2014/08/07 11:17:06 QC value within limits for Co 228.616 Recovery = 96.96%						
Cr 267.716	66,131.5	0.4872	0.00396	mg/L	0.4872	0.81 %
2014/08/07 11:17:06 QC value within limits for Cr 267.716 Recovery = 97.44%						
Cu 324.754	141,233.9	0.4849	0.00371	mg/L	0.4849	0.76 %
2014/08/07 11:17:06 QC value within limits for Cu 324.754 Recovery = 96.99%						
Fe 273.955	58,315.1	2.461	0.0230	mg/L	2.461	0.94 %
2014/08/07 11:17:06 QC value within limits for Fe 273.955 Recovery = 98.44%						
K 766.491R	68,015.7	24.1	0.04	mg/L	24.1	0.18 %
2014/08/07 11:17:06 QC value within limits for K 766.491R Recovery = 96.39%						
Li 670.781R	37,743.6	0.489	0.0003	mg/L	0.489	0.07 %
2014/08/07 11:17:06 QC value within limits for Li 670.781R Recovery = 97.83%						
Mg 279.079R	4,194.8	4.86	0.030	mg/L	4.86	0.62 %
2014/08/07 11:17:06 QC value within limits for Mg 279.079R Recovery = 97.21%						
Mn 257.610	366,311.5	0.4891	0.00044	mg/L	0.4891	0.09 %
2014/08/07 11:17:06 QC value within limits for Mn 257.610 Recovery = 97.83%						
Mo 202.030	7,191.0	0.4898	0.00478	mg/L	0.4898	0.98 %
2014/08/07 11:17:06 QC value within limits for Mo 202.030 Recovery = 97.97%						
Na 589.592R	205,417.3	24.4	0.02	mg/L	24.4	0.10 %
2014/08/07 11:17:06 QC value within limits for Na 589.592R Recovery = 97.79%						
Ni 231.604	21,311.2	0.4839	0.00406	mg/L	0.4839	0.84 %
2014/08/07 11:17:06 QC value within limits for Ni 231.604 Recovery = 96.78%						
Pb 220.353	4,321.4	0.4936	0.00442	mg/L	0.4936	0.89 %
2014/08/07 11:17:06 QC value within limits for Pb 220.353 Recovery = 98.72%						
Sb 206.833	1,359.8	0.4877	0.00910	mg/L	0.4877	1.87 %
2014/08/07 11:17:06 QC value within limits for Sb 206.833 Recovery = 97.54%						
Se 196.026	1,391.9	0.4791	0.00577	mg/L	0.4791	1.20 %
2014/08/07 11:17:06 QC value within limits for Se 196.026 Recovery = 95.83%						
Sn 189.933	3,519.4	0.4888	0.00297	mg/L	0.4888	0.61 %
2014/08/07 11:17:06 QC value within limits for Sn 189.933 Recovery = 97.77%						
Sr 421.539R	276,412.7	0.4909	0.00032	mg/L	0.4909	0.06 %
2014/08/07 11:17:06 QC value within limits for Sr 421.539R Recovery = 98.17%						
Ti 337.280	165,931.7	0.2444	0.00167	mg/L	0.2444	0.68 %
2014/08/07 11:17:06 QC value within limits for Ti 337.280 Recovery = 97.75%						
Tl 190.800	1,043.7	0.4937	0.00281	mg/L	0.4937	0.57 %
2014/08/07 11:17:06 QC value within limits for Tl 190.800 Recovery = 98.75%						
V 292.402	121,581.3	0.4881	0.00353	mg/L	0.4881	0.72 %
2014/08/07 11:17:06 QC value within limits for V 292.402 Recovery = 97.63%						
Zn 206.191	22,029.1	0.4907	0.00233	mg/L	0.4907	0.48 %
2014/08/07 11:17:06 QC value within limits for Zn 206.191 Recovery = 98.15%						

Mean Data

ID: BLK **Seq. No.:** 35 **A/S Pos:** 1

2014/08/07 11:20:02 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:18:27

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	176,529.6	101.5	0.52	%				0.51 %
Y 324.227A	1,776,076.1	101.8	0.40	%				0.39 %
Ag 328.068	190.9	0.0008	0.00039	mg/L	0.0008			48.38 %

2014/08/07 11:20:01 QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215	1.6	0.002	0.0048	mg/L	0.002	193.69 %

2014/08/07 11:20:01 QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979	3.3	0.0020	0.00266	mg/L	0.0020	136.44 %

2014/08/07 11:20:01 QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527	-16.4	-0.0002	0.00001	mg/L	-0.0002	4.44 %

2014/08/07 11:20:01 QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107	214.8	0.0000	0.00001	mg/L	0.0000	30.17 %

2014/08/07 11:20:01 QC value within limits for Be 313.107 Recovery = Not calculated

B 208.959	85.3	0.0097	0.00122	mg/L	0.0097	12.61 %

2014/08/07 11:20:01 QC value within limits for B 208.959 Recovery = Not calculated

Ca 317.933	119.4	0.0091	0.00331	mg/L	0.0091	36.31 %

2014/08/07 11:20:01 QC value within limits for Ca 317.933 Recovery = Not calculated

Cd 226.502	-17.2	-0.0001	0.00002	mg/L	-0.0001	11.27 %

2014/08/07 11:20:01 QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616	-28.5	-0.0006	0.00015	mg/L	-0.0006	23.39 %

2014/08/07 11:20:01 QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716	2.0	0.0000	0.00006	mg/L	0.0000	424.59 %

2014/08/07 11:20:01 QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.754	-266.4	-0.0009	0.00028	mg/L	-0.0009	30.26 %

2014/08/07 11:20:01 QC value within limits for Cu 324.754 Recovery = Not calculated

Fe 273.955	330.0	0.0140	0.00032	mg/L	0.0140	2.26 %

2014/08/07 11:20:01 QC value within limits for Fe 273.955 Recovery = Not calculated

K 766.491R	-58.9	-0.021	0.0399	mg/L	-0.021	191.00 %

2014/08/07 11:20:01 QC value within limits for K 766.491R Recovery = Not calculated

Li 670.781R	197.3	0.003	0.0013	mg/L	0.003	52.11 %

2014/08/07 11:20:01 QC value within limits for Li 670.781R Recovery = Not calculated

Mg 279.079R	8.5	0.010	0.0060	mg/L	0.010	61.65 %

2014/08/07 11:20:01 QC value within limits for Mg 279.079R Recovery = Not calculated

Mn 257.610	220.7	0.0003	0.00005	mg/L	0.0003	17.23 %

2014/08/07 11:20:01 QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.030	43.3	0.0029	0.00046	mg/L	0.0029	15.53 %

2014/08/07 11:20:01 QC value within limits for Mo 202.030 Recovery = Not calculated

Na 589.592R	-130.2	-0.015	0.0180	mg/L	-0.015	116.24 %

2014/08/07 11:20:01 QC value within limits for Na 589.592R Recovery = Not calculated

Ni 231.604	19.1	0.0004	0.00016	mg/L	0.0004	36.30 %

2014/08/07 11:20:01 QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	-16.8	-0.0019	0.00014	mg/L	-0.0019	7.59 %

2014/08/07 11:20:01 QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	1.6	0.0005	0.00439	mg/L	0.0005	806.07 %

2014/08/07 11:20:01 QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	13.0	0.0045	0.00270	mg/L	0.0045	60.04 %

2014/08/07 11:20:01 QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.933	-5.3	-0.0007	0.00087	mg/L	-0.0007	117.15 %

2014/08/07 11:20:01 QC value within limits for Sn 189.933 Recovery = Not calculated

Sr 421.539R	113.0	0.0002	0.00021	mg/L	0.0002	106.60 %

2014/08/07 11:20:01 QC value within limits for Sr 421.539R Recovery = Not calculated

Ti 337.280	419.5	0.0006	0.00012	mg/L	0.0006	19.58 %

2014/08/07 11:20:01 QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	13.4	0.0064	0.00202	mg/L	0.0064	31.73 %

2014/08/07 11:20:01 QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	-8.1	0.0000	0.00045	mg/L	0.0000	7,290.48 %

2014/08/07 11:20:01 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-47.6	-0.0011	0.00008	mg/L	-0.0011	7.35 %

2014/08/07 11:20:01 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: b403655-12 **Seq. No.:** 36 **A/S Pos:** 421

Sample Qty: g **Prep. Vol.:** **Dilution:** : **Date:** 2014/08/07 11:21:24

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD

Y 371.029R	174,207.1	100.1	0.64	%			%	0.64 %
Y 324.227A	1,760,921.3	100.9	0.17	%			%	0.17 %
Ag 328.068	-139.7	0.0004	0.00027	mg/L	0.0004	0.00027	mg/L	62.18 %
Al 308.215	7,704.2	12.1	0.05	mg/L	12.1	0.05	mg/L	0.37 %
As 188.979	2.1	0.0055	0.00298	mg/L	0.0055	0.00298	mg/L	54.56 %
Ba 233.527	9,427.5	0.0929	0.00257	mg/L	0.0929	0.00257	mg/L	2.77 %
Be 313.107	3,122.2	0.0003	0.00001	mg/L	0.0003	0.00001	mg/L	4.30 %
B 208.959	100.8	0.0115	0.00081	mg/L	0.0115	0.00081	mg/L	7.01 %
Ca 317.933	19,079.9	1.455	0.0096	mg/L	1.455	0.0096	mg/L	0.66 %
Cd 226.502	119.8	0.0000	0.00014	mg/L	0.0000	0.00014	mg/L	559.32 %
Co 228.616	209.0	0.0025	0.00027	mg/L	0.0025	0.00027	mg/L	10.61 %
Cr 267.716	4,258.4	0.0316	0.00123	mg/L	0.0316	0.00123	mg/L	3.90 %
Cu 324.754	2,507.7	0.0087	0.00012	mg/L	0.0087	0.00012	mg/L	1.36 %
Fe 273.955	276,420.0	11.72	0.060	mg/L	11.72	0.060	mg/L	0.51 %
K 766.491R	2,855.0	1.01	0.035	mg/L	1.01	0.035	mg/L	3.48 %
Li 670.781R	602.1	0.008	0.0005	mg/L	0.008	0.0005	mg/L	6.08 %
Mg 279.079R	1,321.5	1.53	0.008	mg/L	1.53	0.008	mg/L	0.51 %
Mn 257.610	100,960.6	0.1348	0.00041	mg/L	0.1348	0.00041	mg/L	0.30 %
Mo 202.030	31.8	0.0022	0.00046	mg/L	0.0022	0.00046	mg/L	21.18 %
Na 589.592R	367.3	0.044	0.0066	mg/L	0.044	0.0066	mg/L	15.11 %
Ni 231.604	299.2	0.0068	0.00024	mg/L	0.0068	0.00024	mg/L	3.54 %
Pb 220.353	434.1	0.0508	0.00207	mg/L	0.0508	0.00207	mg/L	4.08 %
Sb 206.833	3.1	-0.0002	0.00064	mg/L	-0.0002	0.00064	mg/L	340.34 %
Se 196.026	0.2	0.0053	0.00455	mg/L	0.0053	0.00455	mg/L	85.65 %
Sn 189.933	82.1	0.0098	0.00031	mg/L	0.0098	0.00031	mg/L	3.13 %
Sr 421.539R	9,490.2	0.0169	0.00020	mg/L	0.0169	0.00020	mg/L	1.17 %
Ti 337.280	420,020.4	0.6183	0.00196	mg/L	0.6183	0.00196	mg/L	0.32 %
Tl 190.800	-24.4	-0.0044	0.00068	mg/L	-0.0044	0.00068	mg/L	15.34 %
V 292.402	10,342.8	0.0413	0.00028	mg/L	0.0413	0.00028	mg/L	0.68 %
Zn 206.191	1,505.2	0.0338	0.00107	mg/L	0.0338	0.00107	mg/L	3.16 %

Mean Data

ID: b403655-13 **Seq. No.:** 37 **A/S Pos:** 422

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:24:18

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,839.6	99.92	0.239	%			%	0.24 %
Y 324.227A	1,765,118.5	101.1	0.07	%			%	0.07 %
Ag 328.068	-67.0	0.0004	0.00038	mg/L	0.0004	0.00038	mg/L	89.18 %
Al 308.215	4,579.3	7.18	0.039	mg/L	7.18	0.039	mg/L	0.54 %
As 188.979	12.2	0.0105	0.00249	mg/L	0.0105	0.00249	mg/L	23.80 %
Ba 233.527	4,738.2	0.0464	0.00124	mg/L	0.0464	0.00124	mg/L	2.67 %
Be 313.107	2,563.0	0.0003	0.00002	mg/L	0.0003	0.00002	mg/L	5.11 %
B 208.959	84.0	0.0096	0.00053	mg/L	0.0096	0.00053	mg/L	5.46 %
Ca 317.933	15,476.1	1.180	0.0101	mg/L	1.180	0.0101	mg/L	0.86 %
Cd 226.502	81.9	0.0000	0.00003	mg/L	0.0000	0.00003	mg/L	71.26 %
Co 228.616	145.2	0.0016	0.00021	mg/L	0.0016	0.00021	mg/L	12.66 %
Cr 267.716	3,072.9	0.0228	0.00109	mg/L	0.0228	0.00109	mg/L	4.77 %
Cu 324.754	1,916.9	0.0066	0.00025	mg/L	0.0066	0.00025	mg/L	3.70 %
Fe 273.955	204,913.8	8.690	0.0855	mg/L	8.690	0.0855	mg/L	0.98 %
K 766.491R	1,990.6	0.705	0.0224	mg/L	0.705	0.0224	mg/L	3.18 %
Li 670.781R	398.9	0.005	0.0011	mg/L	0.005	0.0011	mg/L	21.64 %
Mg 279.079R	840.2	0.974	0.0080	mg/L	0.974	0.0080	mg/L	0.82 %
Mn 257.610	68,862.9	0.0920	0.00065	mg/L	0.0920	0.00065	mg/L	0.71 %
Mo 202.030	24.8	0.0017	0.00059	mg/L	0.0017	0.00059	mg/L	34.88 %
Na 589.592R	864.7	0.103	0.0153	mg/L	0.103	0.0153	mg/L	14.85 %
Ni 231.604	262.4	0.0060	0.00015	mg/L	0.0060	0.00015	mg/L	2.58 %
Pb 220.353	296.0	0.0344	0.00176	mg/L	0.0344	0.00176	mg/L	5.10 %
Sb 206.833	10.4	0.0028	0.00172	mg/L	0.0028	0.00172	mg/L	61.92 %
Se 196.026	5.3	0.0056	0.00082	mg/L	0.0056	0.00082	mg/L	14.69 %
Sn 189.933	82.8	0.0105	0.00079	mg/L	0.0105	0.00079	mg/L	7.54 %

Sr 421.539R	8,669.2	0.0154	0.00013	mg/L	0.0154	0.00013	mg/L	0.86	%
Ti 337.280	320,326.4	0.4715	0.00400	mg/L	0.4715	0.00400	mg/L	0.85	%
Tl 190.800	-12.4	-0.0012	0.00246	mg/L	-0.0012	0.00246	mg/L	202.73	%
V 292.402	6,345.6	0.0254	0.00025	mg/L	0.0254	0.00025	mg/L	0.99	%
Zn 206.191	1,024.0	0.0230	0.00083	mg/L	0.0230	0.00083	mg/L	3.63	%

Mean Data

ID: b403655-14 **Seq. No.:** 38 **A/S Pos:** 423

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:27:12

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	173,930.7	99.97	0.895	%			%	0.90	%
Y 324.227A	1,767,321.5	101.3	0.71	%			%	0.70	%
Ag 328.068	-123.5	0.0004	0.00039	mg/L	0.0004	0.00039	mg/L	88.76	%
Al 308.215	10,149.4	15.9	0.17	mg/L	15.9	0.17	mg/L	1.05	%
As 188.979	6.0	0.0081	0.00207	mg/L	0.0081	0.00207	mg/L	25.64	%
Ba 233.527	8,721.9	0.0858	0.00301	mg/L	0.0858	0.00301	mg/L	3.51	%
Be 313.107	6,038.5	0.0008	0.00001	mg/L	0.0008	0.00001	mg/L	1.18	%
B 208.959	83.4	0.0096	0.00044	mg/L	0.0096	0.00044	mg/L	4.60	%
Ca 317.933	28,458.4	2.170	0.0233	mg/L	2.170	0.0233	mg/L	1.07	%
Cd 226.502	167.4	0.0004	0.00018	mg/L	0.0004	0.00018	mg/L	47.17	%
Co 228.616	716.4	0.0132	0.00061	mg/L	0.0132	0.00061	mg/L	4.61	%
Cr 267.716	4,718.3	0.0349	0.00159	mg/L	0.0349	0.00159	mg/L	4.55	%
Cu 324.754	18,758.5	0.0646	0.00086	mg/L	0.0646	0.00086	mg/L	1.33	%
Fe 273.955	273,155.5	11.58	0.122	mg/L	11.58	0.122	mg/L	1.05	%
K 766.491R	3,224.6	1.14	0.017	mg/L	1.14	0.017	mg/L	1.51	%
Li 670.781R	788.1	0.010	0.0015	mg/L	0.010	0.0015	mg/L	14.55	%
Mg 279.079R	1,591.2	1.84	0.020	mg/L	1.84	0.020	mg/L	1.11	%
Mn 257.610	158,531.8	0.2117	0.00144	mg/L	0.2117	0.00144	mg/L	0.68	%
Mo 202.030	19.0	0.0013	0.00027	mg/L	0.0013	0.00027	mg/L	20.46	%
Na 589.592R	797.5	0.095	0.0144	mg/L	0.095	0.0144	mg/L	15.15	%
Ni 231.604	596.9	0.0136	0.00019	mg/L	0.0136	0.00019	mg/L	1.44	%
Pb 220.353	872.7	0.1014	0.00351	mg/L	0.1014	0.00351	mg/L	3.46	%
Sb 206.833	22.9	0.0068	0.00359	mg/L	0.0068	0.00359	mg/L	52.68	%
Se 196.026	-6.1	0.0034	0.00057	mg/L	0.0034	0.00057	mg/L	16.84	%
Sn 189.933	95.3	0.0111	0.00006	mg/L	0.0111	0.00006	mg/L	0.51	%
Sr 421.539R	14,243.6	0.0253	0.00025	mg/L	0.0253	0.00025	mg/L	0.98	%
Ti 337.280	565,324.7	0.8322	0.00740	mg/L	0.8322	0.00740	mg/L	0.89	%
Tl 190.800	-26.1	-0.0046	0.00264	mg/L	-0.0046	0.00264	mg/L	57.70	%
V 292.402	9,060.1	0.0360	0.00026	mg/L	0.0360	0.00026	mg/L	0.72	%
Zn 206.191	5,624.1	0.1254	0.00399	mg/L	0.1254	0.00399	mg/L	3.18	%

Mean Data

ID: b403655-15 **Seq. No.:** 39 **A/S Pos:** 424

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:30:06

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	172,056.8	98.89	0.431	%			%	0.44	%
Y 324.227A	1,745,186.2	99.99	0.209	%			%	0.21	%
Ag 328.068	-158.0	0.0000	0.00018	mg/L	0.0000	0.00018	mg/L	588.06	%
Al 308.215	4,231.0	6.64	0.029	mg/L	6.64	0.029	mg/L	0.43	%
As 188.979	3.6	0.0050	0.00343	mg/L	0.0050	0.00343	mg/L	69.22	%
Ba 233.527	3,272.4	0.0319	0.00094	mg/L	0.0319	0.00094	mg/L	2.96	%
Be 313.107	2,075.1	0.0002	0.00001	mg/L	0.0002	0.00001	mg/L	5.24	%
B 208.959	65.1	0.0075	0.00068	mg/L	0.0075	0.00068	mg/L	9.15	%
Ca 317.933	12,335.1	0.9408	0.00357	mg/L	0.9408	0.00357	mg/L	0.38	%
Cd 226.502	81.0	0.0001	0.00004	mg/L	0.0001	0.00004	mg/L	73.54	%
Co 228.616	132.7	0.0015	0.00030	mg/L	0.0015	0.00030	mg/L	20.06	%
Cr 267.716	3,082.2	0.0229	0.00100	mg/L	0.0229	0.00100	mg/L	4.36	%
Cu 324.754	12,051.4	0.0414	0.00062	mg/L	0.0414	0.00062	mg/L	1.49	%
Fe 273.955	172,300.9	7.306	0.1006	mg/L	7.306	0.1006	mg/L	1.38	%

K 766.491R	2,181.1	0.772	0.0327	mg/L	0.772	0.0327	mg/L	4.23 %
Li 670.781R	428.3	0.006	0.0002	mg/L	0.006	0.0002	mg/L	3.45 %
Mg 279.079R	859.6	0.996	0.0030	mg/L	0.996	0.0030	mg/L	0.30 %
Mn 257.610	65,204.1	0.0871	0.00094	mg/L	0.0871	0.00094	mg/L	1.09 %
Mo 202.030	17.1	0.0012	0.00027	mg/L	0.0012	0.00027	mg/L	23.23 %
Na 589.592R	643.2	0.077	0.0061	mg/L	0.077	0.0061	mg/L	7.95 %
Ni 231.604	186.6	0.0042	0.00013	mg/L	0.0042	0.00013	mg/L	3.00 %
Pb 220.353	1,879.8	0.2146	0.00431	mg/L	0.2146	0.00431	mg/L	2.01 %
Sb 206.833	4.9	0.0009	0.00140	mg/L	0.0009	0.00140	mg/L	151.42 %
Se 196.026	-1.8	0.0025	0.00145	mg/L	0.0025	0.00145	mg/L	56.92 %
Sn 189.933	73.1	0.0093	0.00070	mg/L	0.0093	0.00070	mg/L	7.55 %
Sr 421.539R	6,112.1	0.0109	0.00028	mg/L	0.0109	0.00028	mg/L	2.55 %
Ti 337.280	302,031.5	0.4446	0.00673	mg/L	0.4446	0.00673	mg/L	1.51 %
Tl 190.800	-15.5	-0.0034	0.00491	mg/L	-0.0034	0.00491	mg/L	145.27 %
V 292.402	6,454.1	0.0257	0.00080	mg/L	0.0257	0.00080	mg/L	3.10 %
Zn 206.191	1,553.8	0.0347	0.00091	mg/L	0.0347	0.00091	mg/L	2.62 %

Mean Data

ID: b403655-16 **Seq. No.:** 40 **A/S Pos:** 425

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:32:20

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	174,790.0	100.5	0.37	%			%	0.36 %
Y 324.227A	1,862,406.6	106.7	0.47	%			%	0.44 %
Ag 328.068	-2,257.0	-0.0011	0.00035	mg/L	-0.0011	0.00035	mg/L	33.51 %
Al 308.215	137,823.5	216	0.3	mg/L	216	0.3	mg/L	0.16 %
As 188.979	50.1	0.0698	0.00080	mg/L	0.0698	0.00080	mg/L	1.15 %
Ba 233.527	71,826.2	0.7057	0.00298	mg/L	0.7057	0.00298	mg/L	0.42 %
Be 313.107	44,284.1	0.0051	0.00005	mg/L	0.0051	0.00005	mg/L	1.01 %
B 208.959	145.4	0.0165	0.00113	mg/L	0.0165	0.00113	mg/L	6.83 %
Ca 317.933	144,397.4	11.01	0.014	mg/L	11.01	0.014	mg/L	0.13 %
Cd 226.502	991.3	-0.0014	0.00014	mg/L	-0.0014	0.00014	mg/L	10.50 %
Co 228.616	3,415.9	0.0503	0.00050	mg/L	0.0503	0.00050	mg/L	1.00 %
Cr 267.716	40,212.3	0.2985	0.00116	mg/L	0.2985	0.00116	mg/L	0.39 %
Cu 324.754	26,181.4	0.0933	0.00048	mg/L	0.0933	0.00048	mg/L	0.52 %
Fe 273.955	2,506,122.7	106.3	0.11	mg/L	106.3	0.11	mg/L	0.10 %
K 766.491R	28,179.6	9.98	0.048	mg/L	9.98	0.048	mg/L	0.49 %
Li 670.781R	10,398.3	0.135	0.0007	mg/L	0.135	0.0007	mg/L	0.50 %
Mg 279.079R	28,940.5	33.5	0.12	mg/L	33.5	0.12	mg/L	0.37 %
Mn 257.610	713,551.6	0.9528	0.00040	mg/L	0.9528	0.00040	mg/L	0.04 %
Mo 202.030	68.0	0.0048	0.00011	mg/L	0.0048	0.00011	mg/L	2.31 %
Na 589.592R	9,576.8	1.14	0.016	mg/L	1.14	0.016	mg/L	1.43 %
Ni 231.604	6,363.6	0.1445	0.00048	mg/L	0.1445	0.00048	mg/L	0.33 %
Pb 220.353	315.3	0.0679	0.00117	mg/L	0.0679	0.00117	mg/L	1.73 %
Sb 206.833	-3.1	-0.0142	0.00399	mg/L	-0.0142	0.00399	mg/L	28.09 %
Se 196.026	-160.4	0.0025	0.00304	mg/L	0.0025	0.00304	mg/L	119.52 %
Sn 189.933	224.9	0.0032	0.00220	mg/L	0.0032	0.00220	mg/L	69.41 %
Sr 421.539R	85,502.1	0.1518	0.00016	mg/L	0.1518	0.00016	mg/L	0.10 %
Ti 337.280	5,519,009.4	8.124	0.0022	mg/L	8.124	0.0022	mg/L	0.03 %
Tl 190.800	-250.2	-0.0212	0.00359	mg/L	-0.0212	0.00359	mg/L	16.92 %
V 292.402	74,425.2	0.2951	0.00131	mg/L	0.2951	0.00131	mg/L	0.45 %
Zn 206.191	13,489.3	0.3060	0.00162	mg/L	0.3060	0.00162	mg/L	0.53 %

Mean Data

ID: b403655-17 **Seq. No.:** 41 **A/S Pos:** 426

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:34:16

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	176,391.1	101.4	0.78	%			%	0.77 %
Y 324.227A	1,852,300.4	106.1	1.28	%			%	1.21 %
Ag 328.068	-2,720.2	-0.0010	0.00020	mg/L	-0.0010	0.00020	mg/L	20.41 %

Al 308.215	186,381.1	292	0.4	mg/L	292	0.4	mg/L	0.13 %
As 188.979	38.8	0.0626	0.00533	mg/L	0.0626	0.00533	mg/L	8.51 %
Ba 233.527	110,602.0	1.090	0.0140	mg/L	1.090	0.0140	mg/L	1.29 %
Be 313.107	47,112.4	0.0069	0.00010	mg/L	0.0069	0.00010	mg/L	1.40 %
B 208.959	187.3	0.0214	0.00080	mg/L	0.0214	0.00080	mg/L	3.75 %
Ca 317.933	193,700.5	14.77	0.026	mg/L	14.77	0.026	mg/L	0.17 %
Cd 226.502	1,193.8	-0.0012	0.00024	mg/L	-0.0012	0.00024	mg/L	19.23 %
Co 228.616	3,591.9	0.0562	0.00127	mg/L	0.0562	0.00127	mg/L	2.26 %
Cr 267.716	50,638.9	0.3757	0.00451	mg/L	0.3757	0.00451	mg/L	1.20 %
Cu 324.754	29,921.1	0.1035	0.00145	mg/L	0.1035	0.00145	mg/L	1.40 %
Fe 273.955	3,169,011.5	134.4	0.29	mg/L	134.4	0.29	mg/L	0.21 %
K 766.491R	31,555.2	11.2	0.03	mg/L	11.2	0.03	mg/L	0.26 %
Li 670.781R	11,639.3	0.151	0.0006	mg/L	0.151	0.0006	mg/L	0.37 %
Mg 279.079R	29,302.6	34.0	0.04	mg/L	34.0	0.04	mg/L	0.11 %
Mn 257.610	1,232,125.5	1.645	0.0035	mg/L	1.645	0.0035	mg/L	0.21 %
Mo 202.030	63.8	0.0047	0.00088	mg/L	0.0047	0.00088	mg/L	18.86 %
Na 589.592R	11,640.8	1.39	0.004	mg/L	1.39	0.004	mg/L	0.28 %
Ni 231.604	7,093.7	0.1611	0.00219	mg/L	0.1611	0.00219	mg/L	1.36 %
Pb 220.353	541.1	0.1054	0.00108	mg/L	0.1054	0.00108	mg/L	1.03 %
Sb 206.833	8.0	-0.0140	0.00370	mg/L	-0.0140	0.00370	mg/L	26.43 %
Se 196.026	-193.7	0.0077	0.00252	mg/L	0.0077	0.00252	mg/L	32.76 %
Sn 189.933	308.5	0.0049	0.00033	mg/L	0.0049	0.00033	mg/L	6.74 %
Sr 421.539R	120,374.7	0.2138	0.00021	mg/L	0.2138	0.00021	mg/L	0.10 %
Ti 337.280	4,038,960.1	5.946	0.0221	mg/L	5.946	0.0221	mg/L	0.37 %
Tl 190.800	-313.6	-0.0088	0.00155	mg/L	-0.0088	0.00155	mg/L	17.55 %
V 292.402	88,944.4	0.3573	0.00457	mg/L	0.3573	0.00457	mg/L	1.28 %
Zn 206.191	15,396.9	0.3505	0.00365	mg/L	0.3505	0.00365	mg/L	1.04 %

Mean Data

ID: b403655-18 **Seq. No.:** 42 **A/S Pos:** 427

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:36:52

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,543.0	99.75	0.397	%			%	0.40 %
Y 324.227A	1,761,614.4	100.9	0.14	%			%	0.14 %
Ag 328.068	-20.9	0.0004	0.00007	mg/L	0.0004	0.00007	mg/L	15.41 %
Al 308.215	4,161.1	6.53	0.050	mg/L	6.53	0.050	mg/L	0.77 %
As 188.979	3.1	0.0041	0.00324	mg/L	0.0041	0.00324	mg/L	78.55 %
Ba 233.527	3,327.3	0.0326	0.00093	mg/L	0.0326	0.00093	mg/L	2.86 %
Be 313.107	1,934.9	0.0002	0.00002	mg/L	0.0002	0.00002	mg/L	11.60 %
B 208.959	46.2	0.0053	0.00075	mg/L	0.0053	0.00075	mg/L	14.14 %
Ca 317.933	14,326.9	1.093	0.0047	mg/L	1.093	0.0047	mg/L	0.43 %
Cd 226.502	49.4	-0.0001	0.00009	mg/L	-0.0001	0.00009	mg/L	82.17 %
Co 228.616	107.2	0.0011	0.00009	mg/L	0.0011	0.00009	mg/L	7.46 %
Cr 267.716	2,513.2	0.0186	0.00063	mg/L	0.0186	0.00063	mg/L	3.39 %
Cu 324.754	1,151.8	0.0041	0.00048	mg/L	0.0041	0.00048	mg/L	11.79 %
Fe 273.955	141,888.7	6.017	0.0469	mg/L	6.017	0.0469	mg/L	0.78 %
K 766.491R	1,808.7	0.640	0.0107	mg/L	0.640	0.0107	mg/L	1.67 %
Li 670.781R	384.4	0.005	0.0013	mg/L	0.005	0.0013	mg/L	25.70 %
Mg 279.079R	809.4	0.938	0.0112	mg/L	0.938	0.0112	mg/L	1.19 %
Mn 257.610	45,965.3	0.0614	0.00034	mg/L	0.0614	0.00034	mg/L	0.56 %
Mo 202.030	16.1	0.0011	0.00040	mg/L	0.0011	0.00040	mg/L	36.11 %
Na 589.592R	726.4	0.086	0.0061	mg/L	0.086	0.0061	mg/L	7.02 %
Ni 231.604	168.8	0.0038	0.00018	mg/L	0.0038	0.00018	mg/L	4.70 %
Pb 220.353	194.1	0.0229	0.00129	mg/L	0.0229	0.00129	mg/L	5.65 %
Sb 206.833	6.6	0.0017	0.00332	mg/L	0.0017	0.00332	mg/L	193.04 %
Se 196.026	9.7	0.0061	0.00248	mg/L	0.0061	0.00248	mg/L	40.89 %
Sn 189.933	78.8	0.0101	0.00117	mg/L	0.0101	0.00117	mg/L	11.64 %
Sr 421.539R	6,810.4	0.0121	0.00018	mg/L	0.0121	0.00018	mg/L	1.52 %
Ti 337.280	260,864.7	0.3840	0.00141	mg/L	0.3840	0.00141	mg/L	0.37 %
Tl 190.800	-8.4	-0.0004	0.00251	mg/L	-0.0004	0.00251	mg/L	701.81 %

V 292.402	5,207.2	0.0207	0.00043	mg/L	0.0207	0.00043	mg/L	2.07	%
Zn 206.191	858.5	0.0193	0.00055	mg/L	0.0193	0.00055	mg/L	2.83	%

Mean Data

ID: b403655-19 **Seq. No.:** 43 **A/S Pos:** 428

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:39:46

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	173,292.4	99.60	0.599	%			%	0.60	%
Y 324.227A	1,755,835.4	100.6	0.43	%			%	0.42	%
Ag 328.068	-128.5	0.0003	0.00035	mg/L	0.0003	0.00035	mg/L	127.93	%
Al 308.215	5,865.5	9.20	0.040	mg/L	9.20	0.040	mg/L	0.43	%
As 188.979	11.6	0.0106	0.00165	mg/L	0.0106	0.00165	mg/L	15.64	%
Ba 233.527	6,120.3	0.0601	0.00194	mg/L	0.0601	0.00194	mg/L	3.24	%
Be 313.107	3,124.7	0.0003	0.00002	mg/L	0.0003	0.00002	mg/L	5.24	%
B 208.959	55.5	0.0063	0.00052	mg/L	0.0063	0.00052	mg/L	8.22	%
Ca 317.933	18,894.6	1.441	0.0099	mg/L	1.441	0.0099	mg/L	0.69	%
Cd 226.502	84.0	-0.0001	0.00004	mg/L	-0.0001	0.00004	mg/L	33.27	%
Co 228.616	164.8	0.0017	0.00022	mg/L	0.0017	0.00022	mg/L	12.57	%
Cr 267.716	3,843.1	0.0285	0.00119	mg/L	0.0285	0.00119	mg/L	4.19	%
Cu 324.754	1,868.7	0.0065	0.00008	mg/L	0.0065	0.00008	mg/L	1.28	%
Fe 273.955	225,739.6	9.573	0.0616	mg/L	9.573	0.0616	mg/L	0.64	%
K 766.491R	2,178.9	0.771	0.0189	mg/L	0.771	0.0189	mg/L	2.45	%
Li 670.781R	429.4	0.006	0.0013	mg/L	0.006	0.0013	mg/L	23.33	%
Mg 279.079R	1,025.5	1.19	0.005	mg/L	1.19	0.005	mg/L	0.42	%
Mn 257.610	90,215.1	0.1205	0.00052	mg/L	0.1205	0.00052	mg/L	0.43	%
Mo 202.030	20.7	0.0014	0.00071	mg/L	0.0014	0.00071	mg/L	49.87	%
Na 589.592R	1,103.3	0.131	0.0116	mg/L	0.131	0.0116	mg/L	8.84	%
Ni 231.604	246.8	0.0056	0.00024	mg/L	0.0056	0.00024	mg/L	4.30	%
Pb 220.353	342.1	0.0400	0.00062	mg/L	0.0400	0.00062	mg/L	1.55	%
Sb 206.833	6.4	0.0012	0.00298	mg/L	0.0012	0.00298	mg/L	251.30	%
Se 196.026	0.7	0.0045	0.00287	mg/L	0.0045	0.00287	mg/L	64.53	%
Sn 189.933	83.7	0.0104	0.00129	mg/L	0.0104	0.00129	mg/L	12.41	%
Sr 421.539R	10,334.5	0.0184	0.00005	mg/L	0.0184	0.00005	mg/L	0.30	%
Ti 337.280	404,962.4	0.5961	0.00315	mg/L	0.5961	0.00315	mg/L	0.53	%
Tl 190.800	-22.3	-0.0052	0.00200	mg/L	-0.0052	0.00200	mg/L	38.41	%
V 292.402	7,964.7	0.0317	0.00039	mg/L	0.0317	0.00039	mg/L	1.23	%
Zn 206.191	1,196.1	0.0269	0.00059	mg/L	0.0269	0.00059	mg/L	2.18	%

Mean Data

ID: b403655-20 **Seq. No.:** 44 **A/S Pos:** 429

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:42:04

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,223.6	100.1	0.81	%			%	0.81	%
Y 324.227A	1,769,605.1	101.4	0.11	%			%	0.11	%
Ag 328.068	-471.4	0.0001	0.00018	mg/L	0.0001	0.00018	mg/L	133.88	%
Al 308.215	25,701.0	40.3	0.40	mg/L	40.3	0.40	mg/L	0.99	%
As 188.979	18.9	0.0191	0.00587	mg/L	0.0191	0.00587	mg/L	30.77	%
Ba 233.527	16,174.8	0.1585	0.00041	mg/L	0.1585	0.00041	mg/L	0.26	%
Be 313.107	9,325.3	0.0016	0.00003	mg/L	0.0016	0.00003	mg/L	1.94	%
B 208.959	94.9	0.0107	0.00081	mg/L	0.0107	0.00081	mg/L	7.59	%
Ca 317.933	63,030.9	4.807	0.0585	mg/L	4.807	0.0585	mg/L	1.22	%
Cd 226.502	456.1	0.0016	0.00010	mg/L	0.0016	0.00010	mg/L	6.40	%
Co 228.616	738.8	0.0125	0.00024	mg/L	0.0125	0.00024	mg/L	1.89	%
Cr 267.716	8,117.6	0.0604	0.00022	mg/L	0.0604	0.00022	mg/L	0.36	%
Cu 324.754	4,352.6	0.0146	0.00021	mg/L	0.0146	0.00021	mg/L	1.42	%
Fe 273.955	661,962.1	28.07	0.048	mg/L	28.07	0.048	mg/L	0.17	%
K 766.491R	5,722.5	2.03	0.035	mg/L	2.03	0.035	mg/L	1.71	%
Li 670.781R	1,702.3	0.022	0.0004	mg/L	0.022	0.0004	mg/L	1.85	%
Mg 279.079R	3,079.5	3.57	0.052	mg/L	3.57	0.052	mg/L	1.44	%

Mn 257.610	176,672.1	0.2359	0.00059	mg/L	0.2359	0.00059	mg/L	0.25 %
Mo 202.030	72.8	0.0050	0.00022	mg/L	0.0050	0.00022	mg/L	4.34 %
Na 589.592R	1,153.9	0.137	0.0018	mg/L	0.137	0.0018	mg/L	1.30 %
Ni 231.604	905.1	0.0206	0.00040	mg/L	0.0206	0.00040	mg/L	1.92 %
Pb 220.353	274.1	0.0367	0.00067	mg/L	0.0367	0.00067	mg/L	1.83 %
Sb 206.833	6.9	-0.0008	0.00319	mg/L	-0.0008	0.00319	mg/L	401.95 %
Se 196.026	-30.5	0.0032	0.00148	mg/L	0.0032	0.00148	mg/L	46.15 %
Sn 189.933	124.2	0.0118	0.00086	mg/L	0.0118	0.00086	mg/L	7.24 %
Sr 421.539R	28,239.4	0.0501	0.00005	mg/L	0.0501	0.00005	mg/L	0.09 %
Ti 337.280	528,877.5	0.7786	0.00138	mg/L	0.7786	0.00138	mg/L	0.18 %
Tl 190.800	-53.0	-0.0019	0.00469	mg/L	-0.0019	0.00469	mg/L	243.52 %
V 292.402	16,788.7	0.0680	0.00019	mg/L	0.0680	0.00019	mg/L	0.29 %
Zn 206.191	6,306.1	0.1413	0.00024	mg/L	0.1413	0.00024	mg/L	0.17 %

Mean Data

ID: CVS **Seq. No.:** 46 **A/S Pos:** 3

2014/08/07 11:48:18 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:47:01

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	171,508.5	98.58	0.247	%				0.25 %
Y 324.227A	1,693,682.2	97.04	0.479	%				0.49 %
Ag 328.068	115,934.1	0.4976	0.00325	mg/L	0.4976			0.65 %
2014/08/07 11:48:17 QC value within limits for Ag 328.068 Recovery = 99.53%								
Al 308.215	3,132.6	4.90	0.067	mg/L	4.90			1.37 %
2014/08/07 11:48:17 QC value within limits for Al 308.215 Recovery = 98.06%								
As 188.979	830.1	0.4923	0.00692	mg/L	0.4923			1.41 %
2014/08/07 11:48:17 QC value within limits for As 188.979 Recovery = 98.46%								
Ba 233.527	49,316.3	0.4925	0.00417	mg/L	0.4925			0.85 %
2014/08/07 11:48:17 QC value within limits for Ba 233.527 Recovery = 98.50%								
Be 313.107	225,960.0	0.0485	0.00013	mg/L	0.0485			0.26 %
2014/08/07 11:48:17 QC value within limits for Be 313.107 Recovery = 96.98%								
B 208.959	21,043.2	2.403	0.0280	mg/L	2.403			1.16 %
2014/08/07 11:48:17 QC value within limits for B 208.959 Recovery = 96.13%								
Ca 317.933	63,574.0	4.849	0.0640	mg/L	4.849			1.32 %
2014/08/07 11:48:17 QC value within limits for Ca 317.933 Recovery = 96.97%								
Cd 226.502	5,860.2	0.0487	0.00043	mg/L	0.0487			0.89 %
2014/08/07 11:48:17 QC value within limits for Cd 226.502 Recovery = 97.34%								
Co 228.616	22,329.4	0.4899	0.00333	mg/L	0.4899			0.68 %
2014/08/07 11:48:17 QC value within limits for Co 228.616 Recovery = 97.98%								
Cr 267.716	66,572.3	0.4904	0.00324	mg/L	0.4904			0.66 %
2014/08/07 11:48:17 QC value within limits for Cr 267.716 Recovery = 98.09%								
Cu 324.754	142,689.2	0.4899	0.00273	mg/L	0.4899			0.56 %
2014/08/07 11:48:17 QC value within limits for Cu 324.754 Recovery = 97.99%								
Fe 273.955	58,110.0	2.452	0.0132	mg/L	2.452			0.54 %
2014/08/07 11:48:17 QC value within limits for Fe 273.955 Recovery = 98.09%								
K 766.491R	68,235.2	24.2	0.03	mg/L	24.2			0.11 %
2014/08/07 11:48:17 QC value within limits for K 766.491R Recovery = 96.71%								
Li 670.781R	37,967.0	0.492	0.0013	mg/L	0.492			0.26 %
2014/08/07 11:48:17 QC value within limits for Li 670.781R Recovery = 98.41%								
Mg 279.079R	4,231.2	4.90	0.031	mg/L	4.90			0.63 %
2014/08/07 11:48:17 QC value within limits for Mg 279.079R Recovery = 98.06%								
Mn 257.610	367,869.1	0.4912	0.00111	mg/L	0.4912			0.23 %
2014/08/07 11:48:17 QC value within limits for Mn 257.610 Recovery = 98.24%								
Mo 202.030	7,253.2	0.4941	0.00427	mg/L	0.4941			0.86 %
2014/08/07 11:48:17 QC value within limits for Mo 202.030 Recovery = 98.82%								
Na 589.592R	206,184.5	24.5	0.03	mg/L	24.5			0.12 %
2014/08/07 11:48:17 QC value within limits for Na 589.592R Recovery = 98.16%								
Ni 231.604	21,502.7	0.4882	0.00270	mg/L	0.4882			0.55 %
2014/08/07 11:48:17 QC value within limits for Ni 231.604 Recovery = 97.65%								
Pb 220.353	4,355.8	0.4975	0.00532	mg/L	0.4975			1.07 %
2014/08/07 11:48:17 QC value within limits for Pb 220.353 Recovery = 99.50%								

Sb 206.833	1,382.6	0.4959	0.00543	mg/L	0.4959	1.09 %
2014/08/07 11:48:17 QC value within limits for Sb 206.833 Recovery = 99.18%						
Se 196.026	1,407.1	0.4844	0.00760	mg/L	0.4844	1.57 %
2014/08/07 11:48:17 QC value within limits for Se 196.026 Recovery = 96.87%						
Sn 189.933	3,556.1	0.4939	0.00439	mg/L	0.4939	0.89 %
2014/08/07 11:48:17 QC value within limits for Sn 189.933 Recovery = 98.79%						
Sr 421.539R	277,765.1	0.4933	0.00063	mg/L	0.4933	0.13 %
2014/08/07 11:48:17 QC value within limits for Sr 421.539R Recovery = 98.65%						
Ti 337.280	165,138.5	0.2432	0.00159	mg/L	0.2432	0.65 %
2014/08/07 11:48:17 QC value within limits for Ti 337.280 Recovery = 97.28%						
Tl 190.800	1,049.6	0.4966	0.00309	mg/L	0.4966	0.62 %
2014/08/07 11:48:17 QC value within limits for Tl 190.800 Recovery = 99.31%						
V 292.402	122,438.9	0.4916	0.00299	mg/L	0.4916	0.61 %
2014/08/07 11:48:17 QC value within limits for V 292.402 Recovery = 98.32%						
Zn 206.191	22,196.2	0.4945	0.00355	mg/L	0.4945	0.72 %
2014/08/07 11:48:17 QC value within limits for Zn 206.191 Recovery = 98.89%						

Mean Data

ID: BLK **Seq. No.:** 47 **A/S Pos:** 1

2014/08/07 11:51:13 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:49:37

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	174,776.7	100.5	0.64	%				0.64 %
Y 324.227A	1,755,097.1	100.6	0.79	%				0.78 %
Ag 328.068	161.0	0.0007	0.00022	mg/L	0.0007			32.68 %
2014/08/07 11:51:12 QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215	5.6	0.009	0.0047	mg/L	0.009			53.80 %
2014/08/07 11:51:12 QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979	0.7	0.0004	0.00273	mg/L	0.0004			622.75 %
2014/08/07 11:51:12 QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527	-12.1	-0.0001	0.00009	mg/L	-0.0001			75.26 %
2014/08/07 11:51:12 QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107	122.5	0.0000	0.00003	mg/L	0.0000			96.51 %
2014/08/07 11:51:12 QC value within limits for Be 313.107 Recovery = Not calculated								
B 208.959	76.5	0.0086	0.00148	mg/L	0.0086			17.14 %
2014/08/07 11:51:12 QC value within limits for B 208.959 Recovery = Not calculated								
Ca 317.933	265.6	0.0203	0.02784	mg/L	0.0203			137.44 %
2014/08/07 11:51:12 QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 226.502	-25.5	-0.0002	0.00014	mg/L	-0.0002			64.94 %
2014/08/07 11:51:12 QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616	-17.3	-0.0004	0.00010	mg/L	-0.0004			27.68 %
2014/08/07 11:51:12 QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	22.4	0.0002	0.00008	mg/L	0.0002			47.87 %
2014/08/07 11:51:12 QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	-428.2	-0.0015	0.00034	mg/L	-0.0015			23.21 %
2014/08/07 11:51:12 QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 273.955	207.9	0.0088	0.00035	mg/L	0.0088			3.97 %
2014/08/07 11:51:12 QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.491R	-87.2	-0.031	0.0297	mg/L	-0.031			96.18 %
2014/08/07 11:51:12 QC value within limits for K 766.491R Recovery = Not calculated								
Li 670.781R	144.1	0.002	0.0003	mg/L	0.002			14.92 %
2014/08/07 11:51:12 QC value within limits for Li 670.781R Recovery = Not calculated								
Mg 279.079R	1.4	0.002	0.0096	mg/L	0.002			591.36 %
2014/08/07 11:51:12 QC value within limits for Mg 279.079R Recovery = Not calculated								
Mn 257.610	109.6	0.0001	0.00002	mg/L	0.0001			12.28 %
2014/08/07 11:51:12 QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	48.8	0.0033	0.00066	mg/L	0.0033			19.94 %
2014/08/07 11:51:12 QC value within limits for Mo 202.030 Recovery = Not calculated								
Na 589.592R	-221.4	-0.026	0.0130	mg/L	-0.026			49.49 %
2014/08/07 11:51:12 QC value within limits for Na 589.592R Recovery = Not calculated								
Ni 231.604	5.9	0.0001	0.00014	mg/L	0.0001			100.12 %

2014/08/07 11:51:12 QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	-9.1	-0.0010	0.00073	mg/L	-0.0010	71.22 %

2014/08/07 11:51:12 QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	7.0	0.0025	0.00081	mg/L	0.0025	32.36 %

2014/08/07 11:51:12 QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	14.8	0.0051	0.00142	mg/L	0.0051	27.91 %

2014/08/07 11:51:12 QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.933	3.9	0.0005	0.00009	mg/L	0.0005	17.44 %

2014/08/07 11:51:12 QC value within limits for Sn 189.933 Recovery = Not calculated

Sr 421.539R	-36.3	-0.0001	0.00034	mg/L	-0.0001	527.08 %

2014/08/07 11:51:12 QC value within limits for Sr 421.539R Recovery = Not calculated

Ti 337.280	188.9	0.0003	0.00008	mg/L	0.0003	28.64 %

2014/08/07 11:51:12 QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	7.8	0.0037	0.00226	mg/L	0.0037	60.92 %

2014/08/07 11:51:12 QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	7.1	0.0001	0.00035	mg/L	0.0001	598.72 %

2014/08/07 11:51:12 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-63.6	-0.0014	0.00009	mg/L	-0.0014	6.63 %

2014/08/07 11:51:12 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: 4H06004-blk1 **Seq. No.:** 48 **A/S Pos:** 431

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:52:34

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,570.5	99.19	0.544	%			%	0.55 %
Y 324.227A	1,746,428.4	100.1	0.77	%			%	0.77 %
Ag 328.068	116.6	0.0005	0.00019	mg/L	0.0005	0.00019	mg/L	39.02 %
Al 308.215	5.2	0.008	0.0003	mg/L	0.008	0.0003	mg/L	3.36 %
As 188.979	7.5	0.0044	0.00150	mg/L	0.0044	0.00150	mg/L	33.92 %
Ba 233.527	10.5	0.0001	0.00011	mg/L	0.0001	0.00011	mg/L	108.38 %
Be 313.107	77.9	0.0000	0.00003	mg/L	0.0000	0.00003	mg/L	178.99 %
B 208.959	50.6	0.0058	0.00058	mg/L	0.0058	0.00058	mg/L	9.90 %
Ca 317.933	96.4	0.0073	0.00346	mg/L	0.0073	0.00346	mg/L	47.02 %
Cd 226.502	-9.8	-0.0001	0.00004	mg/L	-0.0001	0.00004	mg/L	53.60 %
Co 228.616	5.1	0.0001	0.00012	mg/L	0.0001	0.00012	mg/L	109.31 %
Cr 267.716	29.0	0.0002	0.00019	mg/L	0.0002	0.00019	mg/L	89.67 %
Cu 324.754	-283.7	-0.0010	0.00010	mg/L	-0.0010	0.00010	mg/L	10.49 %
Fe 273.955	237.9	0.0101	0.00051	mg/L	0.0101	0.00051	mg/L	5.02 %
K 766.491R	-156.7	-0.056	0.0177	mg/L	-0.056	0.0177	mg/L	31.84 %
Li 670.781R	190.4	0.002	0.0024	mg/L	0.002	0.0024	mg/L	99.25 %
Mg 279.079R	-3.2	-0.004	0.0039	mg/L	-0.004	0.0039	mg/L	104.52 %
Mn 257.610	223.9	0.0003	0.00002	mg/L	0.0003	0.00002	mg/L	5.32 %
Mo 202.030	3.1	0.0002	0.00049	mg/L	0.0002	0.00049	mg/L	235.15 %
Na 589.592R	-399.5	-0.048	0.0110	mg/L	-0.048	0.0110	mg/L	23.09 %
Ni 231.604	14.2	0.0003	0.00017	mg/L	0.0003	0.00017	mg/L	51.46 %
Pb 220.353	-8.8	-0.0010	0.00232	mg/L	-0.0010	0.00232	mg/L	233.78 %
Sb 206.833	11.0	0.0041	0.00229	mg/L	0.0041	0.00229	mg/L	55.59 %
Se 196.026	9.0	0.0031	0.00257	mg/L	0.0031	0.00257	mg/L	83.05 %
Sn 189.933	94.0	0.0131	0.00120	mg/L	0.0131	0.00120	mg/L	9.16 %
Sr 421.539R	-50.4	-0.0001	0.00012	mg/L	-0.0001	0.00012	mg/L	134.92 %
Ti 337.280	117.5	0.0002	0.00014	mg/L	0.0002	0.00014	mg/L	78.09 %
Tl 190.800	-7.0	-0.0033	0.00118	mg/L	-0.0033	0.00118	mg/L	36.23 %
V 292.402	17.6	0.0001	0.00020	mg/L	0.0001	0.00020	mg/L	272.91 %
Zn 206.191	-35.8	-0.0008	0.00033	mg/L	-0.0008	0.00033	mg/L	41.06 %

Mean Data

ID: 4H06004-bs1 **Seq. No.:** 49 **A/S Pos:** 432

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:54:53

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD

Y 371.029R	167,775.4	96.43	0.595	%			%	0.62 %
Y 324.227A	1,686,859.0	96.65	0.299	%			%	0.31 %
Ag 328.068	22,293.8	0.0998	0.00048	mg/L	0.0998	0.00048	mg/L	0.48 %
Al 308.215	3,159.5	4.95	0.029	mg/L	4.95	0.029	mg/L	0.58 %
As 188.979	821.6	0.4873	0.00205	mg/L	0.4873	0.00205	mg/L	0.42 %
Ba 233.527	49,741.0	0.4967	0.00171	mg/L	0.4967	0.00171	mg/L	0.35 %
Be 313.107	226,431.4	0.0486	0.00018	mg/L	0.0486	0.00018	mg/L	0.37 %
B 208.959	20,353.7	2.324	0.0123	mg/L	2.324	0.0123	mg/L	0.53 %
Ca 317.933	64,724.2	4.936	0.0203	mg/L	4.936	0.0203	mg/L	0.41 %
Cd 226.502	5,974.5	0.0496	0.00019	mg/L	0.0496	0.00019	mg/L	0.39 %
Co 228.616	22,420.6	0.4919	0.00141	mg/L	0.4919	0.00141	mg/L	0.29 %
Cr 267.716	67,316.7	0.4959	0.00163	mg/L	0.4959	0.00163	mg/L	0.33 %
Cu 324.754	144,209.2	0.4952	0.00293	mg/L	0.4952	0.00293	mg/L	0.59 %
Fe 273.955	58,353.0	2.462	0.0074	mg/L	2.462	0.0074	mg/L	0.30 %
K 766.491R	67,981.9	24.1	0.02	mg/L	24.1	0.02	mg/L	0.10 %
Li 670.781R	38,287.1	0.496	0.0012	mg/L	0.496	0.0012	mg/L	0.24 %
Mg 279.079R	4,326.2	5.01	0.037	mg/L	5.01	0.037	mg/L	0.74 %
Mn 257.610	369,802.0	0.4938	0.00162	mg/L	0.4938	0.00162	mg/L	0.33 %
Mo 202.030	7,253.9	0.4941	0.00184	mg/L	0.4941	0.00184	mg/L	0.37 %
Na 589.592R	206,360.4	24.6	0.01	mg/L	24.6	0.01	mg/L	0.04 %
Ni 231.604	21,766.6	0.4942	0.00229	mg/L	0.4942	0.00229	mg/L	0.46 %
Pb 220.353	4,390.0	0.5014	0.00235	mg/L	0.5014	0.00235	mg/L	0.47 %
Sb 206.833	1,359.7	0.4878	0.00531	mg/L	0.4878	0.00531	mg/L	1.09 %
Se 196.026	1,404.0	0.4833	0.00366	mg/L	0.4833	0.00366	mg/L	0.76 %
Sn 189.933	3,619.0	0.5027	0.00196	mg/L	0.5027	0.00196	mg/L	0.39 %
Sr 421.539R	279,398.0	0.4962	0.00026	mg/L	0.4962	0.00026	mg/L	0.05 %
Ti 337.280	165,761.9	0.2441	0.00124	mg/L	0.2441	0.00124	mg/L	0.51 %
Tl 190.800	1,042.0	0.4930	0.00222	mg/L	0.4930	0.00222	mg/L	0.45 %
V 292.402	123,658.7	0.4964	0.00228	mg/L	0.4964	0.00228	mg/L	0.46 %
Zn 206.191	22,355.6	0.4980	0.00021	mg/L	0.4980	0.00021	mg/L	0.04 %

Mean Data

ID: 4H06004-ms1 **Seq. No.:** 50 **A/S Pos:** 433

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:56:54

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	169,899.3	97.65	1.012	%			%	1.04 %
Y 324.227A	1,709,109.7	97.93	1.127	%			%	1.15 %
Ag 328.068	21,799.3	0.0985	0.00104	mg/L	0.0985	0.00104	mg/L	1.06 %
Al 308.215	10,788.1	16.9	0.08	mg/L	16.9	0.08	mg/L	0.49 %
As 188.979	796.6	0.4761	0.00733	mg/L	0.4761	0.00733	mg/L	1.54 %
Ba 233.527	53,490.4	0.5330	0.00752	mg/L	0.5330	0.00752	mg/L	1.41 %
Be 313.107	227,938.4	0.0486	0.00018	mg/L	0.0486	0.00018	mg/L	0.37 %
B 208.959	19,974.9	2.281	0.0278	mg/L	2.281	0.0278	mg/L	1.22 %
Ca 317.933	73,843.2	5.632	0.0201	mg/L	5.632	0.0201	mg/L	0.36 %
Cd 226.502	5,937.2	0.0485	0.00072	mg/L	0.0485	0.00072	mg/L	1.48 %
Co 228.616	22,319.0	0.4878	0.00619	mg/L	0.4878	0.00619	mg/L	1.27 %
Cr 267.716	70,180.1	0.5173	0.00738	mg/L	0.5173	0.00738	mg/L	1.43 %
Cu 324.754	143,060.3	0.4913	0.00630	mg/L	0.4913	0.00630	mg/L	1.28 %
Fe 273.955	300,145.7	12.72	0.173	mg/L	12.72	0.173	mg/L	1.36 %
K 766.491R	69,811.8	24.7	0.04	mg/L	24.7	0.04	mg/L	0.18 %
Li 670.781R	39,066.0	0.506	0.0013	mg/L	0.506	0.0013	mg/L	0.25 %
Mg 279.079R	5,195.6	6.02	0.019	mg/L	6.02	0.019	mg/L	0.31 %
Mn 257.610	412,188.4	0.5504	0.00222	mg/L	0.5504	0.00222	mg/L	0.40 %
Mo 202.030	7,034.2	0.4792	0.00783	mg/L	0.4792	0.00783	mg/L	1.63 %
Na 589.592R	203,821.8	24.3	0.04	mg/L	24.3	0.04	mg/L	0.16 %
Ni 231.604	21,739.2	0.4936	0.00648	mg/L	0.4936	0.00648	mg/L	1.31 %
Pb 220.353	4,552.5	0.5214	0.00865	mg/L	0.5214	0.00865	mg/L	1.66 %
Sb 206.833	1,124.7	0.4025	0.00827	mg/L	0.4025	0.00827	mg/L	2.06 %
Se 196.026	1,326.3	0.4614	0.00618	mg/L	0.4614	0.00618	mg/L	1.34 %
Sn 189.933	3,478.8	0.4816	0.00649	mg/L	0.4816	0.00649	mg/L	1.35 %

Sr 421.539R	284,961.7	0.5060	0.00089	mg/L	0.5060	0.00089	mg/L	0.18 %
Ti 337.280	524,852.3	0.7727	0.00431	mg/L	0.7727	0.00431	mg/L	0.56 %
Tl 190.800	999.3	0.4795	0.00498	mg/L	0.4795	0.00498	mg/L	1.04 %
V 292.402	129,928.5	0.5214	0.00697	mg/L	0.5214	0.00697	mg/L	1.34 %
Zn 206.191	23,232.1	0.5179	0.00712	mg/L	0.5179	0.00712	mg/L	1.37 %

Mean Data

ID: 4H06004-msd1 **Seq. No.:** 51 **A/S Pos:** 434

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 11:58:55

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	169,611.2	97.49	0.269	%			%	0.28 %
Y 324.227A	1,718,010.4	98.44	0.534	%			%	0.54 %
Ag 328.068	21,657.2	0.0979	0.00032	mg/L	0.0979	0.00032	mg/L	0.33 %
Al 308.215	11,352.6	17.8	0.06	mg/L	17.8	0.06	mg/L	0.35 %
As 188.979	789.4	0.4719	0.00412	mg/L	0.4719	0.00412	mg/L	0.87 %
Ba 233.527	53,395.8	0.5321	0.00117	mg/L	0.5321	0.00117	mg/L	0.22 %
Be 313.107	227,814.4	0.0486	0.00013	mg/L	0.0486	0.00013	mg/L	0.26 %
B 208.959	19,950.8	2.278	0.0085	mg/L	2.278	0.0085	mg/L	0.37 %
Ca 317.933	74,364.9	5.672	0.0060	mg/L	5.672	0.0060	mg/L	0.11 %
Cd 226.502	5,927.6	0.0484	0.00032	mg/L	0.0484	0.00032	mg/L	0.67 %
Co 228.616	22,254.0	0.4864	0.00158	mg/L	0.4864	0.00158	mg/L	0.33 %
Cr 267.716	70,132.7	0.5169	0.00105	mg/L	0.5169	0.00105	mg/L	0.20 %
Cu 324.754	142,644.8	0.4898	0.00098	mg/L	0.4898	0.00098	mg/L	0.20 %
Fe 273.955	306,087.6	12.97	0.014	mg/L	12.97	0.014	mg/L	0.11 %
K 766.491R	70,311.3	24.9	0.04	mg/L	24.9	0.04	mg/L	0.15 %
Li 670.781R	38,984.8	0.505	0.0006	mg/L	0.505	0.0006	mg/L	0.11 %
Mg 279.079R	5,277.0	6.11	0.035	mg/L	6.11	0.035	mg/L	0.56 %
Mn 257.610	414,832.5	0.5539	0.00131	mg/L	0.5539	0.00131	mg/L	0.24 %
Mo 202.030	7,017.6	0.4780	0.00341	mg/L	0.4780	0.00341	mg/L	0.71 %
Na 589.592R	207,699.3	24.7	0.01	mg/L	24.7	0.01	mg/L	0.05 %
Ni 231.604	21,735.9	0.4935	0.00125	mg/L	0.4935	0.00125	mg/L	0.25 %
Pb 220.353	4,546.0	0.5208	0.00402	mg/L	0.5208	0.00402	mg/L	0.77 %
Sb 206.833	1,117.0	0.3997	0.00508	mg/L	0.3997	0.00508	mg/L	1.27 %
Se 196.026	1,327.6	0.4620	0.00387	mg/L	0.4620	0.00387	mg/L	0.84 %
Sn 189.933	3,471.8	0.4805	0.00506	mg/L	0.4805	0.00506	mg/L	1.05 %
Sr 421.539R	287,270.7	0.5101	0.00079	mg/L	0.5101	0.00079	mg/L	0.15 %
Ti 337.280	523,821.6	0.7712	0.00139	mg/L	0.7712	0.00139	mg/L	0.18 %
Tl 190.800	1,000.1	0.4803	0.00309	mg/L	0.4803	0.00309	mg/L	0.64 %
V 292.402	129,715.3	0.5206	0.00197	mg/L	0.5206	0.00197	mg/L	0.38 %
Zn 206.191	23,305.7	0.5195	0.00095	mg/L	0.5195	0.00095	mg/L	0.18 %

Mean Data

ID: b403655-21 **Seq. No.:** 52 **A/S Pos:** 435

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:00:52

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,862.6	101.1	0.61	%			%	0.60 %
Y 324.227A	1,820,107.5	104.3	0.28	%			%	0.27 %
Ag 328.068	-1,612.5	-0.0010	0.00026	mg/L	-0.0010	0.00026	mg/L	24.89 %
Al 308.215	104,354.1	164	0.4	mg/L	164	0.4	mg/L	0.23 %
As 188.979	14.0	0.0333	0.00392	mg/L	0.0333	0.00392	mg/L	11.76 %
Ba 233.527	58,845.5	0.5798	0.00383	mg/L	0.5798	0.00383	mg/L	0.66 %
Be 313.107	30,055.8	0.0038	0.00003	mg/L	0.0038	0.00003	mg/L	0.84 %
B 208.959	313.0	0.0359	0.00304	mg/L	0.0359	0.00304	mg/L	8.48 %
Ca 317.933	161,227.9	12.30	0.044	mg/L	12.30	0.044	mg/L	0.36 %
Cd 226.502	678.6	-0.0008	0.00014	mg/L	-0.0008	0.00014	mg/L	18.14 %
Co 228.616	2,184.1	0.0325	0.00017	mg/L	0.0325	0.00017	mg/L	0.53 %
Cr 267.716	30,492.2	0.2262	0.00106	mg/L	0.2262	0.00106	mg/L	0.47 %
Cu 324.754	20,215.0	0.0710	0.00073	mg/L	0.0710	0.00073	mg/L	1.03 %
Fe 273.955	1,708,161.9	72.44	0.103	mg/L	72.44	0.103	mg/L	0.14 %

K 766.491R	19,031.1	6.74	0.017	mg/L	6.74	0.017	mg/L	0.25 %
Li 670.781R	6,540.8	0.085	0.0003	mg/L	0.085	0.0003	mg/L	0.41 %
Mg 279.079R	17,346.3	20.1	0.09	mg/L	20.1	0.09	mg/L	0.43 %
Mn 257.610	463,731.8	0.6192	0.00364	mg/L	0.6192	0.00364	mg/L	0.59 %
Mo 202.030	74.2	0.0051	0.00042	mg/L	0.0051	0.00042	mg/L	8.21 %
Na 589.592R	4,518.4	0.538	0.0082	mg/L	0.538	0.0082	mg/L	1.52 %
Ni 231.604	4,220.6	0.0959	0.00047	mg/L	0.0959	0.00047	mg/L	0.49 %
Pb 220.353	948.1	0.1326	0.00038	mg/L	0.1326	0.00038	mg/L	0.28 %
Sb 206.833	8.1	-0.0065	0.00129	mg/L	-0.0065	0.00129	mg/L	19.74 %
Se 196.026	-105.8	0.0045	0.00120	mg/L	0.0045	0.00120	mg/L	26.51 %
Sn 189.933	212.7	0.0080	0.00023	mg/L	0.0080	0.00023	mg/L	2.89 %
Sr 421.539R	77,982.9	0.1385	0.00044	mg/L	0.1385	0.00044	mg/L	0.32 %
Ti 337.280	3,263,325.9	4.804	0.0079	mg/L	4.804	0.0079	mg/L	0.16 %
Tl 190.800	-173.6	-0.0081	0.00295	mg/L	-0.0081	0.00295	mg/L	36.58 %
V 292.402	50,817.6	0.2024	0.00084	mg/L	0.2024	0.00084	mg/L	0.42 %
Zn 206.191	11,251.5	0.2547	0.00152	mg/L	0.2547	0.00152	mg/L	0.60 %

Mean Data

ID: b403655-22 **Seq. No.:** 53 **A/S Pos:** 436

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:03:27

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	174,426.5	100.3	0.20	%			%	0.20 %
Y 324.227A	1,760,629.6	100.9	0.52	%			%	0.52 %
Ag 328.068	-366.4	0.0002	0.00033	mg/L	0.0002	0.00033	mg/L	199.50 %
Al 308.215	6,885.4	10.8	0.07	mg/L	10.8	0.07	mg/L	0.62 %
As 188.979	4.6	0.0107	0.00190	mg/L	0.0107	0.00190	mg/L	17.80 %
Ba 233.527	8,890.8	0.0859	0.00262	mg/L	0.0859	0.00262	mg/L	3.05 %
Be 313.107	3,452.3	0.0004	0.00002	mg/L	0.0004	0.00002	mg/L	3.76 %
B 208.959	161.5	0.0185	0.00150	mg/L	0.0185	0.00150	mg/L	8.12 %
Ca 317.933	24,111.3	1.839	0.0145	mg/L	1.839	0.0145	mg/L	0.79 %
Cd 226.502	361.9	0.0011	0.00007	mg/L	0.0011	0.00007	mg/L	6.25 %
Co 228.616	329.9	0.0043	0.00028	mg/L	0.0043	0.00028	mg/L	6.62 %
Cr 267.716	4,942.5	0.0369	0.00125	mg/L	0.0369	0.00125	mg/L	3.40 %
Cu 324.754	28,990.7	0.0990	0.00126	mg/L	0.0990	0.00126	mg/L	1.27 %
Fe 273.955	613,425.8	26.01	0.105	mg/L	26.01	0.105	mg/L	0.40 %
K 766.491R	2,950.4	1.04	0.030	mg/L	1.04	0.030	mg/L	2.85 %
Li 670.781R	614.0	0.008	0.0009	mg/L	0.008	0.0009	mg/L	11.58 %
Mg 279.079R	1,378.0	1.60	0.008	mg/L	1.60	0.008	mg/L	0.49 %
Mn 257.610	277,150.4	0.3701	0.00503	mg/L	0.3701	0.00503	mg/L	1.36 %
Mo 202.030	34.3	0.0024	0.00030	mg/L	0.0024	0.00030	mg/L	12.14 %
Na 589.592R	1,236.0	0.147	0.0051	mg/L	0.147	0.0051	mg/L	3.44 %
Ni 231.604	924.0	0.0210	0.00062	mg/L	0.0210	0.00062	mg/L	2.94 %
Pb 220.353	2,901.7	0.3304	0.00774	mg/L	0.3304	0.00774	mg/L	2.34 %
Sb 206.833	21.7	0.0049	0.00198	mg/L	0.0049	0.00198	mg/L	40.28 %
Se 196.026	-13.9	0.0053	0.00203	mg/L	0.0053	0.00203	mg/L	38.42 %
Sn 189.933	123.7	0.0157	0.00127	mg/L	0.0157	0.00127	mg/L	8.07 %
Sr 421.539R	11,284.9	0.0200	0.00006	mg/L	0.0200	0.00006	mg/L	0.32 %
Ti 337.280	387,590.9	0.5706	0.00256	mg/L	0.5706	0.00256	mg/L	0.45 %
Tl 190.800	-38.2	-0.0060	0.00147	mg/L	-0.0060	0.00147	mg/L	24.42 %
V 292.402	9,035.5	0.0372	0.00098	mg/L	0.0372	0.00098	mg/L	2.63 %
Zn 206.191	6,655.9	0.1482	0.00431	mg/L	0.1482	0.00431	mg/L	2.91 %

Mean Data

ID: b403655-23 **Seq. No.:** 54 **A/S Pos:** 437

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:05:45

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,775.4	99.31	0.575	%			%	0.58 %
Y 324.227A	1,764,389.8	101.1	0.83	%			%	0.82 %
Ag 328.068	-993.3	-0.0012	0.00024	mg/L	-0.0012	0.00024	mg/L	19.50 %

Al 308.215	30,479.9	47.8	0.15	mg/L	47.8	0.15	mg/L	0.31 %
As 188.979	9.8	0.0177	0.00368	mg/L	0.0177	0.00368	mg/L	20.78 %
Ba 233.527	22,382.8	0.2188	0.00111	mg/L	0.2188	0.00111	mg/L	0.51 %
Be 313.107	13,330.3	0.0023	0.00001	mg/L	0.0023	0.00001	mg/L	0.40 %
B 208.959	175.7	0.0197	0.00040	mg/L	0.0197	0.00040	mg/L	2.02 %
Ca 317.933	388,850.9	29.66	0.039	mg/L	29.66	0.039	mg/L	0.13 %
Cd 226.502	967.9	0.0047	0.00002	mg/L	0.0047	0.00002	mg/L	0.49 %
Co 228.616	1,045.3	0.0174	0.00025	mg/L	0.0174	0.00025	mg/L	1.45 %
Cr 267.716	9,525.9	0.0709	0.00031	mg/L	0.0709	0.00031	mg/L	0.44 %
Cu 324.754	47,347.7	0.1621	0.00188	mg/L	0.1621	0.00188	mg/L	1.16 %
Fe 273.955	1,013,293.2	42.97	0.029	mg/L	42.97	0.029	mg/L	0.07 %
K 766.491R	8,542.2	3.02	0.029	mg/L	3.02	0.029	mg/L	0.95 %
Li 670.781R	3,265.1	0.042	0.0013	mg/L	0.042	0.0013	mg/L	3.06 %
Mg 279.079R	9,093.7	10.5	0.03	mg/L	10.5	0.03	mg/L	0.32 %
Mn 257.610	466,706.9	0.6232	0.00074	mg/L	0.6232	0.00074	mg/L	0.12 %
Mo 202.030	142.6	0.0094	0.00009	mg/L	0.0094	0.00009	mg/L	0.94 %
Na 589.592R	1,480.4	0.176	0.0103	mg/L	0.176	0.0103	mg/L	5.83 %
Ni 231.604	1,563.1	0.0355	0.00051	mg/L	0.0355	0.00051	mg/L	1.44 %
Pb 220.353	1,536.5	0.1807	0.00181	mg/L	0.1807	0.00181	mg/L	1.00 %
Sb 206.833	21.6	0.0023	0.00069	mg/L	0.0023	0.00069	mg/L	30.12 %
Se 196.026	-46.7	0.0034	0.00148	mg/L	0.0034	0.00148	mg/L	44.20 %
Sn 189.933	205.6	0.0202	0.00162	mg/L	0.0202	0.00162	mg/L	8.05 %
Sr 421.539R	44,835.2	0.0796	0.00024	mg/L	0.0796	0.00024	mg/L	0.30 %
Ti 337.280	755,629.6	1.112	0.0013	mg/L	1.112	0.0013	mg/L	0.12 %
Tl 190.800	-76.2	-0.0045	0.00389	mg/L	-0.0045	0.00389	mg/L	87.04 %
V 292.402	18,179.2	0.0743	0.00058	mg/L	0.0743	0.00058	mg/L	0.79 %
Zn 206.191	11,896.5	0.2657	0.00244	mg/L	0.2657	0.00244	mg/L	0.92 %

Mean Data

ID: b403655-24 **Seq. No.:** 55 **A/S Pos:** 438

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:07:45

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,280.6	99.60	0.160	%			%	0.16 %
Y 324.227A	1,770,605.1	101.5	0.86	%			%	0.85 %
Ag 328.068	-811.5	-0.0005	0.00068	mg/L	-0.0005	0.00068	mg/L	143.21 %
Al 308.215	31,290.4	49.1	0.37	mg/L	49.1	0.37	mg/L	0.76 %
As 188.979	10.4	0.0191	0.00145	mg/L	0.0191	0.00145	mg/L	7.60 %
Ba 233.527	22,518.2	0.2207	0.00189	mg/L	0.2207	0.00189	mg/L	0.86 %
Be 313.107	10,560.9	0.0012	0.00001	mg/L	0.0012	0.00001	mg/L	1.23 %
B 208.959	160.2	0.0183	0.00081	mg/L	0.0183	0.00081	mg/L	4.40 %
Ca 317.933	54,372.3	4.147	0.0312	mg/L	4.147	0.0312	mg/L	0.75 %
Cd 226.502	382.9	0.0000	0.00001	mg/L	0.0000	0.00001	mg/L	27.56 %
Co 228.616	941.6	0.0140	0.00008	mg/L	0.0140	0.00008	mg/L	0.56 %
Cr 267.716	11,522.4	0.0856	0.00041	mg/L	0.0856	0.00041	mg/L	0.48 %
Cu 324.754	18,131.4	0.0626	0.00082	mg/L	0.0626	0.00082	mg/L	1.32 %
Fe 273.955	891,349.1	37.80	0.032	mg/L	37.80	0.032	mg/L	0.08 %
K 766.491R	9,193.1	3.25	0.034	mg/L	3.25	0.034	mg/L	1.06 %
Li 670.781R	2,147.2	0.028	0.0009	mg/L	0.028	0.0009	mg/L	3.24 %
Mg 279.079R	6,654.5	7.71	0.090	mg/L	7.71	0.090	mg/L	1.16 %
Mn 257.610	412,494.6	0.5508	0.00043	mg/L	0.5508	0.00043	mg/L	0.08 %
Mo 202.030	52.0	0.0037	0.00033	mg/L	0.0037	0.00033	mg/L	9.05 %
Na 589.592R	3,907.8	0.465	0.0243	mg/L	0.465	0.0243	mg/L	5.22 %
Ni 231.604	1,604.3	0.0364	0.00008	mg/L	0.0364	0.00008	mg/L	0.23 %
Pb 220.353	983.5	0.1183	0.00120	mg/L	0.1183	0.00120	mg/L	1.01 %
Sb 206.833	7.4	-0.0017	0.00292	mg/L	-0.0017	0.00292	mg/L	168.31 %
Se 196.026	-43.7	0.0027	0.00163	mg/L	0.0027	0.00163	mg/L	60.80 %
Sn 189.933	124.7	0.0108	0.00073	mg/L	0.0108	0.00073	mg/L	6.75 %
Sr 421.539R	33,875.2	0.0602	0.00062	mg/L	0.0602	0.00062	mg/L	1.03 %
Ti 337.280	1,319,170.9	1.942	0.0040	mg/L	1.942	0.0040	mg/L	0.20 %
Tl 190.800	-73.3	-0.0081	0.00158	mg/L	-0.0081	0.00158	mg/L	19.62 %

V 292.402	24,878.0	0.0996	0.00080	mg/L	0.0996	0.00080	mg/L	0.80	%
Zn 206.191	11,717.3	0.2618	0.00179	mg/L	0.2618	0.00179	mg/L	0.68	%

Mean Data

ID: b403655-25 **Seq. No.:** 56 **A/S Pos:** 439

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:10:22

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	173,474.5	99.71	0.186	%			%	0.19	%
Y 324.227A	1,751,557.3	100.4	0.29	%			%	0.29	%
Ag 328.068	-211.8	0.0001	0.00014	mg/L	0.0001	0.00014	mg/L	128.26	%
Al 308.215	7,204.8	11.3	0.06	mg/L	11.3	0.06	mg/L	0.56	%
As 188.979	8.2	0.0093	0.00222	mg/L	0.0093	0.00222	mg/L	23.87	%
Ba 233.527	6,638.8	0.0649	0.00190	mg/L	0.0649	0.00190	mg/L	2.93	%
Be 313.107	3,492.1	0.0004	0.00002	mg/L	0.0004	0.00002	mg/L	4.60	%
B 208.959	107.4	0.0123	0.00041	mg/L	0.0123	0.00041	mg/L	3.35	%
Ca 317.933	22,622.9	1.725	0.0076	mg/L	1.725	0.0076	mg/L	0.44	%
Cd 226.502	122.7	0.0000	0.00005	mg/L	0.0000	0.00005	mg/L	1,620.25	%
Co 228.616	222.7	0.0028	0.00030	mg/L	0.0028	0.00030	mg/L	10.78	%
Cr 267.716	4,187.5	0.0311	0.00123	mg/L	0.0311	0.00123	mg/L	3.95	%
Cu 324.754	2,602.1	0.0090	0.00032	mg/L	0.0090	0.00032	mg/L	3.52	%
Fe 273.955	296,162.6	12.56	0.071	mg/L	12.56	0.071	mg/L	0.57	%
K 766.491R	2,580.6	0.914	0.0305	mg/L	0.914	0.0305	mg/L	3.33	%
Li 670.781R	578.7	0.007	0.0007	mg/L	0.007	0.0007	mg/L	9.13	%
Mg 279.079R	1,210.1	1.40	0.005	mg/L	1.40	0.005	mg/L	0.38	%
Mn 257.610	102,060.9	0.1363	0.00047	mg/L	0.1363	0.00047	mg/L	0.34	%
Mo 202.030	22.6	0.0016	0.00036	mg/L	0.0016	0.00036	mg/L	23.01	%
Na 589.592R	1,084.5	0.129	0.0037	mg/L	0.129	0.0037	mg/L	2.86	%
Ni 231.604	319.5	0.0073	0.00022	mg/L	0.0073	0.00022	mg/L	2.97	%
Pb 220.353	326.9	0.0384	0.00070	mg/L	0.0384	0.00070	mg/L	1.83	%
Sb 206.833	4.5	0.0002	0.00215	mg/L	0.0002	0.00215	mg/L	1,271.13	%
Se 196.026	-9.0	0.0024	0.00267	mg/L	0.0024	0.00267	mg/L	113.05	%
Sn 189.933	86.8	0.0105	0.00105	mg/L	0.0105	0.00105	mg/L	9.94	%
Sr 421.539R	12,179.5	0.0216	0.00027	mg/L	0.0216	0.00027	mg/L	1.24	%
Ti 337.280	410,266.6	0.6039	0.00523	mg/L	0.6039	0.00523	mg/L	0.87	%
Tl 190.800	-22.4	-0.0034	0.00222	mg/L	-0.0034	0.00222	mg/L	65.77	%
V 292.402	8,771.5	0.0352	0.00019	mg/L	0.0352	0.00019	mg/L	0.53	%
Zn 206.191	1,427.1	0.0321	0.00093	mg/L	0.0321	0.00093	mg/L	2.91	%

Mean Data

ID: b403655-26 **Seq. No.:** 57 **A/S Pos:** 440

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:13:16

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD	
Y 371.029R	174,018.3	100.0	1.19	%			%	1.19	%
Y 324.227A	1,739,589.3	99.67	0.890	%			%	0.89	%
Ag 328.068	-360.0	-0.0002	0.00022	mg/L	-0.0002	0.00022	mg/L	91.07	%
Al 308.215	8,996.5	14.1	0.17	mg/L	14.1	0.17	mg/L	1.19	%
As 188.979	9.0	0.0105	0.00473	mg/L	0.0105	0.00473	mg/L	45.22	%
Ba 233.527	8,265.0	0.0807	0.00275	mg/L	0.0807	0.00275	mg/L	3.40	%
Be 313.107	3,371.3	0.0004	0.00003	mg/L	0.0004	0.00003	mg/L	7.39	%
B 208.959	136.5	0.0156	0.00081	mg/L	0.0156	0.00081	mg/L	5.15	%
Ca 317.933	47,344.5	3.611	0.0066	mg/L	3.611	0.0066	mg/L	0.18	%
Cd 226.502	299.8	0.0012	0.00014	mg/L	0.0012	0.00014	mg/L	11.26	%
Co 228.616	339.4	0.0051	0.00017	mg/L	0.0051	0.00017	mg/L	3.26	%
Cr 267.716	4,654.7	0.0344	0.00141	mg/L	0.0344	0.00141	mg/L	4.10	%
Cu 324.754	6,568.6	0.0224	0.00068	mg/L	0.0224	0.00068	mg/L	3.04	%
Fe 273.955	386,224.3	16.38	0.326	mg/L	16.38	0.326	mg/L	1.99	%
K 766.491R	3,972.8	1.41	0.010	mg/L	1.41	0.010	mg/L	0.70	%
Li 670.781R	762.5	0.010	0.0019	mg/L	0.010	0.0019	mg/L	18.85	%
Mg 279.079R	1,771.1	2.05	0.035	mg/L	2.05	0.035	mg/L	1.72	%

Mn 257.610	366,745.3	0.4897	0.00054	mg/L	0.4897	0.00054	mg/L	0.11 %
Mo 202.030	33.8	0.0024	0.00059	mg/L	0.0024	0.00059	mg/L	24.43 %
Na 589.592R	1,595.7	0.190	0.0040	mg/L	0.190	0.0040	mg/L	2.09 %
Ni 231.604	479.3	0.0109	0.00037	mg/L	0.0109	0.00037	mg/L	3.36 %
Pb 220.353	1,021.3	0.1177	0.00369	mg/L	0.1177	0.00369	mg/L	3.14 %
Sb 206.833	5.5	0.0001	0.00413	mg/L	0.0001	0.00413	mg/L	2,914.35 %
Se 196.026	-6.6	0.0045	0.00405	mg/L	0.0045	0.00405	mg/L	90.05 %
Sn 189.933	108.5	0.0130	0.00125	mg/L	0.0130	0.00125	mg/L	9.60 %
Sr 421.539R	18,852.9	0.0335	0.00011	mg/L	0.0335	0.00011	mg/L	0.32 %
Ti 337.280	391,359.3	0.5761	0.00489	mg/L	0.5761	0.00489	mg/L	0.85 %
Tl 190.800	-38.9	-0.0091	0.00330	mg/L	-0.0091	0.00330	mg/L	36.27 %
V 292.402	10,802.2	0.0435	0.00104	mg/L	0.0435	0.00104	mg/L	2.38 %
Zn 206.191	4,853.5	0.1083	0.00356	mg/L	0.1083	0.00356	mg/L	3.28 %

Mean Data

ID: CVS **Seq. No.:** 58 **A/S Pos:** 3

2014/08/07 12:16:54 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:15:36

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,599.0	99.21	0.516	%				0.52 %
Y 324.227A	1,706,396.8	97.77	0.812	%				0.83 %
Ag 328.068	115,089.9	0.4940	0.00441	mg/L	0.4940			0.89 %
2014/08/07 12:16:53 QC value within limits for Ag 328.068 Recovery = 98.81%								
Al 308.215	3,117.9	4.88	0.034	mg/L	4.88			0.71 %
2014/08/07 12:16:53 QC value within limits for Al 308.215 Recovery = 97.60%								
As 188.979	821.8	0.4874	0.00356	mg/L	0.4874			0.73 %
2014/08/07 12:16:53 QC value within limits for As 188.979 Recovery = 97.48%								
Ba 233.527	48,954.1	0.4889	0.00567	mg/L	0.4889			1.16 %
2014/08/07 12:16:53 QC value within limits for Ba 233.527 Recovery = 97.78%								
Be 313.107	225,149.8	0.0483	0.00007	mg/L	0.0483			0.15 %
2014/08/07 12:16:53 QC value within limits for Be 313.107 Recovery = 96.63%								
B 208.959	20,867.8	2.383	0.0333	mg/L	2.383			1.40 %
2014/08/07 12:16:53 QC value within limits for B 208.959 Recovery = 95.34%								
Ca 317.933	63,441.0	4.839	0.0667	mg/L	4.839			1.38 %
2014/08/07 12:16:53 QC value within limits for Ca 317.933 Recovery = 96.77%								
Cd 226.502	5,813.3	0.0483	0.00043	mg/L	0.0483			0.90 %
2014/08/07 12:16:53 QC value within limits for Cd 226.502 Recovery = 96.56%								
Co 228.616	22,180.5	0.4866	0.00478	mg/L	0.4866			0.98 %
2014/08/07 12:16:53 QC value within limits for Co 228.616 Recovery = 97.33%								
Cr 267.716	66,080.6	0.4868	0.00490	mg/L	0.4868			1.01 %
2014/08/07 12:16:53 QC value within limits for Cr 267.716 Recovery = 97.36%								
Cu 324.754	141,632.1	0.4863	0.00514	mg/L	0.4863			1.06 %
2014/08/07 12:16:53 QC value within limits for Cu 324.754 Recovery = 97.26%								
Fe 273.955	58,010.4	2.448	0.0233	mg/L	2.448			0.95 %
2014/08/07 12:16:53 QC value within limits for Fe 273.955 Recovery = 97.93%								
K 766.491R	68,283.1	24.2	0.05	mg/L	24.2			0.19 %
2014/08/07 12:16:53 QC value within limits for K 766.491R Recovery = 96.77%								
Li 670.781R	37,973.3	0.492	0.0009	mg/L	0.492			0.18 %
2014/08/07 12:16:53 QC value within limits for Li 670.781R Recovery = 98.43%								
Mg 279.079R	4,194.1	4.86	0.056	mg/L	4.86			1.15 %
2014/08/07 12:16:53 QC value within limits for Mg 279.079R Recovery = 97.20%								
Mn 257.610	366,728.9	0.4897	0.00101	mg/L	0.4897			0.21 %
2014/08/07 12:16:53 QC value within limits for Mn 257.610 Recovery = 97.94%								
Mo 202.030	7,151.7	0.4872	0.00382	mg/L	0.4872			0.78 %
2014/08/07 12:16:53 QC value within limits for Mo 202.030 Recovery = 97.43%								
Na 589.592R	205,442.0	24.5	0.07	mg/L	24.5			0.27 %
2014/08/07 12:16:53 QC value within limits for Na 589.592R Recovery = 97.81%								
Ni 231.604	21,380.8	0.4855	0.00462	mg/L	0.4855			0.95 %
2014/08/07 12:16:53 QC value within limits for Ni 231.604 Recovery = 97.10%								
Pb 220.353	4,293.8	0.4904	0.00378	mg/L	0.4904			0.77 %
2014/08/07 12:16:53 QC value within limits for Pb 220.353 Recovery = 98.09%								

Sb 206.833	1,363.1	0.4889	0.00790	mg/L	0.4889	1.62 %
2014/08/07 12:16:53 QC value within limits for Sb 206.833 Recovery = 97.77%						
Se 196.026	1,404.1	0.4833	0.00751	mg/L	0.4833	1.55 %
2014/08/07 12:16:53 QC value within limits for Se 196.026 Recovery = 96.67%						
Sn 189.933	3,506.2	0.4870	0.00435	mg/L	0.4870	0.89 %
2014/08/07 12:16:53 QC value within limits for Sn 189.933 Recovery = 97.40%						
Sr 421.539R	276,747.7	0.4915	0.00080	mg/L	0.4915	0.16 %
2014/08/07 12:16:53 QC value within limits for Sr 421.539R Recovery = 98.29%						
Ti 337.280	164,165.4	0.2418	0.00244	mg/L	0.2418	1.01 %
2014/08/07 12:16:53 QC value within limits for Ti 337.280 Recovery = 96.71%						
Tl 190.800	1,057.0	0.4999	0.00565	mg/L	0.4999	1.13 %
2014/08/07 12:16:53 QC value within limits for Tl 190.800 Recovery = 99.99%						
V 292.402	121,751.5	0.4888	0.00500	mg/L	0.4888	1.02 %
2014/08/07 12:16:53 QC value within limits for V 292.402 Recovery = 97.76%						
Zn 206.191	21,845.2	0.4867	0.00706	mg/L	0.4867	1.45 %
2014/08/07 12:16:53 QC value within limits for Zn 206.191 Recovery = 97.33%						

Mean Data

ID: BLK **Seq. No.:** 59 **A/S Pos:** 1

2014/08/07 12:19:49 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:18:14

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	173,746.8	99.87	0.674	%				0.68 %
Y 324.227A	1,761,385.1	100.9	0.55	%				0.55 %
Ag 328.068	98.0	0.0004	0.00028	mg/L	0.0004			66.84 %
2014/08/07 12:19:48 QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215	5.3	0.008	0.0065	mg/L	0.008			79.23 %
2014/08/07 12:19:48 QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979	7.1	0.0042	0.00054	mg/L	0.0042			12.92 %
2014/08/07 12:19:48 QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527	-21.6	-0.0002	0.00007	mg/L	-0.0002			30.28 %
2014/08/07 12:19:48 QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107	378.4	0.0001	0.00001	mg/L	0.0001			8.36 %
2014/08/07 12:19:48 QC value within limits for Be 313.107 Recovery = Not calculated								
B 208.959	96.0	0.0109	0.00117	mg/L	0.0109			10.70 %
2014/08/07 12:19:48 QC value within limits for B 208.959 Recovery = Not calculated								
Ca 317.933	126.0	0.0096	0.00303	mg/L	0.0096			31.50 %
2014/08/07 12:19:48 QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 226.502	-28.2	-0.0002	0.00004	mg/L	-0.0002			16.36 %
2014/08/07 12:19:48 QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616	-24.8	-0.0005	0.00007	mg/L	-0.0005			12.30 %
2014/08/07 12:19:48 QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	13.7	0.0001	0.00005	mg/L	0.0001			51.25 %
2014/08/07 12:19:48 QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	-336.8	-0.0012	0.00019	mg/L	-0.0012			16.61 %
2014/08/07 12:19:48 QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 273.955	211.0	0.0090	0.00022	mg/L	0.0090			2.45 %
2014/08/07 12:19:48 QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.491R	-71.9	-0.025	0.0327	mg/L	-0.025			128.45 %
2014/08/07 12:19:48 QC value within limits for K 766.491R Recovery = Not calculated								
Li 670.781R	201.7	0.003	0.0016	mg/L	0.003			59.34 %
2014/08/07 12:19:48 QC value within limits for Li 670.781R Recovery = Not calculated								
Mg 279.079R	-0.9	-0.001	0.0050	mg/L	-0.001			499.38 %
2014/08/07 12:19:48 QC value within limits for Mg 279.079R Recovery = Not calculated								
Mn 257.610	173.4	0.0002	0.00005	mg/L	0.0002			21.07 %
2014/08/07 12:19:48 QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	41.6	0.0028	0.00069	mg/L	0.0028			24.43 %
2014/08/07 12:19:48 QC value within limits for Mo 202.030 Recovery = Not calculated								
Na 589.592R	-139.1	-0.017	0.0271	mg/L	-0.017			163.71 %
2014/08/07 12:19:48 QC value within limits for Na 589.592R Recovery = Not calculated								
Ni 231.604	6.8	0.0002	0.00010	mg/L	0.0002			62.33 %

2014/08/07 12:19:48 QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353	1.1	0.0001	0.00129	mg/L	0.0001	934.15 %

2014/08/07 12:19:48 QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.833	8.7	0.0031	0.00188	mg/L	0.0031	61.03 %

2014/08/07 12:19:48 QC value within limits for Sb 206.833 Recovery = Not calculated

Se 196.026	11.0	0.0038	0.00517	mg/L	0.0038	137.19 %

2014/08/07 12:19:48 QC value within limits for Se 196.026 Recovery = Not calculated

Sn 189.933	-7.8	-0.0011	0.00042	mg/L	-0.0011	38.99 %

2014/08/07 12:19:48 QC value within limits for Sn 189.933 Recovery = Not calculated

Sr 421.539R	62.5	0.0001	0.00005	mg/L	0.0001	49.45 %

2014/08/07 12:19:48 QC value within limits for Sr 421.539R Recovery = Not calculated

Ti 337.280	200.1	0.0003	0.00021	mg/L	0.0003	72.51 %

2014/08/07 12:19:48 QC value within limits for Ti 337.280 Recovery = Not calculated

Tl 190.800	3.5	0.0017	0.00137	mg/L	0.0017	81.55 %

2014/08/07 12:19:48 QC value within limits for Tl 190.800 Recovery = Not calculated

V 292.402	-12.8	0.0000	0.00023	mg/L	0.0000	883.83 %

2014/08/07 12:19:48 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-63.9	-0.0014	0.00020	mg/L	-0.0014	13.85 %

2014/08/07 12:19:48 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: b403655-27 **Seq. No.:** 60 **A/S Pos:** 441

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:21:10

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	172,788.5	99.31	0.568	%			%	0.57 %
Y 324.227A	1,766,487.4	101.2	0.23	%			%	0.23 %
Ag 328.068	-197.7	0.0000	0.00008	mg/L	0.0000	0.00008	mg/L	370.44 %
Al 308.215	5,678.3	8.91	0.038	mg/L	8.91	0.038	mg/L	0.43 %
As 188.979	3.3	0.0057	0.00232	mg/L	0.0057	0.00232	mg/L	40.84 %
Ba 233.527	3,963.9	0.0385	0.00096	mg/L	0.0385	0.00096	mg/L	2.50 %
Be 313.107	2,693.5	0.0003	0.00001	mg/L	0.0003	0.00001	mg/L	4.13 %
B 208.959	110.1	0.0126	0.00050	mg/L	0.0126	0.00050	mg/L	3.98 %
Ca 317.933	8,689.9	0.6628	0.00364	mg/L	0.6628	0.00364	mg/L	0.55 %
Cd 226.502	86.4	-0.0001	0.00009	mg/L	-0.0001	0.00009	mg/L	78.03 %
Co 228.616	168.8	0.0019	0.00011	mg/L	0.0019	0.00011	mg/L	5.79 %
Cr 267.716	3,364.9	0.0250	0.00076	mg/L	0.0250	0.00076	mg/L	3.03 %
Cu 324.754	1,291.9	0.0045	0.00054	mg/L	0.0045	0.00054	mg/L	11.92 %
Fe 273.955	238,527.5	10.11	0.014	mg/L	10.11	0.014	mg/L	0.14 %
K 766.491R	2,303.3	0.816	0.0432	mg/L	0.816	0.0432	mg/L	5.30 %
Li 670.781R	490.7	0.006	0.0007	mg/L	0.006	0.0007	mg/L	11.53 %
Mg 279.079R	899.7	1.04	0.004	mg/L	1.04	0.004	mg/L	0.41 %
Mn 257.610	49,733.0	0.0664	0.00012	mg/L	0.0664	0.00012	mg/L	0.17 %
Mo 202.030	22.3	0.0015	0.00035	mg/L	0.0015	0.00035	mg/L	23.10 %
Na 589.592R	533.1	0.063	0.0016	mg/L	0.063	0.0016	mg/L	2.51 %
Ni 231.604	212.8	0.0048	0.00024	mg/L	0.0048	0.00024	mg/L	4.92 %
Pb 220.353	259.1	0.0304	0.00267	mg/L	0.0304	0.00267	mg/L	8.76 %
Sb 206.833	10.1	0.0025	0.00322	mg/L	0.0025	0.00322	mg/L	127.64 %
Se 196.026	-2.4	0.0036	0.00146	mg/L	0.0036	0.00146	mg/L	40.54 %
Sn 189.933	78.8	0.0098	0.00236	mg/L	0.0098	0.00236	mg/L	24.06 %
Sr 421.539R	5,361.4	0.0095	0.00018	mg/L	0.0095	0.00018	mg/L	1.89 %
Ti 337.280	366,681.4	0.5398	0.00305	mg/L	0.5398	0.00305	mg/L	0.56 %
Tl 190.800	-18.2	-0.0030	0.00375	mg/L	-0.0030	0.00375	mg/L	126.27 %
V 292.402	8,296.6	0.0331	0.00038	mg/L	0.0331	0.00038	mg/L	1.14 %
Zn 206.191	1,100.2	0.0247	0.00048	mg/L	0.0247	0.00048	mg/L	1.94 %

Mean Data

ID: CVS **Seq. No.:** 70 **A/S Pos:** 3

2014/08/07 12:47:10 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:45:52

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD

Y 371.029R	171,151.2	98.37	0.431	%		0.44 %
Y 324.227A	1,706,472.0	97.78	0.602	%		0.62 %
Ag 328.068	115,402.1	0.4954	0.00407	mg/L	0.4954	0.82 %
2014/08/07 12:47:09 QC value within limits for Ag 328.068 Recovery = 99.08%						
Al 308.215	3,144.6	4.92	0.017	mg/L	4.92	0.35 %
2014/08/07 12:47:09 QC value within limits for Al 308.215 Recovery = 98.45%						
As 188.979	815.8	0.4839	0.00418	mg/L	0.4839	0.86 %
2014/08/07 12:47:09 QC value within limits for As 188.979 Recovery = 96.77%						
Ba 233.527	49,269.1	0.4920	0.00479	mg/L	0.4920	0.97 %
2014/08/07 12:47:09 QC value within limits for Ba 233.527 Recovery = 98.41%						
Be 313.107	224,291.8	0.0481	0.00008	mg/L	0.0481	0.16 %
2014/08/07 12:47:09 QC value within limits for Be 313.107 Recovery = 96.26%						
B 208.959	20,968.3	2.395	0.0235	mg/L	2.395	0.98 %
2014/08/07 12:47:09 QC value within limits for B 208.959 Recovery = 95.80%						
Ca 317.933	63,556.8	4.847	0.0230	mg/L	4.847	0.47 %
2014/08/07 12:47:09 QC value within limits for Ca 317.933 Recovery = 96.95%						
Cd 226.502	5,834.5	0.0485	0.00040	mg/L	0.0485	0.82 %
2014/08/07 12:47:09 QC value within limits for Cd 226.502 Recovery = 96.91%						
Co 228.616	22,387.1	0.4912	0.00427	mg/L	0.4912	0.87 %
2014/08/07 12:47:09 QC value within limits for Co 228.616 Recovery = 98.24%						
Cr 267.716	66,701.0	0.4914	0.00441	mg/L	0.4914	0.90 %
2014/08/07 12:47:09 QC value within limits for Cr 267.716 Recovery = 98.28%						
Cu 324.754	141,844.9	0.4870	0.00419	mg/L	0.4870	0.86 %
2014/08/07 12:47:09 QC value within limits for Cu 324.754 Recovery = 97.41%						
Fe 273.955	58,006.7	2.448	0.0235	mg/L	2.448	0.96 %
2014/08/07 12:47:09 QC value within limits for Fe 273.955 Recovery = 97.92%						
K 766.491R	68,049.7	24.1	0.04	mg/L	24.1	0.16 %
2014/08/07 12:47:09 QC value within limits for K 766.491R Recovery = 96.44%						
Li 670.781R	37,875.9	0.491	0.0010	mg/L	0.491	0.21 %
2014/08/07 12:47:09 QC value within limits for Li 670.781R Recovery = 98.17%						
Mg 279.079R	4,224.6	4.90	0.034	mg/L	4.90	0.70 %
2014/08/07 12:47:09 QC value within limits for Mg 279.079R Recovery = 97.90%						
Mn 257.610	365,027.8	0.4874	0.00091	mg/L	0.4874	0.19 %
2014/08/07 12:47:09 QC value within limits for Mn 257.610 Recovery = 97.48%						
Mo 202.030	7,144.2	0.4867	0.00308	mg/L	0.4867	0.63 %
2014/08/07 12:47:09 QC value within limits for Mo 202.030 Recovery = 97.33%						
Na 589.592R	207,717.7	24.7	0.03	mg/L	24.7	0.12 %
2014/08/07 12:47:09 QC value within limits for Na 589.592R Recovery = 98.89%						
Ni 231.604	21,576.6	0.4899	0.00381	mg/L	0.4899	0.78 %
2014/08/07 12:47:09 QC value within limits for Ni 231.604 Recovery = 97.98%						
Pb 220.353	4,300.1	0.4912	0.00416	mg/L	0.4912	0.85 %
2014/08/07 12:47:09 QC value within limits for Pb 220.353 Recovery = 98.23%						
Sb 206.833	1,359.9	0.4876	0.00075	mg/L	0.4876	0.15 %
2014/08/07 12:47:09 QC value within limits for Sb 206.833 Recovery = 97.53%						
Se 196.026	1,408.9	0.4850	0.00187	mg/L	0.4850	0.39 %
2014/08/07 12:47:09 QC value within limits for Se 196.026 Recovery = 97.00%						
Sn 189.933	3,493.6	0.4853	0.00382	mg/L	0.4853	0.79 %
2014/08/07 12:47:09 QC value within limits for Sn 189.933 Recovery = 97.05%						
Sr 421.539R	276,622.3	0.4912	0.00032	mg/L	0.4912	0.07 %
2014/08/07 12:47:09 QC value within limits for Sr 421.539R Recovery = 98.25%						
Ti 337.280	164,785.1	0.2427	0.00226	mg/L	0.2427	0.93 %
2014/08/07 12:47:09 QC value within limits for Ti 337.280 Recovery = 97.07%						
Tl 190.800	1,060.3	0.5015	0.00498	mg/L	0.5015	0.99 %
2014/08/07 12:47:09 QC value within limits for Tl 190.800 Recovery = 100.30%						
V 292.402	122,809.7	0.4930	0.00463	mg/L	0.4930	0.94 %
2014/08/07 12:47:09 QC value within limits for V 292.402 Recovery = 98.60%						
Zn 206.191	21,818.4	0.4861	0.00417	mg/L	0.4861	0.86 %
2014/08/07 12:47:09 QC value within limits for Zn 206.191 Recovery = 97.22%						

Mean Data

ID: BLK **Seq. No.:** 71 **A/S Pos:** 1

2014/08/07 12:50:05 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 12:48:29

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,939.8	101.1	0.56	%				0.55 %
Y 324.227A	1,772,578.3	101.6	0.54	%				0.53 %
Ag 328.068	6.4	0.0000	0.00024	mg/L	0.0000			825.88 %
2014/08/07 12:50:04 QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 308.215	-1.6	-0.003	0.0059	mg/L	-0.003			224.61 %
2014/08/07 12:50:04 QC value within limits for Al 308.215 Recovery = Not calculated								
As 188.979	1.4	0.0008	0.00281	mg/L	0.0008			352.94 %
2014/08/07 12:50:04 QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527	-18.6	-0.0002	0.00002	mg/L	-0.0002			12.14 %
2014/08/07 12:50:04 QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107	469.9	0.0001	0.00001	mg/L	0.0001			10.85 %
2014/08/07 12:50:04 QC value within limits for Be 313.107 Recovery = Not calculated								
B 208.959	121.1	0.0138	0.00143	mg/L	0.0138			10.31 %
2014/08/07 12:50:04 QC value within limits for B 208.959 Recovery = Not calculated								
Ca 317.933	106.2	0.0081	0.00723	mg/L	0.0081			89.32 %
2014/08/07 12:50:04 QC value within limits for Ca 317.933 Recovery = Not calculated								
Cd 226.502	-28.1	-0.0002	0.00007	mg/L	-0.0002			31.44 %
2014/08/07 12:50:04 QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616	-28.3	-0.0006	0.00006	mg/L	-0.0006			10.03 %
2014/08/07 12:50:04 QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716	-0.7	0.0000	0.00004	mg/L	0.0000			823.28 %
2014/08/07 12:50:04 QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 324.754	-310.9	-0.0011	0.00024	mg/L	-0.0011			22.06 %
2014/08/07 12:50:04 QC value within limits for Cu 324.754 Recovery = Not calculated								
Fe 273.955	127.8	0.0054	0.00041	mg/L	0.0054			7.65 %
2014/08/07 12:50:04 QC value within limits for Fe 273.955 Recovery = Not calculated								
K 766.491R	-127.1	-0.045	0.0406	mg/L	-0.045			90.10 %
2014/08/07 12:50:04 QC value within limits for K 766.491R Recovery = Not calculated								
Li 670.781R	224.1	0.003	0.0009	mg/L	0.003			30.16 %
2014/08/07 12:50:04 QC value within limits for Li 670.781R Recovery = Not calculated								
Mg 279.079R	-2.9	-0.003	0.0069	mg/L	-0.003			208.45 %
2014/08/07 12:50:04 QC value within limits for Mg 279.079R Recovery = Not calculated								
Mn 257.610	154.2	0.0002	0.00003	mg/L	0.0002			12.21 %
2014/08/07 12:50:04 QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.030	45.5	0.0031	0.00033	mg/L	0.0031			10.62 %
2014/08/07 12:50:04 QC value within limits for Mo 202.030 Recovery = Not calculated								
Na 589.592R	437.4	0.052	0.0279	mg/L	0.052			53.61 %
2014/08/07 12:50:04 QC value within limits for Na 589.592R Recovery = Not calculated								
Ni 231.604	1.3	0.0000	0.00019	mg/L	0.0000			666.02 %
2014/08/07 12:50:04 QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353	-1.6	-0.0002	0.00081	mg/L	-0.0002			477.01 %
2014/08/07 12:50:04 QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.833	5.7	0.0020	0.00111	mg/L	0.0020			55.20 %
2014/08/07 12:50:04 QC value within limits for Sb 206.833 Recovery = Not calculated								
Se 196.026	14.9	0.0051	0.00140	mg/L	0.0051			27.40 %
2014/08/07 12:50:04 QC value within limits for Se 196.026 Recovery = Not calculated								
Sn 189.933	-11.2	-0.0016	0.00138	mg/L	-0.0016			88.72 %
2014/08/07 12:50:04 QC value within limits for Sn 189.933 Recovery = Not calculated								
Sr 421.539R	34.5	0.0001	0.00025	mg/L	0.0001			400.90 %
2014/08/07 12:50:04 QC value within limits for Sr 421.539R Recovery = Not calculated								
Ti 337.280	24.0	0.0000	0.00005	mg/L	0.0000			133.84 %
2014/08/07 12:50:04 QC value within limits for Ti 337.280 Recovery = Not calculated								
Tl 190.800	13.1	0.0062	0.00300	mg/L	0.0062			48.39 %
2014/08/07 12:50:04 QC value within limits for Tl 190.800 Recovery = Not calculated								
V 292.402	43.5	0.0002	0.00017	mg/L	0.0002			85.15 %

2014/08/07 12:50:04 QC value within limits for V 292.402 Recovery = Not calculated

Zn 206.191	-72.0	-0.0016	0.00026	mg/L	-0.0016	16.01 %

2014/08/07 12:50:04 QC value within limits for Zn 206.191 Recovery = Not calculated

Mean Data

ID: 4H06003-ps1 **Seq. No.:** 77 **A/S Pos:** 456

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 13:06:01

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	176,382.5	101.4	0.64	%			%	0.63 %
Y 324.227A	1,776,971.4	101.8	0.60	%			%	0.59 %
Ag 328.068	-965.5	0.0007	0.00066	mg/L	0.0007	0.00066	mg/L	88.79 %
Al 308.215	1,925.1	3.01	0.027	mg/L	3.01	0.027	mg/L	0.90 %
As 188.979	754.0	0.4483	0.00630	mg/L	0.4483	0.00630	mg/L	1.40 %
Ba 233.527	48,923.7	0.4884	0.00125	mg/L	0.4884	0.00125	mg/L	0.26 %
Be 313.107	212,209.8	0.0455	0.00012	mg/L	0.0455	0.00012	mg/L	0.26 %
B 208.959	19,329.6	2.208	0.0064	mg/L	2.208	0.0064	mg/L	0.29 %
Ca 317.933	2,027.2	0.1546	0.00140	mg/L	0.1546	0.00140	mg/L	0.91 %
Cd 226.502	5,505.3	0.0456	0.00082	mg/L	0.0456	0.00082	mg/L	1.81 %
Co 228.616	21,541.2	0.4723	0.00199	mg/L	0.4723	0.00199	mg/L	0.42 %
Cr 267.716	64,644.5	0.4763	0.00183	mg/L	0.4763	0.00183	mg/L	0.38 %
Cu 324.754	139,359.8	0.4783	0.00155	mg/L	0.4783	0.00155	mg/L	0.32 %
Fe 273.955	102,899.6	4.352	0.0159	mg/L	4.352	0.0159	mg/L	0.37 %
K 766.491R	411.0	0.146	0.0418	mg/L	0.146	0.0418	mg/L	28.76 %
Li 670.781R	37,855.6	0.491	0.0012	mg/L	0.491	0.0012	mg/L	0.25 %
Mg 279.079R	416.0	0.482	0.0080	mg/L	0.482	0.0080	mg/L	1.66 %
Mn 257.610	384,847.4	0.5139	0.00094	mg/L	0.5139	0.00094	mg/L	0.18 %
Mo 202.030	6,479.7	0.4415	0.00883	mg/L	0.4415	0.00883	mg/L	2.00 %
Na 589.592R	-545.1	-0.065	0.0071	mg/L	-0.065	0.0071	mg/L	10.98 %
Ni 231.604	21,006.5	0.4770	0.00236	mg/L	0.4770	0.00236	mg/L	0.49 %
Pb 220.353	4,236.8	0.4834	0.00496	mg/L	0.4834	0.00496	mg/L	1.03 %
Sb 206.833	1,212.3	0.4342	0.00444	mg/L	0.4342	0.00444	mg/L	1.02 %
Se 196.026	1,308.1	0.4509	0.00397	mg/L	0.4509	0.00397	mg/L	0.88 %
Sn 189.933	3,153.2	0.4385	0.01070	mg/L	0.4385	0.01070	mg/L	2.44 %
Sr 421.539R	271,362.6	0.4819	0.00059	mg/L	0.4819	0.00059	mg/L	0.12 %
Ti 337.280	220,888.8	0.3253	0.00112	mg/L	0.3253	0.00112	mg/L	0.34 %
Tl 190.800	1,044.8	0.4932	0.00108	mg/L	0.4932	0.00108	mg/L	0.22 %
V 292.402	115,537.9	0.4638	0.00093	mg/L	0.4638	0.00093	mg/L	0.20 %
Zn 206.191	20,812.9	0.4637	0.00180	mg/L	0.4637	0.00180	mg/L	0.39 %

Mean Data

ID: 4H06004-ps1 **Seq. No.:** 78 **A/S Pos:** 457

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 13:08:56

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	175,461.9	100.9	0.81	%			%	0.80 %
Y 324.227A	1,762,232.2	101.0	1.31	%			%	1.30 %
Ag 328.068	-1,039.2	0.0004	0.00020	mg/L	0.0004	0.00020	mg/L	45.48 %
Al 308.215	571.6	0.886	0.0102	mg/L	0.886	0.0102	mg/L	1.15 %
As 188.979	768.0	0.4562	0.01088	mg/L	0.4562	0.01088	mg/L	2.38 %
Ba 233.527	48,887.9	0.4881	0.00624	mg/L	0.4881	0.00624	mg/L	1.28 %
Be 313.107	214,429.4	0.0460	0.00021	mg/L	0.0460	0.00021	mg/L	0.46 %
B 208.959	19,628.8	2.242	0.0324	mg/L	2.242	0.0324	mg/L	1.45 %
Ca 317.933	799.0	0.0609	0.00073	mg/L	0.0609	0.00073	mg/L	1.20 %
Cd 226.502	5,584.5	0.0463	0.00126	mg/L	0.0463	0.00126	mg/L	2.73 %
Co 228.616	21,992.4	0.4824	0.00778	mg/L	0.4824	0.00778	mg/L	1.61 %
Cr 267.716	65,269.0	0.4808	0.00765	mg/L	0.4808	0.00765	mg/L	1.59 %
Cu 324.754	140,432.4	0.4820	0.00783	mg/L	0.4820	0.00783	mg/L	1.62 %
Fe 273.955	80,087.4	3.385	0.0520	mg/L	3.385	0.0520	mg/L	1.54 %
K 766.491R	221.7	0.079	0.0421	mg/L	0.079	0.0421	mg/L	53.65 %
Li 670.781R	38,261.2	0.496	0.0014	mg/L	0.496	0.0014	mg/L	0.28 %

Mg 279.079R	76.4	0.088	0.0072	mg/L	0.088	0.0072	mg/L	8.14 %
Mn 257.610	371,936.7	0.4966	0.00213	mg/L	0.4966	0.00213	mg/L	0.43 %
Mo 202.030	6,610.8	0.4504	0.01172	mg/L	0.4504	0.01172	mg/L	2.60 %
Na 589.592R	-499.5	-0.059	0.0081	mg/L	-0.059	0.0081	mg/L	13.56 %
Ni 231.604	21,375.0	0.4853	0.00712	mg/L	0.4853	0.00712	mg/L	1.47 %
Pb 220.353	4,284.5	0.4885	0.00866	mg/L	0.4885	0.00866	mg/L	1.77 %
Sb 206.833	1,241.5	0.4448	0.00864	mg/L	0.4448	0.00864	mg/L	1.94 %
Se 196.026	1,322.6	0.4553	0.00893	mg/L	0.4553	0.00893	mg/L	1.96 %
Sn 189.933	3,219.6	0.4480	0.01276	mg/L	0.4480	0.01276	mg/L	2.85 %
Sr 421.539R	275,809.3	0.4898	0.00146	mg/L	0.4898	0.00146	mg/L	0.30 %
Ti 337.280	192,710.3	0.2838	0.00485	mg/L	0.2838	0.00485	mg/L	1.71 %
Tl 190.800	1,053.6	0.4963	0.00621	mg/L	0.4963	0.00621	mg/L	1.25 %
V 292.402	117,187.0	0.4704	0.00748	mg/L	0.4704	0.00748	mg/L	1.59 %
Zn 206.191	20,813.5	0.4636	0.00762	mg/L	0.4636	0.00762	mg/L	1.64 %

Mean Data

ID: CVS **Seq. No.:** 79 **A/S Pos:** 3

2014/08/07 13:12:36 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 13:11:18

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	171,171.6	98.38	0.664	%				0.67 %
Y 324.227A	1,715,579.9	98.30	0.154	%				0.16 %
Ag 328.068	115,487.8	0.4958	0.00110	mg/L	0.4958			0.22 %
2014/08/07 13:12:35 QC value within limits for Ag 328.068 Recovery = 99.15%								
Al 308.215	3,132.4	4.90	0.041	mg/L	4.90			0.84 %
2014/08/07 13:12:35 QC value within limits for Al 308.215 Recovery = 98.06%								
As 188.979	820.4	0.4866	0.00476	mg/L	0.4866			0.98 %
2014/08/07 13:12:35 QC value within limits for As 188.979 Recovery = 97.31%								
Ba 233.527	49,186.5	0.4912	0.00047	mg/L	0.4912			0.10 %
2014/08/07 13:12:35 QC value within limits for Ba 233.527 Recovery = 98.24%								
Be 313.107	225,057.4	0.0483	0.00007	mg/L	0.0483			0.14 %
2014/08/07 13:12:35 QC value within limits for Be 313.107 Recovery = 96.59%								
B 208.959	21,175.1	2.419	0.0082	mg/L	2.419			0.34 %
2014/08/07 13:12:35 QC value within limits for B 208.959 Recovery = 96.76%								
Ca 317.933	64,179.3	4.895	0.0171	mg/L	4.895			0.35 %
2014/08/07 13:12:35 QC value within limits for Ca 317.933 Recovery = 97.90%								
Cd 226.502	5,804.6	0.0482	0.00012	mg/L	0.0482			0.25 %
2014/08/07 13:12:35 QC value within limits for Cd 226.502 Recovery = 96.42%								
Co 228.616	22,376.3	0.4909	0.00102	mg/L	0.4909			0.21 %
2014/08/07 13:12:35 QC value within limits for Co 228.616 Recovery = 98.19%								
Cr 267.716	66,671.3	0.4912	0.00046	mg/L	0.4912			0.09 %
2014/08/07 13:12:35 QC value within limits for Cr 267.716 Recovery = 98.23%								
Cu 324.754	141,861.2	0.4871	0.00068	mg/L	0.4871			0.14 %
2014/08/07 13:12:35 QC value within limits for Cu 324.754 Recovery = 97.42%								
Fe 273.955	58,272.8	2.459	0.0041	mg/L	2.459			0.17 %
2014/08/07 13:12:35 QC value within limits for Fe 273.955 Recovery = 98.37%								
K 766.491R	68,217.4	24.2	0.04	mg/L	24.2			0.15 %
2014/08/07 13:12:35 QC value within limits for K 766.491R Recovery = 96.68%								
Li 670.781R	38,220.3	0.495	0.0016	mg/L	0.495			0.32 %
2014/08/07 13:12:35 QC value within limits for Li 670.781R Recovery = 99.07%								
Mg 279.079R	4,242.6	4.92	0.044	mg/L	4.92			0.89 %
2014/08/07 13:12:35 QC value within limits for Mg 279.079R Recovery = 98.32%								
Mn 257.610	366,569.5	0.4895	0.00033	mg/L	0.4895			0.07 %
2014/08/07 13:12:35 QC value within limits for Mn 257.610 Recovery = 97.89%								
Mo 202.030	7,141.6	0.4865	0.00035	mg/L	0.4865			0.07 %
2014/08/07 13:12:35 QC value within limits for Mo 202.030 Recovery = 97.30%								
Na 589.592R	204,465.0	24.3	0.04	mg/L	24.3			0.15 %
2014/08/07 13:12:35 QC value within limits for Na 589.592R Recovery = 97.34%								
Ni 231.604	21,679.1	0.4923	0.00122	mg/L	0.4923			0.25 %
2014/08/07 13:12:35 QC value within limits for Ni 231.604 Recovery = 98.45%								
Pb 220.353	4,280.6	0.4889	0.00287	mg/L	0.4889			0.59 %

2014/08/07 13:12:35 QC value within limits for Pb 220.353 Recovery = 97.79%

Sb 206.833	1,362.8	0.4887	0.00106	mg/L	0.4887	0.22 %

2014/08/07 13:12:35 QC value within limits for Sb 206.833 Recovery = 97.73%

Se 196.026	1,411.9	0.4860	0.00163	mg/L	0.4860	0.33 %

2014/08/07 13:12:35 QC value within limits for Se 196.026 Recovery = 97.21%

Sn 189.933	3,486.0	0.4842	0.00130	mg/L	0.4842	0.27 %

2014/08/07 13:12:35 QC value within limits for Sn 189.933 Recovery = 96.84%

Sr 421.539R	276,664.8	0.4913	0.00093	mg/L	0.4913	0.19 %

2014/08/07 13:12:35 QC value within limits for Sr 421.539R Recovery = 98.26%

Ti 337.280	165,064.4	0.2431	0.00009	mg/L	0.2431	0.04 %

2014/08/07 13:12:35 QC value within limits for Ti 337.280 Recovery = 97.24%

Tl 190.800	1,053.6	0.4983	0.00214	mg/L	0.4983	0.43 %

2014/08/07 13:12:35 QC value within limits for Tl 190.800 Recovery = 99.67%

V 292.402	122,687.0	0.4925	0.00052	mg/L	0.4925	0.11 %

2014/08/07 13:12:35 QC value within limits for V 292.402 Recovery = 98.50%

Zn 206.191	21,702.5	0.4835	0.00109	mg/L	0.4835	0.22 %

2014/08/07 13:12:35 QC value within limits for Zn 206.191 Recovery = 96.70%

Mean Data

ID: BLK **Seq. No.:** 80 **A/S Pos:** 1

2014/08/07 13:15:31 All analyte(s) passed QC.

Sample Qty: g **Prep. Vol.:** **Dilution:** **:** **Date:** 2014/08/07 13:13:55

Analyte	Corr. Intensity	Conc (Calib)	Std. Dev.	Calib Units	Conc (Sample)	Std. Dev.	Sample Units	RSD
Y 371.029R	176,777.1	101.6	0.75	%				0.74 %
Y 324.227A	1,747,279.5	100.1	0.52	%				0.52 %
Ag 328.068	36.2	0.0002	0.00017	mg/L	0.0002			112.08 %

2014/08/07 13:15:30 QC value within limits for Ag 328.068 Recovery = Not calculated

Al 308.215	4.6	0.007	0.0022	mg/L	0.007			31.65 %

2014/08/07 13:15:30 QC value within limits for Al 308.215 Recovery = Not calculated

As 188.979	0.1	0.0001	0.00130	mg/L	0.0001			2,456.93 %

2014/08/07 13:15:30 QC value within limits for As 188.979 Recovery = Not calculated

Ba 233.527	-4.0	0.0000	0.00009	mg/L	0.0000			211.80 %

2014/08/07 13:15:30 QC value within limits for Ba 233.527 Recovery = Not calculated

Be 313.107	274.4	0.0001	0.00002	mg/L	0.0001			37.94 %

2014/08/07 13:15:30 QC value within limits for Be 313.107 Recovery = Not calculated

B 208.959	189.5	0.0217	0.00211	mg/L	0.0217			9.74 %

2014/08/07 13:15:30 QC value within limits for B 208.959 Recovery = Not calculated

Ca 317.933	-11.5	-0.0009	0.00495	mg/L	-0.0009			561.49 %

2014/08/07 13:15:30 QC value within limits for Ca 317.933 Recovery = Not calculated

Cd 226.502	-8.3	-0.0001	0.00005	mg/L	-0.0001			77.82 %

2014/08/07 13:15:30 QC value within limits for Cd 226.502 Recovery = Not calculated

Co 228.616	-6.8	-0.0001	0.00013	mg/L	-0.0001			84.35 %

2014/08/07 13:15:30 QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716	13.8	0.0001	0.00009	mg/L	0.0001			89.40 %

2014/08/07 13:15:30 QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 324.754	-200.7	-0.0007	0.00037	mg/L	-0.0007			54.24 %

2014/08/07 13:15:30 QC value within limits for Cu 324.754 Recovery = Not calculated

Fe 273.955	266.7	0.0113	0.00053	mg/L	0.0113			4.73 %

2014/08/07 13:15:30 QC value within limits for Fe 273.955 Recovery = Not calculated

K 766.491R	-42.2	-0.015	0.0399	mg/L	-0.015			266.94 %

2014/08/07 13:15:30 QC value within limits for K 766.491R Recovery = Not calculated

Li 670.781R	137.8	0.002	0.0007	mg/L	0.002			40.60 %

2014/08/07 13:15:30 QC value within limits for Li 670.781R Recovery = Not calculated

Mg 279.079R	7.3	0.008	0.0076	mg/L	0.008			90.53 %

2014/08/07 13:15:30 QC value within limits for Mg 279.079R Recovery = Not calculated

Mn 257.610	43.4	0.0001	0.00004	mg/L	0.0001			67.73 %

2014/08/07 13:15:30 QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.030	54.7	0.0037	0.00046	mg/L	0.0037			12.33 %

2014/08/07 13:15:30 QC value within limits for Mo 202.030 Recovery = Not calculated

Na 589.592R	-149.6	-0.018	0.0164	mg/L	-0.018			92.10 %

2014/08/07 13:15:30 QC value within limits for Na 589.592R Recovery = Not calculated

Ni 231.604	0.4	0.0000	0.00012	mg/L	0.0000	1,139.94	%
2014/08/07 13:15:30 QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353	-2.8	-0.0003	0.00135	mg/L	-0.0003	436.00	%
2014/08/07 13:15:30 QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.833	12.5	0.0045	0.00083	mg/L	0.0045	18.57	%
2014/08/07 13:15:30 QC value within limits for Sb 206.833 Recovery = Not calculated							
Se 196.026	18.7	0.0064	0.00060	mg/L	0.0064	9.32	%
2014/08/07 13:15:30 QC value within limits for Se 196.026 Recovery = Not calculated							
Sn 189.933	1.9	0.0003	0.00092	mg/L	0.0003	341.58	%
2014/08/07 13:15:30 QC value within limits for Sn 189.933 Recovery = Not calculated							
Sr 421.539R	-52.5	-0.0001	0.00011	mg/L	-0.0001	115.14	%
2014/08/07 13:15:30 QC value within limits for Sr 421.539R Recovery = Not calculated							
Ti 337.280	213.6	0.0003	0.00012	mg/L	0.0003	38.25	%
2014/08/07 13:15:30 QC value within limits for Ti 337.280 Recovery = Not calculated							
Tl 190.800	3.7	0.0018	0.00398	mg/L	0.0018	219.59	%
2014/08/07 13:15:30 QC value within limits for Tl 190.800 Recovery = Not calculated							
V 292.402	40.0	0.0002	0.00020	mg/L	0.0002	102.61	%
2014/08/07 13:15:30 QC value within limits for V 292.402 Recovery = Not calculated							
Zn 206.191	-77.5	-0.0017	0.00022	mg/L	-0.0017	12.82	%
2014/08/07 13:15:30 QC value within limits for Zn 206.191 Recovery = Not calculated							

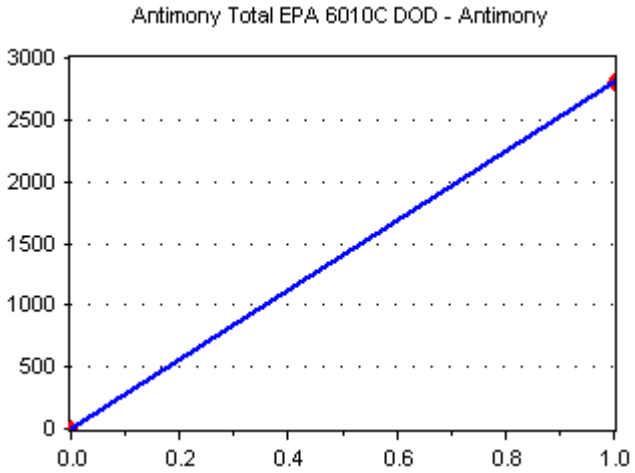
INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

Antimony Total EPA 6010C DOD

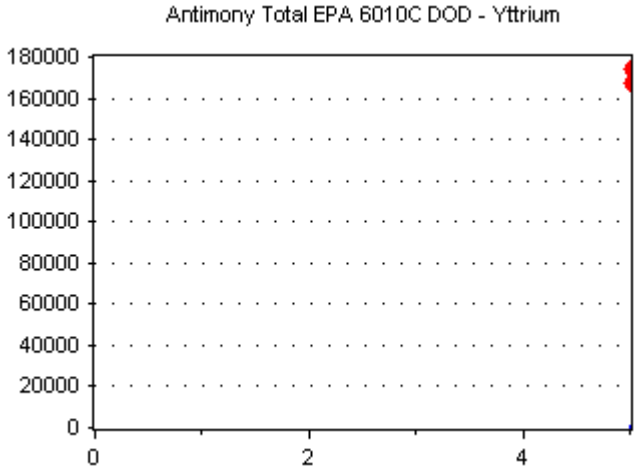
Antimony



Curve Type: Linear regression
Avg RF/Slope: 2804.635
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	1	2804.635			2804.635

Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

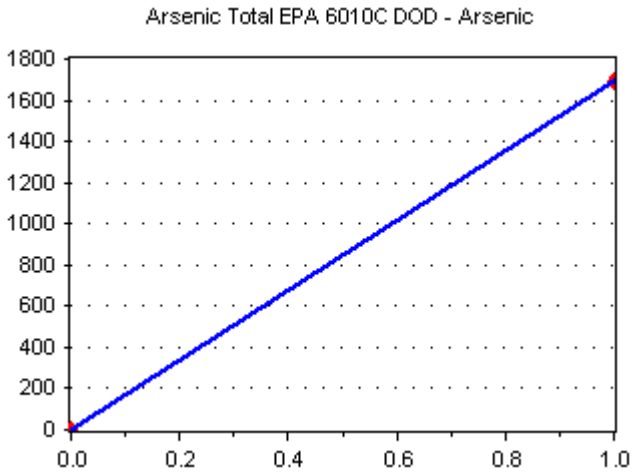
INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

Arsenic Total EPA 6010C DOD

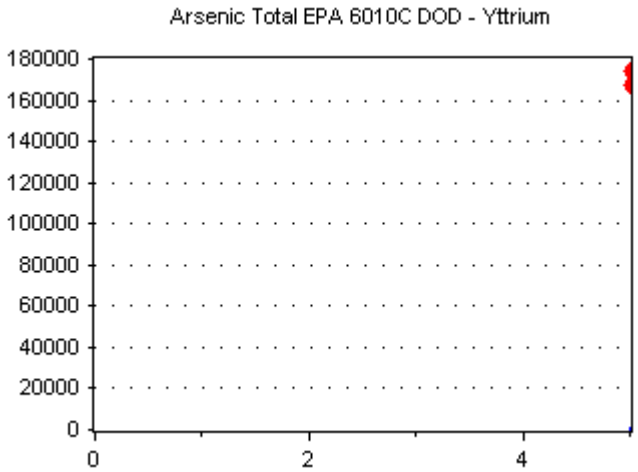
Arsenic



Curve Type: Linear regression
Avg RF/Slope: 1690.67
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	1	1690.67			1690.67

Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

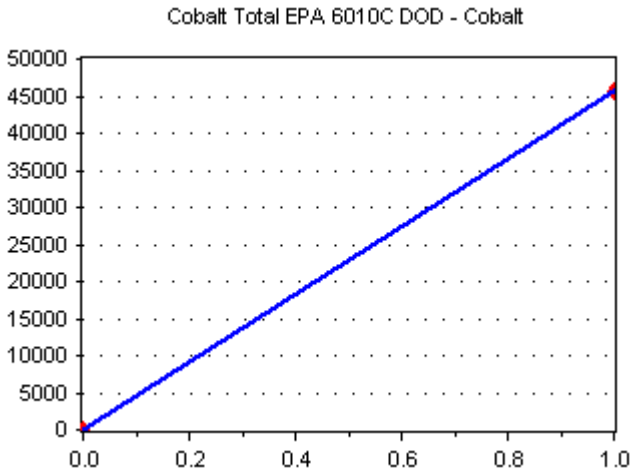
INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

Cobalt Total EPA 6010C DOD

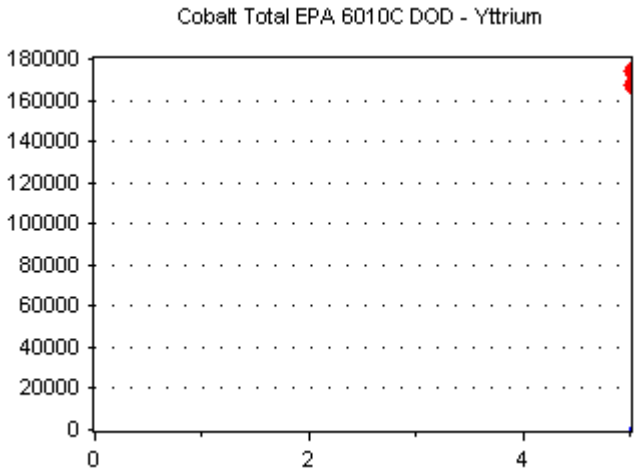
Cobalt



Curve Type: Linear regression
Avg RF/Slope: 45549.04
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	1	45549.04			45549.04

Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

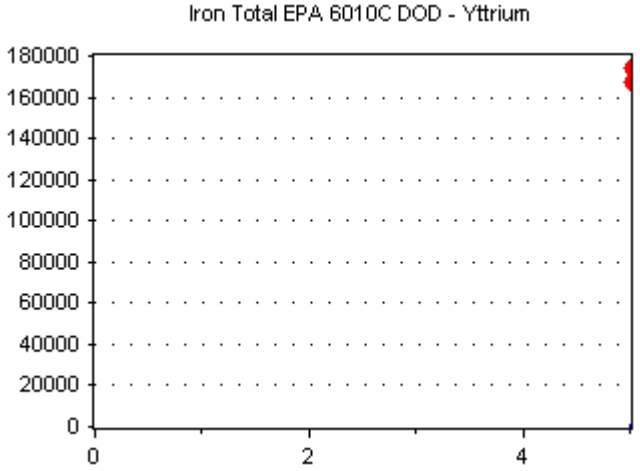
Iron Total EPA 6010C DOD

Iron

Curve Type: Linear regression
Avg RF/Slope: 23579.94
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	5	117899.7			23579.94

Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

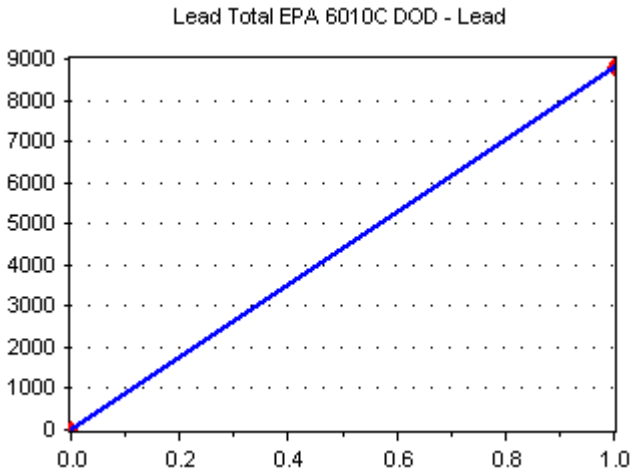
INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

Lead Total EPA 6010C DOD

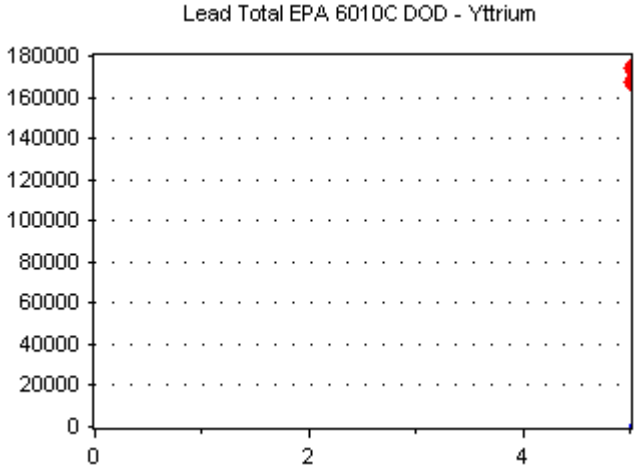
Lead



Curve Type: Linear regression
Avg RF/Slope: 8790.788
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	1	8790.788			8790.788

Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

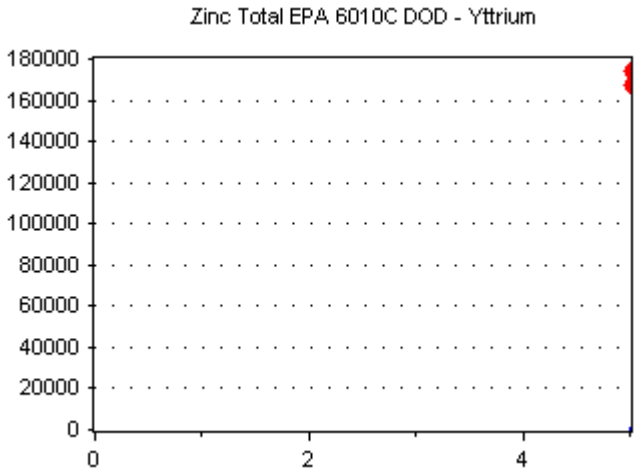
INITIAL CALIBRATION CURVE

Laboratory: **ENCO Jacksonville** **Calibration ID:** **1408002**

Instrument: JMICP2 Created By: ACV Calibration Date: 07-Aug-2014 9:30

Zinc Total EPA 6010C DOD

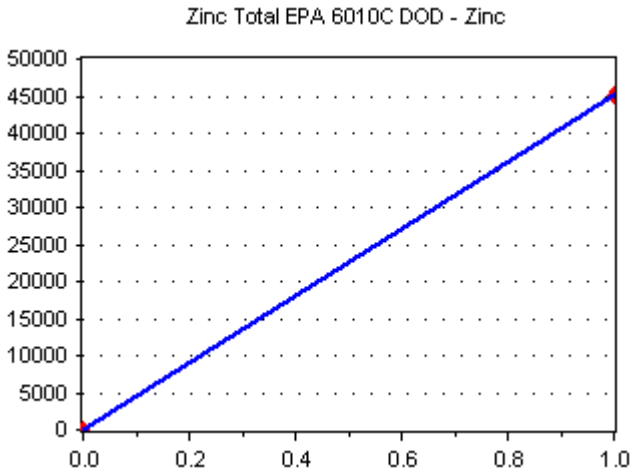
Yttrium



Curve Type: Linear regression
Avg RF/Slope: 0
Intercept: 0
RF RSD/COD: 0

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	5	173981.4			34796.28
BA15922-CAL2	B4F0073	5	167052.9			33410.58

Zinc



Curve Type: Linear regression
Avg RF/Slope: 45011.57
Intercept: 0
RF RSD/COD: 1

Lab Number	Standard ID	Concentration (ug/mL)	Response	ISTD Conc (ug/mL)	ISTD Resp	Response Factor
BA15922-CAL1	B4H0008	0	0			0
BA15922-CAL2	B4F0073	1	45011.57			45011.57

ICAL VERIFICATION

Calibration: 1408002 LRI 8/7/2014 1:36:30PM

ENCO policy QA-008 requires that regression curves be validated to ensure that curve intercepts will not result in mathematically-derived false positive or false negative results. This report facilitates this check, but requires that the curve in Element and in the source data system (Chemstation, Turbochrom, ELAN, etc) be an exact matc The slope and Y-intercept must match exactly to at least three decimal places. Please verify this before using the information on this report.

Antimony Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Antimony	0.0400	mg/L	0.000000	0		
BA15922-CAL2	LRI	Antimony	0.0400	mg/L	1.000000	1.00	100	75-125

Arsenic Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Arsenic	0.0400	mg/L	0.000000	0		
BA15922-CAL2	LRI	Arsenic	0.0400	mg/L	1.000000	1.00	100	75-125

Cobalt Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Cobalt	0.0100	mg/L	0.000000	0		
BA15922-CAL2	LRI	Cobalt	0.0100	mg/L	1.000000	1.00	100	75-125

Iron Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Iron	0.100	mg/L	0.000000	0		
BA15922-CAL2	LRI	Iron	0.100	mg/L	5.000000	5.00	100	75-125

Lead Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Lead	0.0400	mg/L	0.000000	0		
BA15922-CAL2	LRI	Lead	0.0400	mg/L	1.000000	1.00	100	75-125

Zinc Total EPA 6010C DOD

Sample ID	Type	Analyte	MRL	Units	CAL Result	True Value	%Rec	Limits
BA15922-CAL1	LRI	Zinc	0.0200	mg/L	0.000000	0		
BA15922-CAL2	LRI	Zinc	0.0200	mg/L	1.000000	1.00	100	75-125

PREPARATION BENCH SHEET

Printed: 8/6/2014 11:08:35AM

4H06003

ENCO Jacksonville

Prepared using: EPA 3050B

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

Matrix: Soil

8/6/14 HW

Lab Number	CNT	LOC	Sample ID [Source] or Sample ID [Client]	Due Date	Method	Analytes	Initial (g)	Final (mL)	Spike ID	ul Spike	Extraction Comments
4H06003-BLK1			QC		QC		0.53	50	Z		
4H06003-BS1			QC		QC		0.52	50	B4B0134 B4B0135	500 500	
4H06003-MS1			Matrix Spike [B403655-11]		QC		0.56	50	B4B0134 B4B0135	500 500	
4H06003-MSD1			Matrix Spike Dup [B403655-11]		QC		0.55	50	B4B0134 B4B0135	500 500	
B403655-01	A	C8	A404270-01 (TR-5TH-CSW01-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.72	50			
B403655-02	A	C8	A404270-02 (TR-5TH-CSW02-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.96	50			
B403655-03	A	C8	A404270-03 (TR-5TH-CSW03-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.83	50			
B403655-04	A	C8	A404270-04 (TR-5TH-CSW04-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.73	50			
B403655-05	A	C8	A404270-05 (TR-5TH-CSW05-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.71	50			
B403655-06	A	C8	A404270-06 (TR-5TH-CSW06-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.86	50			
B403655-07	A	C8	A404270-07 (TR-5TH-CSW07-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.87	50			
B403655-08	A	C8	A404270-08 (TR-5TH-CSW07D-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.82	50			
B403655-09	A	C8	A404270-09 (TR-5TH-CSW08-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.79	50			
B403655-10	A	C8	A404270-10 (TR-5TH-CSW09-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.79	50			
B403655-11	A	C8	A404270-11 (TR-5TH-CSW010-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.81	50			

8/6/14 HW

PREPARATION BENCH SHEET

Printed: 8/6/2014 11:08:35AM

4H06003

ENCO Jacksonville

Prepared using: EPA 3050B

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

Matrix: Soil

Lab Number	CNT	LOC	Sample ID [Source] or Sample ID [Client]	Due Date	Method	Analytes	Initial (g)	Final (mL)	Spike ID	ul Spike	Extraction Comments
B403655-12	A	C8	A404270-12 (TR-5TH-CSW11-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.74	50			
B403655-13	A	C8	A404270-13 (TR-5TH-CSW11D-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.82	50			
B403655-14	A	C8	A404270-14 (TR-5TH-CSW12-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.77	50			
B403655-15	A	C8	A404270-15 (TR-5TH-CSW13-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.89	50			
B403655-16	A	C8	A404270-16 (TR-5TH-CSW14-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.86	50			
B403655-17	A	C8	A404270-18 (TR-5TH-CSW15-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.92	50			
B403655-18	A	C8	A404270-19 (TR-5TH-CSF01-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.75	50			
B403655-19	A	C8	A404270-20 (TR-5TH-CSF02-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.93	50			
B403655-20	A	C8	A404270-21 (TR-5TH-CSF03-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.91	50			

8/6/14 HCV

Start Date/Time 8/6/14 13:00

StopDate/Time 8/6/14 14:40

Temperature 91°C

Standard ID#	Description	LotNum
B3I0136	Hydrogen peroxide 30% for 3050B	133502
B3K0064	Trace metals resin beads	1306159
B4F0080	Conc. Nitric Acid (Trace Metal Gra	1114010
B4F0081	Conc. Hydrochloric Acid (Trace Me	4113110

PREPARATION BENCH SHEET

Printed: 8/6/2014 11:08:35AM

4H06003

ENCO Jacksonville

Prepared using: EPA 3050B

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

JMBAL4	JMDIGEXT2	140455
Balance ID	Hot Block ID	Digestion Tube Lot #
[illegible] 8/6/14		
Samples Prepared By Date/Time	Samples Prepared By Date/Time	Samples Prepared By Date/Time
JAX-T075	JAX-V-001	
Thermometer ID	Pipette ID	

Note - /F at the end of the analyte means that this is a Filtered

PREPARATION BENCH SHEET

Printed: 8/6/2014 11:10:54AM

4H06004

ENCO Jacksonville

Prepared using: EPA 3050B

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

Matrix: Soil

8/6/14 AW

Lab Number	CNT	LOC	Sample ID [Source] or Sample ID [Client]	Due Date	Method	Analytes	Initial (g)	Final (mL)	Spike ID	ul Spike	Extraction Comments
4H06004-BLK1			QC		QC		0.51	50			
4H06004-BS1			QC		QC		0.53	50	B4B0134 B4B0135	500 500	
4H06004-MS1			Matrix Spike [B403655-27]		QC		0.68	50	B4B0134 B4B0135	500 500	
4H06004-MSD1			Matrix Spike Dup [B403655-27]		QC		0.71	50	B4B0134 B4B0135	500 500	
B403655-21	A	C8	A404270-22 (TR-5TH-CSF04-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.77	50			
B403655-22	A	C8	A404270-23 (TR-5TH-CSF05-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.75	50			
B403655-23	A	C8	A404270-24 (TR-5TH-CSF05D-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.65	50			
B403655-24	A	C8	A404270-25 (TR-5TH-CSF06-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.68	50			
B403655-25	A	C8	A404270-26 (TR-5TH-CSF07-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.97	50			
B403655-26	A	C8	A404270-27 (TR-5TH-CSF08-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.79	50			
B403655-27	A	C8	A404270-28 (TR-5TH-CSF09-0814) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	0.74	50			

8/6/14 AW

Start Date/Time 8/6/14 13:00

StopDate/Time 8/6/14 14:40

Temperature 91°C

Standard ID#	Description	LotNum
B3I0136	Hydrogen peroxide 30% for 3050B	133502
B3K0064	Trace metals resin beads	1306159
B4F0080	Conc. Nitric Acid (Trace Metal Gra	1114010
B4F0081	Conc. Hydrochloric Acid (Trace Me	4113110

Reviewed 8.7.14

PREPARATION BENCH SHEET

Printed: 8/6/2014 11:10:54AM

4H06004

ENCO Jacksonville

Prepared using: EPA 3050B

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

JMBALA Balance ID	JMDIGESTE Hot Block ID	140405 Digestion Tube Lot #
CE 8/6/14 Samples Prepared By Date/Time	Samples Prepared By Date/Time	Samples Prepared By Date/Time
JAX-T-058 Thermometer ID	JAX-V-001 Pipette ID	

Note - /F at the end of the analyte means that this is a Filtered

PREPARATION BENCH SHEET

Printed: 8/6/2014 3:36:22PM

4H06006

ENCO Jacksonville

Prepared using: EPA 3005A

Spiking Solution
B4B0134 ICP Spike A
B4B0135 ICP Spike B

Matrix: Water

8/6/14 ACW

Lab Number	CNT	LOC	Sample ID [Source] or Sample ID [Client]	Due Date	Method	Analytes	Initial (mL)	Final (mL)	Spike ID	ul Spike	Extraction Comments
4H06006-BLK1			QC		QC		50	50	Z		
4H06006-BS1			QC		QC		50	50	B4B0134 B4B0135	500 500	
4H06006-BSD1					QC		50	50	B4B0134 B4B0135	500 500	
B403655-28	A	S17	A404270-29 (TR-5TH-CS-EB-080114) [ENCO Orlando - CTO-0017 Towers Road Disposal-5th St.]	8/8/14	EPA 6010C	As Co Fe Pb Sb Zn	50	50	Z		

8/6/14 ACW

Start Date/Time 8/6/14 1600

StopDate/Time 8/6/14 1900

Temperature 91°C

Standard ID#	Description	LotNum
B4F0080	Conc. Nitric Acid (Trace Metal Gra	1114010
B4F0081	Conc. Hydrochloric Acid (Trace Me	4113110

NA
Balance ID

JM DIGEST 2
Hot Block ID

140405
Digestion Tube Lot #

GZ 8/6/14
Samples Prepared By Date/Time

Samples Prepared By Date/Time

Samples Prepared By Date/Time

JAX-T-058
Thermometer ID

JAX-V-001
Pipette ID

Note - /F at the end of the analyte means that this is a Filtered

Reviewed 8-7-14