REMEDIAL INVESTIGATION REPORT

EAST BARRACKS RAIL YARD
EAST STATE STREET & SOUTH OLDEN AVENUE
TRENTON, MERCER COUNTY, NJ 08611
NJDEP CASE No. 00-03-20-1219-43
PROGRAM INTEREST No. G000043212

Prepared For:

National Railroad Passenger Corporation (Amtrak)
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May 2017

Amec Foster Wheeler Project Number 277710568

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ACRONYMS

4'4'-DDE	1,1-Dichloro-2,2-Bis(p-chlorophenyl) Ethylene
4'4-DDT	Dichloro-Diphenyl-Trichloroethane
Amec Foster Wheeler	Amec Foster Wheeler Environment & Infrastructure, Inc.
Amtrak	National Railroad Passenger Corporation
AOC	Area of Concern
ARRCS	Administrative Requirements for the Remediation of Contaminated Sites
bgs	below ground surface
BN	Base Neutral
CID	Case Inventory Document
COPEC	Contaminants of Potential Environmental Concern
EDD	Electronic Data Deliverable
EE	Ecological Evaluation
EMA	Environmental Management Associates
ESNR	Environmentally Sensitive Natural Resource
FSPM	Field Sampling Procedures Manual
GPS	Global Positioning System
IAL	Integrated Analytical Laboratories LLC.
IGWSSL	Impact to Ground Water Soil Screening Level
LSRP	Licensed Site Remediation Professional
mg/kg	milligrams per kilogram
MOA	Memorandum of Agreement
NAD 83	North American Datum
NAVD 88	North American Vertical Datum
N.J.A.C.	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NJT	New Jersey Transit
NRDCSCC	Non-Residential Direct Contact Soil Cleanup Criteria
NRDCSRS	Non-Residential Direct Contact Soil Remediation Standards
OPRA	Open Public Records Act
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PCE	Tetrachloroethene
Penn Central	Penn Central Transportation Company
PID	Photo-Ionization Detector
PP+40	Priority Pollutants with library search
PRR	The Pennsylvania Railroad
QAPP	Quality Assurance Project Plan
RAO	Response Action Outcome
RAWP	Remedial Action Work Plan
RDCSCC	Non-Residential Direct Soil Cleanup Criteria
RDCSRS	Residential Direct Contact Soil Remediation Standards
RE	Receptor Evaluation
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
Roux	Roux Associates, Inc.
SCC	Soil Cleanup Criteria
Site	East Barracks Rail Yard
SRP	Site Remediation Program
SRRA	Site Remediation and Reform Act
SRS	Soil Remediation Standards
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TSCA	Toxic Substances Control Act
TCL	Target Compound List
TRSR	N.J.A.C 7.26E Technical Requirements for Site Remediation
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This remedial investigation report (RIR) provides the results of the remedial investigation (RI) activities conducted at the East Barracks Rail Yard Site located at East State Street and Olden Avenue, Trenton New Jersey (Site) by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) on behalf of Amtrak (National Railroad Passenger Corporation). Investigation activities at the Site have been conducted pursuant to New Jersey Administrative Code (N.J.A.C.) 7:26C, *Administrative Requirements for Remediation of Contaminated Sites* (ARRCS) under direction of a Licensed Site Remediation Professional (LSRP).

New Jersey Transit (NJT) currently leases and formerly operated facilities at the East Barracks Rail Yard, which is owned by Amtrak.

1.1 PURPOSE

This report provides information related to NJDEP Case Number 00-03-20-1219-43 under Program Interest Number G000043212. This RIR has been prepared to address a discharge of polychlorinated biphenyls (PCBs), which was initially reported by the Site operator, NJT, on March 20, 2000. The discharge was attributed to leaking transformers on electric powered, self-propelled rail cars. NJT entered into a Memorandum of Agreement (MOA) with the New Jersey Department of Environmental Protection (NJDEP) on April 18, 2002. Initial RI activities were performed by Roux Associates, Inc. (Roux) beginning in 2001.

As the Site owner, Amtrak has continued the RI activities in order to comply with the *Site Remediation Reform Act* (SRRA), N.J.S.A. 58:10C-1 et seq. Amtrak has never operated the rail yard.

1.2 COMPLIANCE WITH TECHNICAL AND REGUILATORY REQUIREMENTS

All RI work performed for this project was conducted in accordance with ARRCS, the *Technical Requirements for Site Remediation* (TRSR) - N.J.A.C. 7:26E and the current version of the NJDEP *Field Sampling Procedures Manual* (FSPM) (NJDEP, 2005). There

were no variances from the TRSR or applicable guidance documents implemented during performance of RI activities.

1.2.1 Regulatory Status

The discharge of PCBs to soil that was reported to NJDEP is being addressed pursuant to the *Spill Compensation and Control Act* (Spill Act), N.J.S.A 58:10-23 and under the United States Environmental Protection Agency (USEPA) *Toxic Substances and Control Act* (TSCA), 15 U.S.C. §2601 et seq. Technical work has been conducted in accordance with NJDEP's policy for coordination between NJDEP and USEPA relative to PCBs (NJDEP, 2013).

NJDEP regulations applicable to this project include:

- N.J.A.C. 7:1E *Discharges of Petroleum and Other Hazardous Materials Substances Rules*
- N.J.A.C. 7:26C ARRCS
- N.J.A.C. 7:26D *Remediation Standards*
- N.J.A.C. 7:26E TRSR

1.2.2 Cleanup Standards

1.2.2.1 NJDEP

Historical and recent data have been reviewed for this RIR and compared to the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS), the Non Residential Direct Contact Soil Remediation standards (NRDCSRS) and the 2013 default Impact to Ground Water Soil Screening Levels (IGWSSL) (NJDEP, 2010). The Soil Remediation Standards (SRS) and IGWSSL are included in the analytical results summary tables.

Note that per NJDEP policy, PCBs are considered an immobile chemical, as listed in the *Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway* (NJDEP, 2008).

1.2.2.2 TSCA

NJDEP has issued guidance regarding PCB remediation entitled *Coordination of NJDEP and USEPA PCB Remediation Policies*, March 1, 2013. Relevant portions of the guidance related to TSCA are summarized below.

TSCA provides federal policy that must be coordinated with the NJDEP Site Remediation Program (SRP) policy during PCB remediation projects. This coordination allows the remediation of PCBs to be dependent on the Site-specific concentrations and the future Site use. TSCA does not regulate PCBs at concentrations less than 1 milligram per kilogram (mg/kg). For PCB concentrations greater than 1 mg/kg, TSCA offers several options under 40 CFR part 761. These are described below.

Options for remediation of PCBs in compliance with TSCA include:

- **TSCA Self-Implementing Criteria In Defined High Occupancy Areas** - PCBs may remain between 1 mg/kg and less than or equal to 10 mg/kg with a cap. This would be applicable to residential, unrestricted use or other uses where occupancy will exceed an average of 6.7 hours/week.
- **TSCA Self-Implementing Criteria In Defined Low Occupancy Areas** - Where occupancy will not exceed an average of 6.7 hours/week, PCBs up to 25 mg/kg may remain without engineering or institutional controls. PCBs between 25 and 50 mg/kg may remain when access is restricted by fencing and warning signs. PCBs may remain at levels between 25 and 100 mg/kg when capped. 40 CFR 761.61(a)7 defines a cap as being a minimum of 6 inches of asphalt, concrete or similar material, or 10 inches of compacted soil. Additional cap requirements may be imposed by USEPA to address geotechnical properties.
- **TSCA Performance-Based Disposal** - The performance-based disposal codified in 40 CFR 761.61(b) allows for remediation under certain conditions without USEPA notification or approval. In such situations, PCB remediation must be completed to less than 1 mg/kg and all remediation waste must be disposed at a TSCA-approved disposal facility. This option allows for the more rapid remediation of PCB-contaminated soils.

- **TSCA Risk-Based Disposal Approval** - Taking into account a future low occupancy use scenario with appropriate deed notice and engineering controls, PCB concentrations up to 100 mg/kg may remain onsite under both NJDEP and TSCA guidelines. A risk-based disposal approval may be requested under 40 CFR 761.61(c) from the USEPA Regional Administrator. Such risk-based disposal proposals may include requests to waive the more restrictive high occupancy limitations or to leave PCB concentrations in excess of 100 ppm.

Self-implementing PCB remediation requires a minimum 30-day advance written notification by the party conducting the remediation to the USEPA Regional Administrator and other involved regulatory agencies. The proposed remediation is assumed to be acceptable if the USEPA Regional Administrator does not respond within 30 calendar days of receiving the notice.

1.2.2.3 Coordination of NJDEP and USEPA PCB Remediation Policies

NJDEP policy does not recognize the USEPA occupancy levels or concentration-based scenarios and requires a deed notice for PCBs in soil at concentrations greater than 0.2 mg/kg and the addition of a cap when PCBs in soil exceed 1 mg/kg for non-residential scenarios. NJDEP also recognizes the special case of active rail yards where access is limited or precluded, and the ground surface along rail alignments and supporting areas is covered with ballast or pavement and routinely maintained as part of ongoing operations. For railroad lines, spurs and/or sidings that have not been remediated and will remain in service, a pre-approved notice may be inserted into the response action outcome (RAO) by the LSRP. This notice defers the need for remediation of low levels of polynuclear aromatic hydrocarbons (PAHs), PCBs and heavy metals as long as the railroad line, spur and/or siding remains in service (NJDEP, 2016). In light of these USEPA and NJDEP site-specific requirements and policies, a remediation level of 10 mg/kg has been deemed applicable for the internal, active portions of the rail yard.

The sporadic presence of other contaminants at low concentrations, such as metals and PAHs, do not require complete investigation and remediation as long as the property continues to function as an active rail yard.

1.2.3 Regulatory Timeframe

The remediation was required to be initiated on March 20, 2000. In accordance with SRRA, the regulatory timeframe for the RIR was May 7, 2015. Remedial Timeframe Notification Forms were submitted to NJDEP in 2015 and 2016 to extend the regulatory deadline for this RIR to May 7, 2017.

1.2.4 Technical and Regulatory Requirements

All RI activities presented in this report were conducted in accordance with the TRSR in effect at the time. There were no variances from the TRSR or applicable guidance documents.

The following items were performed in accordance with current administrative regulatory requirements:

- The LSRP for this Site, Marlene Lindhardt, was retained on March 5, 2015.
- The initial Receptor Evaluation (RE) was submitted on April 1, 2016; an updated RE is included with this submittal.
- Remediation Timeframe Notification Forms were submitted on April 2, 2015 and April 6, 2016.

There are no outstanding NJDEP fees due as of April 2017.

This RIR is being submitted to NJDEP by the LSRP, Ms. Marlene Lindhardt, LSRP No. 581173 through the online system and includes the updated RE and the Case Inventory Document (CID).

All electronic data deliverables (EDDs) for data collected by Amec Foster Wheeler have been submitted to NJDEP in accordance with the NJDEP Electronic Data Interchange Manual, September 2016, http://www.state.nj.us/dep/srp/hazsite/docs/edi/.

2.0 SITE DESCRIPTION AND PHYSICAL SETTING

2.1 SITE HISTORY AND OPERATIONS

Amtrak acquired the East Barracks rail yard on April 1, 1976 when Amtrak took over the entire Northeast Corridor line. Amtrak has never operated the rail yard. NJT and predecessor railroads, including the Pennsylvania Railroad (PRR) and the Penn Central Transportation Company (Penn Central), used the rail yard for overnight storage of electric powered, self-propelled passenger rail equipment for the Northeast Corridor rail line. The facility provided minor routine maintenance, e.g., brake pad changing, interior car cleaning, and overnight storage for commuter rail cars. NJT presently maintains the lease on the property from Amtrak, but has not operated the rail yard for several years.

The Site is currently used by Amtrak for storage of rail equipment that is used to maintain the right of way. The Site consists of the following:

- Active and former rail lines/spurs,
- One crew office trailer, and
- A parking area.

The Site is bordered by the active Northeast Corridor rail line to the west.

2.2 SITE LOCATION AND TOPOGRAPHY

The Site consists of land located on Block 25101 Lot 1, Block 25201 Lot 1, Block 25301 Lot 2, and Block 25401 Lot 4 in Trenton. The Site encompasses approximately 7 acres and extends 0.47 miles in length. The general location of the Site is presented on Figure 1 (Site Location Map) and a site plan depicting the Site in greater detail is presented on Figure 2.

The Site is bordered by Olden Avenue to the north and Lincoln Avenue/Chambers Street to the south, which are elevated rail overpasses that cross the tracks. The Site is bordered to the west by the active Northeast Corridor rail line. Located adjacent to the eastern Site boundary is one school, a park, residential properties that front East State Street.

The Site is located approximately 1,000 feet south of Assunpink Creek, which discharges to the Delaware River, approximately two miles west of the Site. Topography at the Site is generally flat, with the exception of rail lines that are slightly elevated. Relief across the Site is approximately two feet except along the southeastern portion of the Site, where soil that has been reworked and placed along the Site fence line results in a steep incline of up to four feet. The entrance to the Site (North Cook Avenue) is located down a moderately sloping hill. A slight depression is present parallel to the fence line along the western side of the railroad tracks. In addition, a slight depression or drainage swale is present to the southeast of the unpaved road that parallels the fence line that is located to the northeast of the North Cook Avenue entrance.

2.3 GEOLOGY

The Site is located in the northernmost section of the Atlantic Coastal Plain Province, approximately one mile south of the Fall Line (boundary of Piedmont Province). The Atlantic Coastal Plain is comprised of Cretaceous age unconsolidated or poorly consolidated layers of gravel, sand and clay.

According to the Geologic Map of the Trenton East and West Quadrangle (Stanford, 2014), surficial deposits in the vicinity of the Site include artificial fill, fluvial deposits (Lake Wisconsinan Glaciofluvial deposits), and Alluvium. The Lake Wisconsinan Glaciofluvial deposits, which are as much as 60 feet thick, consist of well stratified fine-to-coarse sand and unstratified to weakly stratified gravel. The Alluvium deposits, which are as much as 40 feet thick, consist of unstratified to weakly stratified sand, silt, minor clay and peat and pebble to cobble gravel. The depth to bedrock beneath the Site is estimated to be greater than 40 feet.

2.4 SITE SOIL

Site historical operations have resulted in fill material being placed at the surface across the Site. Stone ballast is present adjacent to the current railroad tracks, along the unpaved road south of the fence, and in the parking area. Underlying the ballast is fill material consisting of black sand, cinders and gravel to a depth of approximately two feet. Below two feet are

native deposits of sand, silt and gravel associated with the historical Assunpink Creek flood plain (Roux, 2002).

Amec Foster Wheeler advanced multiple shallow borings across the Site. The soils encountered were consistent with those reported by Roux in the 2002 Remedial Investigation Work Plan (RIWP).

2.5 HYDROGEOLOGY

According to Roux, based on groundwater investigations conducted at the nearby NJT former Mercer Bus Garage facility that was located immediately to the northeast of the Site, groundwater in the area occurs under unconfined, water table conditions. The depth to water at the adjacent former Mercer Bus Garage facility was encountered at 18 to 19.5 feet below ground surface (bgs). The direction of groundwater flow at the former Mercer Bus Garage was determined to be to the north, towards Assunpink Creek. Therefore, it was assumed that groundwater at the Site also flows to the north (Roux, 2003).

Based on Site-specific data, the depth to groundwater at the Site is approximately 5.3 to 7.8 feet bgs.

2.6 RECEPTOR EVALUATION

The initial RE was prepared and submitted for this Site in 2016. The RE has been updated for this RIR. The results of the RE are summarized below.

2.6.1 Onsite and Surrounding Land Use

The subject property is a 7-acre parcel with an active rail line formerly operated by NJT, an employee parking area, and one office trailer. The property is listed on the City of Trenton's Tax Map as Block 12501 Lot 1, Block 25201 Lot 1, Block 25301 Lot 2, and Block 25401 Lot 4.

The property was used as a "layover facility" for NJT, the PRR and Penn Central and other predecessor commuter trains. It is currently used by Amtrak to store rail equipment, which is used to maintain the rail right of way.

The property is located in a mixed commercial area with some light urban, industrial land use and deciduous forest sections of Trenton. The Site is bordered on the north by Olden Avenue, south by Lincoln Avenue/Chambers Street, and west by the Northeast Corridor. Located adjacent to the eastern Site boundary is one school, P.J. Hill Elementary School, a playground, Greg Grant Park, and numerous residential properties along East State Street. Junk and debris have been observed outside the Site boundary at the rear of these properties, adjacent to the Site.

2.6.2 Ecological Evaluation

An ecological evaluation (EE) was performed in 2015 to identify environmentally sensitive natural resources (ESNRs), which potentially could be impacted by the Site; identify migration pathways to ESNRs and document observations of impact that could be attributable to Site contaminants; and identify contaminants of potential environmental concern (COPECs) that could adversely impact ESNRs. The EE concluded that there are currently no ESNRs on, adjacent to, or potentially impacted by the Site. In addition, there are no existing pathways for COPECS to reach ESNRs. Therefore, no further action is warranted for ecological receptors.

3.0 PREVIOUS INVESTIGATIONS

3.1 INITIAL INVESTIGATION - 1999

NJT collected four soil samples from the track area in November 1999 to investigate the presence of PCBs. PCBs were detected at concentrations ranging between 519 mg/kg and 36,205 mg/kg, exceeding the NJDEP Non-Residential Direct Contact Soil Clean Criteria (NRDCSCC) of 2 mg/kg which was in effect at the time (Roux, 2003).

On December 29, 1999, NJT issued an internal memorandum as a precautionary measure to notify employees that PCBs had been detected under the ballast at the Site during routine environmental testing. The memorandum prohibited excavation without prior NJT approval, and stated that additional ballast and liner fabric was being placed at the Site (NJT, 1999).

On March 20, 2000, NJT notified the NJDEP communications center of these findings, and Case Number 00-03-20-1219-43 was assigned. No specific details regarding the testing results or interim remedial actions are available for review.

In order to prevent direct contact by workers with the PCB-impacted soil/ballast and to minimize the potential for migration of PCB contamination, NJT installed a geotextile liner over the existing ballast between and within the railroad tracks, and placed an additional one foot of clean ballast on top of the geotextile liner. NJT entered into a MOA with NJDEP on April 18, 2002 (Roux, 2003). No documentation or maps depicting the sample locations are available for review.

(It should be noted that the analytical results from the NJT 1999 sampling event have not been replicated in subsequent investigations; further an analytical laboratory report for these samples is not available for review.)

3.2 REMEDIAL INVESTIGATION – 2001

On behalf of NJT, Roux conducted soil sampling activities at the Site on October 18, 2001. The results of the October 2001 sampling activities were presented in the 2002 RIWP and are summarized below.

Eight soil borings were completed to a depth of 2.5 feet bgs. Two soil samples were collected from each boring, one from the zero to 0.5-foot interval of the first soil encountered below the geotextile liner and the second from 2.0 to 2.5 bgs. A total of 16 soil samples were analyzed for PCBs. PCB concentrations ranged from 3.8 mg/kg to 440 mg/kg in the zero to 0.5-foot samples, and from 0.077 mg/kg to 160 mg/kg in the 2.0 to 2.5 samples. The soil sample from the zero to 0.5-foot interval from the track area exhibiting the highest PCB concentration and the soil sample from the zero to 0.5-foot interval from the swale area exhibiting the highest PCB concentration were also analyzed for the priority pollutant list parameters with a library search (PP+40). Additional compounds exceeding the NJDEP NRDCSCC were detected and included: base neutral extractable compounds (BNs), specifically PAHs; arsenic; and pesticides (specifically dieldrin, endrin, 1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene (4',4'-DDE), and dichloro-diphenyl-trichloroethane (4',4'-DDT) (Roux, 2002).

The 2001 sampling activities were documented in the Roux 2002 RIWP that was submitted to NJDEP on March 6, 2002. The RIWP proposed additional sampling to achieve delineation of contaminants at the Site.

3.3 REMEDIAL INVESTIGATION - 2003

Amec Foster Wheeler reviewed the draft 2003 Roux RIR (the final document was not available for review.) Note that the NJDEP Data Miner website lists receipt of a site investigation report on February 17, 2004. It is not known if the referenced report is the final version of the draft RIR that was available for Amec Foster Wheeler review. The referenced report was not located through the Open Public Records Act (OPRA) records search of NJDEP files.

Roux conducted two sampling events in May 2002 and May 2003. All soil samples were analyzed for PCBs and select soil samples were analyzed for PP+40. The May 2002 sampling event included soil borings completed within the track area (the northern portion of the Site between the catenary poles and fence) and in the parking area near the entrance to the Site. The second sampling event completed in May 2003 entailed additional

delineation sampling south of the track area, within the employee parking area and to the south of the fence along the unpaved road that parallels the railroad tracks.

During the two sampling events, a total of 62 soil borings were completed and 108 soil samples were obtained for laboratory analysis. Soil samples were collected from the surface soil at all boring locations, with the exception of a row of samples collected between the existing railroad tracks, where soil contaminants were assumed to be less than the soil cleanup criteria (SCC). Deeper soil samples were also collected within the track area of the property and the parking lot.

Overall, the sampling results from the zero to 0.5-foot interval below the geotextile liner within and immediately adjacent to the track area confirmed that the PCB concentrations were greater than the NRDCSCC. PCB concentrations at the surface along the fence line also exceeded the NRDCSCC. However, half of the results for surface soil samples from the parking lot were less than the NRDCSCC and the remainder were only slightly greater than the NRDCSCC. With a few exceptions, the soil samples that were collected from the 2.0 to 2.5-foot interval below the geotextile liner within and immediately adjacent to the track area exhibited PCB concentrations that were less than the NRDCSCC. No concentrations of constituents greater than the NRDCSCC were detected in soil samples analyzed for PP+40.

The findings of the RIR included:

- Surface soil at the north, east and west perimeter of the Site exceeded the NRDCSCC for PCBs. This area was beyond the NJT-specified Site perimeter and immediately adjacent to the active railroad tracks of Amtrak's Northeast Corridor. Therefore, no further delineation or remediation was conducted.
- The upper two feet of soil and ballast within the track area located between the fence line and the catenary poles, where the PCB concentrations in soil exceeded the NRDCSCC was recommended for excavation and offsite disposal.
- Concentrations of other constituents that exceeded the NRDCSCC, which were identified through the PP+40 analyses, were limited to the surface soil in the zero to 0.5-foot interval. Surface soil concentrations of PP+40 constituents that

exceeded the NRDCSCC would be included in the excavation of the PCB-impacted surface soil.

- Generally, the concentrations of PCBs that exceeded the NRDCSCC were limited to the gray to black fill material beneath and adjacent to the railroad tracks. The gray to black fill material was typically limited to a depth of two feet bgs. For the most part, the yellowish-brown sand present below the fill material did not contain contaminants that exceeded the NRDCSCC.
- The extent of soil with PCB concentrations that exceeded the TSCA concentration of 50 mg/kg was generally defined. The extent of TSCA-regulated soils would be further defined during implementation of the remedial action.
- Full delineation to the Residential Direct Contact Soil Cleanup Criteria (RDCSCC) and NRDCSCC was not completed along the southern portion of the Site. Therefore, surface soil concentrations of PCBs present to the south of the fence, which parallels the railroad tracks, would be further defined via additional delineation prior to submission of a Remedial Action Work Plan (RAWP).

The RIR included specific recommendations for additional delineation sampling; it is not known whether this additional investigation was performed, and no supplemental data were available for Amec Foster Wheeler review. Based on the 2015 OPRA reviews of NJDEP documents, an RAWP was not located.

4.0 TECHNICAL OVERVIEW

4.1 AOC-1 HISTORICAL PCB DISCHARGE

One area of concern (AOC) has been identified for this Site. AOC-1 consists of the contamination in soil throughout the rail yard, as initially reported to NJDEP in 2000 and investigated by NJT between 2001 and 2003. Case Number 00-03-20-1219-43 has been assigned to this project.

4.2 PRE-EXISTING DATA EVALUATION

Amec Foster Wheeler reviewed the historical data collected by NJT's consultant, Roux, as part of the RI planning process. Reports that were reviewed include:

- Remedial Investigation Work Plan, March 6, 2002.
- Draft Remedial Investigation Report, undated – assumed to have been prepared in 2003. (The final report was not available for review.)

The results included in the 2002 and 2003 documents were used by Amec Foster Wheeler to determine additional sampling locations for horizontal and vertical delineation purposes.

The 2003 report conclusions were based on the SCC regulatory requirements in effect at the time, and were limited to the NJT-designated project area. Amec Foster Wheeler's review considered the current NRDCSRS, RDCSRS and IGWSSL and expanded the project area to reach physical railroad limitations to the north, south and east of the Site.

PCBs and pesticides were present in concentrations that exceeded the current standards. Additionally, laboratory detection limits were consistently greater than applicable standards for the pesticides alpha-BHC, beta-BHC, gamma-BHC and dieldrin. Low levels of semi-volatile organic compounds (SVOCs) (benzo(a)pyrene and benzo(b)fluoranthene) and arsenic were present at the Site at several locations and are attributed to normal operations at this active rail yard. The volatile organic compound (VOC) data were determined to be not usable because a large number of laboratory analytical results reported detection limits greater than applicable standards.

Based on the review of the historical data, the RI sampling program was designed to address the Site-wide PCB discharge, pesticides and potential VOCs. Other incidental contamination (e.g., low levels of arsenic and PAHs) was not investigated as part of this RI, as they represent incidental contamination associated with rail operations, and are addressed by the RAO Active Rail Notice (Section 1.2.2.3). Table 1 provides a summary of the sampling program.

4.3 QUALITY ASSURANCE/QUALITY CONTROL

All RI work was completed in accordance with the Quality Assurance Project Plan (QAPP) contained in Appendix B, as well as the TRSR, the FSPM, and applicable NJDEP guidance. All samples were analyzed by Integrated Analytical Laboratories LLC. (IAL), NJDEP Certification 14751, located in Randolph, New Jersey. Analytical methods included USEPA SW846 8082A (PCBs), SW846 8260C (Target Compound List [TCL] VOCs) and SW846 8081B (pesticides).

4.3.1 Field Quality Control Samples

Duplicate samples, equipment blanks and trip blanks were collected at the frequency specified in the QAPP. The results for the equipment blanks are included in Table 2. No parameters were detected in any equipment blank or trip blank for the duration of the sampling program.

Duplicate sample results are discussed under the specific AOC results section and included in Tables 3, 4 and 5. All duplicate results provided data that were consistent with the original samples.

4.3.2 Data Usability

Amec Foster Wheeler reviewed all RI laboratory analytical data deliverables produced for this RI for completeness and general conformance with analytical requirements. The data reviewed are considered to be valid and useful for the intended purposes. All method specified calibrations and quality control performance criteria were met for these data, except as noted in the conformance/non-conformance summaries provided in the laboratory deliverable packages.

The laboratory data are reliable based upon compliance with sample holding times and precision and accuracy criteria for each analytical method, as well as the results of the analyses of blanks, within the limitations noted in the laboratory reports.

Detection limits for PCBs in soil occasionally were reported to exceed the lowest regulatory standard of 0.2 mg/kg. This was generally due to highly contaminated samples obtained from within the active rail portion of the Site that required dilution.

There were no significant events or seasonal variations that are known to have affected the sampling procedures or the results for the soil samples presented in this report. Laboratory data packages are provided in Appendix C. The laboratory EDDs have been emailed to the Department in conjunction with submittal of this report.

4.4 REMEDIAL INVESTIGATION PROCEDURES

Delineation sampling occurred over several stages. As results were evaluated, additional sampling was performed as necessary. In addition, extra step-out samples were collected from some locations. The analysis of these samples was put on hold at the laboratory and only analyzed if necessary for further delineation. This technique reduced the number of sampling events and the disturbance to onsite and offsite operations.

Field schedules and sample locations were impacted by safety issues related to work at an operating rail yard and in close proximity to the Northeast Corridor commuter line, where trains travel at high speeds.

4.4.1 Survey

Prior to sample collection, surface topography and sample locations were surveyed. The horizontal datum used is the New Jersey State Plane Coordinate System, North American Datum (NAD 83) and the vertical datum is the North American Vertical Datum (NAVD 88). The primary control was established by a set of dual frequency global positioning system (GPS) units referencing a control monument published by The National Geodetic Survey.

New Jersey One Call was used for utility clearance. In addition, soft-dig methods were used to identify potential onsite subsurface utilities during the investigation.

4.4.2 Soil Borings

Soil borings deeper than three feet were advanced by Environmental Management Associates (EMA) of Freehold, New Jersey utilizing direct-push (Geoprobe®) drilling under the supervision of an Amec Foster Wheeler geologist. All samples were collected from below the ballast or pavement, where present. Each location was hand cleared to a depth of up to three feet bgs. The soil borings were then advanced using a 2.2-inch outer diameter-cutting shoe and stainless steel Macro-Core® sampler lined with a 1.5-inch diameter acetate sleeve to collect soil samples with minimal disturbance. Soil cores were obtained continuously from ground surface to the finished depth of the borings. Upon recovery, the sample liner was opened lengthwise and the entire core length was screened with a portable photo-ionization detector (PID). The PID was calibrated at the beginning of the workday and calibration records were maintained along with field notes in a permanently-bound field book or tablet. After the Site geologist collected samples from a six-inch interval for laboratory analysis, the soil core was logged. Following completion, each borehole was backfilled and sealed with cement grout, as necessary, and all drilling equipment and tools were decontaminated. The boring logs are included in Appendix A.

4.4.3 Piezometers

Two piezometers were installed at the Site in order to determine the depth to the top of the water table. This information was used to determine the interval of uncontaminated soil above the water table.

The borings for PZ-1 and PZ-2 were advanced to 15 to 16 feet bgs, respectively. At the time of installation, groundwater within the borings was observed at approximately 5 and 6.5 feet bgs, respectively. Piezometers were installed to a depth of 5 feet below the top of the water table. The piezometers were 2-inch PVC with a 10-foot screen. The piezometers were developed until free flowing. The well permits, construction diagrams, Form A's, Form B's and Well Abandonment Forms are included in Appendix A.

Soil samples were collected from each boring prior to piezometer construction. Sample intervals were determined in the field, based on visual observations, PID readings, and

estimated depth to groundwater, to include the estimated 6-inch interval at the top of the water table. Soil samples were analyzed for PCBs, TCL VOCs and pesticides.

Amec Foster Wheeler collected groundwater level measurements on three occasions, as discussed in Section 5.1.3; these data are provided on Table 8.

4.4.4 Sampling Methods

Sampling was performed in accordance with the procedures described in the NJDEP FSPM.

Shallow soil samples were collected using decontaminated stainless-steel hand augers, and laboratory samples were collected using dedicated, disposable plastic scoops.

For deeper samples, soil cores were obtained in 5-foot increments from the ground surface (measured from beneath any overlying ballast). As noted above, following recovery, the sample liner was opened lengthwise with a knife and the entire core length screened with a PID. In addition to logging the geologic descriptions, observations including color, moisture content, density, and PID readings were recorded by the geologist.

5.0 REMEDIAL INVESTIGATION RESULTS

Sample location and laboratory analytical specifications for samples collected during this RI are presented in Table 1. Analytical data generated during this RI are presented in Tables 3 through 5.

Sample locations are shown on Figure 3; Figures 4 through 6 present the analytical results. Historical analytical data for PCBs, VOCs and pesticides that were provided in the Roux reports are also included on these figures and are discussed below. Historical SVOC and metals data that were included in the Roux reports are provided in Tables 6 and 7, respectively.

Laboratory analytical data reports for this RI are include in Appendix C.

5.1 POLYCHLORINATED BIPHENYL RESULTS

Historical samples for PCB analysis were collected from 65 locations across the Site during the initial investigations performed between 2001 and 2003. Samples were collected from an additional 72 locations for delineation purposes as part of this RI. Analytical results are included in Table 3 and presented on Figures 4a and 4b. Concentration levels relative to 10 mg/kg are indicated by color coding on these figures.

5.1.1 Southern Area

PCB results in the southern portion of the Site ranged from not detected to 440 mg/kg at SB-6 (zero to 0,5-foot interval). Concentrations are the greatest along the rail tracks and tend to decline with distance from the tracks to the east. Delineation to 10 mg/kg is complete at the southern Site boundary along the tracks, but is not complete at the southern Site boundary along the eastern fence line, where PCB concentrations at location E-61 were 84.6 mg/kg (sample E 61-2.0-2.5) and 136 mg/kg (sample E-61-0.5-1.0). Horizontal delineation to the west is precluded by the Northeast Corridor line. With the exception of location E-72, PCBs have been delineated to 0.2 mg/kg at the eastern Site boundary.

Within the southern area, the majority of PCB exceedances occurs in the upper two feet of soil, beneath the ballast to a maximum depth of 5 feet bgs at two locations. The sample

locations that exhibited PCBs at depth, E-2 (1.99 mg/kg) and E-4 (2.51 mg/kg), were located within the track area, which is elevated approximately two feet from the eastern portion of the Site. Vertical delineation is complete.

Analytical results are presented on Figure 4a.

5.1.2 Northern Area

PCB results for the northern portion of the Site ranged from not detected to 800 mg/kg at location A7 (zero to 0.5-foot interval). Concentrations are highest along the rail tracks and tend to decline with distance to the east. Horizontal delineation to the northern Site boundary could not be completed past E-43 due to placement of permanent rail equipment and associated safety issues. Horizontal delineation is precluded to the west by the Northeast Corridor.

Fill material has been placed along the eastern side of the property. Delineation to the property line is not complete at locations E-42, E-44, E-50, E-54, and E-60 and offsite sample will be performed. Amtrak is in the process of obtaining access to the offsite properties.

Within the northern area, the majority of PCB exceedances occurs in the upper two feet of soil, beneath the ballast and asphalt pavement to a maximum depth of 4 feet bgs. Most sample locations that exhibited PCBs at depth were located within the track area, which is elevated approximately two feet from the eastern portion of the Site. Vertical delineation is complete.

Analytical results are presented on Figure 4b.

5.1.3 Piezometers

Two deep borings, PZ-1 and PZ-2, were installed at the Site at a depth of 15 feet bgs and 16 feet bgs, respectively. Depth to groundwater within the borings was observed to range between 5.3 and 7.8 feet bgs. Water level measurements were collected on three occasions between 2015 and 2017; results are provided in Table 8.

PZ-1 was installed towards the center of the Site. Samples at PZ-1 were collected from zero to 0.5 feet bgs, 2.0 to 2.5 feet bgs, 2.5 to 3.0 feet bgs, and 4.5 to 5.0 feet bgs (six-inch

interval above the water table). The total PCB result for PZ-1-0.5-1.0 was 1.33 mg/kg. Results for deeper samples were less than applicable standards (Figure 4a). The depth to groundwater in PZ-1 ranged from 5.33 feet bgs to 6.81 feet bgs.

PZ-2 was installed in the northern portion of the Site, in the area of historical sample location PL-8, which had exhibited a PCB concentration of 230 mg/kg. Samples at PZ-2 were collected from zero to 0.5 feet bgs, 2.0 to 2.5 feet bgs, 4.0 to 4.5 feet bgs, and 6.0 to 6.5 feet bgs (six-inch interval above the water table). All results were less than applicable standards. The depth to groundwater in PZ-2 ranged from 6.73 to 7.80 feet bgs.

The piezometers were abandoned by a licensed well drill in accordance with NJDEP requirements. Well records are included in Appendix A.

5.2 VOLATILE ORGANIC COMPOUNDS RESULTS

During the course of the initial investigations, Roux collected 21 samples for VOC analysis. Results indicated IGWSSL exceedances of methylene chloride, a common laboratory contaminant, and one IGWSSL exceedance for benzene at SB 1. However, the majority of the laboratory detection limits for the samples were greater than current standards. In order to confirm the VOC results, Amec Foster Wheeler collected an initial round of samples from ten locations for TCL VOC analysis. The results indicated an exceedance of the IGWSSL for tetrachloroethene (PCE) at two locations, E-1 (0.028 mg/kg) and E-2 (0.009 mg/kg). A second sampling event was conducted to delineate these locations. Samples to horizontally delineate E-1 were collected from E-30 and E-31. PCE was not detected in in either sample. Delineation to the west was precluded for safety reasons by the proximity of the Northeast Corridor. The PCE was limited to the upper four feet of soil. Samples to delineate E-1 and E-2 were collected from E-30/E-31 and E-32/E-33, respectively. VOCs were not detected. These locations provide horizontal and vertical delineation to 5 feet bgs.

Analytical results for VOCs are included in Table 4 and Figure 5.

5.3 PESTICIDE RESULTS

Historical pesticide results reported by Roux indicated that contamination was limited to the upper two feet of soil and located in sporadic locations across the Site. Pesticides that historically exceeded standards included dieldrin, endrin, 4,4'DDE, and 4,4'DDT.

Samples for analysis were collected from ten locations by Amec Foster Wheeler to delineate the historical pesticides reported by Roux and to verify results where laboratory detection limits from the historical investigations were greater than current applicable standards. Based on the results of the first event, two additional samples were collected in order to confirm horizontal delineation of dieldrin. No pesticides were detected during the Amec Foster Wheeler RI. Table 5 provides the pesticide results compared to NRDCSRS, RDCSRS and IGWSSL. Analytical results are presented on Figure 6.

5.4 SEMI-VOLATILE ORGANIC COMPOUND RESULTS

All samples that were analyzed for SVOCs were collected by Roux during the 2001 to 2003 investigations. Table 6 provides the SVOC results compared to current NRDCSRS. RDCSRS and IGWSSL.

SVOCs that exceeded current standards were reported for 7 of 18 soil boring locations: A-15(1.0-1.5); D-4(0.0-0.5); PL-12(0.0-0.5); D-13(0.0-0.5); PL-1(0.0-0.5); SB-1; and SB-6.

SVOC parameters that exceeded current standards include the PAHs; 1,2,4-tichlorobenzene; benzo(a)anthracene; benzo(a)pyrene; benzo(b)fluoranthene; dibenz(a,h)anthracene (estimated values only); and indeno(1,2,3-c,d)pyrene.

5.5 METALS RESULTS

All samples that were analyzed for target analyte list (TAL) metals were collected by Roux during the 2001 to 2003 investigations.

Metal concentrations that exceeded current IGWSSL were reported for 6 of 16 soil boring locations: A-15(1.0-1.5); C-10(2.0-2.5); D4(0.0-0.5); D-13(0-0.5); PL-1(0.0-0.5); and PL-12(0.0-0.5). The parameters that exceeded IGWSSL include antimony, beryllium, lead

and mercury. Table 7 provides the metals results compared to the current NRDCSRS, RDCSRS and IGWSSL. None of the results exceeded NRDCSRS or RDCSRS.

6.0 FINDINGS AND CONCLUSIONS

6.1 POLYCHLORINATED BIPHENYLS

PCBs in soil have been vertically delineated on the Site to a maximum depth between 3.5 to 4.5 feet below the ballast. Horizontal delineation has not been completed for all of the Site; delineation sampling to the north cannot continue due to the location of Site fixtures/equipment and safety issues. Further sampling to the west of the Site also cannot continue due to the presence of the active Northeast Corridor. Delineation to the south is complete along the rail tracks, but is not complete along the eastern fence line. Delineation to the east requires offsite access, negotiation of which is in progress by Amtrak.

Sampling results indicate that the majority of the contamination is located along the tracks where railcars were parked. PCB concentrations generally decline with distance from the tracks and most of the PCB contamination tends to be limited to the upper two feet of soil.

The eastern portion of the Site boundary is littered with junk and debris, which appears to be the result of historical dumping or other operations from adjacent, offsite facilities. Within the Site perimeter, fill materials have been reworked and placed along the interior fence line. This non-native material exhibits varying concentrations of PCBs that are greater than standards.

6.2 VOLATILE ORGANIC COMPOUNDS

Results for samples collected across the Site indicated no exceedances of RDCSRS and NRDCSRS. At two locations within the track area, PCE results exceeded the IGWSSL at low concentrations. The PCE has been delineated and found to occur only within the upper four feet of soil.

6.3 PESTICIDES

Historical pesticide results reported by Roux indicated that contamination was limited to the upper two feet of soil and located in sporadic locations across the Site. Pesticides that historically exceeded standards included dieldrin, endrin, 4,4'DDE, and 4,4'DDT. No pesticides were detected in samples obtained during the Amec Foster Wheeler RI.

Historical pesticides have been delineated. Based on current standards, only dieldrin exceeded the NRDCSRS at one surficial location.

6.4 SEMI-VOLATILE ORGANIC COMPOUNDS

Based on historical results, PAH results exceeded current standards at seven locations within surface samples. PAHs are incidental to the Site operations and do not warrant further investigation.

6.5 METALS

Historical TAL metal concentrations that exceeded current IGWSSLs were reported at six locations. None of the results exceeded NRDCSRS or RDCSRS for any parameter. All samples with reported exceedances of IGWSSL were collected from shallow soil up to 1.5 feet deep. Metals are incidental to the Site operations do not warrant further investigation.

6.6 POTENTIAL IMPACT TO GROUNDWATER

Investigation results have confirmed that PCBs generally do not extend below four feet bgs in the area of the tracks or below three feet bgs in the eastern portion of the Site. The top of the water table was encountered at approximately 5.3 to 7.8 feet bgs in piezometers placed outside the track area in the eastern portion of the Site, at an approximately one to two-foot deeper elevation than the track area and two feet deeper than the top of the mounded soil along the eastern property boundary. As provided in the NJDEP *Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway*, the Department has included PCBs in the list of immobile contaminants that are likely to be strongly adsorbed to soil and therefore unlikely to impact groundwater.

Based on the sampling results, there is a clean zone of more than two feet above the water table. The immobility of PCBs at this Site is further demonstrated by the fact that the majority of discharges are believed to have occurred years ago, and vertical migration of PCBs has not progressed in that time period. Therefore, the PCBs in soil are not causing an impact to groundwater.

Pertinent NJDEP guidance in this regard (Ground Water Technical Guidance: Site Investigation, Remedial Investigation, Remedial Action Performance Monitoring), recommends performance of a groundwater investigation where there is a potential for groundwater to be contaminated. Factors to consider include:

1. Impact to potential receptors (i.e., potable wells, occupied structures, or surface water);
2. Presence of free or residual product;
3. Distance of contamination to the water table.
4. Mobility of the contaminant
5. Detections of contamination within two feet of the water table or bedrock;
6. Permeability of the soil; or
7. Time contamination has had to migrate through the unsaturated zone to the water table.

At this Site, no potential receptors have been identified. Free or residual product has never been observed. Soil sampling has demonstrated that the detected PCBs in soil are essentially immobile, have not extended beyond a depth of five feet, and do not represent a source of contamination to groundwater. Therefore, a groundwater investigation is not warranted.

6.7 POTENTIAL OFFSITE CONTAMINATION

Offsite delineation could not be completed due to ongoing access issues. Amtrak is currently pursuing negotiation of access agreements for the following properties:

- Block 25301, Lot 1 - Trenton Board of Education
- Block 25401, Lot 2 – Owner not identified in Trenton City tax records

Sampling will proceed after access has been granted.

6.8 REMEDIAL ACTIONS

A remedial action work plan will be prepared to identify and address the remediation of the Site.

7.0 REFERENCES

Amec Foster Wheeler, 2016. Receptor Evaluation (RE) Form

New Jersey Administrative Code 7:1E Discharges of Petroleum and other Hazardous Substances Rules

New Jersey Administrative Code 7:26C. Administrative Requirements for the Remediation of Contaminated Sites

New Jersey Administrative Code 7:26D. Soil Remediation Standards

New Jersey Administrative Code 7:26E. Technical Requirements for Site Remediation

New Jersey Statutes Annotated 58:C-1 et seq., Site Remediation Reform Act

New Jersey Statutes Annotated 58:10-23.11 Spill Compensation and Control Act

NJDEP, 2005. Field Sampling Procedures Manual, August, Updated April 2011

NJDEP, 2008. Guidance for the Evaluation of Immobile Chemicals for the Impact to Ground Water Pathway, June 2, 2008

NJDEP, 2010. Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria, Version 1.0, September 24, 2012

NJDEP, 2013. Coordination of NJDEP and USEPA PCB Remediation Policies Updated March 1, 2013

NJDEP, 2016. Guidance for the Issuance of Response Action Outcomes, April 2016

NJT, 1999. Memorandum from Jim Samuelson, General Superintendent, Newark Division and Stephen Klejst, Assistant General Manager, Safety and Training to Newark Division Employees and Staff, Notice: County and East Barracks Yards, December 29, 1999

Roux, 2002. Remedial Investigation Work Plan, March 6, 2002

Roux, 2003. Draft Remedial Investigation Report

Stanford, Scott D., 2014. Surficial Geology of the Trenton East and Trenton West Quadrangles, Burlington and Mercer Counties, New Jersey. Open-File Map OFM 102, New Jersey Department of Environmental Protection Division of Science, Research, and Technology, New Jersey Geological Survey.

USDA. 1972. Soil Survey of Mercer County New Jersey. United States Department of Agriculture Soil Conservation Service. January 1972

TABLES

Table 1
Sampling Program
East Barracks Rail Yard Site
Trenton, NJ

Sample ID	Northing	Easting	Lab ID	Date	Depth	Analysis		
E-1-0.5-1.0	507771.7519	424365.7576	05428-014	24-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-1-2.0-2.5	507771.7519	424365.7576	05428-015	24-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-1-3.0-3.5	507771.7519	424365.7576	05428-016	24-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-1-4.5-5.0	507771.7519	424365.7576	05428-017	24-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-2-0.5-1.0	507335.43	423945.0299	05428-020	24-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-2 Dup X-3-0.5-1.0	507335.43	423945.0299	05428-011	24-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-2-2.0-2.5	507335.43	423945.0299	05428-021	24-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-2-3.0-3.5	507335.43	423945.0299	05428-022	24-Jun-15	3.0-3.5	PCBs	---	---
E-2-4.5-5.0	507335.43	423945.0299	05428-023	24-Jun-15	4.5-5.0	PCBs	---	---
E-3-0.5-1.0	507184.1666	423783.7828	05367-002	23-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-3-2.0-2.5	507184.1666	423783.7828	05367-003	23-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-3-3.0-3.5	507184.1666	423783.7828	05367-001	23-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-3-4.5-5.0	507184.1666	423783.7828	05367-004	23-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-4-0.5-1.0	506997.5971	423556.0043	05367-007	23-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-4-2.0-2.5	506997.5971	423556.0043	05367-008	23-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-4-3.0-3.5	506997.5971	423556.0043	05367-009	23-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-4-4.5-5.0	506997.5971	423556.0043	05367-010	23-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-4 Dup X-1-4.5-5.0	506997.5971	423556.0043	05367-023	23-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-5-0.5-1.0	507324.54	424067.834	05367-035	22-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-5-2.0-2.5	507324.54	424067.834	05367-037	22-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-5-3.0-3.5	507324.54	424067.834	05367-036	22-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-5-4.5-5.0	507324.54	424067.834	05367-038	22-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-6-0.5-1.0	506907.1171	423486.9104	05367-039	23-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-6-2.0-2.5	506907.1171	423486.9104	05367-041	23-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-6-3.0-3.5	506907.1171	423486.9104	05367-042	23-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-6-4.0-4.5	506907.1171	423486.9104	05367-042	23-Jun-15	4.0-4.5	PCBs	Pesticides	VOCs
E-7-0.5-1.0	507014.9823	423692.591	05428-020	24-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-7-2.0-2.5	507014.9823	423692.591	05428-021	24-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-7-3.0-3.5	507014.9823	423692.591	05428-022	24-Jun-15	3.0-3.5	PCBs	Pesticides	VOCs
E-7-4.5-5.0	507014.9823	423692.591	05428-023	24-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
E-8-0.5-1.0	506898.3626	423439.2238	05367-025	23-Jun-15	0.5-1.0	PCBs	---	---
E-8-2.0-2.5	506898.3626	423439.2238	05367-026	23-Jun-15	2.0-2.5	PCBs	---	---
E-9-0.5-1.0	506875.2457	423457.8171	05367-029	23-Jun-15	0.5-1.0	PCBs	---	---
E-9-2.0-2.5	506875.2457	423457.8171	05367-030	23-Jun-15	2.0-2.5	PCBs	---	---
E-10-0.5-1.0	506933.1161	423613.2881	05428-024	24-Jun-15	0.5-1.0	PCBs	---	---
E-10-2.0-2.5	506933.1161	423613.2881	05428-019	24-Jun-15	2.0-2.5	PCBs	---	---
E-11-0.5-1.0	507075.864	423630.3739	05367-011	23-Jun-15	0.5-1.0	PCBs	---	---
E-11-2.0-2.5	507075.864	423630.3739	05367-012	23-Jun-15	2.0-2.5	PCBs	---	---
E-12-0.5-1.0	507199.1684	423770.1654	05367-013	23-Jun-15	0.5-1.0	PCBs	---	---
E-12-2.0-2.5	507199.1684	423770.1654	05367-014	23-Jun-15	2.0-2.5	PCBs	---	---
E-13-0.5-1.0	507101.1176	423822.7082	05467-001	25-Jun-15	0.5-1.0	PCBs	---	---
E-13-2.0-2.5	507101.1176	423822.7082	05467-002	25-Jun-15	2.0-2.5	PCBs	---	---
E-14-0.5-1.0	507274.8462	423839.1856	05367-015	23-Jun-15	0.5-1.0	PCBs	---	---

Table 1
Sampling Program
East Barracks Rail Yard Site
Trenton, NJ

Sample ID	Northing	Easting	Lab ID	Date	Depth	Analysis		
E-14-2.0-2.5	507274.8462	423839.1856	05367-016	23-Jun-15	2.0-2.5	PCBs	---	---
E-15-0.5-1.0	507230.0558	423869.6513	05428-018	24-Jun-15	0.5-1.0	PCBs	---	---
E-15-2.0-2.5	507230.0558	423869.6513	05428-019	24-Jun-15	2.0-2.5	PCBs	---	---
E-16-0.5-1.0	507188.5779	423959.5651	05367-017	22-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
E-16-2.0-2.5	507188.5779	423959.5651	05367-018	22-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
E-17-0.5-1.0	507298.1378	423898.5071	05367-027	23-Jun-15	0.5-1.0	PCBs	---	---
E-17-2.0-2.5	507298.1378	423898.5071	05367-028	23-Jun-15	2.0-2.5	PCBs	---	---
E-18-0.5-1.0	507350.0008	423918.6188	05367-005	23-Jun-15	0.5-1.0	PCBs	---	---
E-18-2.0-2.5	507350.0008	423918.6188	05367-006	23-Jun-15	2.0-2.5	PCBs	---	---
E-18 Dup X-2-2.0-2.5	507350.0008	423918.6188	05367-024	23-Jun-15	2.0-2.5	PCBs	---	---
E-19-0.5-1.0	507418.8191	424005.0657	05428-007	24-Jun-15	0.5-1.0	PCBs	---	---
E-19-2.0-2.5	507418.8191	424005.0657	05428-008	24-Jun-15	2.0-2.5	PCBs	---	---
E-20-0.5-1.0	507514.0397	424102.7666	05428-001	24-Jun-15	0.5-1.0	PCBs	---	---
E-20-2.0-2.5	507514.0397	424102.7666	05428-002	24-Jun-15	2.0-2.5	PCBs	---	---
E-21-0.5-1.0	507435.2313	424125.7452	05467-003	25-Jun-15	0.5-1.0	PCBs	---	---
E-21-2.0-2.5	507435.2313	424125.7452	05467-004	25-Jun-15	2.0-2.5	PCBs	---	---
E-22-0.5-1.0	507617.7636	424216.2364	05428-003	24-Jun-15	0.5-1.0	PCBs	---	---
E-22-2.0-2.5	507617.7636	424216.2364	05428-004	24-Jun-15	2.0-2.5	PCBs	---	---
E-23-0.5-1.0	507567.6192	424266.7204	05467-005	25-Jun-15	0.5-1.0	PCBs	---	---
E-23-2.0-2.5	507567.6192	424266.7204	05467-006	25-Jun-15	2.5-3.0	PCBs	Pesticides	VOCs
E-24-0.5-1.0	507638.7258	424349.2622	05467-013	25-Jun-15	0.5-1.0	PCBs	---	---
E-24-2.0-2.5	507638.7258	424349.2622	05467-014	25-Jun-15	0.5-1.0	PCBs	---	---
E-25-0.5-1.0	507712.2828	424422.7841	05467-007	25-Jun-15	0.5-1.0	PCBs	---	---
E-25-2.0-2.5	507712.2828	424422.7841	05467-008	25-Jun-15	2.0-2.5	PCBs	---	---
E-26-0.5-1.0	507782.7626	424497.9786	05467-009	25-Jun-15	0.5-1.0	PCBs	---	---
E-26 Dup X-4-0.5-1.0	507782.7626	424497.9786	05467-011	25-Jun-15	0.5-1.0	PCBs	---	---
E-26-2.0-2.5	507782.7626	424497.9786	05467-010	25-Jun-15	2.0-2.5	PCBs	---	---
E-27-0.5-1.0	507843.329	424447.6927	05428-009	24-Jun-15	0.5-1.0	PCBs	---	---
E-27-2.0-2.5	507843.329	424447.6927	05428-010	24-Jun-15	2.0-2.5	PCBs	---	---
E-28-0.5-1.0	507908.7612	424527.989	05428-012	24-Jun-15	0.5-1.0	PCBs	---	---
E-28-2.0-2.5	507908.7612	424527.989	05428-013	24-Jun-15	2.0-2.5	PCBs	---	---
E-29-0.5-1.0	507892.1782	424551.5725	05428-005	24-Jun-15	0.5-1.0	PCBs	---	---
E-29-2.0-2.5	507892.1782	424551.5725	05428-006	24-Jun-15	2.0-2.5	PCBs	---	---
E-30	507781.26	424387.5	09537-033	11-Oct-06	3.0-3.5	---	---	PCE
E-30	507781.26	424387.5	09537-034	11-Oct-06	4.5-5.0	---	---	PCE
E-31	507744.34	424349.24	09537-035	11-Oct-06	3.0-3.5	---	---	PCE
E-31	507744.34	424349.24	09537-036	11-Oct-06	4.5-5.0	---	---	PCE
E-32-0.5-1.0	507333.4092	423968.4416	09537-045	12-Oct-16	0.5-1.0	PCBs	---	---
E-32-2.0-2.5	507333.4092	423968.4416	09537-046	12-Oct-16	2.0-2.5	PCBs	---	---
E-32-3.0-3.5	507333.4092	423968.4416	09537-047	12-Oct-16	3.0-3.5	PCBs	---	---
E-32-4.5-5.0	507333.4092	423968.4416	09537-048	12-Oct-16	4.5-5.0	PCBs	---	---
E-32-5.5-6.0	507333.4092	423968.4416	09537-049	12-Oct-16	5.5-6.0	PCBs	---	---
E-33-0.5-1.0	507317.8847	423954.4808	09537-037	11-Oct-16	0.5-1.0	PCBs	---	---

Table 1
Sampling Program
East Barracks Rail Yard Site
Trenton, NJ

Sample ID	Northing	Easting	Lab ID	Date	Depth	Analysis		
E-33-2.0-2.5	507317.8847	423954.4808	09537-038	11-Oct-16	2.0-2.5	PCBs	---	---
E-33-3.0-3.5	507317.8847	423954.4808	09537-039	11-Oct-16	3.0-3.5	PCBs	---	---
E-33-4.5-5.0	507317.8847	423954.4808	09537-040	11-Oct-16	4.5-5.0	PCBs	---	VOCs
E-33-5.5-6.0	507317.8847	423954.4808	09537-041	11-Oct-16	5.5-6.0	PCBs	---	VOCs
E-34-3.0-3.5	507234.62	423805.56	09537-027	11-Oct-16	3.0-3.5	PCBs	---	---
E-35-0.5-1.0	507086.54	423835.31	09581-001	12-Oct-16	0.5-1.0	PCBs	---	---
E-35 Dup X-3-0.5-1.0	507086.54	423835.31	09581-018	12-Oct-16	0.5-1.0	PCBs	---	---
E-35-2.0-2.5	507086.54	423835.31	09581-002	12-Oct-16	2.0-2.5	PCBs	---	---
E-36-0.5-1.0	507324.48	424076.61	09537-017	10-Oct-16	0.5-1.0	PCBs	---	---
E-36-2.0-2.5	507324.48	424076.61	09537-018	10-Oct-16	2.0-2.5	PCBs	---	---
E-37-0.5-1.0	507691.81	424434.94	09537-012	10-Oct-16	0.5-1.0	PCBs	---	---
E-38-0.5-1.0	507276.6321	423939.7741	09581-015	12-Oct-16	0.5-1.0	PCBs	---	---
E-38-2.0-2.5	507276.6321	423939.7741	09581-016	12-Oct-16	2.0-2.5	PCBs	---	---
E-38-4.5-5.0	507276.6321	423939.7741	09581-017	12-Oct-16	4.5-5.0	PCBs	---	---
E-39-4.5-5.0	507285.26	423882.7	09537-043	11-Oct-16	4.5-5.0	PCBs	---	---
E-40-4.5-5.0	507440.1	424028.42	09537-042	11-Oct-16	4.5-5.0	PCBs	---	---
E-41-0.5-1.0	507490.92	424130.27	09537-050	12-Oct-16	0.5-1.0	PCBs	---	---
E-41-2.0-2.5	507490.92	424130.27	09537-051	12-Oct-16	2.0-2.5	PCBs	---	---
E-41 Dup X-2-2.0-2.5	507490.92	424130.27	09537-054	12-Oct-16	2.0-2.5	PCBs	---	---
E-41-5.0-5.5	507490.92	424130.27	09537-053	12-Oct-16	5.0-5.5	PCBs	---	---
E-42-0.5-1.0	507773.91	424509.42	09537-003	10-Oct-16	0.5-1.0	PCBs	---	---
E-42-2.0-2.5	507773.91	424509.42	09537-004	10-Oct-16	2.0-2.5	PCBs	---	---
E-42-3.0-3.5	507773.91	424509.42	09537-005	10-Oct-16	3.0-3.5	PCBs	---	---
E-42-4.0-4.5	507773.91	424509.42	09537-006	10-Oct-16	4.0-4.5	PCBs	---	---
E-43-0.5-1.0	507937.05	424549.22	09537-022	11-Oct-16	0.5-1.0	PCBs	---	---
E-43-2.0-2.5	507937.05	424549.22	09537-023	11-Oct-16	2.0-2.5	PCBs	---	---
E-43-3.0-3.5	507937.05	424549.22	09537-024	11-Oct-16	3.0-3.5	PCBs	---	---
E-43-4.5-5.0	507937.05	424549.22	09537-025	11-Oct-16	4.5-5.0	PCBs	---	---
E-44-0.5-1.0	507479.75	424209.66	09537-013	10-Oct-16	0.5-1.0	PCBs	---	---
E-44-2.0-2.5	507479.75	424209.66	09537-014	10-Oct-16	2.0-2.5	PCBs	---	---
E-44-4.5-5.0	507479.75	424209.66	09537-057	12-Oct-16	4.5-5.0	PCBs	---	---
E-45-0.5-1.0	506802.55	423492.72	09581-003	12-Oct-16	0.5-1.0	PCBs	---	---
E-45-2.0-2.5	506802.55	423492.72	09581-004	12-Oct-16	2.0-2.5	PCBs	---	---
E-45-4.5-5.0	506802.55	423492.72	09581-006	12-Oct-16	4.5-5.0	PCBs	---	---
E-46-0.5-1.0	506854.4466	423541.6144	09581-011	12-Oct-16	0.5-1.0	PCBs	---	---
E-46-2.0-2.5	506854.4466	423541.6144	09581-012	12-Oct-16	2.0-2.5	PCBs	---	---
E-46-4.5-5.0	506854.4466	423541.6144	09581-014	12-Oct-16	4.5-5.0	PCBs	---	---
E-47-0.5-1.0	507177.88	423968.61	09537-019	10-Oct-16	0.5-1.0	PCBs	---	---
E-48-0.5-1.0	506916.09	423626.21	09581-010	12-Oct-16	0.5-1.0	PCBs	Pesticides	---
E-49-0.5-1.0	507624.68	424362.18	09537-010	10-Oct-16	0.5-1.0	PCBs	---	---
E-50-0.5-1.0	507552.05	424279.29	09537-058	10-Oct-16	0.5-1.0	PCBs	---	---
E-50 Dup X-1-0.5-1.0	507552.05	424279.29	09537-020	12-Oct-16	0.5-1.0	PCBs	---	---
E-50-2.0-2.5	507552.05	424279.29	09537-059	12-Oct-16	2.0-2.5	PCBs	---	---

Table 1
Sampling Program
East Barracks Rail Yard Site
Trenton, NJ

Sample ID	Northing	Easting	Lab ID	Date	Depth	Analysis		
E-50-4.5-5.0	507552.05	424279.29	09537-055	12-Oct-16	4.5-5.0	PCBs	---	---
E-51-0.5-1.0	507568.25	424258.99	09537-007	10-Oct-16	0.5-1.0	PCBs	---	---
E-51-2.0-2.5	507568.25	424258.99	09537-008	10-Oct-16	2.0-2.5	PCBs	---	---
E-51-3.0-3.5	507568.25	424258.99	09537-009	10-Oct-16	3.0-3.5	PCBs	---	---
E-51-4.5-5.0	507568.25	424258.99	09537-056	12-Oct-16	4.5-5.0	PCBs	---	---
E-52-0.5-1.0	507425.57	424145.81	09537-011	10-Oct-16	0.5-1.0	PCBs	---	---
E-53-0.5-1.0	506991.86	423704.57	09581-007	12-Oct-16	0.5-1.0	PCBs	Pesticides	---
E-54-0.5-1.0	507849.11	424581.86	09537-001	10-Oct-16	0.5-1.0	PCBs	---	---
E-54-2.0-2.5	507849.11	424581.86	09537-002	10-Oct-16	2.0-2.5	PCBs	---	---
E-55-4.5-5.0	507871.78	424484.16	09537-006	11-Oct-16	4.5-5.0	PCBs	---	---
E-56-4.5-5.0	507042.75	423603.87	09537-031	11-Oct-16	4.5-5.0	PCBs	---	---
E-56-6.0-6.5	507042.75	423603.87	09537-032	11-Oct-16	6.0-6.5	PCBs	---	---
E-57-4.5-5.0	507003.31	423582.85	09537-029	11-Oct-16	4.5-5.0	PCBs	---	---
E-57-6.0-6.5	507003.31	423582.85	09537-030	11-Oct-16	6.0-6.5	PCBs	---	---
E-58-0.5-1.0	507041.52	423788.49	09581-008	12-Oct-16	0.5-1.0	PCBs	---	---
E-58 Dup X-4-0.5-1.0	507041.52	423788.49	09581-019	12-Oct-16	0.5-1.0	PCBs	---	---
E-59-0.5-1.0	507117.7145	423881.5535	09581-009	12-Oct-16	0.5-1.0	PCBs	---	---
E-60-0.5-1.0	507374.77	424101.7	09537-016	10-Oct-16	0.5-1.0	PCBs	---	---
E-61-0.5-1.0	506773.96	423487.57	02179-001	16-Mar-17	0.5-1.0	PCBs	---	---
E-61-2.0-2.5	506773.96	423487.57	02179-002	16-Mar-17	2.0-2.5	PCBs	---	---
E-62-0.5-1.0	506758.18	423512.87	02179-003	16-Mar-17	0.5-1.0	PCBs	---	---
E-62-2.0-2.5	506758.18	423512.87	02179-004	16-Mar-17	2.0-2.5	PCBs	---	---
E-63-0.5-1.0	506795.5	423518.02	02179-005	16-Mar-17	0.5-1.0	PCBs	---	---
E-63-2.0-2.5	506795.5	423518.02	02179-006	16-Mar-17	2.0-2.5	PCBs	---	---
E-64-0.5-1.0	506783.62	423546.41	02179-007	16-Mar-17	0.5-1.0	PCBs	---	---
E-64-2.0-2.5	506783.62	423546.41	02179-008	16-Mar-17	2.0-2.5	PCBs	---	---
E-65-0.5-1.0	506830.5	423554.29	02179-009	16-Mar-17	0.5-1.0	PCBs	---	---
E-66-0.5-1.0	506814.9226	423564.8589	02179-011	16-Mar-17	0.5-1.0	PCBs	---	---
E-66-2.0-2.5	506814.9226	423564.8589	02179-012	16-Mar-17	2.0-2.5	PCBs	---	---
E-67-0.5-1.0	506904.67	423632.91	02179-013	16-Mar-17	0.5-1.0	PCBs	---	---
E-67-2.0-2.5	506904.67	423632.91	02179-014	16-Mar-17	2.0-2.5	PCBs	---	---
E-68-0.5-1.0	506873.08	423653.68	02179-015	16-Mar-17	0.5-1.0	PCBs	---	---
E-68 Dup X-1-0.5-1.0	506873.08	423653.68	02179-017	16-Mar-17	0.5-1.0	PCBs	---	---
E-68-2.0-2.5	506873.08	423653.68	02179-016	16-Mar-17	2.0-2.5	PCBs	---	---
E-69-0.5-1.0	506958.12	423713.35	02179-018	16-Mar-17	0.5-1.0	PCBs	---	---
E-70-0.5-1.0	506941.69	423737.42	02179-020	16-Mar-17	0.5-1.0	PCBs	---	---
E-70-2.0-2.5	506941.69	423737.42	02179-021	16-Mar-17	2.0-2.5	PCBs	---	---
E-71-0.5-1.0	507172.61	423986.31	02179-022	16-Mar-17	0.5-1.0	PCBs	---	---
E-71 DUP X-2-0.5-1.0	507172.61	423986.31	02179-024	16-Mar-17	0.5-1.0	PCBs	---	---
E-72-0.5-1.0	507165.74	424007.07	02179-025	16-Mar-17	0.5-1.0	PCBs	---	---
E-72-2.0-2.5	507165.74	424007.07	02179-026	16-Mar-17	2.0-2.5	PCBs	---	---
E-73-1	507368.2611	424109.2917		(2)				
E-73-2	507361.7522	424116.8835		(2)				

Table 1
Sampling Program
East Barracks Rail Yard Site
Trenton, NJ

Sample ID	Northing	Easting	Lab ID	Date	Depth	Analysis		
E-73-3	507355.2434	424124.4752		(2)				
E-74-1	507473.18	424217.28		(2)				
E-74-2	507466.67	424224.82		(2)				
E-74-3	507460.17	424232.32		(2)				
E-75-1	507545.5411	424286.8817		(2)				
E-75-2	507539.0322	424294.4735		(2)				
E-75-3	507532.5234	424302.0652		(2)				
E-76-1-RESET	507769.01	424512.42		(2)				
E-76-2-RESET	507760.93	424524.02		(2)				
E-76-3	507754.3834	424532.1952		(2)				
E-77-1	507842.6011	424589.4517		(2)				
E-77-2	507836.0922	424597.0435		(2)				
E-77-3	507829.5834	424604.6352		(2)				
PZ-1-0.5-1.0	507225.66	423960.88	05367-031	22-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
PZ-1-2.0-2.5	507225.66	423960.88	05367-032	22-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
PZ-1-2.5-3.0	507225.66	423960.88	05367-033	22-Jun-15	2.5-3.0	PCBs	Pesticides	VOCs
PZ-1-4.5-5.0	507225.66	423960.88	05367-034	22-Jun-15	4.5-5.0	PCBs	Pesticides	VOCs
PZ-2-0.5-1.0	507413.42	424099.88	05367-019	22-Jun-15	0.5-1.0	PCBs	Pesticides	VOCs
PZ-2-2.0-2.5	507413.42	424099.88	05367-020	22-Jun-15	2.0-2.5	PCBs	Pesticides	VOCs
PZ-2-4.0-4.5	507413.42	424099.88	05367-021	22-Jun-15	4.0-4.5	PCBs	Pesticides	VOCs
PZ-2-6.0-6.5	507413.42	424099.88	05367-022	22-Jun-15	6.0-6.5	PCBs	Pesticides	VOCs
EB-101016	NA	NA	09537-021	10-Oct-16	NA	PCBs	---	---
EB-101116	NA	NA	09537-044	11-Oct-16	NA	PCBs	---	VOCs
EB-101216	NA	NA	09581-020	12-Oct-16	NA	PCBs	---	VOCs
EB-01-031617	NA	NA	02179-027	16-Mar-17	NA	PCBs	---	---
FB-062215	NA	NA	05367-040	23-Jun-15	NA	PCBs	Pesticides	VOCs
FB-062315	NA	NA	05428-030	23-Jun-15	NA	PCBs	Pesticides	VOCs
FB-062415	NA	NA	05428-032	24-Jun-15	NA	PCBs	Pesticides	VOCs
FB-062515	NA	NA	05467-012	25-Jun-15	NA	PCBs	---	---
TB-062315	NA	NA	05367-044	23-Jun-15	NA	---	---	VOCs
TB-062415	NA	NA	05428-031	24-Jun-15	NA	---	---	VOCs
TRIP BLANK	NA	NA	09537-060	10-Oct-16	NA	---	---	VOCs
TRIP BLANK	NA	NA	09581-021	12-Oct-16	NA	---	---	VOCs

Notes:
(1) - Step-out sample not analyzed
(2) - Awaiting access agreeement
NA - Not applicable
PCE - Tetrochloroethene
--- - Not analyzed

Table 2
Quality Assurance/Quality Control Field Samples
East Barracks Rail Yard Site
Trenton, NJ

LOCATION	FB-062215		FB-062315		FB-062415		FB-062515		EB-101016		EB-101116		EB-101216		EB-01-031617	
SAMPLING DATE	6/23/15		6/23/15		6/24/15		6/25/15		10/10/16		10/11/16		10/12/16		3/16/17	
LAB SAMPLE ID	05367-040		05428-030		05428-032		05467-012		09537-021		09537-044		09581-020		02179-027	
SAMPLE DEPTH (ft.)	NA		NA		NA		05428-032		NA		NA		NA		NA	
	Results	Qual	Results	Qual	Results	Qual	NA		Results	Qual	Results	Qual	Results	Qual	Results	Qual
UNITS	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Polychlorinated Biphenyls																
Aroclor 1016	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1221	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1232	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1242	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1248	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1254	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1260	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1262	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
Aroclor 1268	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U
PCBs, Total	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U	0.00005	U

Notes:
ug/l - micrograms per liter
U - Not detected at the reporting limit for the sample.

Table 2
Quality Assurance/Quality Control Field Samples
East Barracks Rail Yard Site
Trenton, NJ

LOCATION	FB-062215		FB-062315		FB-062415		EB-101116		EB-101216		TB-062315		TB-062415		TRIP BLANK		TRIP BLANK	
SAMPLING DATE	6/23/15		6/23/15		6/24/15		10/11/16		10/12/16		6/23/15		6/24/15		10/10/16		10/12/16	
LAB SAMPLE ID	05367-040		05428-030		05428-032		09537-044		09581-020		05367-044		05428-031		09537-060		09581-021	
SAMPLE DEPTH (ft.)	NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
UNITS	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Volatiles (ug/L)																		
Dichlorodifluoromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Chloromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Vinyl chloride	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Bromomethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Chloroethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Trichlorofluoromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1-Dichloroethene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Acetone	0.005	U	0.002	U	0.002	U	NA		NA		0.005	U	0.002	U	NA		NA	
Carbon disulfide	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Methylene chloride	0.002	U	0.002	U	0.002	U	NA		NA		0.002	U	0.002	U	NA		NA	
trans-1,2-Dichloroethene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Methyl tert-butyl ether (MTBE	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1-Dichloroethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
cis-1,2-Dichloroethene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
2-Butanone (MEK)	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Bromochloromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Chloroform	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1,1-Trichloroethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Carbon tetrachloride	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2-Dichloroethane (EDC)	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Benzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Trichloroethene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2-Dichloropropane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,4-Dioxane	0.200	U	0.200	U	0.200	U	NA		NA		0.200	U	0.200	U	NA		NA	
Bromodichloromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
cis-1,3-Dichloropropene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
4-Methyl-2-pentanone (MIBK)	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Toluene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
trans-1,3-Dichloropropene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1,2-Trichloroethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Tetrachloroethene	0.001	U	0.001	U	0.001	U	0.0005	U	0.0005	U	0.001	U	0.001	U	0.0005	U	0.0005	U
2-Hexanone	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Dibromochloromethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2-Dibromoethane (EDB)	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Chlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Ethylbenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	

Table 2
Quality Assurance/Quality Control Field Samples
East Barracks Rail Yard Site
Trenton, NJ

LOCATION	FB-062215		FB-062315		FB-062415		EB-101116		EB-101216		TB-062315		TB-062415		TRIP BLANK		TRIP BLANK	
SAMPLING DATE	6/23/15		6/23/15		6/24/15		10/11/16		10/12/16		6/23/15		6/24/15		10/10/16		10/12/16	
LAB SAMPLE ID	05367-040		05428-030		05428-032		09537-044		09581-020		05367-044		05428-031		09537-060		09581-021	
SAMPLE DEPTH (ft.)	NA		NA		NA		NA		NA		NA		NA		NA		NA	
	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual	Results	Qual
UNITS	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Total Xylenes	0.002	U	0.002	U	0.002	U	NA		NA		0.002	U	0.002	U	NA		NA	
Styrene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Bromoform	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Isopropylbenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1,2,2-Tetrachloroethane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,3-Dichlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,4-Dichlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2-Dichlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2-Dibromo-3-chloropropane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2,4-Trichlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,2,3-Trichlorobenzene	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,1,2-Trichloro-1,2,2-trifluoroe	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Methyl acetate	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
Cyclohexane	0.002	U	0.002	U	0.002	U	NA		NA		0.002	U	0.002	U	NA		NA	
Methylcyclohexane	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
1,3-Dichloropropene (cis- and	0.001	U	0.001	U	0.001	U	NA		NA		0.001	U	0.001	U	NA		NA	
TOTAL VO's:	ND		ND		ND		ND		ND		ND		ND		ND		ND	
TOTAL TIC's:	ND		ND		ND		ND		ND		ND		ND		ND		ND	
TOTAL VO's & TIC's:	ND		ND		ND		ND		ND		ND		ND		ND		ND	

Notes:
ug/l - micrograms per liter
U - Not detected at the reporting limit for the sample.
NA - Not analyzed

Table 2
Quality Assurance/Quality Control Field Samples
East Barracks Rail Yard Site
Trenton, NJ

LOCATION	FB-062215		FB-062315		FB-062415	
SAMPLING DATE	6/23/15		6/23/15		6/24/15	
LAB SAMPLE ID	05367-040		05428-030		05428-032	
SAMPLE DEPTH (ft.)	NA		NA		NA	
	Results	Qual	Results	Qual	Results	Qual
UNITS	ug/L		ug/L		ug/L	
Pesticides						
alpha-BHC	0.00001	U	0.00001	U	0.00001	U
beta-BHC	0.00001	U	0.00001	U	0.00001	U
gamma-BHC (Lindane)	0.00001	U	0.00001	U	0.00001	U
delta-BHC	0.00001	U	0.00001	U	0.00001	U
Heptachlor	0.00001	U	0.00001	U	0.00001	U
Aldrin	0.00001	U	0.00001	U	0.00001	U
Heptachlor epoxide	0.00001	U	0.00001	U	0.00001	U
Endosulfan I	0.00001	U	0.00001	U	0.00001	U
4,4'-DDE	0.00001	U	0.00001	U	0.00001	U
Dieldrin	0.00001	U	0.00001	U	0.00001	U
Endrin	0.00001	U	0.00001	U	0.00001	U
Endosulfan II	0.00001	U	0.00001	U	0.00001	U
4,4'-DDD	0.00001	U	0.00001	U	0.00001	U
Endrin aldehyde	0.00001	U	0.00001	U	0.00001	U
Endosulfan sulfate	0.00001	U	0.00001	U	0.00001	U
4,4'-DDT	0.00001	U	0.00001	U	0.00001	U
Endrin ketone	0.00001	U	0.00001	U	0.00001	U
Methoxychlor	0.00001	U	0.00001	U	0.00001	U
alpha-Chlordane	0.00001	U	0.00001	U	0.00001	U
gamma-Chlordane	0.00001	U	0.00001	U	0.00001	U
Toxaphene	0.000125	U	0.000125	U	0.000125	U
Endosulfan (I and II)	0.00001	U	0.00001	U	0.00001	U
Chlordane (alpha and gamma)	0.00001	U	0.00001	U	0.00001	U

Notes:
ug/L - milligrams per liter
U - Not detected at the reporting limit for the sample.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					A-1 (0.0-0.5)	A-1 (2.0-2.5)	A-2 (0.0-0.5)	A-2 (2.0-2.5)	A-3 (0.0-0.5)	A-3 (2.0-2.5)	A-3 (3.0-3.5)	A-4 (0.0-0.5)	A-4 (2.0-2.5)	A-5 (0.0-0.5)	A-5 (2.0-2.5)	A-6 (0.0-0.5)	A-6 (2.0-2.5)
SAMPLING DATE					5/14/2002	5/15/2002	5/14/2002	5/14/2002	5/16/2002	5/16/2002	5/16/2002	5/17/2002	5/17/2002	5/17/2002	5/17/2002	5/17/2002	5/17/2002
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	3.0-3.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA													
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1221	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1232	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1242	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1248	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1254	1	0.2	0.2		***0.97U***	0.018U	***1.9U***	0.02U	***2U***	0.094U	0.18U	***0.91U***	0.019U	***1.9U***	0.018U	***4U***	0.018U
Aroclor-1260	1	0.2	0.2		**17**	0.018U	**42**	0.02U	**46**	**2.5**	**2.7**	**24**	0.21	**26**	0.046	**160**	0.04
Total PCBs	1	0.2	0.2	1- <10	**17**	ND	**42**	ND	**46**	**2.5**	**2.7**	**24**	0.21	**26**	0.046	**160**	0.04

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					A-7 (0.0-0.5)	A-7 (2.0-2.5)	A-8 (0.0-0.5)	A-8 (2.0-2.5)	A-9 (0.0-0.5)	A-9 (2.0-2.5)	A-10 (0.0-0.5)	A-10 (2.0-2.5)	A-11 (0.0-0.5)	A-11 (2.0-2.5)	A-12 (0.0-0.5)	A-12 (2.0-2.5)	A-12 (3.0-3.5)
SAMPLING DATE					5/17/2002	5/17/2002	5/16/2002	5/16/2002	5/17/2002	5/17/2002	5/22/2002	5/22/2002	5/22/2002	5/22/2002	5/22/2002	5/22/2002	5/22/2002
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	3.0-3.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA													
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		***19U***	0.018U	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1221	1	0.2	0.2		***19U***	0.018U	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1232	1	0.2	0.2		***19U***	0.018U	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1242	1	0.2	0.2		***19U***	0.018U	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1248	1	0.2	0.2		***19U***	0.018U	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1254	1	0.2	0.2		**800**	0.15	***0.96U***	0.018U	***4.2U***	0.018 U	***1.9U***	0.018 U	***1 U***	0.019 U	***3.6 U***	***0.39 U***	0.018 U
Aroclor-1260	1	0.2	0.2		***19U***	0.018U	**20**	**0.45**	**130**	0.18	**42**	**0.79**	**18**	0.17	**48**	**7.6**	**0.32**
Total PCBs	1	0.2	0.2	1- <10	**800**	0.15	**20**	**0.45**	**130**	0.18	**42**	**0.79**	**18**	0.17	**48**	**7.6**	**0.32**

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					A-13 (0.0-0.5)	A-13 (2.0-2.5)	A-14 (0.0-0.5)	A-14 (2.0-2.5)	A-14 (3.0-3.5)	A-15 (0.0-0.5)	A-15 (1.0-1.5)	B-1 (2.0-2.5)	B-3 (2.0-2.5)	B-5 (2.0-2.5)	B-7 (2.0-2.5)	B-9 (2.0-2.5)	B-9 (3.0-3.5)
SAMPLING DATE					**5/23/2002**	**5/23/2002**	**5/23/2002**	**5/23/2002**	**5/23/2002**	**5/23/2002**	**5/23/2002**	**5/14/2002**	**5/15/2002**	**5/15/2002**	**5/15/2002**	**5/17/2002**	**5/17/2002**
SAMPLE DEPTH-ft.					**0.0-0.5**	**2.0-2.5**	**0.0-0.5**	**2.0-2.5**	**3.0-3.5**	**0.0-0.5**	**1.0-1.5**	**2.0-2.5**	**2.0-2.5**	**2.0-2.5**	**2.0-2.5**	**2.0-2.5**	**3.0-3.5**
	NRDCSRS	**RDCSRS**	**IGWSSL**	**TSCA**													
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1221	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1232	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1242	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1248	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1254	1	0.2	0.2		***1.9 U***	0.018 U	***1.9 U***	0.18 U	0.18 U	***0.88 U***	0.19 U	0.017 U	0.018 U	0.018 U	0.019 U	***2.1 U***	***4 U***
Aroclor-1260	1	0.2	0.2		**32**	**0.79**	**45**	**4**	**3.1**	**14**	**4.3**	0.056	0.19	**0.48**	0.026	**30**	**52**
Total PCBs	1	0.2	0.2	1- <10	**32**	**0.79**	**45**	**4**	**3.1**	**14**	**4.3**	0.056	0.19	**0.48**	0.026	**30**	**52**

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

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TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					B-11 (2.0-2.5)	B-11 (3.0-3.5)	B-13 (2.0-2.5)	B-13 (3.0-3.5)	B-15 (2.0-2.5)	C-1 (0.0-0.5)	C-1 (2.0-2.5)	C-2 (0.0-0.5)	C-2 (2.0-2.5)	C-3 (0.0-0.5)	C-3 (2.0-2.5)	C-4 (0.0-0.5)	C-4 (2.0-2.5)
SAMPLING DATE					5/22/2002	5/22/2002	5/23/2002	5/23/2002	5/23/2002	5/14/2002	5/14/2002	5/14/2002	5/14/2002	5/15/2002	5/15/2002	5/14/2002	5/14/2002
SAMPLE DEPTH-ft.					2.0-2.5	3.0-3.5	2.0-2.5	3.0-3.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA													
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1221	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1232	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1242	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1248	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1254	1	0.2	0.2		***0.39 U***	0.2 U	0.18 U	0.018 U	0.09 U	***0.98 U***	0.019 U	***0.38 U***	0.022 U	***1.2 U***	0.018 U	***2.2 U***	0.018 U
Aroclor-1260	1	0.2	0.2		**11**	**6.5**	**2.9**	**0.75**	**1.8**	**16**	0.043	**12**	0.031	**19**	ND	**57**	0.031
Total PCBs	1	0.2	0.2	1- <10	**11**	**6.5**	**2.9**	**0.75**	**1.8**	**16**	0.043	**12**	0.031	**19**	ND	**57**	0.031

Notes:

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Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

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NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					C-5 (0.0-0.5)	C-5 (2.0-2.5)	C-6 (0.0-0.5)	C-6 (2.0-2.5)	C-7 (0.0-0.5)	C-7 (2.0-2.5)	C-8 (0.0-0.5)	C-8 (2.0-2.5)	C-9 (0.0-0.5)	C-9 (2.0-2.5)	C-10 (0.0-0.5)	C-10 (2.0-2.5)	C-11 (0.0-0.5)
SAMPLING DATE					5/15/2002	5/15/2002	5/15/2002	5/15/2002	5/15/2002	5/15/2002	5/16/2002	5/16/2002	5/16/2002	5/16/2002	5/16/2002	5/16/2002	5/16/2002
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA													
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1221	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1232	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1242	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1248	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1254	1	0.2	0.2		***1.9 U***	0.018 U	2U	0.018 U	***0.93 U***	0.019 U	***0.44 U***	0.019 U	***0.19 U***	0.018 U	0.018 U	0.019 U	0.19 U
Aroclor-1260	1	0.2	0.2		**40**	0.018 U	**33**	0.018 U	**12**	0.024	**9.6**	0.25	**3.6**	0.018 U	**0.34**	0.18	**5**
Total PCBs	1	0.2	0.2	1- <10	**40**	ND	**33**	ND	**12**	0.024	**9.6**	0.25	**3.6**	ND	**0.34**	0.18	**5**

Notes:

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TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					C-11 (2.0-2.5)	C-12 (0.0-0.5)	C-12 (2.0-2.5)	C-13 (0.0-0.5)	C-13 (2.0-2.5)	C-14 (0.0-0.5)	C-14 (2.0-2.5)	C-15 (0.0-0.5)	C-15 (2.0-2.5)	D-1 (0.0-0.5)	D-2 (0.0-0.5)	D-3 (0.0-0.5)	D-4 (0.0-0.5)
SAMPLING DATE					5/16/2002	5/16/2002	5/16/2002	5/16/2002	5/16/2002	5/22/2002	5/22/2002	5/23/2002	5/23/2002	5/8/2003	5/8/2015	5/8/2003	5/8/2015
SAMPLE DEPTH-ft.					2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA													
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls																	
Aroclor-1016	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1221	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1232	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1242	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1248	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1254	1	0.2	0.2		0.019 U	***0.35 U***	0.019 U	***1 U***	0.02 U	***1.9 U***	0.02 U	***0.36 U***	0.019 U	***3.3 U***	0.028 U	***0.31 U***	***0.62 U***
Aroclor-1260	1	0.2	0.2		0.019 U	**7.5**	0.019 U	**50**	0.02 U	**21**	**0.28**	**7.4**	0.046	**82**	**1.1**	**8.5**	**13**
Total PCBs	1	0.2	0.2	1- <10	ND	**7.5**	ND	**50**	ND	**21**	**0.28**	**7.4**	0.046	**82**	**1.1**	**8.5**	**13**

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					D-5 (0.0-0.5)	D-6 (0.0-0.5)	D-7 (0.0-0.5)	D-11 (0.0-0.5)	D-12 (0.0-0.5)	D-13 (0.0-0.5)	D-13 (2.0-2.5)	D-14 (0.0-0.5)	D-15 (0.0-0.5)
SAMPLING DATE					**5/8/2015**	**5/8/2003**	**5/8/2002**	**5/8/2003**	**5/8/2003**	**5/8/2003**	**5/8/2003**	**5/8/2003**	**5/8/2003**
SAMPLE DEPTH-ft.					**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**0.0-0.5**	**2.0-2.5**	**0.0-0.5**	**0.0-0.5**
	NRDCSRS	**RDCSRS**	**IGWSSL**	**TSCA**									
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Polychlorinated Biphenyls													
Aroclor-1016	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1221	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1232	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1242	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1248	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1254	1	0.2	0.2		***3.0 U***	***6.2 U***	***1.6 U***	***0.31 U***	***0.59 U***	***1.5 U***	0.027 U	***0.58 U***	***0.57 U***
Aroclor-1260	1	0.2	0.2		**30**	**120**	**5.4**	**4.5**	**15**	**44**	0.027 U	**12**	**13**
Total PCBs	1	0.2	0.2	1- <10	**30**	**120**	**5.4**	**4.5**	**15**	**44**	ND	**12**	**13**

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					PL-1 (0.0-0.5)	PL-1 (2.0-2.5)	PL-2 (0.0-0.5)	PL-2 (2.0-2.5)	PL-3 (0.0-0.5)	PL-3 (1.5-2.0)	PL-4 (0.0-0.5)	PL-4 (2.0-2.5)	PL-5 (0.0-0.5)	PL-5 (2.0-2.5)	PL-6 (0.0-0.5)	PL-6 (2.0-2.5)
SAMPLING DATE					5/14/2002	5/14/2002	5/22/2002	5/22/2002	5/22/2002	5/22/2002	5/14/2002	5/14/2002	5/16/2002	5/16/2002	5/22/2002	5/22/2002
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	1.5-2.0	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA												
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls																
Aroclor-1016	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1221	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1232	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1242	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1248	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1254	1	0.2	0.2		0.021 U	0.02 U	0.019 U	0.019 U	0.019 U	0.018 U	0.017 U	***0.37 U***	0.095 U	0.018 U	0.17 U	0.02 U
Aroclor-1260	1	0.2	0.2		**1.2**	0.025	**1.3**	**0.74**	0.019 U	**0.29**	**0.26**	**7.8**	**2.1**	**1**	**5**	0.15
Total PCBs	1	0.2	0.2	1- <10	**1.2**	0.025	**1.3**	**0.74**	ND	**0.29**	**0.26**	**7.8**	**2.1**	**1**	**5**	0.15

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					PL-7 (0.0-0.5)	PL-7 (2.0-2.5)	PL-8 (0.0-0.5)	PL-8 (2.0-2.5)	PL-9 (0.0-0.5)	PL-9 (1.5-2.0)	PL-10 (0.0-0.5)	PL-11 (0.0-0.5)	PL-12 (0.0-0.5)
SAMPLING DATE					5/22/2002	5/22/2002	5/22/2002	5/22/2002	5/8/2003	5/8/2003	5/8/2003	5/8/2003	5/8/2003
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	1.5-2.0	0.0-0.5	0.0-0.5	0.0-0.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA									
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls													
Aroclor-1016	1	0.2	0.2		***0.98 U***	0.019 U	***19U***	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1221	1	0.2	0.2		***0.98 U***	0.019 U	***19U***	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1232	1	0.2	0.2		***0.98 U***	0.019 U	***19U***	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1242	1	0.2	0.2		***0.98 U***	0.019 U	***19U***	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1248	1	0.2	0.2		***0.98 U***	0.019 U	***19U***	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1254	1	0.2	0.2		***0.98 U***	0.019 U	**230**	0.018 U	***1.5 U***	0.026 U	0.03 U	***0.6 U***	***0.28 U***
Aroclor-1260	1	0.2	0.2		**17**	0.23	***19U***	0.048	**11**	**0.25**	0.13	**7.7**	**7.3**
Total PCBs	1	0.2	0.2	1- <10	**17**	0.23	**230**	0.048	**11**	**0.25**	0.13	**7.7**	**7.3**

Notes:

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ND - Not Detected.

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-1-0.5-1.0			E-1-2.0-2.5			E-1-3.0-3.5			E-1-4.5-5.0			E-2-0.5-1.0			E-2 Dup X-3-0.5-1.0			E-2-2.0-2.5			E-2-3.0-3.5			E-2-4.5-5.0			E-3-0.5-1.0		
LAB SAMPLE ID					05428-014			05428-015			05428-016			05428-017			05428-020			05428-011			05428-021			05428-022			05428-023			05367-002		
SAMPLING DATE					6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/23/2015		
SAMPLE DEPTH-ft.					0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1221	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1232	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1242	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1248	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1254	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1260	1	0.2	0.2		**3.02**	D		0.018		0.00179	ND		0.00192	ND		0.00201	**11.2**	D		**29.5**	D		**7.8**			**1.04**	D		**1.99**	D		**127**	D	
Aroclor 1262	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
Aroclor 1268	1	0.2	0.2		ND		0.04	ND		0.00179	ND		0.00192	ND		0.00201	ND		***0.432***	ND		***1.06***	ND		***0.366***	ND		0.018	ND		0.036	ND		***1.06***
PCBs, Total	1	0.2	0.2	1- <10	**3.02**	D		0.018		0.00179	ND		0.00192	ND		0.00201	**11.2**	D		**29.5**	D		**7.8**			**1.04**	D		**1.99**	D		**127**	D	

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-3-2.0-2.5			E-3-3.0-3.5			E-3-4.5-5.0			E-4-0.5-1.0			E-4-2.0-2.5			E-4-3.0-3.5			E-4-4.5-5.0			E-4 Dup X-1-4.5-5.0			E-5-0.5-1.0			E-5-2.0-2.5		
LAB SAMPLE ID					05367-003			05367-001			05367-004			05367-007			05367-008			05367-009			05367-010			05367-023			05367-035			05367-037		
SAMPLING DATE					6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.					2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			4.5-5.0			0.5-1.0			2.0-2.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1221	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1232	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1242	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1248	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1254	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1260	1	0.2	0.2		**25.2**	D		0.037			0.00624			**30**	D		**0.938**	D		**0.827**	D		**2.51**	D		**2.34**	D		**6.35**	D		**0.247**	D	
Aroclor 1262	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
Aroclor 1268	1	0.2	0.2		ND		***0.942***	ND		0.00179	ND		0.00174	ND		***0.951***	ND		0.018	ND		0.018	ND		0.037	ND		0.036	ND		0.204	ND		0.02
PCBs, Total	1	0.2	0.2	1- <10	**25.2**	D		0.037			0.00624			**30**	D		**0.938**	D		**0.827**	D		**2.51**	D		**2.34**	D		**6.35**	D		**0.247**	D	

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-5-3.0-3.5			E-5-4.5-5.0			E-6-0.5-1.0			E-6-2.0-2.5			E-6-3.0-3.5			E-6-4.0-4.5			E-7-0.5-1.0			E-7-2.0-2.5			E-7-3.0-3.5		
LAB SAMPLE ID					05367-036			05367-038			05367-039			05367-041			05367-042			05367-042			05428-020			05428-021			05428-022		
SAMPLING DATE					6/22/2015			6/22/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/24/2015		
SAMPLE DEPTH-ft.					3.0-3.5			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5			4.0-4.5			0.5-1.0			2.0-2.5			3.0-3.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																											
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1221	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1232	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1242	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1248	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1254	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1260	1	0.2	0.2		**0.103**	D		ND		0.00406	**5.22**	D		0.03			0.011			0.00148	J		**1.11**	D		0.00157	J		ND		0.00183
Aroclor 1262	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
Aroclor 1268	1	0.2	0.2		ND		0.00405	ND		0.00406	ND		0.042	ND		0.00176	ND		0.00175	ND		0.00182	ND		0.019	ND		0.00173	ND		0.00183
PCBs, Total	1	0.2	0.2	1- <10	**0.103**	D		ND		0.00406	**5.22**	D		0.03			0.011			0.00148	J		**1.11**	D		0.00157	J		ND		0.00183

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-7-4.5-5.0			E-8-0.5-1.0			E-8-2.0-2.5			E-9-0.5-1.0			E-9-2.0-2.5			E-10-0.5-1.0			E-10-2.0-2.5			E-11-0.5-1.0			E-11-2.0-2.5			E-12-0.5-1.0		
LAB SAMPLE ID					05428-023			05367-025			05367-026			05367-029			05367-030			05428-024			05428-019			05367-011			05367-012			05367-013		
SAMPLING DATE					6/24/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/23/2015			6/23/2015			6/23/2015		
SAMPLE DEPTH-ft.					4.5-5.0			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1221	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1232	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1242	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1248	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1254	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1260	1	0.2	0.2		ND		0.00185	**4.05**			ND		0.041	**8.25**	D		0.144			**0.418**			0.047			**19.8**	D		ND		0.038	**128**	D	
Aroclor 1262	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
Aroclor 1268	1	0.2	0.2		ND		0.00185	ND		0.039	ND		0.041	ND		0.212	ND		0.041	ND		0.039	ND		0.042	ND		***0.447***	ND		0.038	ND		***4.59***
PCBs, Total	1	0.2	0.2	1- <10	ND		0.00185	**4.05**			ND		0.041	**8.25**	D		0.144			**0.418**			0.047			**19.8**	D		ND		0.038	**128**	D	

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East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-12-2.0-2.5			E-13-0.5-1.0			E-13-2.0-2.5			E-14-0.5-1.0			E-14-2.0-2.5			E-15-0.5-1.0			E-15-2.0-2.5			E-16-0.5-1.0			E-16-2.0-2.5			E-17-0.5-1.0		
LAB SAMPLE ID					05367-014			05467-001			05467-002			05367-015			05367-016			05428-018			05428-019			05367-017			05367-018			05367-027		
SAMPLING DATE					6/23/2015			6/25/2015			6/25/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/22/2015			6/22/2016			6/23/2015		
SAMPLE DEPTH-ft.					2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1221	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1232	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1242	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1248	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1254	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1260	1	0.2	0.2		**2.03**			**5.19**			**3.89**			**35.4**	D		**4.44**			**2.1**			0.044			**1.74**	D		ND		0.01	**224**	D	
Aroclor 1262	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
Aroclor 1268	1	0.2	0.2		ND		0.044	ND		0.044	ND		0.054	ND		***0.813***	ND		0.042	ND		0.045	ND		0.044	ND		0.041	ND		0.01	ND		***8.67***
PCBs, Total	1	0.2	0.2	1- <10	**2.03**			**5.19**			**3.89**			**35.4**	D		**4.44**			**2.1**			0.044			**1.74**	D		ND		0.01	**224**	D	

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

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TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-17-2.0-2.5			E-18-0.5-1.0			E-18-2.0-2.5			E-18 Dup X-2-2.0-2.5			E-19-0.5-1.0			E-19-2.0-2.5			E-20-0.5-1.0			E-20-2.0-2.5			E-21-0.5-1.0			E-21-2.0-2.5		
LAB SAMPLE ID					05367-028			05367-005			05367-006			05367-024			05428-007			05428-008			05428-001			05428-002			05467-003			05467-004		
SAMPLING DATE					6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/25/2015			6/25/2015		
SAMPLE DEPTH-ft.					2.0-2.5			0.5-1.0			2.0-2.5			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1221	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1232	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1242	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1248	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1254	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1260	1	0.2	0.2		**3.2**			**12.5**	D		**0.734**			**0.449**			**11.2**	D		**4.37**			**168**	D		**3.67**			**17.4**	D		0.195		
Aroclor 1262	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
Aroclor 1268	1	0.2	0.2		ND		0.052	ND		***0.457***	ND		0.04	ND		0.038	ND		0.214	ND		0.041	ND		***4.85***	ND		0.036	ND		***0.412***	ND		0.048
PCBs, Total	1	0.2	0.2	1- <10	**3.2**			**12.5**	D		**0.734**			**0.449**			**11.2**	D		**4.37**			**168**	D		**3.67**			**17.4**	D		0.195		

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-22-0.5-1.0			E-22-2.0-2.5			E-23-0.5-1.0			E-23-2.0-2.5			E-24-0.5-1.0			E-24-2.0-2.5			E-25-0.5-1.0			E-25-2.0-2.5			E-26-0.5-1.0			E-26 Dup X-4-0.5-1.0		
LAB SAMPLE ID					05428-003			05428-004			05467-005			05467-006			05467-013			05467-014			05467-007			05467-008			05467-009			05467-011		
SAMPLING DATE					6/24/2015			6/24/2015			6/25/2015			6/25/2015			6/25/2015			6/25/2015			6/25/2015			6/25/2015			6/25/2015			6/25/2015		
SAMPLE DEPTH-ft.					0.5-1.0			2.0-2.5			0.5-1.0			2.5-3.0			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1221	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1232	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1242	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1248	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1254	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1260	1	0.2	0.2		**9.58**	D		0.243			**54.5**	D		**29.8**	D		**143**	D		ND		0.049	**11.9**	D		ND		0.044	**13.7**	D		**8.99**	D	
Aroclor 1262	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
Aroclor 1268	1	0.2	0.2		ND		0.212	ND		0.039	ND		***0.87***	ND		***0.429***	ND		***4.15***	ND		0.049	ND		***0.4***	ND		0.044	ND		***0.41***	ND		0.203
PCBs, Total	1	0.2	0.2	1- <10	**9.58**	D		0.243			**54.5**	D		**29.8**	D		**143**	D		ND		0.049	**11.9**	D		ND		0.044	**13.7**	D		**8.99**	D	

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-26-2.0-2.5			E-27-0.5-1.0			E-27-2.0-2.5			E-28-0.5-1.0			E-28-2.0-2.5			E-29-0.5-1.0			E-29-2.0-2.5			E-32-0.5-1.0			E-32-2.0-2.5			E-32-3.0-3.5		
LAB SAMPLE ID					05467-010			05428-009			05428-010			05428-012			05428-013			05428-005			05428-006			09537-045			09537-046			09537-047		
SAMPLING DATE					6/25/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			10/12/2016			10/12/2016			10/12/2016		
SAMPLE DEPTH-ft.					2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			3.0-3.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1221	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1232	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1242	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1248	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1254	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1260	1	0.2	0.2		**2.1**			**28.1**	D		**4.18**		0.042	**14.6**	D		**5.42**			**4.39**			**0.326**			**11.8**	D		**5.53**			**1.13**		
Aroclor 1262	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
Aroclor 1268	1	0.2	0.2		ND		***0.04***	ND		***0.461***	ND		0.042	ND		0.017	ND		0.016	ND		0.051	ND		0.039	ND		0.2	ND		0.041	ND		0.037
PCBs, Total	1	0.2	0.2	1- <10	**2.1**			**28.1**	D		**4.18**		0.042	**14.6**	D		**5.42**			**4.39**			**0.326**			**11.8**	D		**5.53**			**1.13**		

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-32-4.5-5.0			E-32-5.5-6.0			E-33-0.5-1.0			E-33-2.0-2.5			E-33-3.0-3.5			E-33-4.5-5.0			E-33-5.5-6.0			E-34-3.0-3.5			E-35-0.5-1.0			E-35 Dup X-3-0.5-1.0		
LAB SAMPLE ID					09537-048			09537-049			09537-037			09537-038			09537-039			09537-040			09537-041			09537-027			09581-001			09581-018		
SAMPLING DATE					10/12/2016			10/12/2016			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/12/2016			10/12/2016		
SAMPLE DEPTH-ft.					4.5-5.0			5.5-6.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			5.5-6.0			3.0-3.5			0.5-1.0			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1221	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1232	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1242	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1248	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1254	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1260	1	0.2	0.2		0.103			0.042			**11.3**	D		**11.7**	D		**2.54**			**0.435**			0.070			0.196			ND		0.041	ND		0.041
Aroclor 1262	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
Aroclor 1268	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.219	ND		0.201	ND		0.041	ND		0.038	ND		0.035	ND		0.043	ND		0.041	ND		0.041
PCBs, Total	1	0.2	0.2	1- <10	0.103			0.042			**11.3**	D		**11.7**	D		**2.54**			**0.435**			0.070			0.196			ND		0.041	ND		0.041

Notes:

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Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-35-2.0-2.5			E-36-0.5-1.0			E-36-2.0-2.5			E-37-0.5-1.0			E-38-0.5-1.0			E-38-2.0-2.5			E-38-4.5-5.0			E-39-4.5-5.0			E-40-4.5-5.0			E-41-0.5-1.0		
LAB SAMPLE ID					09581-002			09537-017			09537-018			09537-012			09581-015			09581-016			09581-017			09537-043			09537-042			09537-050		
SAMPLING DATE					10/12/2016			10/10/2016			10/10/2016			10/10/2016			10/12/2016			10/12/2016			10/12/2016			10/11/2016			10/11/2016			10/12/2016		
SAMPLE DEPTH-ft.					2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0			2.0-2.5			4.5-5.0			4.5-5.0			4.5-5.0			0.5-1.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1221	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1232	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1242	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1248	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1254	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1260	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	0.064			**3.10**			**1.10**			**0.310**			0.110			0.061			**13.3**	D	
Aroclor 1262	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
Aroclor 1268	1	0.2	0.2		ND		0.041	ND		0.041	ND		0.04	ND		0.038	ND		0.041	ND		0.047	ND		0.042	ND		0.039	ND		0.038	ND		0.211
PCBs, Total	1	0.2	0.2	1- <10	ND		0.041	ND		0.041	ND		0.04	0.064			**3.10**			**1.10**			**0.310**			0.110			0.061			**13.3**	D	

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-41-2.0-2.5			E-41 Dup X-2-2.0-2.5			E-41-5.0-5.5			E-42-0.5-1.0			E-42-2.0-2.5			E-42-3.0-3.5			E-42-4.0-4.5			E-43-0.5-1.0			E-43-2.0-2.5			E-43-3.0-3.5		
LAB SAMPLE ID					09537-051			09537-054			09537-053			09537-003			09537-004			09537-005			09537-006			09537-022			09537-023			09537-024		
SAMPLING DATE					10/12/2016			10/12/2016			10/12/2016			10/10/2016			10/10/2016			10/10/2016			10/10/2016			10/11/2016			10/11/2016			10/11/2016		
SAMPLE DEPTH-ft.					2.0-2.5			2.0-2.5			5.0-5.5			0.5-1.0			2.0-2.5			3.0-3.5			4.0-4.5			0.5-1.0			2.0-2.5			3.0-3.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1221	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1232	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1242	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1248	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1254	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1260	1	0.2	0.2		**1.30**			**1.54**			**0.954**			**6.28**			**6.04**			**6.98**	D		ND		0.036	**31.0**	D		**1.66**			**0.323**		
Aroclor 1262	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
Aroclor 1268	1	0.2	0.2		ND		0.038	ND		0.038	ND		0.045	ND		0.04	ND		0.039	ND		0.078	ND		0.036	ND		***0.418***	ND		0.045	ND		0.042
PCBs, Total	1	0.2	0.2	1- <10	**1.30**			**1.54**			**0.954**			**6.28**			**6.04**			**6.98**	D		ND		0.036	**31.0**	D		**1.66**			**0.323**		

Notes:

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mg/kg - milligrams per kilogram.

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TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-43-4.5-5.0			E-44-0.5-1.0			E-44-2.0-2.5			E-44-4.5-5.0			E-45-0.5-1.0			E-45-2.0-2.5			E-45-4.5-5.0			E-46-0.5-1.0			E-46-2.0-2.5			E-46-4.5-5.0		
LAB SAMPLE ID					09537-025			09537-013			09537-014			09537-057			09581-003			09581-004			09581-006			09581-011			09581-012			09581-014		
SAMPLING DATE					10/11/2016			10/10/2016			10/10/2016			10/12/2016			10/12/2016			10/12/2016			10/12/2016			10/12/2016			10/12/2016			10/12/2016		
SAMPLE DEPTH-ft.					4.5-5.0			0.5-1.0			2.0-2.5			4.5-5.0			0.5-1.0			2.0-2.5			4.5-5.0			0.5-1.0			2.0-2.5			4.5-5.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1221	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1232	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1242	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1248	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1254	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1260	1	0.2	0.2		ND		0.037	**0.472**			**0.247**			ND		0.05	**7.64**	D		**4.15**			ND		0.04	**3.36**			ND		0.041	ND		0.039
Aroclor 1262	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
Aroclor 1268	1	0.2	0.2		ND		0.037	ND		0.038	ND		0.038	ND		0.05	ND		0.074	ND		0.038	ND		0.04	ND		0.059	ND		0.041	ND		0.039
PCBs, Total	1	0.2	0.2	1- <10	ND		0.037	**0.472**			**0.247**			ND		0.05	**7.64**	D		**4.15**			ND		0.04	**3.36**			ND		0.041	ND		0.039

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-47-0.5-1.0			E-48-0.5-1.0			E-49-0.5-1.0			E-50-0.5-1.0			E-50-0.5-1.0 Dup X-1-0.5-1.0			E-50-2.0-2.5			E-50-4.5-5.0			E-51-0.5-1.0			E-51-2.0-2.5			E-51-3.0-3.5		
LAB SAMPLE ID					09537-019			09581-010			09537-010			09537-058			09537-020			09537-059			09537-055			09537-007			09537-008			09537-009		
SAMPLING DATE					10/10/2016			10/12/2016			10/10/2016			10/10/2016			10/12/2016			10/12/2016			10/12/2016			10/10/2016			10/10/2016			10/10/2016		
SAMPLE DEPTH-ft.					0.5-1.0			0.5-1.0			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aroclor 1016	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1221	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1232	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1242	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1248	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1254	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1260	1	0.2	0.2		**2.83**			**19.1**	D		**0.205**			**506**	D		**377**	D		**0.735**			**0.736**			ND		0.041	ND		0.039	0.097		
Aroclor 1262	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
Aroclor 1268	1	0.2	0.2		ND		0.039	ND		0.043	ND		0.04	ND		***9.58***	ND		***8.98***	ND		0.043	ND		0.037	ND		0.041	ND		0.039	ND		0.037
PCBs, Total	1	0.2	0.2	1- <10	**2.83**			**19.1**	D		**0.205**			**506**	D		**377**	D		**0.735**			**0.736**			ND		0.041	ND		0.039	0.097		

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-51-4.5-5.0			E-52-0.5-1.0			E-53-0.5-1.0			E-54-0.5-1.0			E-54-2.0-2.5			E-55-4.5-5.0			E-56-4.5-5.0			E-56-6.0-6.5			E-57-4.5-5.0			E-57-6.0-6.5		
LAB SAMPLE ID					09537-056			09537-011			09581-007			09537-001			09537-002			09537-006			09537-031			09537-032			09537-029			09537-030		
SAMPLING DATE					10/12/2016			10/10/2016			10/12/2016			10/10/2016			10/10/2016			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/11/2016		
SAMPLE DEPTH-ft.					4.5-5.0			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			4.5-5.0			4.5-5.0			6.0-6.5			4.5-5.0			6.0-6.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1221	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1232	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1242	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1248	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1254	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1260	1	0.2	0.2		ND		0.042	ND		0.04	**3.13**			**30.6**	D		**5.09**			ND		0.039	0.110			ND		0.04	0.088			0.022	J	
Aroclor 1262	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
Aroclor 1268	1	0.2	0.2		ND		0.042	ND		0.04	ND		0.047	ND		0.042	ND		0.037	ND		0.039	ND		0.039	ND		0.04	ND		0.04	ND		0.039
PCBs, Total	1	0.2	0.2	1- <10	ND		0.042	ND		0.04	**3.13**			**30.6**	D		**5.09**			ND		0.039	0.110			ND		0.04	0.088			0.022	J	

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-58-0.5-1.0			E-58-0.5-1.0 Dup X-4-0.5-1.0			E-59-0.5-1.0			E-60-0.5-1.0			E-61-0.5-1.0			E-61-2.0-2.5			E-62-0.5-1.0			E-62-2.0-2.5			E-63-0.5-1.0			E-63-2.0-2.5		
LAB SAMPLE ID					09581-008			09581-019			09581-009			09537-016			02179-001			02179-002			02179-003			02179-004			02179-005			02179-006		
SAMPLING DATE					10/12/2016			10/12/2016			10/12/2016			10/10/2016			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017		
SAMPLE DEPTH-ft.					0.5-1.0			0.5-1.0			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1221	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1232	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1242	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1248	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1254	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1260	1	0.2	0.2		ND			ND		0.039	ND		0.039	**18.0**	D		**136**	D	2.21	**84.6**	D	0.043	ND		0.045	ND		0.044	**110**	D	2.41	**167**	D	***3.93***
Aroclor 1262	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
Aroclor 1268	1	0.2	0.2		ND		0.042	ND		0.039	ND		0.039	ND		***0.396***	ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.048	ND		***3.93***
PCBs, Total	1	0.2	0.2	1- <10	ND			ND		0.039	ND		0.039	**18.0**	D		**136**	D	2.21	**84.6**	D	0.043	ND		0.045	ND		0.044	**110**	D	2.41	**167**	D	***3.93***

Notes:

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-64-0.5-1.0			E-64-2.0-2.5			E-65-0.5-1.0			E-66-0.5-1.0			E-66-2.0-2.5			E-67-0.5-1.0			E-67-2.0-2.5			E-68-0.5-1.0			E-68-0.5-1.0 Dup X-1-0.5-1.0			E-68-2.0-2.5		
LAB SAMPLE ID					02179-007			02179-008			02179-009			02179-011			02179-012			02179-013			02179-014			02179-015			02179-017			02179-016		
SAMPLING DATE					3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017		
SAMPLE DEPTH-ft.					0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0			2.0-2.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1221	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1232	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1242	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1248	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1254	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1260	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	**1.24**		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1262	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
Aroclor 1268	1	0.2	0.2		ND		0.042	ND		0.041	ND		0.05	ND		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044
PCBs, Total	1	0.2	0.2	1- <10	ND		0.042	ND		0.041	ND		0.05	**1.24**		0.046	ND		0.039	ND		0.042	ND		0.043	ND		0.044	ND		0.047	ND		0.044

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TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					E-69-0.5-1.0			E-70-0.5-1.0			E-70-2.0-2.5			E-71-0.5-1.0			E-71-0.5-1.0 DUP X-2-0.5-1.0			E-72-0.5-1.0			E-72-2.0-2.5			PZ-1-0.5-1.0			PZ-1-2.0-2.5			PZ-1-2.5-3.0		
LAB SAMPLE ID					02179-018			02179-020			02179-021			02179-022			02179-024			02179-025			02179-026			05367-031			05367-032			05367-033		
SAMPLING DATE					3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			3/16/2017			6/22/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.					0.5-1.0			0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			0.5-1.0			2.0-2.5			2.5-3.0		
	RDCSRS	NRDCSRS	IGWSSL	TSCA																														
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg						mg/kg		
Polychlorinated Biphenyls					Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Conc	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1221	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1232	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1242	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1248	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1254	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	0.135		0.043	**0.261**		0.041	0.081		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1260	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	**1.33**	D		0.216			0.225	D	
Aroclor 1262	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
Aroclor 1268	1	0.2	0.2		ND		0.044	ND		0.043	ND		0.045	ND		0.044	ND		0.043	ND		0.041	ND		0.036	ND		0.012	ND		0.0098	ND		0.0090
PCBs, Total	1	0.2	0.2	1- <10	ND		0.044	ND		0.043	ND		0.045	ND		0.044	0.135		0.043	**0.261**		0.041	0.081		0.036	**1.33**	D		0.216			0.225	D	

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Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					PZ-1-4.5-5.0			PZ-2-0.5-1.0			PZ-2-2.0-2.5			PZ-2-4.0-4.5			PZ-2-6.0-6.5		
LAB SAMPLE ID					05367-034			05367-019			05367-020			05367-021			05367-022		
SAMPLING DATE					6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.					4.5-5.0			0.5-1.0			2.0-2.5			4.0-4.5			6.0-6.5		
	RDCSRS	NRDCSRS	IGWSSL	TSCA															
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Polychlorinated Biphenyls					Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Aroclor 1016	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1221	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1232	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1242	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1248	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1254	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1260	1	0.2	0.2		0.012			0.15	D		0.037			0.00423			ND		
Aroclor 1262	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
Aroclor 1268	1	0.2	0.2		ND		0.0019	ND		0.0021	ND		0.0021	ND		0.0018	ND		0.0019
PCBs, Total	1	0.2	0.2	1- <10	0.012			0.15	D		0.037			0.00423			ND		

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Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5	SB-6
SAMPLING DATE					10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001
SAMPLE DEPTH-ft.					0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA											
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls															
Aroclor-1016	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1221	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1232	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1242	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1248	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1254	1	0.2	0.2		***1U***	0.018 U	***0.38 U***	0.018U	***9.8U***	***4U***	***10U***	***2U***	***9.9U***	***9.2U***	***20U***
Aroclor-1260	1	0.2	0.2		**17**	0.077	**9.3**	**0.54**	**120**	**44**	**160**	**43**	**190**	**160**	**440**
Total PCBs	1	0.2	0.2	1- <10	**17**	0.077	**9.3**	**0.54**	**120**	**44**	**160**	**43**	**190**	**160**	**440**

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 3
Analytical Results - Polychlorinated Biphenyls - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION					SB-6	SB-7	SB-7	SB-8	SB-8
SAMPLING DATE					10/18/2001	10/18/2001	10/18/2001	10/18/2001	10/18/2001
SAMPLE DEPTH-ft.					2.0-2.5	0.0-0.5	2.0-2.5	0.0-0.5	2.0-2.5
	NRDCSRS	RDCSRS	IGWSSL	TSCA					
UNITS	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Polychlorinated Biphenyls									
Aroclor-1016	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1221	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1232	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1242	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1248	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1254	1	0.2	0.2		***3.8U***	***3.9U***	***2.0U***	0.20 U	0.20 U
Aroclor-1260	1	0.2	0.2		**38**	**98**	**28**	**3.8**	**20**
Total PCBs	1	0.2	0.2	1- <10	**38**	**98**	**28**	**3.8**	**20**

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level

mg/kg - milligrams per kilogram.

ND - Not Detected.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012

TSCA - Toxic Substances Control Act 40 CFR 761.61 (a)(4)(i)(A) EPA cleanup level for high occupancy areas

Source: Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates Draft RIR.

Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)		
SAMPLING DATE				5/17/2002			5/16/2002			5/22/2002			5/22/2002			5/23/2002			5/23/2002			5/14/2002		
SAMPLE DEPTH-ft.				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			1.0-1.5			2.0-2.5		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,1,2-Trichloroethane	6	2	0.02	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,1-Dichloroethane	24	8	0.2	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.12	ND		0.12	ND		0.11	ND		0.13	ND		0.15	ND		0.26	ND		0.0011
1,2-Dichloroethane	3	0.9	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,2-Dichloroethene (cis)	560	230	0.3	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
1,2-Dichloropropane	5	2	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
1,3-Dichloropropene (cis and trans)	7	2	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		***3.1***	ND		***3***	ND		***2.8***	ND		***3.2***	ND		***3.7***	ND		***6.4***	ND		0.027
2-Chroethylvinylether	NS	NS	NS	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
2-Hexanone	NS	NS	NS	ND		2.5	ND		2.4	ND		2.2	ND		2.6	ND		3	ND		5.1	ND		0.021
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		2.5	ND		2.4	ND		2.2	ND		2.6	ND		3	ND		5.1	ND		0.021
Acetone (2-Propanone)	NS	70000	19	ND		2.5	ND		2.4	ND		2.2	ND		2.6	ND		3	ND		5.1	ND		0.021
Acrolein	1	0.5	0.5	ND		***1.9***	ND		***1.8***	ND		***1.7***	ND		***1.9***	ND		***2.2***	ND		***3.8***	ND		0.016
Acrylonitrile	3	0.9	0.5	ND		***0.86***	ND		***0.83***	ND		***0.78***	ND		***0.89***	ND		***1***	ND		***1.8***	ND		0.0074
Benzene	5	2	0.005	ND		***0.12***	ND		***0.12***	ND		***0.11***	ND		***0.13***	ND		***0.15***	ND		***0.26***	ND		0.0011
Bromodichloromethane (Dichlorobromomethane)	3	1	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Bromoform	280	81	0.03	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Bromomethane (Methyl bromide)	59	25	0.04	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Carbon disulfide	110000	7800	6	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
Carbon tetrachloride	2	0.6	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Chlorobenzene	7400	510	0.6	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
Chloroform	2	0.6	0.4	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Chloromethane (Methyl chloride)	12	4	NS	ND		0.62	ND		0.6	ND		0.56	ND		0.64	ND		0.74	ND		1.3	ND		0.0053
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Ethylbenzene	110000	7800	13	ND		0.12	ND		0.12	ND		0.11	ND		0.13	0.5			0.95			ND		0.0011

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)		
SAMPLING DATE				**5/17/2002**			**5/16/2002**			**5/22/2002**			**5/22/2002**			**5/23/2002**			**5/23/2002**			**5/14/2002**		
SAMPLE DEPTH-ft.				**2.0-2.5**			**2.0-2.5**			**2.0-2.5**			**2.0-2.5**			**2.0-2.5**			**1.0-1.5**			**2.0-2.5**		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Methylene chloride (Dichloromethane)	97	34	0.01	ND		***0.62***	ND		***0.6***	**0.2**	**J^**		**0.26**	**J^**		**0.34**	**J^**		ND		***1.3***	0.0068	B	
Styrene	260	90	3	ND		0.12	ND		0.12	ND		0.11	ND		0.13	1.2			1.3			ND		0.0011
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Toluene	91000	6300	7	ND		0.12	ND		0.12	ND		0.11	ND		0.13	ND		0.15	ND		0.26	ND		0.0011
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Vinyl chloride	2	0.7	0.005	ND		***0.62***	ND		***0.6***	ND		***0.56***	ND		***0.64***	ND		***0.74***	ND		***1.3***	ND		0.0053
Xylenes (Total)	170000	12000	19	ND		0.12	ND		0.12	ND		0.11	ND		0.13	ND		0.15	0.29	J		ND		0.0011
TOTAL TIC's:				0.51	J		0.46	J		1.4	J		1	J		2.9	J		4	J		ND		ND
TOTAL VO's:				0			0			0.2	J		0.26	J		2.04	J		2.54			0.0068	B	
TOTAL VO's & TIC's:				0.51	J		0.46	J		1.6	J		1.26	J		4.94	J		6.54			0.0068		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.

C - Common Laboratory and/or Bottle Contaminant.

D- Sample was diluted.

J - Concentration detected at a value below the RL and above the MDL.

^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.

mg/kg - milligrams per kilogram.

ND - Not Detected.

NS - No Standard Available.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				C-6 (2.0-2.5)			C-10 (2.0-2.5)			C-12 (2.0-2.5)			C-15 (2.0-2.5)			PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			D-4 (0.0-0.5)		
SAMPLING DATE				5/15/2002			5/16/2002			5/16/2002			5/23/2002			5/14/2002			5/22/2002			5/8/2003		
SAMPLE DEPTH-ft.				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			0.0-0.5			2.0-2.5			0.0-0.5		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,1,2-Trichloroethane	6	2	0.02	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,1-Dichloroethane	24	8	0.2	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.0011	ND		0.11	ND		0.13	ND		0.14	ND		0.0013	ND		0.14	~		~
1,2-Dichloroethane	3	0.9	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		***0.71***	ND		***0.92***
1,2-Dichloropropane	5	2	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
1,3-Dichloropropene (cis and trans)	7	2	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.027	ND		***2.8***	ND		***3.2***	ND		***3.4***	ND		0.032	ND		***3.5***	ND		***4.6***
2-Chroethylvinylether	NS	NS	NS	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		0.71	ND		0.92
2-Hexanone	NS	NS	NS	ND		0.021	ND		2.3	ND		2.6	ND		2.8	ND		0.026	ND		2.8	ND		3.7
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.021	ND		2.3	ND		2.6	ND		2.8	ND		0.026	ND		2.8	ND		3.7
Acetone (2-Propanone)	NS	70000	19	ND		0.021	ND		2.3	ND		2.6	ND		2.8	ND		0.026	ND		2.8	ND		3.7
Acrolein	1	0.5	0.5	ND		0.016	ND		***1.7***	ND		***1.9***	ND		***2.1***	ND		0.019	ND		***2.1***	ND		***2.8***
Acrylonitrile	3	0.9	0.5	ND		0.0074	ND		***0.78***	ND		***0.9***	ND		***0.95***	ND		0.0089	ND		***0.98***	ND		***0.92***
Benzene	5	2	0.005	ND		0.0011	ND		***0.11***	ND		***0.13***	ND		***0.14***	ND		0.0013	ND		***0.14***	ND		***0.18***
Bromodichloromethane (Dichlorobromomethane)	3	1	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
Bromoform	280	81	0.03	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
Carbon disulfide	110000	7800	6	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		0.71	ND		***0.92***
Carbon tetrachloride	2	0.6	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
Chlorobenzene	7400	510	0.6	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		***0.71***	ND		***0.92***
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		0.71	ND		0.92
Chloroform	2	0.6	0.4	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
Chloromethane (Methyl chloride)	12	4	NS	ND		0.0053	ND		0.56	ND		0.65	ND		0.69	ND		0.0064	ND		0.71	ND		0.92
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		0.92
Ethylbenzene	110000	7800	13	ND		0.0011	ND		0.11	ND		0.13	ND		0.14	ND		0.0013	ND		0.14	ND		0.18

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				C-6 (2.0-2.5)			C-10 (2.0-2.5)			C-12 (2.0-2.5)			C-15 (2.0-2.5)			PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			D-4 (0.0-0.5)		
SAMPLING DATE				5/15/2002			5/16/2002			5/16/2002			5/23/2002			5/14/2002			5/22/2002			5/8/2003		
SAMPLE DEPTH-ft.				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			0.0-0.5			2.0-2.5			0.0-0.5		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
Methylene chloride (Dichloromethane)	97	34	0.01	0.0037	JB		ND		***0.56***	ND		***0.65***	ND		***0.69***	0.0049	JB		**0.29**	**J^**		ND		***0.92***
Styrene	260	90	3	ND		0.0011	ND		0.11	ND		0.13	ND		0.14	ND		0.0013	ND		0.14	ND		0.18
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
Toluene	91000	6300	7	ND		0.0011	ND		0.11	ND		0.13	ND		0.14	ND		0.0013	ND		0.14	ND		0.18
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		0.0064	ND		***0.71***	ND		***0.92***
Vinyl chloride	2	0.7	0.005	ND		0.0053	ND		***0.56***	ND		***0.65***	ND		***0.69***	ND		***0.0064***	ND		***0.71***	ND		***0.92***
Xylenes (Total)	170000	12000	19	ND		0.0011	ND		0.11	ND		0.13	ND		0.14	ND		0.0013	ND		0.14	ND		0.37
TOTAL TIC's:				ND		ND	0.4	J		0.55	J		1.4	J		0.0039	J		1.6	J		3.94	J	
TOTAL VO's:				0.0037	JB		0			0			0			0.0049			0.29			0		
TOTAL VO's & TIC's:				0.0037			0.4			0.55			1.4			0.0088			1.89			3.94		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.

C - Common Laboratory and/or Bottle Contaminant.

D- Sample was diluted.

J - Concentration detected at a value below the RL and above the MDL.

^ - Exceeds IGWSSL only.

For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.

mg/kg - milligrams per kilogram.

ND - Not Detected.

NS - No Standard Available.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				**PL-12 (0.0-0.5)**			**D-13 (0.0-0.5)**		
SAMPLING DATE				**5/8/2003**			**5/8/2003**		
SAMPLE DEPTH-ft.				**0.0-0.5**			**0.0-0.5**		
	NRDCSRS	**RDCSRS**	**IGWSSL**						
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		***0.63***	ND		***0.67***
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		***0.63***	ND		***0.67***
1,1,2-Trichloroethane	6	2	0.02	ND		***0.63***	ND		***0.67***
1,1-Dichloroethane	24	8	0.2	ND		***0.63***	ND		***0.67***
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		***0.63***	ND		***0.67***
1,2,4-Trimethylbenzene	NS	NS	NS	~		~	~		~
1,2-Dichloroethane	3	0.9	0.005	ND		***0.63***	ND		***0.67***
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.63	ND		***0.67***
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.63	ND		***0.67***
1,2-Dichloropropane	5	2	0.005	ND		***0.63***	ND		***0.67***
1,3-Dichloropropene (cis and trans)	7	2	0.005	ND		***0.63***	ND		***0.67***
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		***3.2***	ND		***3.4***
2-Chroethylvinylether	NS	NS	NS	ND		0.63	ND		0.67
2-Hexanone	NS	NS	NS	ND		2.5	ND		2.7
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		2.5	ND		2.7
Acetone (2-Propanone)	NS	70000	19	ND		2.5	ND		2.7
Acrolein	1	0.5	0.5	ND		***1.9***	ND		***2***
Acrylonitrile	3	0.9	0.5	ND		***0.63***	ND		***0.67***
Benzene	5	2	0.005	ND		***0.13***	ND		***0.13***
Bromodichloromethane (Dichlorobromomethane)	3	1	0.005	ND		***0.63***	ND		***0.67***
Bromoform	280	81	0.03	ND		0.63	ND		***0.67***
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.63	ND		***0.67***
Carbon disulfide	110000	7800	6	ND		0.63	ND		0.67
Carbon tetrachloride	2	0.6	0.005	ND		***0.63***	ND		***0.67***
Chlorobenzene	7400	510	0.6	ND		0.63	ND		***0.67***
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.63	ND		0.67
Chloroform	2	0.6	0.4	ND		***0.63***	ND		***0.67***
Chloromethane (Methyl chloride)	12	4	NS	ND		0.63	ND		0.67
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		***0.63***	ND		***0.67***
Ethylbenzene	110000	7800	13	ND		0.13	ND		0.13

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				PL-12 (0.0-0.5)			D-13 (0.0-0.5)		
SAMPLING DATE				5/8/2003			5/8/2003		
SAMPLE DEPTH-ft.				0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		***0.63***	ND		***0.67***
Methylene chloride (Dichloromethane)	97	34	0.01	ND		***0.63***	ND		***0.67***
Styrene	260	90	3	ND		0.13	ND		0.13
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		***0.63***	ND		***0.67***
Toluene	91000	6300	7	ND		0.13	0.25		
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		***0.63***	ND		***0.67***
Vinyl chloride	2	0.7	0.005	ND		***0.63***	ND		***0.67***
Xylenes (Total)	170000	12000	19	ND		0.25	ND		0.63
TOTAL TIC's:				ND			2.3	J	
TOTAL VO's:				ND			0.25		
TOTAL VO's & TIC's:				ND			2.55	J	

Notes:
Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.
Bold - Exceeds lowest applicable standard/screening level.
~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-1-0.5-1.0			E-1-2.0-2.5			E-1-3.0-3.5			E-1-4.5-5.0			E-2-0.5-1.0			E-2 Dup X-3-0.5-1.0			E-2-2.0-2.5		
LAB SAMPLE ID				05428-014			05428-015			05428-016			05428-017			05248-020			05428-011			05248-021		
SAMPLING DATE				6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015		
SAMPLE DEPTH-ft.				0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			0.5-1.0			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL																					
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,1,2-Trichloroethane	6	2	0.02	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,1-Dichloroethane	24	8	0.2	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dichlorobenzene	59000	5300	17	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dichloroethane	3	0.9	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00135	ND		0.00112	0.00233			ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,2-Dichloropropane	5	2	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,3-Dichlorobenzene	59000	5300	19	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,4-Dichlorobenzene	13	5	2	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
1,4-Dioxane	NS	NS	NS	ND		0.27	ND		0.224	ND		0.194	ND		0.228	ND		0.316	ND		0.326	ND		0.238
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
2-Hexanone	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Acetone (2-Propanone)	NS	70000	19	ND		0.00675	ND		0.0056	ND		0.00485	ND		0.0057	ND		0.0079	ND		0.00815	ND		0.00595
Benzene	5	2	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Bromochloromethane	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Bromodichloromethane	3	1	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Bromoform	280	81	0.03	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Carbon disulfide	110000	7800	6	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Carbon tetrachloride	2	0.6	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Chlorobenzene	7400	510	0.6	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Chloroform	2	0.6	0.4	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	0.0012	J		ND		0.00119
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Cyclohexane	NS	NS	NS	ND		0.00675	ND		0.0056	ND		0.00485	ND		0.0057	ND		0.0079	ND		0.00815	ND		0.00595
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Dichlorodifluoromethane	230000	490	39	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Ethylbenzene	110000	7800	13	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Isopropylbenzene	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Methyl acetate	NS	78000	22	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-1-0.5-1.0			E-1-2.0-2.5			E-1-3.0-3.5			E-1-4.5-5.0			E-2-0.5-1.0			E-2 Dup X-3-0.5-1.0			E-2-2.0-2.5		
LAB SAMPLE ID				05428-014			05428-015			05428-016			05428-017			05248-020			05428-011			05248-021		
SAMPLING DATE				6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015		
SAMPLE DEPTH-ft.				0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			0.5-1.0			2.0-2.5		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Methylene chloride (Dichloromethane)	97	34	0.01	ND		0.0027	0.00283	C		0.00335	C		0.00291	C		ND		0.00316	ND		0.00326	0.00446	C	
Styrene	260	90	3	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00135	0.000831	J		**0.028**	^		0.00229			ND		0.00158	ND		0.00163	0.000652	J	
Toluene	91000	6300	7	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.00135	ND		0.00112	0.0071		0.00097	ND		0.00114	ND		0.00158	0.00413			0.00138		
Trichlorofluoromethane	340000	23000	34	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Vinyl chloride	2	0.7	0.005	ND		0.00135	ND		0.00112	ND		0.00097	ND		0.00114	ND		0.00158	ND		0.00163	ND		0.00119
Xylenes (Total)	170000	12000	19	ND		0.0027	ND		0.00224	ND		0.00194	ND		0.00228	ND		0.00316	ND		0.00326	ND		0.00238
TOTAL TIC's:				ND			ND			ND			ND			ND			ND			ND		
TOTAL VO's:				0			0.003661	CJ		0.041	C		0.0052	C		0			0.00533	J		0.006492	CJ	
TOTAL VO's & TIC's:				0			0.003661	CJ		0.041	C		0.0052	C		0			0.00533			0.006492	CJ	

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-2-3.0-3.5			E-2-4.0-4.5			E-3-0.5-1.0			E-3-2.0-2.5			E-3-3.0-3.5			E-3-4.5-5.0			E-4-0.5-1.0			E-4-2.0-2.5		
LAB SAMPLE ID				05248-022			05248-023			05367-002			05367-003			05367-001			05367-004			05367-007			05367-008		
SAMPLING DATE				6/24/2015			6/24/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015		
SAMPLE DEPTH-ft.				3.0-3.5			4.0-4.5			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL																								
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,1,2-Trichloroethane	6	2	0.02	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,1-Dichloroethane	24	8	0.2	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dichlorobenzene	59000	5300	17	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dichloroethane	3	0.9	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,2-Dichloropropane	5	2	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,3-Dichlorobenzene	59000	5300	19	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,4-Dichlorobenzene	13	5	2	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
1,4-Dioxane	NS	NS	NS	ND		0.246	ND		0.232	ND		0.414	ND		0.28	ND		0.194	ND		0.188	ND		0.268	ND		0.206
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
2-Hexanone	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Acetone (2-Propanone)	NS	70000	19	ND		0.00615	ND		0.0058	ND		0.01	ND		0.007	ND		0.00485	ND		0.0047	ND		0.0067	ND		0.00515
Benzene	5	2	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Bromochloromethane	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Bromodichloromethane	3	1	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Bromoform	280	81	0.03	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.00123	ND		0.00116	ND		0.00414	ND		0.0028	ND		0.00194	ND		0.00188	ND		0.00268	ND		0.00206
Carbon disulfide	110000	7800	6	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Carbon tetrachloride	2	0.6	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Chlorobenzene	7400	510	0.6	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Chloroform	2	0.6	0.4	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Cyclohexane	NS	NS	NS	ND		0.00615	ND		0.0058	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Dichlorodifluoromethane	230000	490	39	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Ethylbenzene	110000	7800	13	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Isopropylbenzene	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Methyl acetate	NS	78000	22	ND		0.00123	ND		0.00116	ND		0.01	ND		0.007	ND		0.00485	ND		0.0047	ND		0.0067	ND		0.00515
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-2-3.0-3.5			E-2-4.0-4.5			E-3-0.5-1.0			E-3-2.0-2.5			E-3-3.0-3.5			E-3-4.5-5.0			E-4-0.5-1.0			E-4-2.0-2.5		
LAB SAMPLE ID				**05248-022**			**05248-023**			**05367-002**			**05367-003**			**05367-001**			**05367-004**			**05367-007**			**05367-008**		
SAMPLING DATE				**6/24/2015**			**6/24/2015**			**6/23/2015**			**6/23/2015**			**6/23/2015**			**6/23/2015**			**6/23/2015**			**6/23/2015**		
SAMPLE DEPTH-ft.				**3.0-3.5**			**4.0-4.5**			**0.5-1.0**			**2.0-2.5**			**3.0-3.5**			**4.5-5.0**			**0.5-1.0**			**2.0-2.5**		
	NRDCSRS	**RDCSRS**	**IGWSSL**																								
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Methylene chloride (Dichloromethane)	97	34	0.01	0.00363	C		0.00308	C		ND		0.00414	ND		0.0028	0.00372	C		ND		0.00188	ND		0.00268	ND		0.00206
Styrene	260	90	3	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	0.000924	J		**0.009**	^		ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Toluene	91000	6300	7	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	0.000658	J		0.000418	J		ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Trichlorofluoromethane	340000	23000	34	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Vinyl chloride	2	0.7	0.005	ND		0.00123	ND		0.00116	ND		0.00207	ND		0.0014	ND		0.00097	ND		0.00094	ND		0.00134	ND		0.00103
Xylenes (Total)	170000	12000	19	ND		0.00246	ND		0.00232	ND		0.00414	ND		0.0028	ND		0.00194	ND		0.00188	ND		0.00268	ND		0.00206
TOTAL TIC's:				ND			ND			ND			ND			ND			ND			ND			ND		
TOTAL VO's:				0.005212	CJ		0.013	CJ		0			0			0.00372	C		0			0			0		
TOTAL VO's & TIC's:				0.005212	CJ		0.013	CJ		0			0			0.00372	C		0			0			0		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.

C - Common Laboratory and/or Bottle Contaminant.

D- Sample was diluted.

J - Concentration detected at a value below the RL and above the MDL.

^ - Exceeds IGWSSL only.

For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.

mg/kg - milligrams per kilogram.

ND - Not Detected.

NS - No Standard Available.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-4-3.0-3.5			E-4-4.5-5.0			E-4 Dup X-1-4.5-5.0			E-5-0.5-1.0			E-5-2.0-2.5			E-5-3.0-3.5			E-5-4.5-5.0			E-6-0.5-1.0		
LAB SAMPLE ID				05367-009			05367-010			05367-023			05367-035			05367-037			05367-036			05367-038			05367-039		
SAMPLING DATE				6/23/2015			6/23/2015			6/23/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/23/2015		
SAMPLE DEPTH-ft.				3.0-3.5			4.5-5.0			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0		
	NRDCSRS	RDCSRS	IGWSSL																								
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,1,2-Trichloroethane	6	2	0.02	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,1-Dichloroethane	24	8	0.2	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dichlorobenzene	59000	5300	17	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dichloroethane	3	0.9	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,2-Dichloropropane	5	2	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,3-Dichlorobenzene	59000	5300	19	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,4-Dichlorobenzene	13	5	2	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
1,4-Dioxane	NS	NS	NS	ND		0.222	ND		0.234	ND		0.198	ND		0.222	ND		0.210	ND		0.332	ND		0.198	ND		0.360
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
2-Hexanone	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Acetone (2-Propanone)	NS	70000	19	ND		0.00555	ND		0.00585	ND		0.00495	ND		0.00555	ND		0.00525	ND		0.0083	ND		0.00495	ND		0.009
Benzene	5	2	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Bromochloromethane	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Bromodichloromethane	3	1	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Bromoform	280	81	0.03	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.00222	ND		0.00234	ND		0.00198	ND		0.00222	ND		0.0021	ND		0.00332	ND		0.00198	ND		0.0036
Carbon disulfide	110000	7800	6	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Carbon tetrachloride	2	0.6	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Chlorobenzene	7400	510	0.6	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Chloroform	2	0.6	0.4	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Cyclohexane	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Dichlorodifluoromethane	230000	490	39	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Ethylbenzene	110000	7800	13	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Isopropylbenzene	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Methyl acetate	NS	78000	22	ND		0.00555	ND		0.00585	ND		0.00495	ND		0.00555	ND		0.00525	ND		0.0083	ND		0.00495	ND		0.009
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-4-3.0-3.5			E-4-4.5-5.0			E-4 Dup X-1-4.5-5.0			E-5-0.5-1.0			E-5-2.0-2.5			E-5-3.0-3.5			E-5-4.5-5.0			E-6-0.5-1.0		
LAB SAMPLE ID				05367-009			05367-010			05367-023			05367-035			05367-037			05367-036			05367-038			05367-039		
SAMPLING DATE				6/23/2015			6/23/2015			6/23/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/23/2015		
SAMPLE DEPTH-ft.				3.0-3.5			4.5-5.0			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0		
	NRDCSRS	RDCSRS	IGWSSL																								
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Methylene chloride (Dichloromethane)	97	34	0.01	ND		0.00222	ND		0.00234	0.00277	C		ND		0.00222	0.00244	C		0.00422	C		0.00236	C		0.00426	C	
Styrene	260	90	3	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Toluene	91000	6300	7	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Trichlorofluoromethane	340000	23000	34	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Vinyl chloride	2	0.7	0.005	ND		0.00111	ND		0.00117	ND		0.00099	ND		0.00111	ND		0.00105	ND		0.00166	ND		0.00099	ND		0.0018
Xylenes (Total)	170000	12000	19	ND		0.00222	ND		0.00234	ND		0.00198	ND		0.00222	ND		0.0021	ND		0.00332	ND		0.00198	ND		0.0036
TOTAL TIC's:				ND			ND			ND			ND			ND			ND			ND			ND		
TOTAL VO's:				0			0			0.00277	C		0			0.00244	C		0.00422	C		0.00236	C		0.00426	C	
TOTAL VO's & TIC's:				0			0			0.00277	C		0			0.00244	C		0.00422	C		0.00236	C		0.00426	C	

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-6-2.0-2.5			E-6-3.0-3.5			E-6-4.0-4.5			E-7-0.5-1.0			E-7-2.0-2.5			E-7-3.0-3.5			E-7-4.5-5.0			E-16-0.5-1.0		
LAB SAMPLE ID				05367-041			05367-042			05367-043			05248-026			05248-027			05248-028			05248-029			05367-017		
SAMPLING DATE				6/23/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/22/2015		
SAMPLE DEPTH-ft.				2.0-2.5			3.0-3.5			4.0-4.5			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0		
	NRDCSRS	RDCSRS	IGWSSL																								
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,1,2-Trichloroethane	6	2	0.02	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,1-Dichloroethane	24	8	0.2	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dichlorobenzene	59000	5300	17	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dichloroethane	3	0.9	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00105	ND		0.00107	ND		0.00099	0.000605	J		ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,2-Dichloropropane	5	2	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,3-Dichlorobenzene	59000	5300	19	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,4-Dichlorobenzene	13	5	2	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
1,4-Dioxane	NS	NS	NS	ND		0.210	ND		0.214	ND		0.198	ND		0.308	ND		0.234	ND		0.21	ND		0.202	ND		0.256
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
2-Hexanone	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Acetone (2-Propanone)	NS	70000	19	ND		0.00525	ND		0.00535	ND		0.00495	ND		0.0077	ND		0.00585	ND		0.00525	ND		0.00505	ND		0.0064
Benzene	5	2	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Bromochloromethane	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Bromodichloromethane	3	1	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Bromoform	280	81	0.03	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.0021	ND		0.00214	ND		0.00198	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00256
Carbon disulfide	110000	7800	6	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Carbon tetrachloride	2	0.6	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Chlorobenzene	7400	510	0.6	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Chloroform	2	0.6	0.4	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Cyclohexane	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.0077	ND		0.00585	ND		0.00525	ND		0.00505	ND		0.00128
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Dichlorodifluoromethane	230000	490	39	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Ethylbenzene	110000	7800	13	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Isopropylbenzene	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Methyl acetate	NS	78000	22	ND		0.00525	ND		0.00535	ND		0.00495	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.0064
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				**E-6-2.0-2.5**			**E-6-3.0-3.5**			**E-6-4.0-4.5**			**E-7-0.5-1.0**			**E-7-2.0-2.5**			**E-7-3.0-3.5**			**E-7-4.5-5.0**			**E-16-0.5-1.0**		
LAB SAMPLE ID				**05367-041**			**05367-042**			**05367-043**			**05248-026**			**05248-027**			**05248-028**			**05248-029**			**05367-017**		
SAMPLING DATE				**6/23/2015**			**6/23/2015**			**6/23/2015**			**6/24/2015**			**6/24/2015**			**6/24/2015**			**6/24/2015**			**6/22/2015**		
SAMPLE DEPTH-ft.				**2.0-2.5**			**3.0-3.5**			**4.0-4.5**			**0.5-1.0**			**2.0-2.5**			**3.0-3.5**			**4.5-5.0**			**0.5-1.0**		
	NRDCSRS	**RDCSRS**	**IGWSSL**																								
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Methylene chloride (Dichloromethane)	97	34	0.01	ND		0.0021	0.00237	C		ND		0.00198	0.00381	C		0.00427	C		0.00391	C		0.00416	C		ND		0.00256
Styrene	260	90	3	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00105	ND		0.00107	ND		0.00099	0.00185			0.00122			0.00205			0.00227			ND		0.00128
Toluene	91000	6300	7	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.00105	ND		0.00107	ND		0.00099	0.00701			ND		0.00117	0.000394	J		0.00462			ND		0.00128
Trichlorofluoromethane	340000	23000	34	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Vinyl chloride	2	0.7	0.005	ND		0.00105	ND		0.00107	ND		0.00099	ND		0.00154	ND		0.00117	ND		0.00105	ND		0.00101	ND		0.00128
Xylenes (Total)	170000	12000	19	ND		0.0021	ND		0.00214	ND		0.00198	ND		0.00308	ND		0.00234	ND		0.0021	ND		0.00202	ND		0.00256
TOTAL TIC's:				ND			ND			ND			ND			ND			ND			ND			ND		
TOTAL VO's:				0			0.00237	C		0			0.013	CJ		0.00549	C		0.00635	CJ		0.011	C		0		
TOTAL VO's & TIC's:				0			0.00237	C		0			0.013	CJ		0.00549	C		0.00635	CJ		0.011	C		0		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.

C - Common Laboratory and/or Bottle Contaminant.

D- Sample was diluted.

J - Concentration detected at a value below the RL and above the MDL.

^ - Exceeds IGWSSL only.

For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.

mg/kg - milligrams per kilogram.

ND - Not Detected.

NS - No Standard Available.

U - Not detected at the reporting limit for the sample.

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-16-2.0-2.5			E-30-3.0-3.5			E-30-4.5-5.0			E-31-3.0-3.5			E-31-4.5-5.0			E-32-4.5-5.0			E-32-5.5-6.0		
LAB SAMPLE ID				05367-018			09537-033			09537-034			09537-035			09537-036			09537-048			09537-049		
SAMPLING DATE				6/22/2015			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/12/2016			10/12/2016		
SAMPLE DEPTH-ft.				2.0-2.5			3.0-3.5			4.5-5.0			3.0-3.5			4.5-5.0			4.5-5.0			5.5-6.0		
	NRDCSRS	RDCSRS	IGWSSL																					
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,1,2-Trichloroethane	6	2	0.02	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,1-Dichloroethane	24	8	0.2	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dichlorobenzene	59000	5300	17	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dichloroethane	3	0.9	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,2-Dichloropropane	5	2	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,3-Dichlorobenzene	59000	5300	19	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,4-Dichlorobenzene	13	5	2	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
1,4-Dioxane	NS	NS	NS	ND		0.232	~		~	~		~	~		~	~		~	~		~	~		~
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
2-Hexanone	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Acetone (2-Propanone)	NS	70000	19	ND		0.0058	~		~	~		~	~		~	~		~	~		~	~		~
Benzene	5	2	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Bromochloromethane	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Bromodichloromethane	3	1	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Bromoform	280	81	0.03	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.00232	~		~	~		~	~		~	~		~	~		~	~		~
Carbon disulfide	110000	7800	6	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Carbon tetrachloride	2	0.6	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Chlorobenzene	7400	510	0.6	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Chloroform	2	0.6	0.4	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Cyclohexane	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Dichlorodifluoromethane	230000	490	39	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Ethylbenzene	110000	7800	13	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Isopropylbenzene	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Methyl acetate	NS	78000	22	ND		0.0058	~		~	~		~	~		~	~		~	~		~	~		~
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-16-2.0-2.5			E-30-3.0-3.5			E-30-4.5-5.0			E-31-3.0-3.5			E-31-4.5-5.0			E-32-4.5-5.0			E-32-5.5-6.0		
LAB SAMPLE ID				05367-018			09537-033			09537-034			09537-035			09537-036			09537-048			09537-049		
SAMPLING DATE				6/22/2015			10/11/2016			10/11/2016			10/11/2016			10/11/2016			10/12/2016			10/12/2016		
SAMPLE DEPTH-ft.				2.0-2.5			3.0-3.5			4.5-5.0			3.0-3.5			4.5-5.0			4.5-5.0			5.5-6.0		
	NRDCSRS	**RDCSRS**	**IGWSSL**																					
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Methylene chloride (Dichloromethane)	97	34	0.01	ND		0.00232	~		~	~		~	~		~	~		~	~		~	~		~
Styrene	260	90	3	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00116	ND		0.00105	ND		0.00085	ND		0.0011	ND		0.00103	ND		0.00123	ND		0.00136
Toluene	91000	6300	7	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Trichlorofluoromethane	340000	23000	34	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Vinyl chloride	2	0.7	0.005	ND		0.00116	~		~	~		~	~		~	~		~	~		~	~		~
Xylenes (Total)	170000	12000	19	ND		0.00232	~		~	~		~	~		~	~		~	~		~	~		~
TOTAL TIC's:				ND			~		~	~		~	~		~	~		~	~		~	~		~
TOTAL VO's:				0			~		~	~		~	~		~	~		~	~		~	~		~
TOTAL VO's & TIC's:				0			~		~	~		~	~		~	~		~	~		~	~		~

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

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~ - Sample not analyzed.

C - Common Laboratory and/or Bottle Contaminant.

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J - Concentration detected at a value below the RL and above the MDL.

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For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.

mg/kg - milligrams per kilogram.

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Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-33-4.5-5.0			E-33-5.5-6.0			PZ-1-0.5-1.0			PZ-1-2.0-2.5			PZ-1-2.5-3.0			PZ-1-4.5-5.0			PZ-2-0.5-1.0			PZ-2-2.0-2.5		
LAB SAMPLE ID				09537-040			09537-041			05367-031			05367-032			05367-033			05367-034			05367-019			05367-020		
SAMPLING DATE				10/11/2016			10/11/2016			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.				4.5-5.0			5.5-6.0			0.5-1.0			2.0-2.5			2.5-3.0			4.5-5.0			0.5-1.0			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL																								
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,1,2,2-Tetrachloroethane	3	1	0.007	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,1,2-Trichloroethane	6	2	0.02	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,1-Dichloroethane	24	8	0.2	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2,3-Trichlorobenzene	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2,4-Trimethylbenzene	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dibromoethane-EDB	0.04	0.008	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dichlorobenzene	59000	5300	17	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dichloroethane	3	0.9	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dichloroethene (cis)	560	230	0.3	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dichloroethene (trans)	720	300	0.6	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,2-Dichloropropane	5	2	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,3-Dichlorobenzene	59000	5300	19	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,3-Dichloropropene (cis- and trans)	7	2	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,4-Dichlorobenzene	13	5	2	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
1,4-Dioxane	NS	NS	NS	~		~	~		~	ND		0.318	ND		0.282	ND		0.224	ND		0.186	ND		0.316	ND		0.336
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
2-Hexanone	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
4-Methyl-2-pentanone-MIBK	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Acetone (2-Propanone)	NS	70000	19	~		~	~		~	ND		0.00795	ND		0.00705	ND		0.0056	ND		0.00465	ND		0.0079	ND		0.0084
Benzene	5	2	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Bromochloromethane	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Bromodichloromethane	3	1	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Bromoform	280	81	0.03	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Bromomethane (Methyl bromide)	59	25	0.04	~		~	~		~	ND		0.00318	ND		0.00282	ND		0.00224	ND		0.00186	ND		0.00316	ND		0.00336
Carbon disulfide	110000	7800	6	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Carbon tetrachloride	2	0.6	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Chlorobenzene	7400	510	0.6	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Chloroethane (Ethyl chloride)	1100	220	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Chloroform	2	0.6	0.4	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Chloromethane (Methyl chloride)	12	4	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Cyclohexane	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Dichlorodifluoromethane	230000	490	39	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Ethylbenzene	110000	7800	13	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Isopropylbenzene	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Methyl acetate	NS	78000	22	~		~	~		~	ND		0.00795	ND		0.00705	ND		0.0056	ND		0.00465	ND		0.0079	ND		0.0084
Methyl tert-butyl ether-MTBE	320	110	0.2	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-33-4.5-5.0			E-33-5.5-6.0			PZ-1-0.5-1.0			PZ-1-2.0-2.5			PZ-1-2.5-3.0			PZ-1-4.5-5.0			PZ-2-0.5-1.0			PZ-2-2.0-2.5		
LAB SAMPLE ID				09537-040			09537-041			05367-031			05367-032			05367-033			05367-034			05367-019			05367-020		
SAMPLING DATE				10/11/2016			10/11/2016			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.				4.5-5.0			5.5-6.0			0.5-1.0			2.0-2.5			2.5-3.0			4.5-5.0			0.5-1.0			2.0-2.5		
	NRDCSRS	**RDCSRS**	**IGWSSL**																								
UNITS	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Methylene chloride (Dichloromethane)	97	34	0.01	~		~	~		~	0.0044	C		0.00382	C		0.00276	C		ND		0.00186	ND		0.00316	0.00423	C	
Styrene	260	90	3	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00132	ND		0.0011	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Toluene	91000	6300	7	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Trichlorofluoromethane	340000	23000	34	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Vinyl chloride	2	0.7	0.005	~		~	~		~	ND		0.00159	ND		0.00141	ND		0.00112	ND		0.00093	ND		0.00158	ND		0.00168
Xylenes (Total)	170000	12000	19	~		~	~		~	ND		0.00318	ND		0.00282	ND		0.00224	ND		0.00186	ND		0.00316	ND		0.00336
TOTAL TIC's:				~		~	~		~	ND			ND			ND			ND			ND			ND		
TOTAL VO's:				~		~	~		~	0.0044	C		0.00382	C		0.00276	C		0			0			0.00423	C	
TOTAL VO's & TIC's:				~		~	~		~	0.0044	C		0.00382	C		0.00276	C		0			0			0.00423	C	

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				PZ-2-4.0-4.5			PZ-2-6.0-6.5		
LAB SAMPLE ID				05367-021			05367-022		
SAMPLING DATE				6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.				4.0-4.5			6.0-6.5		
	NRDCSRS	RDCSRS	IGWSSL						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
1,1,1-Trichloroethane	4200	290	0.3	ND		0.00092	ND		0.00094
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		0.00092	ND		0.00094
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	NS	ND		0.00092	ND		0.00094
1,1,2-Trichloroethane	6	2	0.02	ND		0.00092	ND		0.00094
1,1-Dichloroethane	24	8	0.2	ND		0.00092	ND		0.00094
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		0.00092	ND		0.00094
1,2,3-Trichlorobenzene	NS	NS	NS	ND		0.00092	ND		0.00094
1,2,4-Trimethylbenzene	NS	NS	NS	ND		0.00092	ND		0.00094
1,2-Dibromo-3-chloropropane	0.2	0.08	0.005	ND		0.00092	ND		0.00094
1,2-Dibromoethane-EDB	0.04	0.008	0.005	ND		0.00092	ND		0.00094
1,2-Dichlorobenzene	59000	5300	17	ND		0.00092	ND		0.00094
1,2-Dichloroethane	3	0.9	0.005	ND		0.00092	ND		0.00094
1,2-Dichloroethene (cis)	560	230	0.3	ND		0.00092	ND		0.00094
1,2-Dichloroethene (trans)	720	300	0.6	ND		0.00092	ND		0.00094
1,2-Dichloropropane	5	2	0.005	ND		0.00092	ND		0.00094
1,3-Dichlorobenzene	59000	5300	19	ND		0.00092	ND		0.00094
1,3-Dichloropropene (cis- and trans)	7	2	0.005	ND		0.00092	ND		0.00094
1,4-Dichlorobenzene	13	5	2	ND		0.00092	ND		0.00094
1,4-Dioxane	NS	NS	NS	ND		0.184	ND		0.188
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		0.00092	ND		0.00094
2-Hexanone	NS	NS	NS	ND		0.00092	ND		0.00094
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		0.00092	ND		0.00094
Acetone (2-Propanone)	NS	70000	19	ND		0.0046	ND		0.0047
Benzene	5	2	0.005	ND		0.00092	ND		0.00094
Bromochloromethane	NS	NS	NS	ND		0.00092	ND		0.00094
Bromodichloromethane	3	1	0.005	ND		0.00092	ND		0.00094
Bromoform	280	81	0.03	ND		0.00092	ND		0.00094
Bromomethane (Methyl bromide)	59	25	0.04	ND		0.00184	ND		0.00188
Carbon disulfide	110000	7800	6	ND		0.00092	ND		0.00094
Carbon tetrachloride	2	0.6	0.005	ND		0.00092	ND		0.00094
Chlorobenzene	7400	510	0.6	ND		0.00092	ND		0.00094
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.00092	ND		0.00094
Chloroform	2	0.6	0.4	ND		0.00092	ND		0.00094
Chloromethane (Methyl chloride)	12	4	NS	ND		0.00092	ND		0.00094
Cyclohexane	NS	NS	NS	ND		0.00092	ND		0.00094
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		0.00092	ND		0.00094
Dichlorodifluoromethane	230000	490	39	ND		0.00092	ND		0.00094
Ethylbenzene	110000	7800	13	ND		0.00092	ND		0.00094
Isopropylbenzene	NS	NS	NS	ND		0.00092	ND		0.00094
Methyl acetate	NS	78000	22	ND		0.0046	ND		0.0047
Methyl tert-butyl ether-MTBE	320	110	0.2	ND		0.00092	ND		0.00094

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				PZ-2-4.0-4.5			PZ-2-6.0-6.5		
LAB SAMPLE ID				05367-021			05367-022		
SAMPLING DATE				6/22/2015			6/22/2015		
SAMPLE DEPTH-ft.				4.0-4.5			6.0-6.5		
	NRDCSRS	RDCSRS	IGWSSL						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Volatile Organics				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Methylcyclohexane	NS	NS	NS	ND		0.00092	ND		0.00094
Methylene chloride (Dichloromethane)	97	34	0.01	ND		0.00184	0.0022	C	
Styrene	260	90	3	ND		0.00092	ND		0.00094
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		0.00092	ND		0.00094
Toluene	91000	6300	7	ND		0.00092	ND		0.00094
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		0.00092	ND		0.00094
Trichlorofluoromethane	340000	23000	34	ND		0.00092	ND		0.00094
Vinyl chloride	2	0.7	0.005	ND		0.00092	ND		0.00094
Xylenes (Total)	170000	12000	19	ND		0.00184	ND		0.00188
TOTAL TIC's:				ND			ND		
TOTAL VO's:				0			0.0022	C	
TOTAL VO's & TIC's:				0			0.0022	C	

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				SB-1			SB-6		
SAMPLING DATE				10/18/2001			10/18/2001		
SAMPLE DEPTH-ft.				0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL
1,1,1-Trichloroethane	4200	290	0.3	ND		***0.87***	ND		***0.67***
1,1,2,2-Tetrachloroethane	3	1	0.007	ND		***0.87***	ND		***0.67***
1,1,2-Trichloroethane	6	2	0.02	ND		***0.87***	ND		***0.67***
1,1-Dichloroethane	24	8	0.2	ND		***0.87***	ND		***0.67***
1,1-Dichloroethene (1,1-Dichloroethylene)	150	11	0.008	ND		***0.87***	ND		***0.67***
1,2,4-Trimethylbenzene	NS	NS	NS	~		~	~		~
1,2-Dichloroethane	3	0.9	0.005	ND		***0.87***	ND		***0.67***
1,2-Dichloroethene (cis)	560	230	0.3	ND		***0.87***	ND		***0.67***
1,2-Dichloroethene (trans)	720	300	0.6	ND		***0.87***	ND		***0.67***
1,2-Dichloropropane	5	2	0.005	ND		***0.87***	ND		***0.67***
1,3-Dichloropropene (cis and trans)	7	2	0.005	ND		***0.87***	ND		***0.67***
2-Butanone-MEK (Methyl ethyl ketone)	44000	3100	0.9	ND		4.4	ND		***3.3***
2-Chroethylvinylether	NS	NS	NS	ND		0.87	ND		0.67
2-Hexanone	NS	NS	NS	ND		3.5	ND		2.7
4-Methyl-2-pentanone-MIBK	NS	NS	NS	ND		3.5	ND		2.7
Acetone (2-Propanone)	NS	70000	19	ND		3.5	ND		2.7
Acrolein	1	0.5	0.5	ND		***2.6***	ND		***2***
Acrylonitrile	3	0.9	0.5	ND		***1.2***	ND		***0.92***
Benzene	5	2	0.005	**0.25**			ND		***0.13***
Bromodichloromethane (Dichlorobromomethane)	3	1	0.005	ND		***0.87***	ND		***0.67***
Bromoform	280	81	0.03	ND		***0.87***	ND		***0.67***
Bromomethane (Methyl bromide)	59	25	0.04	ND		***0.87***	ND		***0.67***
Carbon disulfide	110000	7800	6	ND		0.87	ND		0.67
Carbon tetrachloride	2	0.6	0.005	ND		***0.87***	ND		***0.67***
Chlorobenzene	7400	510	0.6	ND		***0.87***	ND		***0.67***
Chloroethane (Ethyl chloride)	1100	220	NS	ND		0.87	ND		0.67
Chloroform	2	0.6	0.4	ND		***0.87***	0.15	J	
Chloromethane (Methyl chloride)	12	4	NS	~		~	~		~
Dibromochloromethane (Chlorodibromomethane)	8	3	0.005	ND		***0.87***	ND		***0.67***
Ethylbenzene	110000	7800	13	ND		0.17	ND		0.13

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Table 4
Analytical Results - Volatile Organic Compounds - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				SB-1			SB-6		
SAMPLING DATE				10/18/2001			10/18/2001		
SAMPLE DEPTH-ft.				0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL						
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Volatile Organics				Result	Q	RL	Result	Q	RL
Methylene chloride (Dichloromethane)	97	34	0.01	**0.31**	JB^		ND		***0.67***
Styrene	260	90	3	ND		0.17	ND		0.67
Tetrachloroethene (PCE) (Tetrachloroethylene)	5	2	0.005	ND		***0.87***	ND		***0.67***
Toluene	91000	6300	7	0.94			0.17		
Trichloroethene (TCE) (Trichloroethylene)	20	7	0.01	ND		***0.87***	ND		***0.67***
Vinyl chloride	2	0.7	0.005	ND		***0.87***	ND		***0.67***
Xylenes (Total)	170000	12000	19	1.91			0.51	J	

Notes:
Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.
Bold - Exceeds lowest applicable standard/screening level.
~ - Sample not analyzed.
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
^ - Exceeds IGWSSL only.
For non-target compounds-i.e. TICs, qualifier indicates estimated concentrations.
mg/kg - milligrams per kilogram.
ND - Not Detected.
NS - No Standard Available.
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)
NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR.

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Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)			C-6 (2.0-2.5)		
SAMPLING DATE				5/17/2002			5/16/2002			5/22/2002			5/22/2002			5/23/2002			5/23/2002			5/15/2002			5/15/2002		
SAMPLE DEPTH				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			1.0-1.5			2.0-2.5			2.0-2.5		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																								
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		***0.075***	ND		0.0035	ND		0.0035
alpha-BHC	0.5	0.1	0.002	ND		***0.0035***	ND		***0.0036***	ND		***0.0036***	ND		***0.0037***	ND		***0.0036***	ND		***0.075***	ND		***0.0035***	ND		***0.0035***
beta-BHC	2	0.4	0.002	ND		***0.0035***	ND		***0.0036***	ND		***0.0036***	ND		***0.0037***	ND		***0.0036***	ND		***0.075***	ND		***0.0035***	ND		***0.0035***
Chlordane	1	0.2	0.05	ND		0.007	ND		0.0072	ND		0.0072	ND		0.0075	ND		0.0072	ND		***0.15***	ND		0.0071	ND		0.0071
delta-BHC	NS	NS	NS	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
Dieldrin	0.2	0.04	0.003	ND		***0.0035***	ND		***0.0036***	ND		***0.0036***	ND		***0.0037***	ND		***0.0036***	ND		***0.075***	ND		***0.0035***	ND		***0.0035***
Endosulfan I	NS	NS	NS	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
Endosulfan II	NS	NS	NS	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
Endosulfan sulfate	6800	470	2	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
Endrin	340	23	1	ND		0.0035	ND		0.0036	0.052			ND		0.0037	0.066			0.45			ND		0.0035	ND		0.0035
Endrin aldehyde	NS	NS	NS	ND		0.0035	ND		0.0036	0.031			0.0038			0.03			ND		0.075	ND		0.0035	ND		0.0035
Endrin ketone	NS	NS	NS	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
gamma-BHC	2	0.4	0.002	ND		***0.0035***	ND		***0.0036***	ND		***0.0036***	ND		***0.0037***	ND		***0.0036***	ND		***0.075***	ND		***0.0035***	ND		***0.0035***
Heptachlor	0.7	0.1	0.5	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
Heptachlor epoxide	0.3	0.07	0.01	ND		0.0035	ND		0.0036	0.0049			ND		0.0037	ND		0.0036	ND		***0.075***	ND		0.0035	ND		0.0035
Methoxychlor	5700	390	160	ND		0.0035	ND		0.0036	0.021			0.011			ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
P,P'-DDD	13	3	4	ND		0.0035	ND		0.0036	ND		0.0036	0.0093			ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
P,P'-DDE	9	2	18	ND		0.0035	ND		0.0036	ND		0.0036	ND		0.0037	ND		0.0036	ND		0.075	ND		0.0035	ND		0.0035
P,P'-DDT	8	2	11	ND		0.0035	ND		0.0036	0.11			0.025			0.093			0.52			ND		0.0035	ND		0.0035
Toxaphene	3	0.6	0.3	ND		0.035	ND		0.0360	ND		0.0360	ND		0.0037	ND		0.0360	ND		***0.75***	ND		0.0350	ND		0.0350

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				C-10 (2.0-2.5)			C-12 (2.0-2.5)			C-15 (2.0-2.5)			D-4 (0.0-0.5)			D-13 (0.0-0.5)			PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			PL-12 (0.0-0.5)		
SAMPLING DATE				5/16/2002			5/16/2002			5/23/2002			5/8/2003			5/8/2003			5/14/2002			5/22/2002			5/8/2003		
SAMPLE DEPTH				2.0-2.5			2.0-2.5			2.0-2.5			0.0-0.5			0.0-0.5			0.0-0.5			2.0-2.5			0.0-0.5		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																								
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
alpha-BHC	0.5	0.1	0.002	ND		***0.0038***	ND		***0.0037***	ND		***0.0037***	ND		***0.0063***	ND		***0.029***	ND		***0.021***	ND		***0.0037***	ND		***0.0057***
beta-BHC	2	0.4	0.002	ND		***0.0038***	ND		***0.0037***	ND		***0.0037***	ND		***0.0063***	ND		***0.029***	ND		***0.021***	ND		***0.0037***	ND		***0.0057***
Chlordane	1	0.2	0.05	ND		0.0077	ND		0.0037	ND		0.0074	0.013			ND		***0.058***	ND		0.043	ND		0.0037	ND		0.0110
delta-BHC	NS	NS	NS	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Dieldrin	0.2	0.04	0.003	ND		***0.0038***	ND		***0.0037***	ND		***0.0037***	ND		***0.0063***	**0.35**			ND		***0.021***	ND		***0.0037***	ND		***0.0057***
Endosulfan I	NS	NS	NS	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Endosulfan II	NS	NS	NS	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Endosulfan sulfate	6800	470	2	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Endrin	340	23	1	ND		0.0038	ND		0.0037	0.0042			ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Endrin aldehyde	NS	NS	NS	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Endrin ketone	NS	NS	NS	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	0.086			ND		0.021	ND		0.0037	ND		0.0057
gamma-BHC	2	0.4	0.002	ND		***0.0038***	ND		***0.0037***	ND		***0.0037***	ND		***0.0063***	ND		***0.029***	ND		***0.021***	ND		***0.0037***	ND		***0.0057***
Heptachlor	0.7	0.1	0.5	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
Heptachlor epoxide	0.3	0.07	0.01	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		***0.029***	ND		***0.021***	ND		0.0037	ND		0.0057
Methoxychlor	5700	390	160	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
P,P'-DDD	13	3	4	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	ND		0.029	ND		0.021	ND		0.0037	ND		0.0057
P,P'-DDE	9	2	18	ND		0.0038	ND		0.0037	ND		0.0037	ND		0.0063	0.072			ND		0.021	ND		0.0037	ND		0.0057
P,P'-DDT	8	2	11	ND		0.0038	ND		0.0037	0.0053			0.24			0.2			0.16			0.0063			ND		0.0057
Toxaphene	3	0.6	0.3	ND		0.0380	ND		0.0370	ND		0.0370	ND		0.0310	ND		0.15	ND		0.021	ND		0.0370	ND		0.0280

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Remediation Standards per Soil Remediation Standards, 5/7/2012

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-1-0.5-1.0			E-1-2.0-2.5			E-1-3.0-3.5			E-1-4.5-5.0			E-2-0.5-1.0			E-2 Dup X-3-0.5-1.0			E-2-2.0-2.5			E-2-3.0-3.5			E-2-4.0-4.5			E-3-0.5-1.0		
LAB SAMPLE ID				05248-014			05248-015			05248-016			05248-017			05248-020			05248-011			05248-021			05248-022			05248-023			05367-002		
SAMPLING DATE				6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015			6/23/2015		
SAMPLE DEPTH				0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			0.5-1.0			2.0-2.5			3.0-3.5			4.0-4.5			0.5-1.0		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																														
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
alpha-BHC	0.5	0.1	0.002	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
alpha-Chlordane	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
beta-BHC	2	0.4	0.002	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
Chlordane-alpha and gamma	1	0.2	0.05	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
delta-BHC	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Dieldrin	0.2	0.04	0.003	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
Endosulfan I	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endosulfan II	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endosulfan-I and II	6800	470	4	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endosulfan sulfate	6800	470	2	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endrin	340	23	1	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endrin aldehyde	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Endrin ketone	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
gamma-Chlordane	NS	NS	NS	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Heptachlor	0.7	0.1	0.5	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Heptachlor epoxide	0.3	0.07	0.01	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
gamma-BHC-Lindane	2	0.4	0.002	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		***0.085***
Methoxychlor	5700	390	160	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
4,4'-DDD	13	3	4	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
4,4'-DDE	9	2	18	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
4,4'-DDT	8	2	11	ND		0.0004	ND		0.000358	ND		0.000384	ND		0.000402	ND		0.000432	ND		0.000426	ND		0.000366	ND		0.00036	ND		0.000356	ND		0.085
Toxaphene	3	0.6	0.3	ND		0.005	ND		0.00448	ND		0.0048	ND		0.00503	ND		0.0054	ND		0.00533	ND		0.00458	ND		0.0045	ND		0.00445	ND		***1.06***

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

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RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-3-2.0-2.5			E-3-3.0-3.5			E-3-4.5-5.0			E-4-0.5-1.0			E-4 Dup X-1-4.5-5.0			E-4-2.0-2.5			E-4-3.0-3.5			E-4-4.5-5.0			E-5-0.5-1.0			E-5-2.0-2.5		
LAB SAMPLE ID				05367-003			05367-001			05367-004			05367-007			05367-023			05367-008			05367-009			05367-010			05367-035			05367-037		
SAMPLING DATE				6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH				2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0			0.5-1.0			2.0-2.5		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																														
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
alpha-BHC	0.5	0.1	0.002	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		***0.00817***	ND		***0.00793***
alpha-Chlordane	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
beta-BHC	2	0.4	0.002	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		***0.00817***	ND		***0.00793***
Chlordane-alpha and gamma	1	0.2	0.05	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
delta-BHC	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Dieldrin	0.2	0.04	0.003	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		***0.00817***	ND		***0.00793***
Endosulfan I	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endosulfan II	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endosulfan-I and II	6800	470	4	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endosulfan sulfate	6800	470	2	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endrin	340	23	1	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endrin aldehyde	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Endrin ketone	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
gamma-Chlordane	NS	NS	NS	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Heptachlor	0.7	0.1	0.5	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Heptachlor epoxide	0.3	0.07	0.01	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
gamma-BHC-Lindane	2	0.4	0.002	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		***0.00817***	ND		***0.00793***
Methoxychlor	5700	390	160	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
4,4'-DDD	13	3	4	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
4,4'-DDE	9	2	18	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
4,4'-DDT	8	2	11	ND		0.000376	ND		0.000358	ND		0.000348	ND		0.00038	ND		0.000356	ND		0.000352	ND		0.000362	ND		0.000368	ND		0.00817	ND		0.00793
Toxaphene	3	0.6	0.3	ND		0.0047	ND		0.00448	ND		0.00435	ND		0.00475	ND		0.00445	ND		0.0044	ND		0.00453	ND		0.0046	ND		0.102	ND		0.099

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-5-3.0-3.5			E-5-4.5-5.0			E-6-0.5-1.0			E-6-2.0-2.5			E-6-3.0-3.5			E-6-4.0-4.5			E-7-0.5-1.0			E-7-2.0-2.5			E-7-3.0-3.5			E-7-4.5-5.0		
LAB SAMPLE ID				05367-036			05367-038			05367-039			05367-041			05367-042			05367-042			05248-026			05248-027			05248-028			05248-029		
SAMPLING DATE				6/22/2015			6/22/2015			6/23/2015			6/23/2015			6/23/2015			6/23/2015			6/24/2015			6/24/2015			6/24/2015			6/24/2015		
SAMPLE DEPTH				3.0-3.5			4.5-5.0			0.5-1.0			2.0-2.5			3.0-3.5			4.0-4.5			0.5-1.0			2.0-2.5			3.0-3.5			4.5-5.0		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																														
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
alpha-BHC	0.5	0.1	0.002	ND		***0.00405***	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
alpha-Chlordane	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
beta-BHC	2	0.4	0.002	ND		***0.00405***	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Chlordane-alpha and gamma	1	0.2	0.05	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
delta-BHC	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Dieldrin	0.2	0.04	0.003	ND		***0.00405***	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endosulfan I	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endosulfan II	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endosulfan-I and II	6800	470	4	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endosulfan sulfate	6800	470	2	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endrin	340	23	1	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endrin aldehyde	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Endrin ketone	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
gamma-Chlordane	NS	NS	NS	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Heptachlor	0.7	0.1	0.5	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Heptachlor epoxide	0.3	0.07	0.01	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
gamma-BHC-Lindane	2	0.4	0.002	ND		***0.00405***	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Methoxychlor	5700	390	160	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
4,4'-DDD	13	3	4	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
4,4'-DDE	9	2	18	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
4,4'-DDT	8	2	11	ND		0.00405	ND		0.000406	ND		0.000416	ND		0.000352	ND		0.00035	ND		0.000364	ND		0.000374	ND		0.000346	ND		0.000366	ND		0.00037
Toxaphene	3	0.6	0.3	ND		0.051	ND		0.00508	ND		0.0052	ND		0.0044	ND		0.00438	ND		0.00455	ND		0.00468	ND		0.00433	ND		0.00458	ND		0.00463

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				E-16-0.5-1.0			E-16-2.0-2.5			E-48-0.5-1.0			E-53-0.5-1.0			PZ-1-0.5-1.0			PZ-1-2.0-2.5			PZ-1-2.5-3.0			PZ-1-4.5-5.0		
LAB SAMPLE ID				05367-017			05367-018			09581-010			09581-007			05367-031			05367-032			05367-033			05367-034		
SAMPLING DATE				6/22/2015			6/23/2015			10/12/2016			10/12/2016			6/22/2015			6/22/2015			6/22/2015			6/22/2015		
SAMPLE DEPTH				0.5-1.0			2.0-2.5			0.5-1.0			0.5-1.0			0.5-1.0			2.0-2.5			2.5-3.0			4.5-5.0		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**																								
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
alpha-BHC	0.5	0.1	0.002	ND		0.00203	ND		0.00202	~		~	~		~	ND		***0.00475***	ND		0.00196	ND		0.00179	ND		0.00037
alpha-Chlordane	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
beta-BHC	2	0.4	0.002	ND		0.00203	ND		0.00202	~		~	~		~	ND		***0.00475***	ND		0.00196	ND		0.00179	ND		0.00037
Chlordane-alpha and gamma	1	0.2	0.05	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
delta-BHC	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Dieldrin	0.2	0.04	0.003	ND		0.00203	ND		0.00202	ND		0.000824	ND		0.000404	ND		***0.00475***	ND		0.00196	ND		0.00179	ND		0.00037
Endosulfan I	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endosulfan II	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endosulfan-I and II	6800	470	4	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endosulfan sulfate	6800	470	2	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endrin	340	23	1	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endrin aldehyde	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Endrin ketone	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
gamma-Chlordane	NS	NS	NS	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Heptachlor	0.7	0.1	0.5	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Heptachlor epoxide	0.3	0.07	0.01	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
gamma-BHC-Lindane	2	0.4	0.002	ND		0.00203	ND		0.00202	~		~	~		~	ND		***0.00475***	ND		0.00196	ND		0.00179	ND		0.00037
Methoxychlor	5700	390	160	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
4,4'-DDD	13	3	4	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
4,4'-DDE	9	2	18	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
4,4'-DDT	8	2	11	ND		0.00203	ND		0.00202	~		~	~		~	ND		0.00475	ND		0.00196	ND		0.00179	ND		0.00037
Toxaphene	3	0.6	0.3	ND		0.025	ND		0.025	~		~	~		~	ND		***0.59***	ND		0.025	ND		0.022	ND		0.00463

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				**PZ-2-0.5-1.0**			**PZ-2-2.0-2.5**			**PZ-2-4.0-4.5**			**PZ-2-6.0-6.5**		
LAB SAMPLE ID				**05367-019**			**05367-020**			**05367-021**			**05367-022**		
SAMPLING DATE				**6/23/2015**			**6/22/2015**			**6/22/2015**			**6/22/2015**		
SAMPLE DEPTH				**0.5-1.0**			**2.0-2.5**			**4.0-4.5**			**6.0-6.5**		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**												
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**			**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
alpha-BHC	0.5	0.1	0.002	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
alpha-Chlordane	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
beta-BHC	2	0.4	0.002	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Chlordane-alpha and gamma	1	0.2	0.05	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
delta-BHC	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Dieldrin	0.2	0.04	0.003	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endosulfan I	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endosulfan II	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endosulfan-I and II	6800	470	4	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endosulfan sulfate	6800	470	2	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endrin	340	23	1	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endrin aldehyde	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Endrin ketone	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
gamma-Chlordane	NS	NS	NS	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Heptachlor	0.7	0.1	0.5	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Heptachlor epoxide	0.3	0.07	0.01	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
gamma-BHC-Lindane	2	0.4	0.002	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Methoxychlor	5700	390	160	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
4,4'-DDD	13	3	4	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
4,4'-DDE	9	2	18	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
4,4'-DDT	8	2	11	ND		0.00209	ND		0.00206	ND		0.000358	ND		0.000382
Toxaphene	3	0.6	0.3	ND		0.026	ND		0.026	ND		0.00448	ND		0.00478

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 5
Analytical Results - Pesticides - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				**SB-1**			**SB-6**		
SAMPLING DATE				**10/18/2001**			**10/18/2001**		
SAMPLE DEPTH				**0.0-0.5**			**0.0-0.5**		
Organochlorine Pestides	**NRDCSRS**	**RDCSRS**	**IGWSSL**						
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**			**mg/kg**		
				Result	**Q**	**RL**	**Result**	**Q**	**RL**
Aldrin	0.2	0.04	0.2	ND		0.04	ND		***2***
alpha-BHC	0.5	0.1	0.002	ND		***0.04***	ND		***2***
beta-BHC	2	0.4	0.002	ND		***0.04***	ND		***2***
Chlordane	1	0.2	0.05	ND		0.04	ND		***2***
delta-BHC	NS	NS	NS	ND		0.04	ND		2
Dieldrin	0.2	0.04	0.003	**0.26**			**18**		
Endosulfan I	NS	NS	NS	ND		0.04	ND		2
Endosulfan II	NS	NS	NS	ND		0.04	ND		2
Endosulfan sulfate	6800	470	2	ND		0.04	ND		2
Endrin	340	23	1	0.58			**35**		
Endrin aldehyde	NS	NS	NS	0.2			10		
Endrin ketone	NS	NS	NS	ND		0.04	ND		2
gamma-BHC	2	0.4	0.002	ND		***0.04***	ND		***2***
Heptachlor	0.7	0.1	0.5	ND		0.04	ND		***2***
Heptachlor epoxide	0.3	0.07	0.01	ND		***0.04***	ND		***2***
Methoxychlor	5700	390	160	ND		0.04	ND		2
P,P'-DDD	13	3	4	ND		0.04	ND		2
P,P'-DDE	9	2	18	ND		0.04	**7**		
P,P'-DDT	8	2	11	0.97			**50**		
Toxaphene	3	0.6	0.3	ND		0.04	ND		***2***

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

NS - No Standard Available

ND - Not Detected

~ - Sample not analyzed

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, 5/7/2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8;

Roux Associates Draft RIR.

Table 6
Analytical Results - Semi-Volatile Organic Compounds - Soil
East Barracks Rail Yard
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)			C-6 (2.0-2.5)			C-10 (2.0-2.5)			C-12 (2.0-2.5)			C-15 (2.0-2.5)		
SAMPLING DATE				5/17/2002			5/16/2002			5/22/2002			5/22/2002			5/23/2002			5/23/2002			5/14/2002			5/15/2002			5/16/2002			5/16/2002			5/23/2002		
SAMPLE DEPTH-ft.				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			1.0-1.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL																																
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Semivolatile Ogranic Compounds				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,2,4-Trichlorobenzene	820	73	0.7	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.04	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
1,2-Dichlorobenzene	59,000	5,300	17	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
1,2-Diphenylhydrazine	2	0.7	0.7	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
1,3-Dichlorobenzene	59,000	5,300	19	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
1,4-Dichlorobenzene	13	5	2	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2,4,5-Trichlorophenol	68,000	6,100	68	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2,4,6-Trichlorophenol	74	19	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
2,4-Dichlorophenol	2,100	180	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
2,4-Dimethylphenol	14,000	1,200	1	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2,4-Dinitrophenol	1,400	120	0.3	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
2,4-Dinitrotoluene	3	0.7	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2,6-Dinitrotoluene	3	0.7	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Chloronaphthalene	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Chlorophenol	2,200	310	0.8	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Methylnaphthalene	2,400	230	8	ND		0.35	ND		0.36	ND		0.36	0.044	J		0.066	J		0.18	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Methylphenol (o-cresol)	3,400	310	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Nitroaniline	23,000	39	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
2-Nitrophenol	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Methylphenol (p-cresol) (3&4-Methylphenol)	340	31	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
3,3'-Dichlorobenzidine	4	1	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
3-Nitroaniline	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4,6-Dinitro-2-methylphenol	68	6	0.3	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
4-Bromophenyl phenyl ether	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Chloro-3-methylphenol	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Chloroaniline	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Chlorophenyl phenyl ether	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Nitroaniline	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
4-Nitrophenol	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Acenaphthene	37,000	3,400	110	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Acenaphthylene	300,000	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.12	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Anthracene	30,000	17,000	2,400	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.19	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Benzidine	0.7	0.7	0.7	ND		0.7	ND		0.72	ND		0.72	ND		0.75	ND		0.72	ND		0.75	ND		0.71	ND		0.71	ND		0.77	ND		0.75	ND		0.74
Benzo(a)anthracene	2	0.6	0.8	ND		0.35	ND		0.36	0.084	J		ND		0.37	0.037	J		0.46			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Benzo(a)pyrene	0.2	0.2	0.2	ND		***0.35***	ND		***0.36***	0.064	J		ND		***0.37***	ND		***0.36***	**0.38**			ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Benzo(b)fluoranthene	2	0.6	2	ND		0.35	ND		0.36	0.1	J		0.039	J		0.05	J		**1.3**			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Benzo(ghi)perylene	30,000	380,000	NS	ND		0.35	ND		0.36	0.039	JB		ND		0.37	0.13	J		0.41			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Benzo(k)fluoranthene	23	6	25	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.32	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Bis(2-chloroethoxy) methane	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Bis(2-chloroethyl)ether	2	0.4	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Bis(2-chloroisopropyl) ether	67	23	5	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Bis(2-ethylhexyl) phthalate	140	35	1,200	0.062	JB		10.12	JB		0.088	J		0.068	J		0.096	JB		0.16	JB		ND		0.35	0.042	J		0.089	JB		0.17	JB		0.05	JB	

Table 6
Analytical Results - Semi-Volatile Organic Compounds - Soil
East Barracks Rail Yard
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)			C-6 (2.0-2.5)			C-10 (2.0-2.5)			C-12 (2.0-2.5)			C-15 (2.0-2.5)		
SAMPLING DATE				5/17/2002			5/16/2002			5/22/2002			5/22/2002			5/23/2002			5/23/2002			5/14/2002			5/15/2002			5/16/2002			5/16/2002			5/23/2002		
SAMPLE DEPTH-ft.				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			1.0-1.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL																																
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Semivolatile Ogranic Compounds				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Butyl benzyl phthalate	14,000	1,200	230	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Carbazole	96	24	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.068	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Chrysene	230	62	80	ND		0.35	ND		0.36	0.078	J		0.054	J		0.062	J		0.85			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Dibenz(a,h)anthracene	0.2	0.2	0.8	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Dibenzofuran	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	0.16	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Diethyl phthalate	550,000	49,000	88	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Dimethyl phthalate	NS	NS	NS	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Di-n-butyl phthalate	68,000	6,100	760	0.061	J		0.038	J		0.049	J		0.069	J		ND		0.36	0.06	J		ND		0.35	ND		0.35	0.05	J		0.039			ND		0.37
Di-n-octylphthalate	27,000	2,400	3,300	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Fluoranthene	24,000	2,300	1,300	ND		0.35	ND		0.36	0.18	J		ND		0.37	0.037	J		0.74			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Fluorene	24,000	2,300	170	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Hexachlorobenzene	1	0.3	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Hexachlorobutadiene	25	6	0.9	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Hexachlorocyclopentadiene	110	45	320	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Hexachloroethane	140	35	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Indeno(1,2,3-c,d)pyrene	2	0.6	7	ND		0.35	ND		0.36	0.041	J		ND		0.37	0.043	J		0.42			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Isophorone	2,000	510	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Naphthalene	17	6	25	ND		0.35	ND		0.36	ND		0.36	ND		0.37	0.042	J		0.16	J		ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Nitrobenzene	340	31	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
N-Nitrosodimethylamine	0.7	0.7	0.7	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
N-nitrosodi-n-propylamine	0.3	0.2	0.2	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
N-nitrosodiphenylamine	390	99	0.4	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Pentachlorophenol	10	3	0.3	ND		***0.35***	ND		***0.36***	ND		***0.36***	ND		***0.37***	ND		***0.36***	ND		***0.37***	ND		***0.35***	ND		***0.35***	ND		***0.38***	ND		***0.37***	ND		***0.37***
Phenanthrene	300,000	NS	NS	ND		0.35	ND		0.36	0.17	J		0.1	J		0.11	J		0.48			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Phenol	210,000	18,000	8	ND		0.35	ND		0.36	ND		0.36	ND		0.37	ND		0.36	ND		0.37	ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Pyrene	18,000	1,700	840	ND		0.35	ND		0.36	0.11	J		ND		0.37	ND		0.36	0.7			ND		0.35	ND		0.35	ND		0.38	ND		0.37	ND		0.37
Total Tics				1.75	J		3.10	J		1.89	J		3.20	J		5.40	J		15	J		ND			1.12	J		10.90	J		1.96	J		5.60	J	

Notes:
Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.
Bold - Exceeds lowest applicable standard/screening level.
~ - Sample not analyzed
C - Common Laboratory and/or Bottle Contaminant.
D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
mg/kg - milligrams per kilogram
ND - Not Detected
NS - No Standard Available
U - Not detected at the reporting limit for the sample.
IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels Criteria per November 2013 Guidance Regulation (Version 2.0).

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR

Table 6
Analytical Results - Semi-Volatile Organic Compounds - Soil
East Barracks Rail Yard
Trenton, NJ

LOCATION				PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			SB-1			SB-6		
SAMPLING DATE				5/14/2002			5/22/2002			10/18/01			10/18/01		
SAMPLE DEPTH-ft.				0.0-0.5			2.0-2.5			0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL												
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg		
Semivolatile Ogranic Compounds				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
1,2,4-Trichlorobenzene	820	73	0.7	ND		***2.1***	ND		0.37	ND		0.4	**2**		
1,2-Dichlorobenzene	59,000	5,300	17	ND		2.1	ND		0.37	ND		0.4	ND		0.4
1,2-Diphenylhydrazine	2	0.7	0.7	ND		***2.1***	ND		0.37	ND		0.4	ND		0.4
1,3-Dichlorobenzene	59,000	5,300	19	ND		2.1	ND		0.37	ND		0.4	ND		0.4
1,4-Dichlorobenzene	13	5	2	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2,4,5-Trichlorophenol	68,000	6,100	68	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2,4,6-Trichlorophenol	74	19	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
2,4-Dichlorophenol	2,100	180	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
2,4-Dimethylphenol	14,000	1,200	1	ND		***2.1***	ND		0.37	ND		0.4	ND		0.4
2,4-Dinitrophenol	1,400	120	0.3	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
2,4-Dinitrotoluene	3	0.7	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2,6-Dinitrotoluene	3	0.7	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2-Chloronaphthalene	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2-Chlorophenol	2,200	310	0.8	ND		***2.1***	ND		0.37	0.26	J		ND		0.4
2-Methylnaphthalene	2,400	230	8	0.46	J		ND		0.37	ND		0.4	0.33	J	
2-Methylphenol (o-cresol)	3,400	310	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2-Nitroaniline	23,000	39	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
2-Nitrophenol	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Methylphenol (p-cresol) (3&4-Methylphenol)	340	31	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
3,3'-Dichlorobenzidine	4	1	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
3-Nitroaniline	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4,6-Dinitro-2-methylphenol	68	6	0.3	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
4-Bromophenyl phenyl ether	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Chloro-3-methylphenol	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Chloroaniline	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Chlorophenyl phenyl ether	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Nitroaniline	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
4-Nitrophenol	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Acenaphthene	37,000	3,400	110	ND		2.1	ND		0.37	ND		0.4	0.054	J	
Acenaphthylene	300,000	NS	NS	ND		2.1	ND		0.37	0.19	J		0.28	J	
Anthracene	30,000	17,000	2,400	ND		2.1	ND		0.37	0.24	J		0.67		
Benzidine	0.7	0.7	0.7	ND		***4.3***	ND		0.73	ND		0.4	ND		0.4
Benzo(a)anthracene	2	0.6	0.8	**0.72**	J		ND		0.37	0.61			**1.3**		
Benzo(a)pyrene	0.2	0.2	0.2	**0.66**	J		ND		***0.37***	**0.61**			**1.1**		
Benzo(b)fluoranthene	2	0.6	2	**1.3**	J		ND		0.37	**2.2**			**2.9**		
Benzo(ghi)perylene	30,000	380,000	NS	0.44	J		ND		0.37	0.32	J		0.44		
Benzo(k)fluoranthene	23	6	25	0.5	J		ND		0.37	0.72			1.1		
Bis(2-chloroethoxy) methane	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Bis(2-chloroethyl)ether	2	0.4	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
Bis(2-chloroisopropyl) ether	67	23	5	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Bis(2-ethylhexyl) phthalate	140	35	1,200	1.1	J		0.062	JB		0.19	J		0.15	J	

Table 6
Analytical Results - Semi-Volatile Organic Compounds - Soil
East Barracks Rail Yard
Trenton, NJ

LOCATION				PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			SB-1			SB-6		
SAMPLING DATE				5/14/2002			5/22/2002			10/18/01			10/18/01		
SAMPLE DEPTH-ft.				0.0-0.5			2.0-2.5			0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL												
UNITS	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg			mg/kg			mg/kg		
Semivolatile Ogranic Compounds				Result	Q	RL	Result	Q	RL	Result	Q	RL	Result	Q	RL
Butyl benzyl phthalate	14,000	1,200	230	17			ND		0.37	ND		0.4	ND		0.4
Carbazole	96	24	NS	ND		2.1	ND		0.37	0.2	J		0.17	J	
Chrysene	230	62	80	1	J		ND		0.37	1.1			1.6		
Dibenz(a,h)anthracene	0.2	0.2	0.8	ND		***2.1***	ND		0.37	0.042	J		0.073	J	
Dibenzofuran	NS	NS	NS	ND		2.1	ND		0.37	0.098	J		0.23	J	
Diethyl phthalate	550,000	49,000	88	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Dimethyl phthalate	NS	NS	NS	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Di-n-butyl phthalate	68,000	6,100	760	0.42	J		ND		0.37	0.054	JB		0.11	JB	
Di-n-octylphthalate	27,000	2,400	3,300	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Fluoranthene	24,000	2,300	1,300	1.3	J		ND		0.37	0.91			1.5		
Fluorene	24,000	2,300	170	ND		2.1	ND		0.37	ND		0.4	0.057	J	
Hexachlorobenzene	1	0.3	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
Hexachlorobutadiene	25	6	0.9	ND		***2.1***	ND		0.37	ND		0.4	ND		0.4
Hexachlorocyclopentadiene	110	45	320	ND		2.1	ND		0.37	ND		0.4	ND		0.4
Hexachloroethane	140	35	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
Indeno(1,2,3-c,d)pyrene	2	0.6	7	0.44	J		ND		0.37	0.35	J		0.53		
Isophorone	2,000	510	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
Naphthalene	17	6	25	0.29	J		ND		0.37	0.18	J		0.26	J	0.26
Nitrobenzene	340	31	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
N-Nitrosodimethylamine	0.7	0.7	0.7	ND		***2.1***	ND		0.37	ND		0.4	ND		0.4
N-nitrosodi-n-propylamine	0.3	0.2	0.2	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
N-nitrosodiphenylamine	390	99	0.4	ND		***2.1***	ND		0.37	ND		0.4	ND		0.4
Pentachlorophenol	10	3	0.3	ND		***2.1***	ND		***0.37***	ND		***0.4***	ND		***0.4***
Phenanthrene	300,000	NS	NS	1.1	J		ND		0.37	0.44			0.78		
Phenol	210,000	18,000	8	ND		2.1	ND		0.37	ND		1.5	ND		1.5
Pyrene	18,000	1,700	840	1.2	J		ND		0.37	1			1.7		
Total Tics				10.9	J		0.70	J		~			~		

Notes:
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D- Sample was diluted.
J - Concentration detected at a value below the RL and above the MDL.
mg/kg - milligrams per kilogram
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RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards Criteria per Soil Remediation Standards, last amended May 7, 2012.
Source:
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR

Table 7
Analytical Results - Metals - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				A-5 (2.0-2.5)			A-8 (2.0-2.5)			A-10 (2.0-2.5)			A-11 (2.0-2.5)			A-13 (2.0-2.5)			A-15 (1.0-1.5)			C-3 (2.0-2.5)			C-6 (2.0-2.5)			C-10 (2.0-2.5)			C-12 (2.0-2.5)		
SAMPLING DATE				5/17/2002			5/16/2002			5/22/2002			5/22/2002			5/23/2002			5/23/2002			5/15/2002			5/15/2002			5/16/2002			5/16/2002		
SAMPLE DEPTH				2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5			1.0-1.5			2.0-2.5			2.0-2.5			2.0-2.5			2.0-2.5		
	NRDCSRS	RDCSRS	IGWSSL	mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Metals				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Antimony	450	31	6	ND		2.1	ND		2.2	ND		2.2	ND		2.2	ND		2.2	4			ND		2.1	ND		2.1	ND		2.3	ND		2.2
Arsenic	19	19	19	5.5			6.1			4			6.7			3.8			9			3.8			6.1			4.9			3.4		
Barium	59000	16000	2100	29			37			18			41			27			46			12			20			45			27		
Beryllium	140	16	0.7	ND		0.63	ND		0.65	ND		0.65	ND		0.67	ND		0.65	ND		0.67	ND		0.64	ND		0.64	**0.98**	^		ND		0.67
Cadmium	78	78	2	ND		0.63	ND		0.65	ND		0.65	ND		0.67	ND		0.65	ND		0.67	ND		0.64	ND		0.64	ND		0.69	ND		0.67
Chromium (total)	NS	NS	NS	7.5			9.7			10			12			9			22			13			8.2			9.7			11		
Copper	45000	3100	11000	14			35			15			110			190			99			12			19			26			17		
Cyanide	23000	1600	20	ND		0.26	ND		0.27	ND		0.27	ND		0.28	ND		0.27	ND		0.28	ND		0.26	ND		0.26	ND		0.29	ND		0.28
Lead	800	400	90	6			57			13			16			18			**110**	^		7.4			6.3			24			8.3		
Mercury	65	23	0.1	ND		***0.15***	ND		***0.15***	ND		***0.15***	ND		***0.16***	ND		***0.15***	ND		***0.16***	ND		***0.15***	ND		***0.15***	ND		***0.16***	ND		***0.16***
Nickel	23000	1600	48	13			14			7.7			28			13			15			16			12			26			13		
Selenium	5700	390	11	ND		2.1	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.2	ND		2.1	ND		2.1	ND		2.3	ND		2.2
Silver	5700	390	1	ND		***2.6***	ND		***2.7***	ND		***2.7***	ND		***2.8***	ND		***2.7***	ND		***2.8***	ND		***2.7***	ND		***2.7***	ND		***2.9***	ND		***2.8***
Thallium	79	5	3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.3	ND		1.4	ND		1.3
Zinc	11000	23000	930	34			83			79			240			65			69			51			40			170			47		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

^ - Exceeds IGWSSL only

NS - No Standard Available

ND - Not Detected

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR

Table 7
Analytical Results - Metals - Soil
East Barracks Rail Yard Site
Trenton, NJ

LOCATION				C-15 (2.0-2.5)			D-4 (0.0-0.5)			D-13 (0.0-0.5)			PL-1 (0.0-0.5)			PL-8 (2.0-2.5)			PL-12 (0.0-0.5)		
SAMPLING DATE				5/23/2002			5/8/2003			5/8/2003			5/14/2002			5/22/2002			5/8/2003		
SAMPLE DEPTH				2.0-2.5			0.0-0.5			0.0-0.5			0.0-0.5			2.0-2.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL																		
				mg/kg			mg/kg			mg/kg			mg/kg			mg/kg			mg/kg		
Metals				**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**	**Result**	**Q**	**RL**
Antimony	450	31	6	ND		2.2	5.9			**8.3**	^		ND		2.6	ND		2.2	2.7		
Arsenic	19	19	19	3.9			14			17			7			5			14		
Barium	59000	16000	2100	33			110			95			89			40			120		
Beryllium	140	16	0.7	ND		0.67	ND		***0.75***	ND		0.7	ND		***0.77***	0.66			**0.86**	^	
Cadmium	78	78	2	ND		0.67	0.77			ND		0.7	ND		0.77	ND		0.66	0.94		
Chromium (total)	NS	NS	NS	11			19			20			16			13			35		
Copper	45000	3100	11000	13			140			190			150			60			87		
Cyanide	23000	1600	20	ND		0.28	ND		0.31	ND		0.37	ND		0.32	ND		0.27	ND		0.28
Lead	800	400	90	8.6			**230**	^		**360**	^		**160**	^		8.8			**160**	^	
Mercury	65	23	0.1	ND		***0.16***	**0.2**	^		**0.77**	^		**0.18**	^		ND		***0.16***	0.13		
Nickel	23000	1600	48	12			17			37			20			18			28		
Selenium	5700	390	11	ND		2.2	2.6			2.4			ND		2.6	ND		2.2	ND		2
Silver	5700	390	1	ND		***2.8***	ND		***3.1***	ND		***2.9***	ND		***3.2***	ND		***2.7***	ND		***2.8***
Thallium	79	5	3	ND		1.3	ND		1.5	ND		1.4	ND		1.5	ND		1.3	ND		1.4
Zinc	11000	23000	930	44			150			130			170			79			180		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

^ - Exceeds IGWSSL only

NS - No Standard Available

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NRDCSRS - NJDEP Non-Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 201

RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 201

Source:

Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR

Table 7
Analytical Results - Metals - Soil
East Barracks Yard Site
Trenton, NJ

LOCATION				SB-1 (0.0-0.5)			SB-6 (0.0-0.5)		
SAMPLING DATE				10/18/2001			10/18/2001		
SAMPLE DEPTH				0.0-0.5			0.0-0.5		
	NRDCSRS	RDCSRS	IGWSSL						
	mg/kg	mg/kg	mg/kg	mg/kg			mg/kg		
Metals				Result	Q	RL	Result	Q	RL
Antimony	450	31	6	5			**11**		
Arsenic	19	19	19	**29**			**21**		
Barium	59000	16000	2100	95			160		
Beryllium	140	16	0.7	ND		0.72	ND		0.71
Cadmium	78	78	2	ND		0.72	**4.3**		
Chromium (total)	NS	NS	NS	15			21		
Copper	45000	3100	11000	200			520		
Cyanide	23000	1600	20	ND		0.3	ND		0.3
Lead	800	400	90	**280**			**430**		
Mercury	65	23	0.1	ND		***0.17***	**0.65**		
Nickel	23000	1600	48	16			15		
Selenium	5700	390	11	3.2			3.3		
Silver	5700	390	1	ND		***3***	ND		***3***
Thallium	79	5	3	ND		1.4	ND		1.4
Zinc	11000	23000	930	190			230		

Notes:

Bold Italics - Laboratory Reporting Limit is greater than standard and/or screening level.

Bold - Exceeds lowest applicable standard/screening level.

mg/kg - milligrams per kilogram

^ - Exceeds IGWSSL only

NS - No Standard Available

ND - Not Detected

IGWSSL - NJDEP Impact to Groundwater Soil Screening Levels per November 2013 Guidance (Version 2.0)

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RDCSRS - NJDEP Residential Direct Contact Soil Remediation Standards per Soil Remediation Standards, last amended May 7, 2012.

Source:

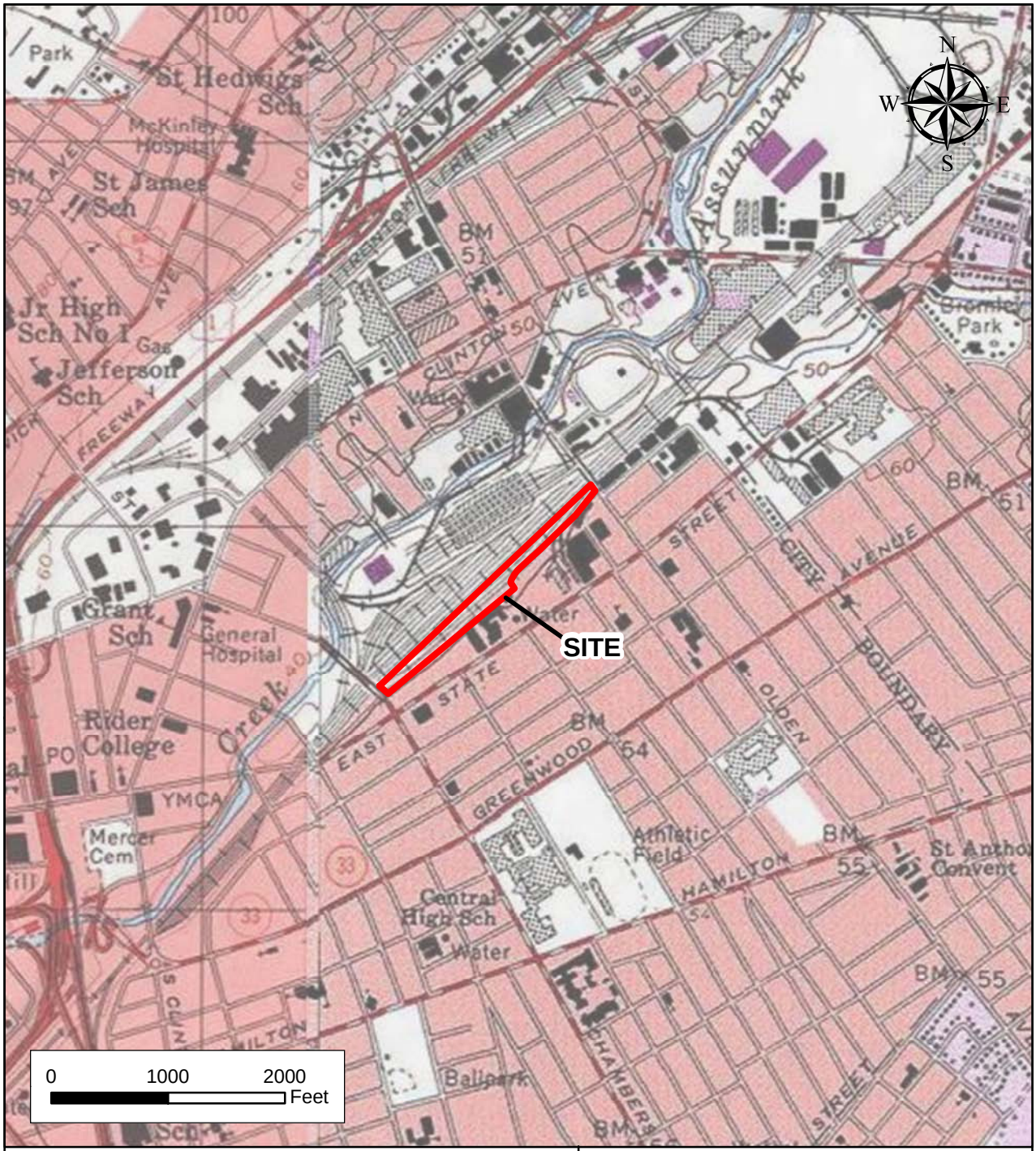
Results for A-1 through D-15 and PL-1 through SB-8; Roux Associates, Draft RIR

Table 8
Water Level Measurements
East Barracks Rail Yard Site
Trenton, NJ

									Depth to Groundwater		
				Elevation (ft)			Total Depth	Screen Interval	6/22/2015	9/11/2015	4/7/2017
ID	Well Permit	Northing	Easting	TIC	TOC	Ground Surface	ft bgs	ft bgs	ft bgs	ft bgs	ft bgs
PZ-1	E201506901	507226	423961	39.27	39.81	39.7	15	4-14	5.33	5.47	6.81
PZ-2	E201506902	507413	424100	39.96	40.22	39.95	16	5-15	6.73	6.51	7.80

Notes:
bgs - below ground surface
ft - feet
TIC - top of inner casing
TOC - top of outer casing

FIGURES



LEGEND

site location

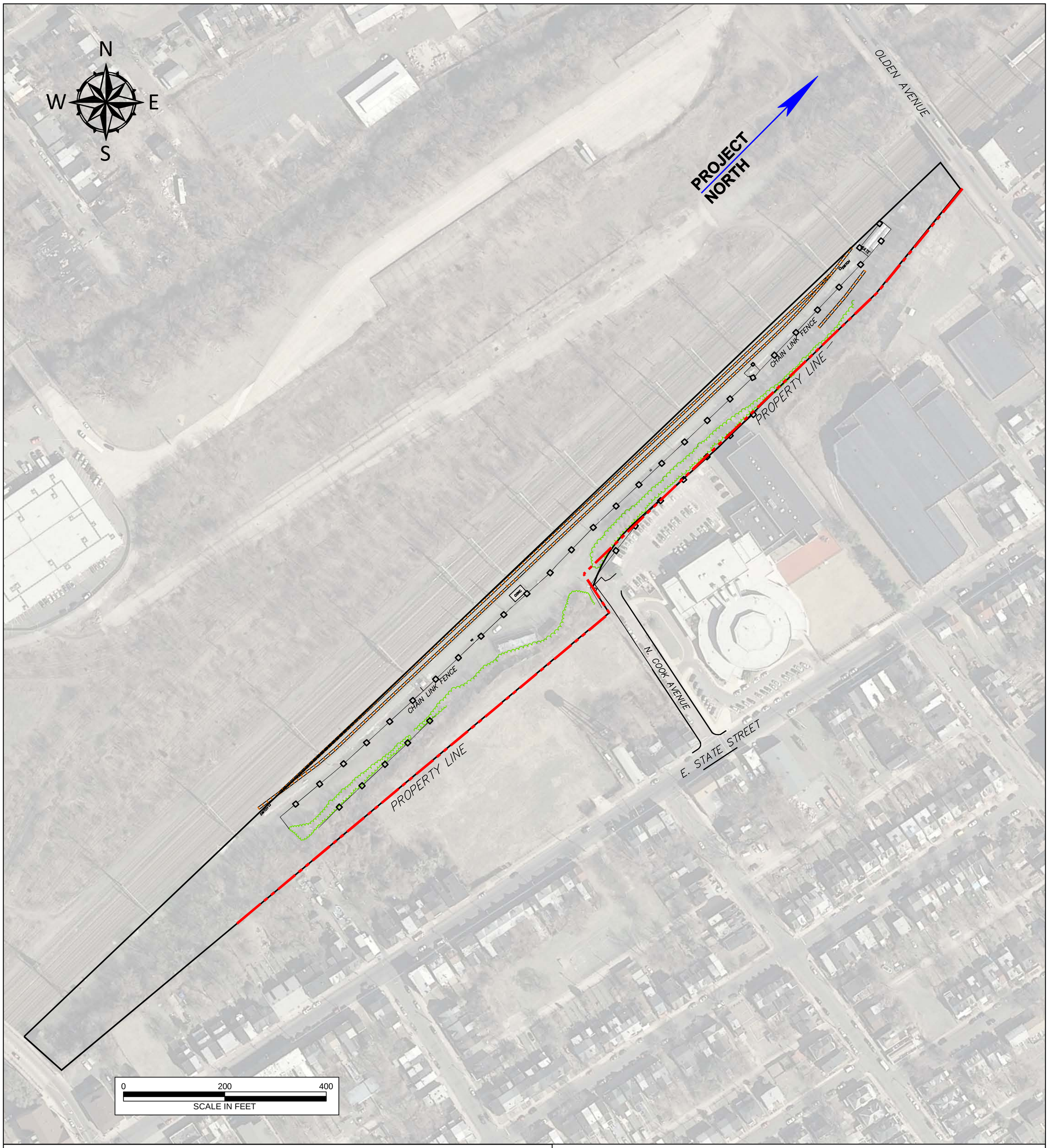
amec foster wheeler

Figure 1

Site Location Map
East Barracks Rail Yard
Trenton, NJ

Source: US Topo Maps; Digital USGS Seamless Maps; ESRI Map Server, 2015

Rev. By: ML	Contract No: 277710568.0001	April 2015



Legend

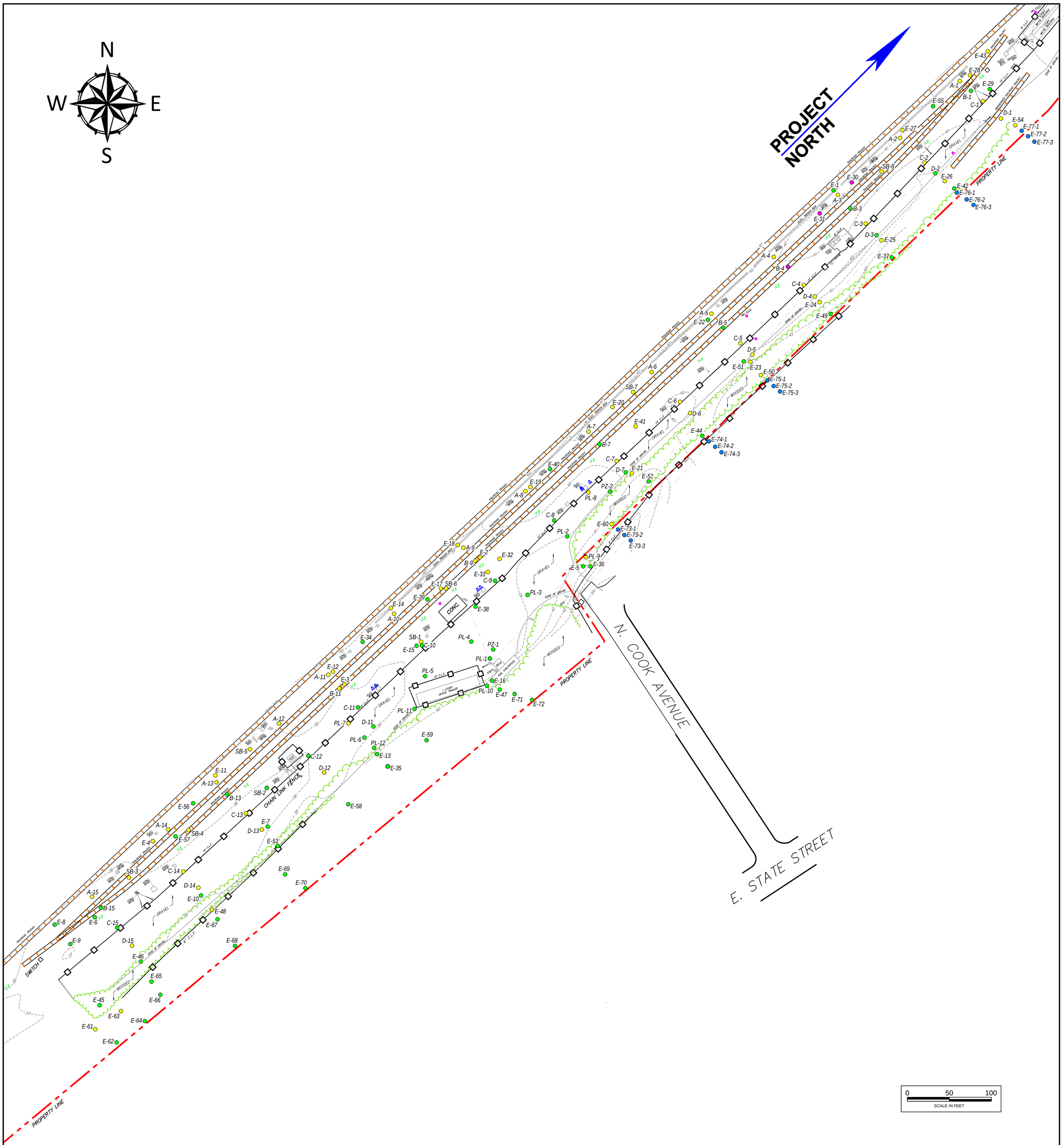
- site location
- vegetation
- chain link fence
- railroad

amec foster wheeler

Figure 2

Site Plan
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017



Legend

- site location
- *E-59* sample ID
- PCB > 10 mg/kg
- PCB ≤ 10 mg/kg
- proposed sample location
- sample not analyzed

PCB - polychlorinated biphenyls

amec foster wheeler

Figure 3

Sample Location Map
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017

N
W E
S

PROJECT NORTH

SHEET 2

SHEET 1

N. COOK

PROPERTY LINE

CHAIN LINK FENCE

CONC.

E-2 (6/24/15)			
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
11.2 D	**7.80**	**1.04 D**	**1.99 D**

B-9 (5/17/02)	
2.0-2.5	3.0-3.5
30	**52**

A-9 (5/17/02)	
0.0-0.5	2.0-2.5
130	0.18

E-18 (6/23/15)	
0.5-1.0	2.0-2.5
12.5	**0.732**

SB-6 (10/18/01)	
0.0-0.5	2.0-2.5
440	**38**

E-17 (6/23/15)	
0.5-1.0	2.0-2.5
224 D	**3.20**

E-39 (10/11/16)
4.5-5.0
0.110

SB-1 (10/18/01)	
0.0-0.5	2.0-2.5
17	0.077

E-14 (6/23/15)	
0.5-1.0	2.0-2.5
35.4	**4.44**

A-10 (5/22/02)	
0.0-0.5	2.0-2.5
42	**0.79**

E-15 (6/24/15)	
0.5-1.0	2.0-2.5
2.1	0.044

E-3 (6/23/15)			
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
127 D	**25.2 D**	0.037	0.00624

E-12 (6/23/15)	
0.5-1.0	2.0-2.5
128 D	**2.03**

A-11 (5/22/02)	
0.0-0.5	2.0-2.5
18	0.17

E-34 (10/11/16)
3.0-3.5
0.196

B-11 (5/22/02)	
2.0-2.5	3.0-3.5
11	**6.5**

C-11 (5/16/02)	
0.0-0.5	2.0-2.5
5.0	ND

E-11 (6/23/15)	
0.5-1.0	2.0-2.5
19.8 D	ND

PL-7 (5/22/02)	
0.0-0.5	2.0-2.5
17	0.23

A-13 (5/23/02)	
0.0-0.5	2.0-2.5
32	**0.79**

A-12 (5/22/02)		
0.0-0.5	2.0-2.5	3.0-3.5
48	**7.6**	**0.32**

B-13 (5/23/02)	
2.0-2.5	3.0-3.5
2.9	**0.75**

SB-5 (10/18/01)	
0.0-0.5	2.0-2.5
190	**160**

C-13 (5/15/02)	
0.0-0.5	2.0-2.5
50	ND

E-56 (10/11/16)	
4.5-5.0	6.0-6.5
0.110	ND

SB-4 (10/18/01)	
0.0-0.5	2.0-2.5
160	**43**

A-14 (5/23/02)		
0.0-0.5	2.0-2.5	3.0-3.5
45	**4.0**	**3.1**

E-57 (10/11/16)	
4.5-5.0	6.0-6.5
0.088	0.022 J

E-4 (6/23/15)			
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
30.0 D	**0.938**	**0.827**	**2.51**

C-14 (5/22/02)	
0.0-0.5	2.0-2.5
21	**0.28**

SB-3 (10/18/01)	
0.0-0.5	2.0-2.5
120	**44**

A-15 (5/23/02)	
0.0-0.5	1.0-1.5
14	**4.3**

B-15 (5/23/02)	
2.0-2.5	
1.8	

E-8 (6/23/15)	
0.5-1.0	2.0-2.5
4.05	ND

E-9 (6/23/15)	
0.5-1.0	2.0-2.5
8.25 D	0.144

C-15 (5/23/02)	
0.0-0.5	2.0-2.5
7.4	0.046

D-15 (5/8/03)
0.0-0.5
13

E-6 (6/23/15)			
0.5-1.0	2.0-2.5	3.0-3.5	4.0-4.5
5.22 D	0.03	0.011	0.00148 J

E-45 (10/12/16)		
0.5-1.0	2.0-2.5	4.5-5.0
7.64 D	**4.15**	ND

E-61 (3/16/17)	
0.5-1.0	2.0-2.5
136	**84.6**

E-62 (3/16/17)	
0.5-1.0	2.0-2.5
ND	ND

E-65 (3/16/17)
0.5-1.0
ND

E-46 (10/12/16)		
0.5-1.0	2.0-2.5	4.5-5.0
3.36	ND	ND

E-66 (3/16/17)	
0.5-1.0	2.0-2.5
1.24	ND

E-64 (3/16/17)	
0.5-1.0	2.0-2.5
ND	ND

E-63 (3/16/17)	
0.5-1.0	2.0-2.5
110	**167**

E-68 (3/16/17)	
0.5-1.0	2.0-2.5
ND	ND

E-67 (3/16/17)	
0.5-1.0	2.0-2.5
ND	ND

E-10 (6/24/15)	
0.5-1.0	2.0-2.5
0.418	0.047

E-48 (10/12/16)
0.5-1.0
19.1 D

D-14 (5/8/03)
0.0-0.5
12

E-69 (3/16/17)
0.5-1.0
ND

E-70-0 (3/16/17)	
0.5-1.0	2.0-2.5
ND	ND

E-53 (10/12/16)
0.5-1.0
3.13

D-13 (5/8/03)	
0.0-0.5	2.0-2.5
44	ND

E-7 (6/24/15)			
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
1.11 D	0.00157 J	ND	ND

SB-2 (10/18/01)	
0.0-0.5	2.0-2.5
9.3	**0.54**

D-12 (5/8/03)
0.0-0.5
15

C-12 (5/16/02)	
0.0-0.5	2.0-2.5
7.5	ND

E-58 (10/12/16)
0.5-1.0
ND

E-35 (10/12/16)	
0.5-1.0	2.0-2.5
ND	ND

E-13 (6/25/15)	
0.5-1.0	2.0-2.5
5.19	**3.89**

PL-12 (5/8/02)
0.0-0.5
7.3

E-59 (10/12/16)
0.5-1.0
ND

PL-10 (5/8/02)
0.0-0.5
0.13

PL-11 (5/8/02)
0.0-0.5
7.7

D-11 (5/8/03)
0.0-0.5
4.5

PL-5 (5/16/02)	
0.0-0.5	2.0-2.5
2.1	**1.0**

E-47 (10/10/16)
0.5-1.0
2.83

E-72 (3/16/17)	
0.5-1.0	2.0-2.5
0.261	0.081

E-71 (3/17/17)
0.5-1.0
0.135

E-16 (6/23/15)	
0.5-1.0	2.0-2.5
1.74 D	ND

PZ-1 (06/22/15)			
0.5-1.0	2.0-2.5	2.5-3.0	4.5-5.0
1.33	0.2	0.2	0.012

PL-1 (5/14/02)	
0.0-0.5	2.0-2.5
1.2	0.025

PL-4 (5/14/02)	
0.0-0.5	2.0-2.5
0.26	**7.8**

C-10 (5/14/02)	
0.0-0.5	2.0-2.5
0.34	0.18

PL-6 (5/22/02)	
0.0-0.5	2.0-2.5
5.0	0.15

PL-3 (5/22/02)	
0.0-0.5	1.5-2.0
ND	**0.29**

E-38 (10/12/16)		
0.5-1.0	2.0-2.5	4.5-5.0
3.10	**1.10**	**0.310**

E-32 (10/12/16)				
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0	5.5-6.0
11.8 D	**5.53**	**1.13**	0.103	0.042

C-9 (5/16/02)	
0.0-0.5	2.0-2.5
3.6	ND

E-33 (10/11/16)				
0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0	5.5-6.0
11.3 D	**11.7 D**	**2.54**	**0.435**	0.070

E-18 A-9 B-9 E-2 E-32 E-33 C-9 E-17 SB-6 E-39 E-14 A-10 E-38 PL-3 E-34 SB-1 C-10 E-15 PL-4 PZ-1 PL-1 E-12 A-11 E-3 B-11 PL-6 PL-5 E-16 PL-10 E-47 E-71 E-72 C-11 A-12 PL-7 D-11 PL-11 E-59 PL-12 C-12 E-13 E-35 A-13 B-13 SB-5 D-12 SB-2 C-13 E-58 E-7 E-53 E-56 E-11 A-14 SB-4 E-57 E-4 D-13 D-14 C-14 E-69 E-70 SB-3 A-15 B-15 E-10 E-48 E-8 E-6 C-15 E-67 E-9 D-15 E-68 E-46 E-65 E-45 E-66 E-63 E-61 E-64 E-62

PROPERTY LINE

0 50 100
SCALE IN FEET

Legend

- site location
- *E-59* sample ID
- PCB > 10 mg/kg
- PCB ≤ 10 mg/kg

PCB - polychlorinated biphenyls

units - mg/kg

ND - not detected

A-4 (5/17/02)	
0.0-0.5	2.0-2.5
24	0.20

soil sample ID
depth of soil sample (ft)
total PCBs (mg\kg)

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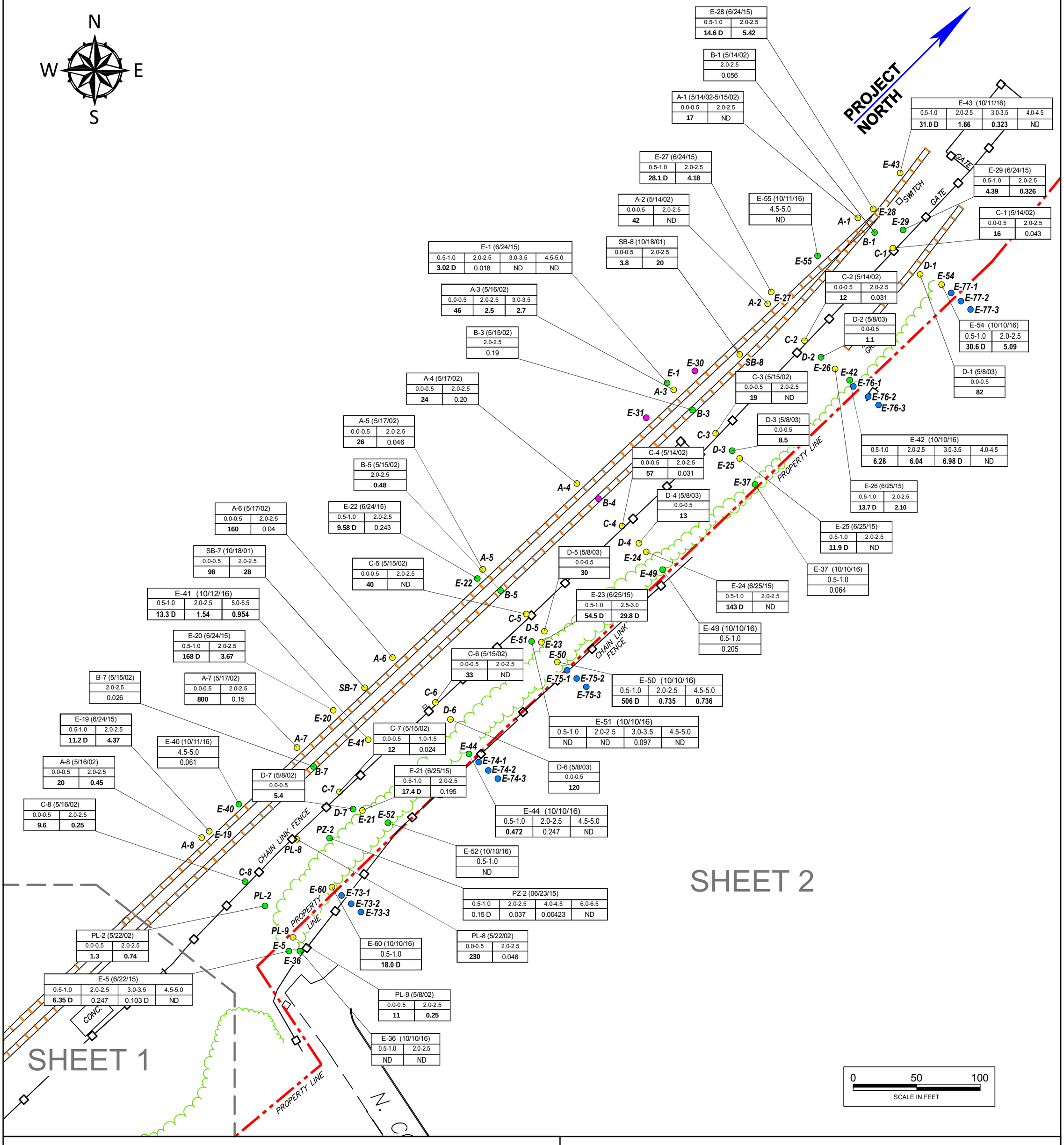
Figure 4a

Analytical Results - PCBs (Sheet 1)
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017



Legend

- site location
- *E-59* sample ID
- PCB > 10 mg/kg
- PCB ≤ 10 mg/kg
- proposed sample location
- sample not analyzed

PCB - polychlorinated biphenyls
units - mg/kg
ND - not detected

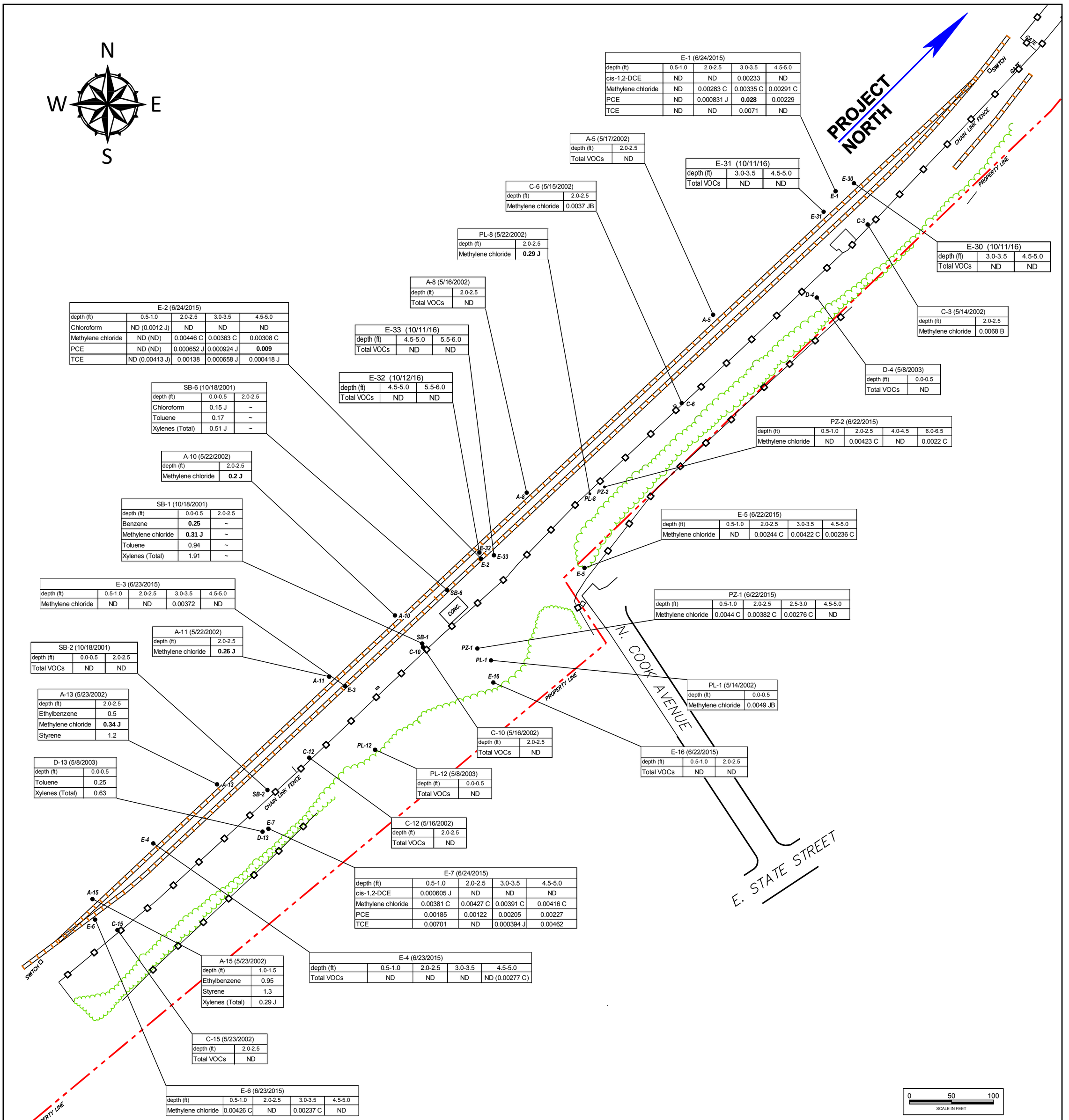
A-4 (5/17/02)	soil sample ID
0.0-0.5 | 2.0-2.5	depth of soil sample (ft)
24 | 0.20	total PCBs (mg\kg)

amec foster wheeler

Figure 4b

Analytical Results - PCBs (Sheet 2)
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017



Legend

- sample location

C-15 (5/23/2002) — soil sample ID
depth (ft) 2.0-2.5 — depth of soil sample (ft)
Total VOCs ND — analyte concentration (mg\kg)
analyte

Screening Criteria (mg\kg)

	RDCSRS	NRDCSRS	IGWSSL
1,2-Dichloroethene (cis)	230	560	0.3
1,4-Dioxane	NS	NS	NS
Benzene	2	5	0.005
Chloroform	0.6	2	0.4
Ethylbenzene	7800	110000	13
Methylene chloride	34	97	0.01
Styrene	90	260	3
Tetrachloroethene (PCE)	2	5	0.005
Toluene	6300	91000	7
Trichloroethene (TCE)	7	20	0.01

RDCSRS - residential direct contact soil remediation standard
NRDCSRS - non-residential direct contact soil remediation standard
IGWSSL - impact to ground water soil screening levels

amec foster wheeler

Figure 5

Analytical Results - VOCs
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017

N

W E

S

PROJECT NORTH

E-1-(6/24/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

A-5 (5/17/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

C-3 (5/15/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

D-4 (5/8/2003)	
Depth (ft)	0.0-0.5
Chlordane	0.013
P,P'-DDT	0.24

E-2-(6/24/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

SB-6 (10/18/2001)	
Depth (ft)	0.0-0.5
Dieldrin	**18**
Endrin	**35**
Endrin aldehyde	10
P,P'-DDE	7
P,P'-DDT	**50**

A-8 (5/16/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

C-6 (5/15/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

A-10 (5/22/2002)	
Depth (ft)	2.0-2.5
Endrin	0.052
Endrin aldehyde	0.031
Heptachlor epoxide	0.0049
Methoxychlor	0.021
P,P'-DDT	0.11

PZ-2 (6/23/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	4.0-4.5	6.0-6.5
Total Pesticides	ND	ND	ND	ND

E-3 (6/23/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

PL-8 (5/14/2002)	
Depth (ft)	2.0-2.5
P,P'-DDT	0.0063

A-11 (5/22/2002)	
Depth (ft)	2.0-2.5
Endrin aldehyde	0.0038
Methoxychlor	0.011
P,P'-DDT	0.025

E-5 (6/22/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

C-12 (5/16/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

PZ-1 (6/22/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	2.5-3.0	4.5-5.0
Total Pesticides	ND	ND	ND	ND

A-13 (5/23/2002)	
Depth (ft)	2.0-2.5
Endrin	0.066
Endrin aldehyde	0.03
P,P'-DDT	0.093

PL-1 (5/14/2002)	
Depth (ft)	0.0-0.5
P,P'-DDT	0.16

E-4 (6/23/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

C-10 (5/16/2002)	
Depth (ft)	2.0-2.5
Total Pesticides	ND

SB-1 (10/18/2001)	
Depth (ft)	0.0-0.5
Dieldrin	**0.26**
Endrin	0.58
Endrin aldehyde	0.2
P,P'-DDT	0.97

C-15 (5/23/2002)	
Depth (ft)	2.0-2.5
Endrin	0.0042
P,P'-DDT	0.0053

PL-12 (5/8/2003)	
Depth (ft)	0.0-0.5
Total Pesticides	ND

A-15 (5/23/2002)	
Depth (ft)	1.0-1.5
Endrin	0.45
P,P'-DDT	0.52

E-7 (6/24/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

E-53 (10/12/16)	
Depth (ft)	0.5-1.0
Total Pesticides	ND

D-13 (5/8/2003)	
Depth (ft)	0.0-0.5
Dieldrin	**0.35**
P,P'-DDE	0.072
P,P'-DDT	0.2

E-48 (10/12/16)	
Depth (ft)	0.5-1.0
Total Pesticides	ND

E-6 (6/23/2015)				
Depth (ft)	0.5-1.0	2.0-2.5	3.0-3.5	4.5-5.0
Total Pesticides	ND	ND	ND	ND

GATE SWITCH GATE CHAIN LINK FENCE PROPERTY LINE CONC. SWITCH CHAIN LINK FENCE PROPERTY LINE

N. COOK AVENUE

E. STATE STREET

0 50 100
SCALE IN FEET

Legend

● sample location

E-48 (10/12/16) — soil sample ID
Depth (ft) 0.5-1.0 — depth of soil sample (ft)
Total Pesticides ND — analyte concentration (mg\kg)
analyte

Screening Criteria (mg\kg)

	RDCSRS	NRDCSRS	IGWSSL
Chlordane	0.2	1	0.05
Dieldrin	0.04	0.2	0.003
Endrin	23	340	1
Endrin aldehyde	NS	NS	NS
Endrin ketone	NS	NS	NS
Heptachlor epoxide	0.07	0.3	0.01
Methoxychlor	390	5700	160
P,P'-DDE	2	9	18
P,P'-DDT	2	8	11

RDCSRS - residential direct contact soil remediation standard
NRDCSRS - non-residential direct contact soil remediation standard
IGWSSL - impact to ground water soil screening levels

amec foster wheeler

Figure 6

Analytical Results - Pesticides
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	APRIL 2017

APPENDIX A
SOIL BORING LOGS/WELL FORMS

New Jersey State Department of Environmental Protection
Bureau of Water Allocation and Well Permitting
Mail Code 401-04Q PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201506901

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: VICTOR MUSHINSKI, MONITORING LICENSE # 233858

Permit Issued to: ENVIRONMENTAL MANAGEMENT ASSOC

Company Address: 5303 RT 33/34 FARMINGDALE, NJ 07727

PROPERTY OWNER

Name: AMTRAK F/K/A UNJRR & CO

Organization: Amtrak F/K/A UNJRR & Co

Address: P.O Box 76654

City: Washington State: District of Columbia Zip Code: 20002

PROPOSED WELL LOCATION

Facility Name: Amtrak East Barracks Rail Yard

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 1 Block: 25201

Easting (X): 423927 Northing (Y): 507222
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: PZ-1

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: PIEZOMETER

Other Use(s):

Diameter (in.): 2

Regulatory Program Requiring Wells/Borings:

Depth (ft.): 25

Case ID Number:

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments:

SPECIFIC CONDITIONS/REQUIREMENTS

Terry D. Pilawski

Approval Date: June 23, 2015
Expiration Date: June 22, 2016

Approved by the authority of:
Bob Martin
Commissioner

Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

New Jersey State Department of Environmental Protection
Bureau of Water Allocation and Wells
PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201506901

WELL PERMIT

%%:activity_class_well%%

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
A well record must be submitted by the well driller to the Bureau of Water Systems and Well Permitting. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the well record shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Record: within ninety (90) days after the well is completed.[N.J.A.C. 7:9D-1]
All well drilling/pump installation activities shall comply with N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
For this permit to remain valid, the well approved in this permit shall be constructed within one year of the effective date of the permit. [N.J.A.C. 7:9D-1]
If the pump capacity applied for is less than 70 gpm, no subsequent increase to 70 gpm or more shall be made without prior approval of the Bureau of Water Systems and Well Permitting. [N.J.A.C. 7:9D-1]
If the use of the well is to be changed a well permit for the proposed use of the well shall be submitted for review and approval. [N.J.A.C. 7:9D-1]
If you or a future property owner intend to redesignate this well as a Category 1 well (domestic, non-public, community water supply or public non-community water supply wells), the well must be constructed as a Category 1 well per the Well Construction and Abandonment Regulations at N.J.A.C. 7:0D-1.1 et seq. In addition, if the current or future property owner intends to have this well redesignated as a community water supply well, the well must be constructed by a Master well driller, which would include having a Master well driller on-site at all times during construction of the well, as specified in the Well Construction and Abandonment Regulations. Otherwise, the New Jersey Department of Environmental Protection will not allow the well to be redesignated, and a new well would have to be installed. [N.J.A.C. 7:9D-1.7((a))1i]
In accepting this permit the Property Owner and Driller agree to abide by the following terms and conditions [N.J.A.C. 7:9D-1]
In the event that this well is not constructed the well driller shall notify the Bureau of Water Systems and Well Permitting of the permit cancellation. Unless prior written approval is obtained from the Bureau of Water Systems and Well Permitting the Cancellation notification shall be submitted electronically through the New Jersey Department of Environmental Protection's Regulatory Services Portal Submit Well Permit Cancellation : by the expiration date of this permit.[N.J.A.C. 7:9D-1]
In the event this well is abandoned, the Owner or Well driller shall assume full responsibility for having the well decommissioned in a manner satisfactory to the New Jersey Department of Environmental Protection in accordance with the provisions of N.J.A.C. 7:9D-1 et seq. [N.J.A.C. 7:9D-1]
The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]

New Jersey State Department of Environmental Protection
Bureau of Water Allocation and Well Permitting
Mail Code 401-04Q PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201506902

WELL PERMIT

New Well

The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit

Certifying Driller: VICTOR MUSHINSKI, MONITORING LICENSE # 233858

Permit Issued to: ENVIRONMENTAL MANAGEMENT ASSOC

Company Address: 5303 RT 33/34 FARMINGDALE, NJ 07727

PROPERTY OWNER

Name: AMTRAK F/K/A UNJRR & CO

Organization: Amtrak F/K/A UNJRR & Co

Address: P.O. Box 76654

City: Washington State: District of Columbia Zip Code: 20002

PROPOSED WELL LOCATION

Facility Name: Amtrak East Barracks Rail Yard

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 2 Block: 25301

Easting (X): 424107 Northing (Y): 507442
Coordinate System: NJ State Plane (NAD83) - USFEET

Local ID: PZ-2

SITE CHARACTERISTICS

PROPOSED CONSTRUCTION

WELL USE: PIEZOMETER

Other Use(s):

Diameter (in.): 2

Regulatory Program Requiring Wells/Borings:

Depth (ft.): 25

Case ID Number:

Pump Capacity (gpm): 0

Deviation Requested: N

Drilling Method: Hollow Stem Augers

Attachments:

SPECIFIC CONDITIONS/REQUIREMENTS

Approved by the authority of:
Bob Martin
Commissioner

Terry D. Pilawski

Terry Pilawski, Chief
Bureau of Water Allocation and Well Permitting

Approval Date: June 23, 2015
Expiration Date: June 22, 2016

New Jersey State Department of Environmental Protection
Bureau of Water Allocation and Wells
PO BOX 420 Trenton, NJ 08625-0420 Tel: 609-984-6831

Well Permit Number
E201506902

WELL PERMIT

%%:activity_class_well%%

DEVIATION INFORMATION	
Purpose:	
Unusual Conditions:	
Reason for Deviation:	
Proposed Well Construction	

GENERAL CONDITIONS/REQUIREMENTS
A copy of this permit shall be kept at the worksite / on the property and shall be exhibited upon request. [N.J.A.C. 7:9D-1]
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The granting of this permit shall not be construed in any way to affect the title or ownership of property, and shall not make the New Jersey Department of Environmental Protection or the State a party in any suit or question of ownership of property. [N.J.A.C. 7:9D-1]
The issuance of this permit shall not be deemed to affect in any way action by the New Jersey Department of Environmental Protection on any future application. [N.J.A.C. 7:9D-1]
This permit conveys no rights, either expressed, or implied to divert water. [N.J.A.C. 7:9D-1]
This permit does not waive the obtaining of Federal or other State or local Government consent when necessary. This permit is not valid and no work shall be undertaken until such time as all other required approvals and permits have been obtained. [N.J.A.C. 7:9D-1]
This permit is NONTRANSFERABLE [N.J.A.C. 7:9D]
This well shall not be used for the supply of potable / drinking water. [N.J.A.C. 7:9D-1]

PEIZOMETER CONSTRUCTION DIAGRAM

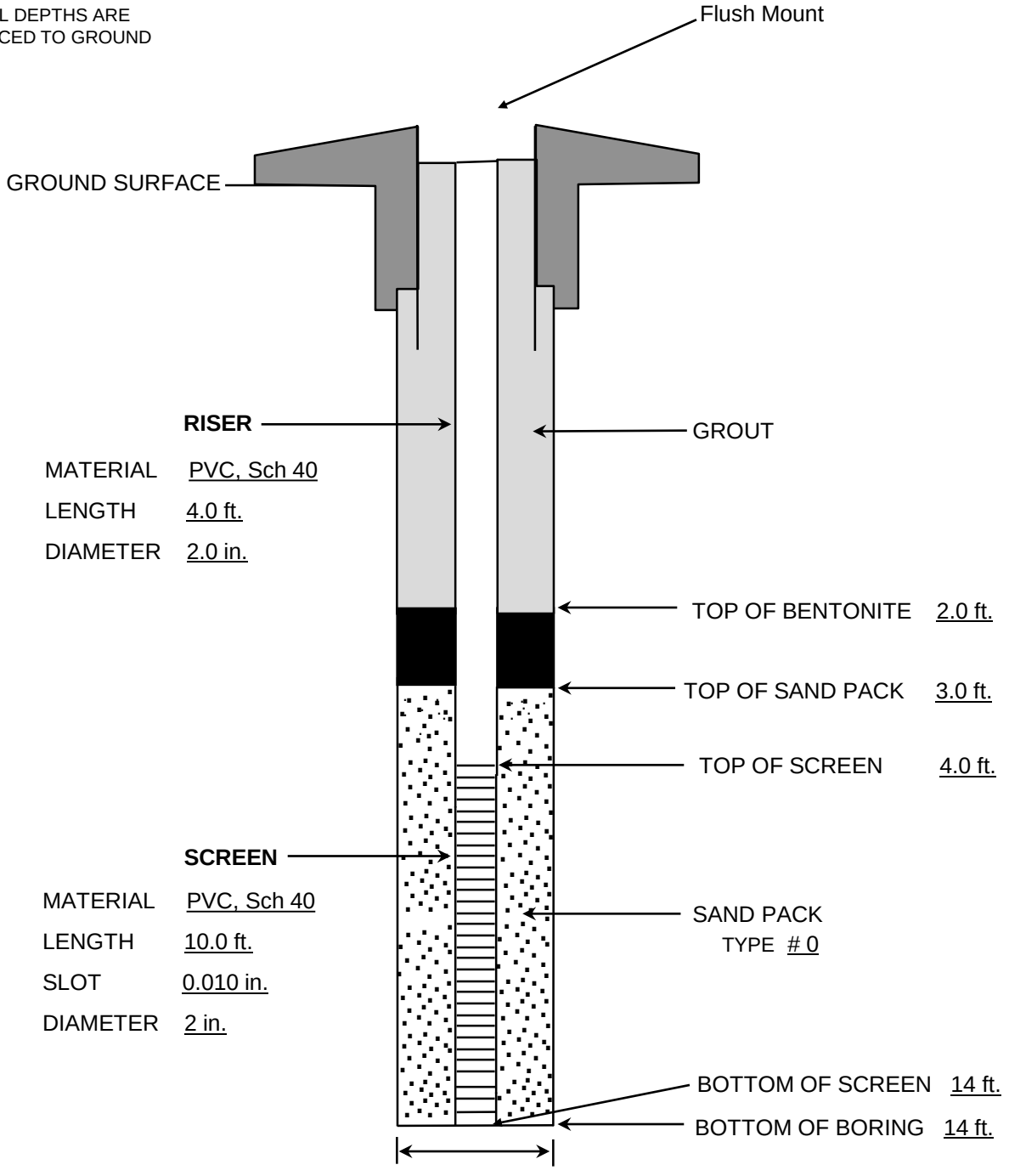
PROJECT NAME: **Amtrak East Barracks** DATE INSTALLED: 6/22/2015 WELL ID: **PZ-1**

PROJECT NUMBER: **277710568** DRILLING COMPANY: **EMA** METHOD: **GeoProbe**

WELL PERMIT NO. **E201506901** GEOLOGIST: **N.DellaFave**

REMARKS: **Rig: Geoprobe 54LT**

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE



NOT TO SCALE

PEIZOMETER CONSTRUCTION DIAGRAM

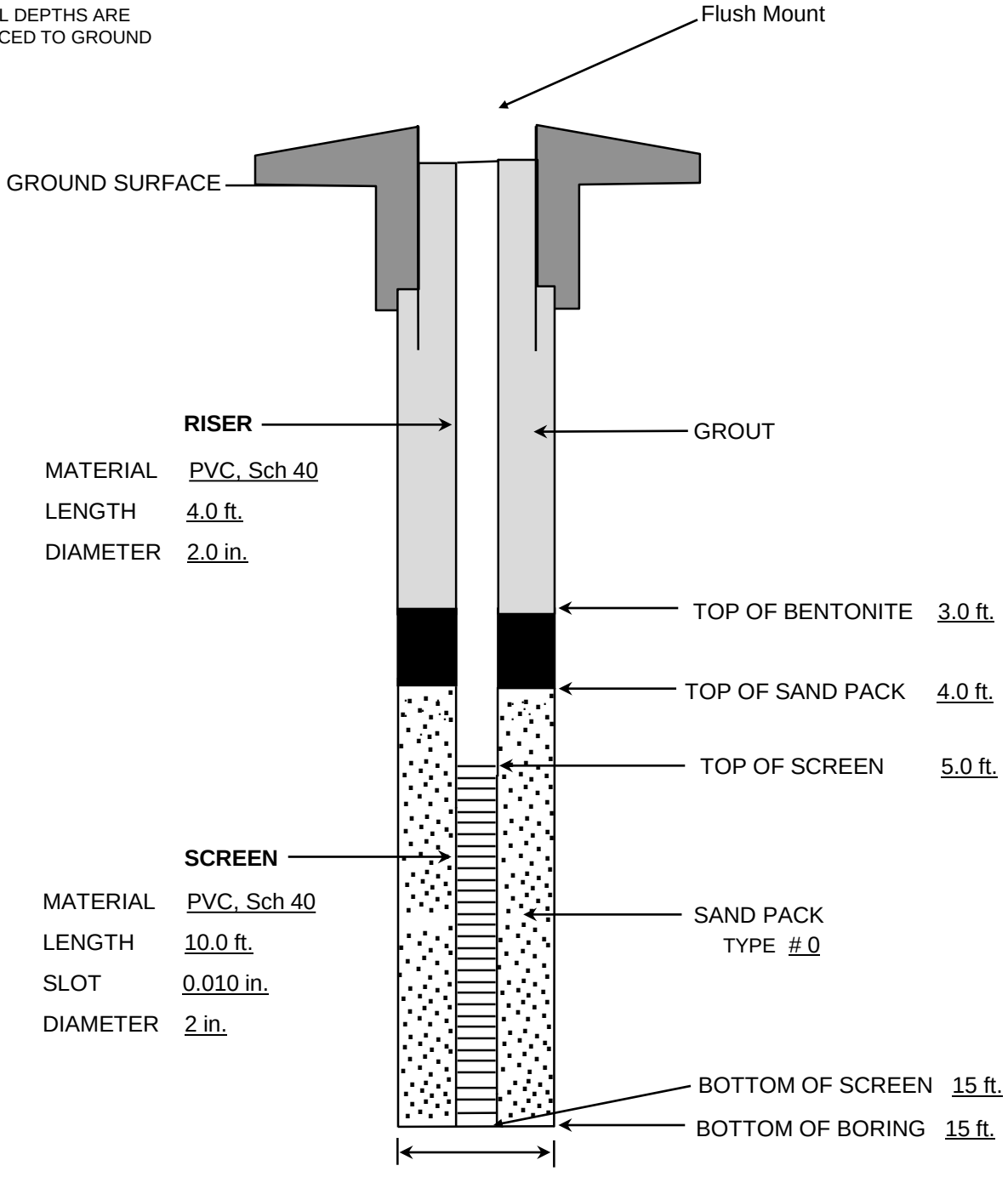
PROJECT NAME: **Amtrak East Barracks** DATE INSTALLED: **6/23/17** WELL ID: **PZ-2**

PROJECT NUMBER: **277710568** DRILLING COMPANY: **EMA** METHOD: **GeoProbe**

WELL PERMIT NO. **E201506902** GEOLOGIST: **N.DellaFave**

REMARKS: **Rig: Geoprobe 54LT**

NOTE: ALL DEPTHS ARE REFERENCED TO GROUND SURFACE



NOT TO SCALE

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Amtrak East Barraks

List all AKAs:

Street Address: North Cook Ave

Municipality: City of Trenton (Township, Borough or City)

County: Mercer Zip Code: 08608

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner: Amtrak F/K/A UNJRR & Co
2. Well Location (Street Address):
3. Well Location (Municipal Block and Lot) Block# 25201 Lot # 1

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):..	E2015056901
2. Site Well Number as shown on application or plans):	PZ-1
3. Well Completion Date:	06/24/2015
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	40
5. Total Depth of Well to the nearest ½ foot:	
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):.....	4
7. Screen Length (or length of open hole) in feet:	14
8. Screen or Slot Size:	10
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	5
13. Yield (gallons per minute):	2 GPM
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1 Hour

New Jersey Department of Environmental Protection
Site Remediation Program

MONITORING WELL CERTIFICATION FORM A - AS-BUILT CERTIFICATION

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Amtrak East Barraks

List all AKAs:

Street Address: North Cook Avenue

Municipality: City of Trenton (Township, Borough or City)

County: Mercer Zip Code: 08608

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Amtrak F/K/A
2. Well Location (Street Address)
3. Well Location (Municipal Block and Lot) Block# 25201 Lot # 1

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing):..	E201506902
2. Site Well Number as shown on application or plans):	PZ-2
3. Well Completion Date:	6/24/2015
4. Distance from Top of Casing (cap off) to ground surface (nearest 0.01'):	40
5. Total Depth of Well to the nearest ½ foot:	
6. Depth to Top of Screen (or top of open hole) from top of casing (nearest 0.01'):.....	5
7. Screen Length (or length of open hole) in feet:	15
8. Screen or Slot Size:	10
9. Screen or Slot Material:	PVC
10. Casing Material (PVC, steel, or other – specify):	PVC
11. Casing Diameter (inches):	2
12. Static Water Level from top of casing at the time of installation (nearest 0.01'):	7
13. Yield (gallons per minute):	2 GPM
14. Development Techinque (specify):	Submersible Pump
15. Length of Time well is developed/pumped or bailed (hours and minutes):	1 Hour

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Amtrack East Barracks

List all AKAs:

Street Address: North Cook Avenue

Municipality: City of Trenton (Township, Borough or City)

County: Mercer Zip Code: 08608

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Amtrak F/K/A UNJRR &Co
2. Well Location (Street Address)
3. Well Location (Municipal Block and Lot) Block# 25201 Lot # 1

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201506901
2. Site Well Number (As shown on application or plans): PZ-1
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40°13'32.6" Longitude: West 74°44'38.9"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 507226 East 423961
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 39.27
   Elevation Top of Outer casing: 39.81 Elevation of ground: 39.70
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
   BENCHMARK: NJTR NJTR TRENTON CORS ARP
   ELEV=244.88 (NAVD 88 DATUM)
7. Significant observations and notes:
   HORIZONTAL DATUM NAD 83 (2011)
   VERTICAL DATUM NAVD 88 (GEOID 12A)

SECTION D. LAND SURVEYOR'S CERTIFICATION

SEAL

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: Date 11/17/15

Surveyor's Name: James J. Heiser License Number: 24GS04331100

Firm Name: DPK Consulting, LLC Certificate of Authorization #: 24GA28042200

Mailing Address 147 Union Avenue - Suite 1C

City/Town: Middlesex State New Jersey Zip Code: 08846

Phone Number 732.764.0100 Fax: 732.764.0990 Job # 15-6807

New Jersey Department of Environmental Protection
Site Remediation Program

Monitoring Well Certification Form B - Location Certification

Date Stamp
(For Department use only)

SECTION A. SITE NAME AND LOCATION

Site Name: Amtrack East Barracks

List all AKAs:

Street Address: North Cook Avenue

Municipality: City of Trenton (Township, Borough or City)

County: Mercer Zip Code: 08608

Program Interest (PI) Number(s): Case Tracking Number(s):

SECTION B. WELL OWNER AND LOCATION

1. Name of Well Owner Amtrak F/K/A UNJRR &Co
2. Well Location (Street Address)
3. Well Location (Municipal Block and Lot) Block# 25201 Lot # 1

SECTION C. WELL LOCATION SPECIFICS

1. Well Permit Number (This number must be permanently affixed to the well casing): E201506902
2. Site Well Number (As shown on application or plans): PZ-2
3. Geographic Coordinate NAD 83 to nearest 1/100 of a second:
   Latitude: North 40°13'34.4" Longitude: West 74°44'37.1"
4. New Jersey State Plane Coordinates NAD 83 datum, US survey feet units, to nearest foot:
   North 507413 East 424100
5. Elevation of Top of Inner Casing (cap off) at reference mark (nearest 0.01'): 39.96
   Elevation Top of Outer casing: 40.22 Elevation of ground: 39.95
   Check one: ☒ NAVD 88 ☐ NVGD29 ☐ On Site Datum ☐ Other
6. Source of elevation datum (benchmark, number/description and elevation/datum). If an on-site datum is used, identify here, assume datum of 100', and give approximated actual elevation (referencing NAVD 88).
   BENCHMARK: NJTR NJTR TRENTON CORS ARP
   ELEV=244.88 (NAVD 88 DATUM)
7. Significant observations and notes:
   HORIZONTAL DATUM NAD 83 (2011)
   VERTICAL DATUM NAVD 88 (GEOID 12A)

SECTION D. LAND SURVEYOR'S CERTIFICATION

SEAL

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature: Date 11/17/15

Surveyor's Name: James J. Heiser License Number: 24GS04331100

Firm Name: DPK Consulting, LLC Certificate of Authorization #: 24GA28042200

Mailing Address 147 Union Avenue - Suite 1C

City/Town: Middlesex State New Jersey Zip Code: 08846

Phone Number 732.764.0100 Fax: 732.764.0990 Job # 15-6807

Service ID: 708247

This document has not yet been reviewed and approved or denied by the NJ DEP. Deficiencies in submittal information or actual construction may result in denial.

WELL RECORD SUBMITTAL PDF

PROPERTY OWNER: Amtrak F/K/A UNJRR & Co

Organization: Amtrak F/K/A UNJRR & Co

Address: P.O Box 76654, Washington, District of Columbia 20002

WELL LOCATION: Amtrak East Barracks Rail Yard

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 1 Block: 25201

Easting(X): 423961 Northing(Y): 507226 Coordinate System: NJ State Plane (NAD83) - USFEET

Method: Survey frm Benchmark Point of Reference: Well

GPS Manufacturer: Surveyor Name: James Heiser

GPS Model: Surveyor License #: 24gs04331100

Accuracy: 1 Accuracy units: Feet

WELL USE: Piezometer **DATE WELL STARTED:** 06/22/2015

Other Use(s): **DATE WELL COMPLETED:** 06/22/2015

WELL CONSTRUCTION

Permit Number Total Depth Drilled(ft): 14 Drilling Company:

E201506901 Finished Well Depth(ft): 14 Driller Name: Victor Mushinski

Local ID: PZ-1 Well was finished: Flush Mount License No.: 233858

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating/Screen Slot # (lbs/sch no.)
Borehole(s)	0	14	7	N/A	N/A
Casing(s)	0	4	2	PVC	SCH 40
Screen(s)	4	14	2	PVC	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	3	7	2	10	90	4
Gravel Pack	3	14	7	2	Fill Pro # 1		

Grouting Method: Gravity method Drilling Method: Hollow Stem Augers

Additional Information:

Attachments:

RECORD OF TEST

Depth to Pump: ft. below land surface

Test Date: Pump Capacity: gpm

Static Water Level: 5 ft. below land surface

Pumping Water Level: ft. below land surface

Water Level Measure Tool: tape

Pumping Equipment:

Well Yield: gpm

Total Design Head: ft.

Pump Horsepower:

If pump tested Discharge Rate: gpm

Duration of Test: hours

Date Boring Decommissioned:

PUMPING EQUIPMENT AND ADDITIONAL INFORMATION

Installed:

Installer's Name:

Installer's Registration No.:

Pump Type:

Well Development Period: .5 hours

Method of Development:

Protective Casing: No

Drilling Fluid:

Drill Rig: Geoprobe 7720

Health and Safety Plan: No

GEOLOGIC LOG

Depth to Top	Depth to Bottom	Color	USCS	Additional Description
0	1	black	GW - Well-graded gravels and gravel-sand mixtures, little or no fines	
1	9	brown	SM - Silty sands, sand-silt mixtures	
9	14	orange	GM - Silty gravels, gravel-sand-silt mixtures	

Service ID: 708255

This document has not yet been reviewed and approved or denied by the NJ DEP. Deficiencies in submittal information or actual construction may result in denial.

WELL RECORD SUBMITTAL PDF

PROPERTY OWNER: Amtrak F/K/A UNJRR & Co

Organization: Amtrak F/K/A UNJRR & Co

Address: P.O. Box 76654, Washington, District of Columbia 20002

WELL LOCATION: Amtrak East Barracks Rail Yard

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 2 Block: 25301

Easting(X): 424100 Northing(Y): 507413 Coordinate System: NJ State Plane (NAD83) - USFEET

Method: Survey frm Benchmark Point of Reference: Well

GPS Manufacturer: Surveyor Name: James Heiser

GPS Model: Surveyor License #: 24gs04331100

Accuracy: 1 Accuracy units: Feet

WELL USE: Piezometer **DATE WELL STARTED:** 06/23/2015

Other Use(s): **DATE WELL COMPLETED:** 06/23/2015

WELL CONSTRUCTION

Permit Number Total Depth Drilled(ft): 15 Drilling Company:

E201506902 Finished Well Depth(ft): 15 Driller Name: Victor Mushinski

Local ID: PZ-2 Well was finished: Flush Mount License No.: 233858

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating/Screen Slot # (lbs/sch no.)
Borehole(s)	0	15	7	N/A	N/A
Casing(s)	0	5	2	PVC	SCH 40
Screen(s)	5	15	2	pvc	.010

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	4	7	2	10	90	4
Gravel Pack	4	15	7	2	Fill pro # 1		

Grouting Method: Gravity method Drilling Method: Hollow Stem Augers

Additional Information:

Attachments:

RECORD OF TEST

Test Date: Depth to Pump: ft. below land surface

Pump Capacity: gpm

Static Water Level: 6.5 ft. below land surface

Pumping Water Level: _____ ft. below land surface

Water Level Measure Tool: Tape

Pumping Equipment: _____

Well Yield: _____ gpm

Total Design Head: _____ ft.

Pump Horsepower: _____

If pump tested Discharge Rate: _____ gpm

Duration of Test: _____ hours

Date Boring Decommissioned: _____

PUMPING EQUIPMENT AND ADDITIONAL INFORMATION

Installed: _____

Installer's Name: _____

Installer's Registration No.: _____

Pump Type: _____

Well Development Period: .5 hours

Method of Development: _____

Protective Casing: No

Drilling Fluid: _____

Drill Rig: Geoprobe 7720

Health and Safety Plan: No

GEOLOGIC LOG

Depth to Top	Depth to Bottom	Color	USCS	Additional Description
0	3	Black	GM - Silty gravels, gravel-sand-silt mixtures	
3	5	Brown	SM - Silty sands, sand-silt mixtures	
5	15	Orange	GM - Silty gravels, gravel-sand-silt mixtures	

Service ID: 708268

This document has not yet been reviewed and approved or denied by the NJ DEP. Deficiencies in submittal information or actual construction may result in denial.

WELL DECOMMISSIONING SUBMITTAL PDF

PROPERTY OWNER: Amtrak F/K/A UNJRR&CO Amtrak F/K/A UNJRR&CO

Organization: Amtrak F/K/A UNJRR&CO

Address: PO Box 76654, Washington, District of Columbia 20002

WELL LOCATION: Amtrak East Barracks Rail Yard

Well Location Description: 124 ft north of cook ave 482 ft northwest of east state street

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 2 Block: 25301

Easting(X): 424100 Northing(Y): 507413 Coordinate System: NJ State Plane (NAD83) - USFEET

Method: Survey frm Benchmark Point of Reference: Well

GPS Manufacturer: Surveyor Name:

GPS Model: Surveyor License #:

Accuracy: 1 Accuracy units: Feet

WELL USE: Monitoring **DATE WELL**

Other Use(s): **DECOMMISSIONED:** 03/16/2017

Reason for Decommissioning: No longer in use

Was a New Well Drilled? No New Well Permit Number:

WELL DECOMMISSIONING INFORMATION

Permit Number: E201506902

Local ID: PZ-2 Drilling Company: ENVIRONMENTAL MANAGEMENT ASSOC

Finished Well Depth (ft.): 15 Address: 5303 Rt. 33/34, Farmingdale (Monmouth), New Jersey 07727

Formation Type: Unconsolidated Driller Name and Lic.: Victor Mushinski, 233858

Well Search Completed? No

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating/Screen Slot # (lbs/sch no.)
Borehole(s)				N/A	N/A
Casing(s)	0	5	2	PVC	SCH 40
Screen(s)	5	15	2	PVC	.010

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	15	2	0	0	100	5.5

Gravel Pack					

Grouting Method: _____

ADDITIONAL INFORMATION

Obstructions: No

Obstruction Type: _____

Alternative Decomm. Method? No

Method Used: _____

Authorization Official: _____

Authorization Number: _____

Authorization Date: _____

ATTACHMENTS: _____

Service ID: 708261

This document has not yet been reviewed and approved or denied by the NJ DEP. Deficiencies in submittal information or actual construction may result in denial.

WELL DECOMMISSIONING SUBMITTAL PDF

PROPERTY OWNER: Amtrak F/K/A UNJRR & Co Amtrak F/K/A UNJRR & Co

Organization: Amtrak F/K/A UNJRR & Co

Address: PO Box 76654, Washington, District of Columbia 20002

WELL LOCATION: Amtrak East Barracks Rail Yard

Well Location Description: 125 ft west of n cook ave 405 ft north of e. state street

Address: near N. Cook Avenue rail road tracks

County: Mercer Municipality: Trenton City Lot: 1 Block: 25201

Easting(X): 423961 Northing(Y): 507226 Coordinate System: NJ State Plane (NAD83) - USFEET

Method: Survey frm Benchmark Point of Reference: Well

GPS Manufacturer: Surveyor Name:

GPS Model: Surveyor License #:

Accuracy: 1 Accuracy units: Feet

WELL USE: Monitoring **DATE WELL**

Other Use(s): **DECOMMISSIONED:** 03/16/2017

Reason for Decommissioning: No longer in use

Was a New Well Drilled? No New Well Permit Number:

WELL DECOMMISSIONING INFORMATION

Permit Number: E201506901

Local ID: PZ-1 Drilling Company: ENVIRONMENTAL MANAGEMENT ASSOC

Finished Well Depth (ft.): 14 Address: 5303 Rt. 33/34, Farmingdale (Monmouth), New Jersey 07727

Formation Type: Unconsolidated Driller Name and Lic.: Victor Mushinski, 233858

Well Search Completed? No

	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating/Screen Slot # (lbs/sch no.)
Borehole(s)				N/A	N/A
Casing(s)	0	4	2	PVC	SCH 40
Screen(s)	4	14	2	pvc	.010

MATERIALS USED

	Depth to Top (ft.)	Depth to Bottom (ft.)	Outer Diameter (in)	Inner Diameter (in)	Material		
					Bentonite (lbs.)	Neat Cement (lbs.)	Water (gal.)
Grout	0	14	2	0	0	100	5.5

Gravel Pack					

Grouting Method: _____

ADDITIONAL INFORMATION

Obstructions: No

Obstruction Type: _____

Alternative Decomm. Method? No

Method Used: _____

Authorization Official: _____

Authorization Number: _____

Authorization Date: _____

ATTACHMENTS: _____

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	PZ-1	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 22JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 22JUN15
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, some cmf Gravel (fill)	
	X	45.1		Sample - PZ-1-0.5-1.0
			Black and Brown cmf SAND, some cmf Gravel (fill)	
2	X	25.0	Brown cmf SAND, some cmf Gravel (fill)	Sample - PZ-1-2.0-2.5
	X	0		Sample - PZ-1-2.5-3.0
			Brown mf SAND, little cmf Gravel, moist	
4			Brown cmf SAND, little mf Gravel, moist	
	X	0	Orange cm SAND, trace mf Gravel, wet	Sample - PZ-1-4.5-5.0
				Approx. Water Level = 5.0' bgs
		0		
6				
		0		
		0		
8			Light Brown and Tan mf SAND, trace Silt, trace mf Gravel, dense, moist	
		0		
			Orange cmf SAND, little mf Gravel, wet	
		0		
10				
		0		
		0		
12				
		0		
			Orange mf SAND, moist	
		0		
14			Orange cmf SAND, some cmf Gravel, wet	
		0	Light Brown and Tan SILT, trace Clay, trace f Gravel, very dense, moist	
			EOB @ 15 ft bgs	
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	PZ-2	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 22JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 22JUN15
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Grass, roots, topsoil, organics	
	X	0	Black cmf SAND, little mf Gravel, trace c Gravel, coal ash (fill)	Sample PZ-2-0.5-1.0 @12:27
2	X	0		Sample PZ-2-2.0-2.5 @12:45
		0	Brown cmf SAND, little cmf Gravel	
4	X	0		Sample PZ-2-4.0-4.5 @12:53
		0	Orange CLAY, trace Silt, trace f Gravel, very dense, moist	
6	X	0	Light Grey SILT and CLAY, little mf Sand, moist	Sample PZ-2-6.0-6.5 @13:00
				Approx. Water Level 6.5' bgs
		0		
8		0	Orange cmf SAND, trace mf Gravel, trace Silt, dense, wet	
		0		
			Orange and Brown cmf SAND, some Silt, little mf Gravel, trace c Gravel, very dense, wet	
10		0		
		0		
12		0		
		0		
14		0		
		0		
16			EOB @ 16 ft bgs Refusal	

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-1	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N.DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf rounded Gravel, coal ash (fill)	1 Foot of Ballast Above Sample
	☒	15		Sample E-1-0.5-1.0 @09:00
			Dark Brown cmf SAND, trace cm rounded Gravel (fill)	
2				
	☒	12		Sample E-1-2.0-2.5 @ 0953
				Geoprobe Begins
	☒	0	Light Brown SILT, trace c Sand, trace f Gravel, dense	Sample E-1-3.0-3.5 @09:55
4				
			Light Brown SILT and CLAY, trace coarse Sand, hard	
	☒	0		Sample E-1-4.5-5.0 @10:00
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-2	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N.DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, coal ash (fill)	
	☒	40		Sample E-2-0.5-1.0 @11:30
				X-3-0.5-1.0
			Brown cmf SAND, trace cm rounded Gravel (fill)	
2	☒	0		Sample E-2-2.0-2.5 @11:40
			Dark Brown cm SAND, trace f Sand, trace cm Gravel	
	☒	0		Sample E-2-3.0-3.5 @11:45
			Dark Brown cmf SAND, trace cmf Gravel, moist	
4	☒	0		Sample E-2-4.0-4.5 @ 12:00
			EOB @ 4.5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-3	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N.DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace mf Gravel (fill)	1 Foot of Ballast Above Sample
	☒	0		Sample E-3-0.5-1.0 @11:08
			Brown cmf SAND, trace cmf Gravel	
2	☒	0		Sample E-3-2.0-2.5 @11:15
	☒	0		Sample E-3-3.0-3.5
4			Dark Brown mf SAND, trace mf Gravel	
	☒	0	Brown cm SAND, trace cmf Gravel	Sample E-3-4.5-5.0
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-4	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Brown cmf SAND, little cm rounded Gravel	1.5 Foot of Ballast above Sample
	X	30.5		Sample E-4-0.5-1.0
			Brown cm SAND, little cmf Gravel, trace f Sand	
2	X	0		Sample E-4-2.0-2.5 @09:45
	X	0	Brown cmf SAND, trace cmf Gravel	Sample E-4-3.0-3.5 @09:52
4				
	X	0	Light Brown cm SAND, trace cmf Gravel, moist	Sample E-4-4.5-5.0 @10:10
			EOB @ 5 ft bgs	X-1-4.5-5.0
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-5	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 22JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 22JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, little mf Gravel, trace c Gravel (fill)	
	X	0		Sample E-5-0.5-1.0
2	X	0	Dark Brown cmf SAND, little cmf Gravel, moist	Sample E-5-2.0-2.5 @13:36
	X	0	Dark Brown cmf SAND, trace mf Gravel, coal ash (fill)	Sample E-5-3.0-3.5 @13:55
4	X	0	Brown cmf SAND, trace cmf Gravel, moist	Sample E-5-4.5-5.05 @14:15
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-6	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cm SAND, little cmf Gravel, coal ash (fill)	1 Foot of Ballast above Sample
	☒	0		Sample E-6-0.5-1.0 @08:25
			Brown cmf SAND, little cm rounded Gravel	
2				
	☒	0		Sample E-6-2.0-2.5
			Dark Brown cm SAND, trace c Gravel, wet	Geoprobe Begins
	☒	0		Sample E-6-3.0-3.5 @08:48
4				
	☒	0	Light Brown cm SAND, little mf Gravel, wet	Sample E-6-4.5-5.0 @08:43
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-7	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Grey cm SAND, trace cmf Gravel	
	X	0		Sample E-7-0.5-1.0 @ 1255
			Light Brown cmf SAND, little m Gravel, trace c Gravel	
2				
	X	0	Brown cm SAND, trace f Sand, trace cmf rounded Gravel	Sample E-7-2.0-2.5 @1303
	X	0		Sample E-7-3.0-3.5 @ 1322
4			Brown SILT, trace Clay, trace m Gravel, moist	
	X	0		Sample E-7-4.5-5.0 @13:27
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis. HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-8	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace mf Gravel, coal ash (fill)	
	☒	0		Sample E-8-0.5-1.0 @ 0905
			Brown cmf SAND, trace cm Gravel (fill)	
2	☒	0	Black and Brown cm trace f SAND, trace c Gravel, moist (fill)	Sample E-8-2.0-2.5 @ 0907
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-9	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cm SAND, little cmf Gravel, coal ash (fill)	
	☒	0		Sample E-9-0.5-1.0 @ 0800
			Brown cmf SAND, little cm Gravel, trace f Gravel, moist	
2	☒	0		Sample E-9-2.0-2.5 @ 0805
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-10	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, little m Gravel, coal ash (fill)	
	☒	0		Sample E-10-0.5-1.0 @13:32
			Brown to Dark Brown cmf SAND, trace cm rounded Gravel	
2	☒	0		Sample E-10-2.0-2.5 @13:37
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-11	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace m Gravel, coal ash (fill)	
	☒	0		Sample E-11-0.5-1.0 @10:25
			Brown to Light Brown cm SAND, trace cmf Gravel	
2	☒	0		Sample E-11-2.0-2.5 @10:32
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-12	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, trace cmf Gravel	
	☒	0		Sample E-12-0.5-1.0 @10:44
2	☒	0	Dark Brown cmf SAND, trace cmf rounded Gravel	Sample E-12-2.0-2.5 @10:53
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-13	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, little cmf Gravel, organics, plastic (fill)	
	☒	0		Sample E-13-0.5-1.0 @08:00
			Brown SILT, and SAND, trace Clay, trace mf Gravel (fill)	
2	☒	0	Black cmf SAND, trace mf Gravel, coal ash, cinder (fill)	Sample E-13-2.0-2.5 @08:20
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-14	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace mf Gravel (fill)	1 Foot of Ballast Above Sample
	☒	0		Sample E-14-0.5-1.0 @11:55
			Dark Brown to Brown cmf SAND, little cmf Gravel, moist	
2	☒	0		Sample E-14-2.0-2.5 @12:00
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-15	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, coal ash (fill)	
	☒	0		Sample E-15-0.5-1.0 @12:00
2			Light Brown cmf SAND, trace m Gravel	
	☒	0	Dark Brown and Brown cmf SAND, trace Silt, trace cmf rounded Gravel, wet	Sample E-15-2.0-2.5 @12:12
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-16	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 22JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 22JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Brown cmf SAND, some cmf Gravel, moist	
	☒	0		Sample E-16-0.5-1.0 @11:40
2	☒	0		Sample E-16-2.0-2.5 @11:50
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-17	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, coal ash (fill)	2 Foot of Ballast Above Sample
	☒	0		Sample E-17-0.5-1.0 @13:15
2	☒	0		Sample E-17-2.0-2.5 @13:20
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-18	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 23JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 23JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cm SAND, trace cm Gravel (fill)	2 Foot of Ballast Above Sample
	☒	0		Sample E-18-0.5-1.0
2	☒	0	Brown cmf SAND, trace cmf Gravel	Sample E-18-2.0-2.5
			EOB @ 2.5 ft bgs	X-2-2.0-2.5
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-19	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, coal ash (fill)	
	☒	0		Sample E-19-0.5-1.0 @11:13
			Brown cmf SAND, little cmf rounded Gravel	
2	☒	0		Sample E-19-2.0-2.5 @11:16
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-20	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cm Gravel, coal ash (fill)	
	☒	0		Sample E-20-0.5-1.0 @10:30
2	☒	0	Brown cm SAND, little mf Gravel, pea gravel (fill)	Sample E-20-2.0-2.5 @10:40
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-21	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, little cmf Gravel, organics (fill)	
	☒	0		Sample E-21-0.5-1.0 @08:47
			Black and Dark Brown cmf SAND, coal Ash, large ballast (fill)	
2	☒	0		Sample E-21-2.0-2.5 @09:20
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-22	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, coal ash (fill)	
	☒	0		Sample E-22-0.5-1.0 @10:14
			Dark Brown cmf SAND, little cmf rounded Gravel (fill)	
2	☒	0		Sample E-22-2.0-2.5 @10:20
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-23	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black and Dark Brown cmf SAND, little cm Gravel (fill)	Ballast
	☒	0		Sample E-23-0.5-1.0 @09:30
2	☒	0		Sample E-23-2.0-2.5 @10:00
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-24	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace mf Gravel, organics, coal ash (fill)	Ballast
	X	0	Dark Brown to Black cmf SAND, some cm Gravel (fill)	Sample E-24-0.5-1.0 @10:15
2	X	0		Sample E-24-2.0-2.5 @11:00
			EOB @ 2.5 ft bgs	

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-25	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, some cmf Gravel, trace Silt (fill)	Ballast
	☒	0		Sample E-25-0.5-1.0 @11:05
2	☒	0		Sample E-25-2.0-2.5 @11:25
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-26	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 25JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 25JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black and Dark Brown cmf SAND, some mf Gravel, trace Silt (fill)	
	☒	0		Sample E-26-0.5-1.0 @11:35
				X-4-0.5-1.0
2	☒	0		Sample E-267-2.0-2.5 @12:15
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-27	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace mf Gravel, coal ash (fill)	
	☒	0		Sample E-27-0.5-1.0 @08:43
			Brown cmf SAND, trace cmf rounded Gravel	
2				
	☒	0	Dark Brown cmf SAND, trace cm rounded Gravel	Sample E-27-2.0-2.5 @08:48
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-28	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel (fill)	
	☒	0		Sample E-28-0.5-1.0 @08:35
			Black and Dark Brown cmf SAND, little cmf rounded Gravel (fill)	
2	☒	0		Sample E-28-2.0-2.5 @08:38
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-29	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/DATE:	N/A	DATE STARTED: 24JUN15
ENGINEER/GEOLOGIST:	N. DellaFave		Depth:	N/A	Date/DATE:	N/A	DATE COMPLETED: 24JUN15
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace f Gravel, coal ash (fill)	
	☒	0		Sample E-29-0.5-1.0 @08:12
2	☒	0	Brown cmf SAND, trace cm Gravel	Sample E-29-2.0-2.5 @08:25
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-30	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 11OCT16
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown and Dark Brown cmf SAND, trace Silt, trace cm Gravel, moist, medium dense	
		0		
		0		
2				
			Brown and Dark brown cmf SAND, some Silt, trace mf Gravel, moist, dense	
	☒	0		Sample E-30-3.0-3.5 @09:53
4				
	☒	0	Light Brown SILT, trace Clay, trace f Gravel	Sample E-30-4.5-5.0 @10:15
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-31	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD:	Hand Auger					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast, Grey cm GRAVEL, trace mf Sand, loose, dry (fill)	
		0		5'Fabric/Matting @ 0.5'
2		0	Brown and Black cmf SAND, little Silt, trace f Gravel, medium loose, moist (fill)	
	X	0	Brown SILT, some f Sand, trace f Gravel, dense, moist	Sample E-31-3.0-3.5 @10:16
4				
	X	0	Light Brown SILT, trace Clay, trace f Gravel	Sample E-31-4.5-5.0 @10:30
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-32	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 12OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 12OCT16
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast - Grey, cm subangular GRAVEL, loose (fill)	
	X	0	Dark brown to black cmf SAND, some cm subrounded Gravel, little Silt, medium loose, moist	Sample E-32-0.5-1.0 @08:35
2	X	0		Sample E-32-2.0-2.5 @08:41
	X	0	Brown cmf SAND, some Silt, trace mf subrounded Gravel, fining downward, medium loose, moist	Sample E-32-3.0-3.5 @08:53
4	X	0		Sample E-32-4.5-5.0 @08:55
6	X	0		Sample E-32-5.5-6.0 @08:58
			EOB @ 6 ft bgs	
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-33	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 11OCT16
SAMPLING METHOD:	Hand Auger/Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast - Grey, cm subangular GRAVEL, loose (fill)	Fabric @0.25'
	X	0	Black to Dark Brown cmf SAND, some cmf subrounded Gravel, trace Silt, dense, moist (fill)	Sample E-33-0.5-1.0 @13:20
2	X	0		Sample E-33-2.0-2.5 @13:45
	X	0		Sample E-33-3.0-3.5 @13:56
4		0		
	X	0		Sample E-33-4.5-5.0 @13:58
6	X	0	Brown cmf SAND, little mf subrounded Gravel, trace Silt, loose, moist	Sample E-33-5.5-6.0 @13:58
			EOB @ 6 ft bgs	
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-34		COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast- Grey cm subangular GRAVEL, some mf Sand, loose, dry (fill)	
		0		Mat/Fabric @ 1.0'
			Dark brown to Brown cmf Sand, some Silt, trace mf Gravel, loose to medium loose, moist	
2		0		
	☒	0		Sample E-34-3.0-3.5 @12:04
4			Brown cmf Sand, some cmf Gravel, trace Silt, medium dense, moist	
	☒	0		Sample E-34-4.5-5.0 @12:05
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-35	COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth: N/A	Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, trace cmf Gravel, organics (Fill)	
	☒	0		Sample E-35-0.5-1.0 @13:05
				X-3-0.5-1.0
			Light brown mf SAND, trace m Gravel	
2	☒	0		Sample E-35-2.0-2.5 @13:55
			EOB @ 2.5 ft bgs Refusal, Attempted 4 Times	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-36	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf Sand, trace cmf Gravel, roots, organics (topsoil)	
	☒	0		Sample E-36-0.5-1.0 @14:15
			Black cmf Sand, trace cmf Gravel, brick, railroad spike (fill)	
2	☒	0		Sample E-36-2.0-2.5 @15:12
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis. HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER:	E-37	COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth: N/A	Date/Time: N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf Sand, trace cmf Gravel, roots, organics (topsoil)	
	☒	0	Light Brown f SAND, trace angular Gravel, roots (fill)	Sample E-37-0.5-1.0 @ 09:55
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-38	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger/Geoprobe		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast- Grey, cmf GRAVEL, trace f Sand, loose, dry (fill)	
	☒	0	Dark Brown to black, cmf SAND, some cmf subangular Gravel, trace Silt, Gravel content increasing downward, medium loose, dry (fill)	Sample E-38-0.5-1.0 @09:37
2	☒	0		Sample E-38-2.0-2.5 @09:43
		0		
4			Brown cmf SAND, little Silt, trace f subrounded gravel, medium loose, moist	
	☒	0		Sample E-38-4.5-5.0 @09:58
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-39	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 11OCT16
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast- Grey cmf GRAVEL, some mf Sand, loose, dry (fill)	Mat/Fabric @ 0.5
		0	Dark Brown and Black cmf SAND, some cmf Gravel, little Silt, medium loose, moist (fill)	
		0		
2				
		0		
			Brown f SAND, some Silt, trace mf Gravel, medium dense, moist	
		0		
4				
	☒	0	Brown Silt, some f Sand, trace f Gravel, medium dense dry	Sample E-39-4.5-5.0 @13:25
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-40	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Ballast-Grey cm rounded to angular GRAVEL loose, dry (fill)	
		0		Mat/ Fabric @ 1.0'
			Black-Dark Brown cmf SAND, little Silt, little mf subrounded Gravel, medium loose, moist (fill)	
		0		
2			Brown cmf SAND, some f Gravel, little m Gravel, trace Silt, loose, moist	
		0		
		0		
4				
	☒	0	Brown cmf SAND, little f Gravel, trace Silt	Sample E-40-4.5-5.0 @11:15
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-41		COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger/Geoprobe				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black and brown cmf SAND, little mf Gravel, coal ash (fill)	
	X	0		Sample E-41-0.5-1.0 @08:57
2	X	0	Light brown cm SAND	Sample E-41-2.0-2.5 @09:13
				X-2-2.0-2.5
		0		Geoprobe @ 3.0'
			Brown cm SAND, trace f Sand	
4	X	0		Sample E-41-4.0-4.5 @09:22
	X	0	Brownish Grey CLAY, trace Silt	Sample E-41-5.0-5.5 @09:25
6			EOB @ 5.5 ft bgs	
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER:	E-42	COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth: N/A	Date/Time: N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace cmf Gravel, roots, organics (topsoil)	
	☒	0	Black and Grey cmf SAND, some mf Gravel, trace organics, ballast, brick, coal ash (fill)	Sample E-42-0.5-1.0 @08:30
2	☒	0		Sample E-42-2.0-2.5 @08:55
	☒	0		Sample E-42-3.0-3.5 @09:15
4			Brown mf SAND, trace fine Gravel	
	☒	0		Sample E-42-4.0-4.5 @09:48
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-43	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD: Hand Auger/Geoprobe		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, some cm Gravel (fill)	
	X	0		Sample E-43-0.5-1.0 @08:50
			Brown cmf SAND, some cm rounded Gravel	
2	X	0		Sample E-43-2.0-2.5 @08:55
			Brown to Light Brown cm SAND, trace m rounded Gravel	
	X	0		Sample E-43-3.0-3.5 @09:02
				Geoprobe @ 3.5'
4				
	X	0		Sample E-43-4.5-5.0 @09:50
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-44	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger/Geoprobe		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black and dark brown cmf SAND, organics, ballast, mf Gravel (fill)	
	☒	0		Sample E-44-0.5-1.0 @13:00
			Light brown mf SAND, trace f Gravel (fill)	
2	☒	0		Sample E-44-2.0-2.5 @13:14
			red brick fragments @ 3' (fill)	
	☒	0		Sample E-44-3.0-3.5 @1330
			Dark brown and black cmf SAND, trace f subangular Gravel, cinder, ash, moist (fill)	geoprobe
4				
	☒	0		Sample E-44-4.5.5.0 @1008 on 10/12
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-45	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD:	Hand Auger /Geoprobe					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown to Dark Brown mf SAND, little cmf subangular Gravel, roots, organics, loose, dry (fill)	
	X	0		Sample E-45-0.5-1.0 @11:10
2	X	0		Sample E-45-2.0-2.5 @11:28
	X	0		Sample E-45-3.0-3.5 @11:40
4			Grades to Light Brown	geoprobe
	X	0		Sample E-45-4.5-5.0 @11:45
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-46	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger/Geoprobe		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, some Silt, some mf subrounded Gravel, organics, medium loose, moist (fill)	
	X	0	Grades to Light Brown	Sample E-46-0.5-1.0 @11:50
2	X	0		Sample E-46-2.0-2.5 @12:00
	X	0		Sample E-46-3.0-3.5 @12:12
			Brown SILT and f SAND	geoprobe
4			Brown cmf SAND, little cm Gravel, trace Silt, loose, moist	
	X	0		Sample E-46-4.0-4.5 @12:15
			EOB @ 5 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-47	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD:	Hand Auger					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, organics, roots, leaves	
	☒	0	Brown f SAND, trace f Gravel, roots, dry	Sample E-47-0.5-1.0 @15:00
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-48	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Brown cmf SAND, roots organics, roots, leaves (topsoil)	
	☒	0	Light Brown f SAND, trace f Gravel, roots, dry	Sample E-48-0.5-1.0 @12:14
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-49	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD:	Hand Auger					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND,roots organics, roots, leaves (topsoil)	
	☒	0	Light brown f SAND, trace f Gravel, roots	Sample E-49-0.5-1.0 @10:05
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-50	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD:	Hand Auger					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, organics (topsoil)	
	X	0		Sample E-50-0.5-1.0 @12:00
				X-1-0.5-1.0 10/10/16
		0		Ballast Refusal, restarted on 10/12/16
2	X		Brown mf SAND, trace f Gravel	Sample E-50-2.0.-2.5 @12:35
		0		10/12/2016
		0		
4				Sample E-50-4.5-5.0 @10:28
	X	0		10/12/2016
			EOB @ 5.0 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-51	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD:	Hand Auger					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Grey GRAVEL and cmf SAND (fill)	
	X	0		Sample E-51-0.5-1.0 @10:20
			Light Brown mf SAND, trace Gravel	
2	X	0		Sample E-51-2.0.-2.5 @10:30
	X	0	Brown SILT, trace mf Sand, trace f subangular Gravel, dense, moist	Sample E-51-3.0.-3.5 @10:55
4				
	X	0		Sample E-51-4.5-5.0 @10:35
			EOB @ 5.0 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-52	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black mf SAND, trace f Gravel, organics (topsoil)	
	☒	0		Sample E-52-0.5-1.0 @13:55
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-53		COORDINATES:			
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black mf SAND, trace f Gravel, organics (topsoil)	
	☒	0		Sample E-53-0.5-1.0 @12:18
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-54	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	10OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	10OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace f Gravel, organics (topsoil)	
	☒	0		Sample E-54-0.5-1.0 @07:50
			Dark Brown cmf SAND, some c Gravel, small pieces of glass (fill)	Ballast
2	☒	0		Sample E-54-2.0-2.5 @08:05
			EOB @ 2.5 ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-55	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD:	Hand Auger/Geoprobe					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Gray cm angular GRAVEL, dry, loose (fill)	Ballast
		0	Black to Dark Brown cmf SAND, some subangular Gravel, loose, moist (fill)	Black Mat @ 0.5'
		0		
2				
		0		
				Geoprobe @ 3.5'
		0		
4				
	☒	0		Sample E-55-4.5-5.0 @10:08
			EOB @ 5.0 ft bgs	
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-56	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 11OCT16
SAMPLING METHOD:	Geoprobe						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			18" of Ballast	Air Knifed to 3.0 ft bgs
2				geoprobe
	X	0	Light Brown cmf SAND, little rounded Gravel, trace Silt	Sample E-56-3.0-3.5 @12:35
4		0		
		0		
6	X	0	Light Brown cm SAND, trace f rounded Gravel, moist	Sample E-56-6.0-6.5 @12:38
			EOB @ 6.5 ft bgs	
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey				
BORING NUMBER:	E-57	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth: N/A	Date/Time:	N/A	DATE STARTED:	11OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth: N/A	Date/Time:	N/A	DATE COMPLETED:	11OCT16
SAMPLING METHOD:	Hand Auger/Geoprobe					PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			18" of Ballast	Air Knifed to 3.5 ft bgs
2				
			Brown cmf SAND, trace mf Gravel	geoprobe
4	☒	0		Sample E-57-4.0-4.5 @13:00
		0		
6	☒	0	Light Brown cmf SAND, trace mf Gravel, moist	Sample E-57-6.0-6.5 @13:05
			EOB @ 6.5 ft bgs	
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey					
BORING NUMBER:	E-58	COORDINATES:					
GROUND ELEVATION:		GWL:	Depth:	N/A	Date/Time:	N/A	DATE STARTED: 12OCT16
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger		Depth:	N/A	Date/Time:	N/A	DATE COMPLETED: 12OCT16
SAMPLING METHOD:	Hand Auger						PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, organic, roots, loose, dry	
	☒	0		Sample E-58-0.5-1.0 @13:00
				X-04-0.5-1.0
2			EOB @ 1.5 ft bgs Refusal	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-59	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A Date/Time: N/A	DATE STARTED:	12OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A Date/Time: N/A	DATE COMPLETED:	12OCT16
SAMPLING METHOD: Hand Auger		PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, organic, roots, loose, dry	
	☒	0		Sample E-59-0.5-1.0 @10:20
				X-05-0.5-1.0
2			EOB @ 1.5 ft bgs Refusal	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER: E-60	COORDINATES:		
GROUND ELEVATION:	GWL: Depth: N/A	Date/Time: N/A	DATE STARTED: 10OCT16
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger	Depth: N/A	Date/Time: N/A	DATE COMPLETED: 10OCT16
SAMPLING METHOD: Hand Auger			PAGE: 1 OF 1

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black cmf SAND, trace m Gravel, glass (fill)	
	☒	0		Sample E-60-0.5-1.0 @14:08
			EOB @ 1.0 ft bgs	
2				
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER:	E-61	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	11:30
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth: N/A	Date/Time: N/A	TIME COMPLETED:	11:50
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
	X	0	Dark brown cmf SAND and SILT, some mf subrounded Gravel, trace c Gravel, organics, medium loose, moist	Sample E-61-0.5-1.0 @11:40
2	X	0		Sample E-61-2.0-2.5 @11:45
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-62		COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	11:49
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	TIME COMPLETED:	11:56
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown mf SAND and SILT, some mf subrounded Gravel, organics, medium loose, moist	
	X	0		Sample E-62-0.5-1.0 @11:50
2	X	0		Sample E-62-2.0-2.5 @11:55
			EOB @ 2.5' ft bgs	

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-63	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	11:19
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	11:32
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark brown mf SAND and SILT, some mf subrounded Gravel, organics, medium loose, moist	
	☒	0		Sample E-63-0.5-1.0 @11:20
2	☒	0		Sample E-63-2.0-2.5 @11:30
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-64	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	11:58
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	12:07
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown mf SAND, little Silt, some mf subrounded Gravel, trace subrounded Gravel, medium	
	☒	0	loose, moist	Sample E-64-0.5-1.0 @12:00
2	☒	0		Sample E-64-2.0-2.5 @12:05
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-65	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	12:08
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	12:17
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown mf SAND and SILT, some mf subrounded Gravel, trace subrounded Gravel, medium	
	☒	0	loose, moist	Sample E-65-0.5-1.0 @12:09
2	☒	0		Sample E-65-2.0-2.5 @12:15
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-66		COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	12:05
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	TIME COMPLETED:	12:09
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Black mf SAND, little Silt, little mf Gravel, trace c Gravel, organics, medium loose, moist	
	X	0		Sample E-66-0.5-1.0 @12:06
2	X	0		Sample E-66-2.0-2.5 @12:07
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-67		COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	10:58
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	TIME COMPLETED:	11:12
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND and SILT, some mf subrounded Gravel, organics, loose, moist	
	☒	0		Sample E-67-0.5-1.0 @11:00
2	☒	0		Sample E-67-2.0-2.5 @11:10
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-68		COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	12:22
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	TIME COMPLETED:	12:30
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Dark Brown mf SAND. and SILT, some cmf subrounded Gravel, organics, loose, moist	
	X	0		Sample E-68-0.5-1.0 @12:24
				X-01-031617
2	X	0		Sample E-68-2.0-2.5 @12:28
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

X Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER: 277710568		PROJECT NAME: Amtrak, East Barracks, Trenton, Mercer County, New Jersey			
BORING NUMBER: E-69		COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth: N/A	Date/Time: N/A	TIME STARTED:	12:31
ENGINEER/GEOLOGIST: N. DellaFave, S. Rittinger		Depth: N/A	Date/Time: N/A	TIME COMPLETED:	12:42
SAMPLING METHOD: Hand Auger				PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown mf SAND, and SILT, little mf subrounded Gravel, organics, loose, moist	
	☒	0		Sample E-69-0.5-1.0 @12:33
2	☒	0		Sample E-69-2.0-2.5 @12:40
			EOB @ 2.5' ft bgs	

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-70	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	12:43
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	12:49
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown mf SAND, and SILT, little mf subrounded Gravel, organics, loose, moist	
	☒	0		Sample E-70-0.5-1.0 @12:44
2	☒	0		Sample E-70-2.0-2.5 @12:47
			EOB @ 2.5' ft bgs	

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-71	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	12:58
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	13:14
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Brown cmf SAND, and SILT, trace mf subrounded Gravel, organics, medium loose, moist	
	☒	0		Sample E-71-0.5-1.0 @13:00
			Grades to Light Brown	X-02-031617
2	☒	0		Sample E-71-2.0-2.5 @13:12
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

SOIL BORING LOG

PROJECT NUMBER:	277710568	PROJECT NAME:	Amtrak, East Barracks, Trenton, Mercer County, New Jersey		
BORING NUMBER:	E-72	COORDINATES:		DATE:	16-Mar-17
GROUND ELEVATION:		GWL: Depth:	N/A Date/Time: N/A	TIME STARTED:	12:56
ENGINEER/GEOLOGIST:	N. DellaFave, S. Rittinger	Depth:	N/A Date/Time: N/A	TIME COMPLETED:	13:02
SAMPLING METHOD:	Hand Auger			PAGE: 1 OF 1	

DEPTH (FT.)	SAMPLE (FT.)	PID/FID READINGS	DESCRIPTION	REMARKS
			Light Brown cmf SAND, some mf subrounded Gravel, trace coarse subrounded Gravel,	
	☒	0	medium loose, organics, moist	Sample E-72-0.5-1.0 @12:57
2	☒	0		Sample E-72-2.0-2.5 @13:00
			EOB @ 2.5' ft bgs	
4				
6				
8				
10				
12				
14				
16				

NOTES:

☒ Soil sample was collected for chemical analysis.

HA- Hand Auger

APPENDIX B
QUALITY ASSURANCE PROJECT PLAN

QUALITY ASSURANCE PROJECT PLAN

EAST BARRACKS RAIL YARD
NORTH COOK AVE
TRENTON, MERCER COUNTY, NEW JERSEY
PROGRAM INTEREST No. *TBD*

Prepared For:

National Railroad Passenger Corporation (Amtrak)
New York, New York

Prepared By:

Amec Foster Wheeler Environment and Infrastructure, Inc.
285 Davidson Avenue, Suite 405
Somerset, New Jersey 08873

February 2015

Amec Foster Wheeler 277710568

QUALITY ASSURANCE PROJECT PLAN
EAST BARRACKS RAIL YARD

APPROVALS
Revision 0

Project Title: East Barracks Rail Yard
Organization Name: National Railroad Corporation (Amtrak)
Person Responsible for Conducting the Remediation: National Railroad Corporation (Amtrak)

Date of Project Initiation: February 3, 2015
Effective Date of Plan: February 3, 2015

Responsible Program: NJDEP SRP

2/3/2015

Marlene B. Lindhardt, CHMM
Licensed Site Remediation Professional
Project Manager **Date**

2/3/2015

Ann Bernhardt
Quality Control Manager **Date**

Distribution List:
Nick Della Fave, Amec Foster Wheeler Somerset Field Team Leader
Steve Posten, Amec Foster Wheeler Somerset Laboratory Manager
Michael H. Leftin, Ph.D., IAL Laboratory Director

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ACRONYMS

AOC	Area of Concern
bgs	below ground surface
BN	Base Neutral
COC	Chain of Custody
DGR	Dangerous Goods Regulation
DKQ	Data of Known Quality
DQI	Data Quality Indicator
DQO	Data Quality Objective
EDD	Electronic Data Deliverable
EDI	Electronic Data Interchange
EPH	Extractable Petroleum Hydrocarbon
FSPM	Field Sampling Procedures Manual
IATA	International Air Transport Association
LIMS	Laboratory Information Management System
LSRP	Licensed Site Remediation Professional
MDL	Method Detection Limit
mg/kg	milligram per kilogram
NJDEP	New Jersey Department of Environmental Protection
NRDCSRS	Non Residential Direct Contact Soil Remediation Standard
PAH	Polynuclear Aromatic Hydrocarbons
PARCCS	Precision, Accuracy, Representativeness, Comparability, Completeness and Sensitivity
PCB	Polychlorinated Biphenyl
PID	Photo-ionization Detector
PP+40	Priority Pollutants plus library search
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
QL	Quantitation Limit
RDCSRS	Residential Direct Contact Soil Remediation Standard
RI	Remedial Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
Site	East Barracks Rail Yard
SOP	Standard Operating Procedure
SRP	Site Remediation Program
SRS	Site Remediation Standard
TCL	Target Compound List
TIC	Tentatively Identified Compound
TRSR	N.J.A.C 7.26E Technical Requirements for Site Remediation
TSCA	Toxic Substances Control Act
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 PROBLEM DEFINITION

This Quality Assurance Project Plan (QAPP) has been prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) to provide a description of the quality assurance (QA) procedures for sampling activities at the Amtrak East Barracks Rail Yard Site (Site) located at North Cook Avenue, Trenton, Mercer County, New Jersey. The investigation activities conducted at the Site will comply with both New Jersey Department of Environmental Protection (NJDEP) N.J.A.C 7.26E Technical Requirements for Site Remediation (TRSR) and the NJDEP Field Sampling Procedures Manual, August 2005, updated 2011 (FSPM). This work is also being performed in accordance with various NJDEP guidance documents that have been issued through the NJDEP Site Remediation Program including the following.

- Analytical Laboratory Data Generation, Assessment and Usability Technical Guidance (NJDEP, 2014a)
- Quality Assurance Project Plan Technical Guidance (NJDEP, 2014b)
- Data of Known Quality Protocols Technical Guidance (NJDEP, 2014c)
- Data Quality Assessment and Data Usability Evaluation Technical Guidance (NJDEP, 2014d)

All work will be reviewed and approved by the Licensed Site Remediation Professional (LSRP) who was retained for this project. As of this date, an LSRP has not been retained.

1.1 PROJECT DEFINITION

This project includes remedial investigation (RI) activities to be conducted in order to comply with the NJDEP TRSR. The overall project goals and objectives are to provide delineation of polychlorinated biphenyls (PCBs) at the Site for completion of a remedial investigation report (RIR).

The data to be collected during this project will be used to determine if PCBs have been delineated in soil, surface water and sediment. The data users include the technical reviewers who will determine if sufficient field data have been collected in order to complete the RI and prepare the RIR.

1.2 BACKGROUND

Previous investigation have been conducted at the Site by Roux Associates, Inc. (Roux) as reported in documents entitled Remedial Investigation Work Plan (RIWP), dated March 6, 2002, and Draft Remedial Investigation Report, undated, for the New Jersey Transit East Barracks Rail Yard Site.

PCBs have been detected in soil at concentrations greater than the NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) of 0.2 milligrams per kilogram (mg/kg), the NJDEP Non-Residential Direct Contact Soil Remediation Standard (NRDCSRS) of 1 mg/kg, the default Impact to Ground Water Soil Screening Level of 0.2 mg/kg, and the US Environmental Protection Agency (USEPA) Toxic Substances Control Act (TSCA) high occupancy limit of 10 mg/kg (with cap and deed notice.)

In addition, volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAH), several metals, and pesticides have been detected at concentration greater than their respective applicable NJDEP standards.

Additional sampling is required to delineate PCBs, VOCs and pesticides in soil to NJDEP standards. PAH and metals will not be addressed during this project.

1.2.1 Physical Setting

The East Barracks Rail Yard is located in Trenton, Mercer County, New Jersey. A Site location map prepared from United States Geological Survey (USGS) 7 1/2 minute topographic quadrangles, Trenton West and Trenton East, New Jersey is included as Figure 1.

The Site covers approximately 3.5 acres. Facilities present at the Site include an active rail line operated by New Jersey Transit, an employee parking area, and two crew quarters trailers.

A communications fiber optic line runs below ground parallel to the northeast corridor.

The Site is located south of Assunpink Creek, which discharges to the Delaware River approximately two miles to the southwest of the Site. Topography at the Site is generally flat with the exception of the rail lines that are slightly elevated. Relief across the Site is approximately two feet. The entrance to the Site (North Cook Street) is down a moderately sloping hill. A slight depression is present parallel to the fence line along the western side of the railroad tracks. (Roux, 2002)

1.2.2 Geology/Hydrogeology

The surficial soils beneath and in the vicinity of the Site consist of the Galestown-Evesboro association according to the United States Department of Agriculture (USDA) Soil Conservation Service (SCS) in the report Soil Survey of Mercer County. Galestown-Evesboro soils are characteristically deep, excessively drained, nearly level to gently sloping hills that are sandy throughout depth. (Roux, 2002)

The Site is located in the northernmost section of the Atlantic Coastal Plain Province, approximately one mile south of the Fall Line. The Atlantic Coastal Plain is comprised of Cretaceous age unconsolidated or poorly consolidated layers of gravel, sand and clay. The Cretaceous formation present in Mercer County and at the Site is the Raritan, Magothy, and Merchantville Formations. These formations dip gently southeast at approximately 35 to 60 feet per mile, where the younger beds dip more gently than the older beds. Also present at the Site, overlying the Cretaceous sediments are unconsolidated stratified deposits of

Quaternary age. These deposits can consist of stratified sand, gravel, and clay and were deposited during the Wisconsin Ice Age (Roux, 2002).

According to groundwater investigations conducted at the nearby NJ Transit former Mercer Bus Garage facility, located approximately to the northeast of the Site, groundwater in the area occurs under unconfined, water table conditions (Dames & Moore, 1998). The depth to water at the adjacent former Mercer Bus Garage facility was encountered at a depth of 18 to 19.5 feet below ground surface (bgs). The former Mercer Bus Garage facility is situated approximately eight feet in elevation above the East Barracks facility; therefore, it is estimated that the depth to groundwater below the Site is approximately 10 feet bgs. The direction of groundwater flow at the former Mercer Bus Garage was determined to be to the north, towards Assunpink Creek. The water table aquifer fluctuates seasonally, responding to changes in meteorological conditions (Roux, 2002).

The shallow aquifer in the area of the Site is not a regional source for potable water. The major regional groundwater sources for potable water include the sand and gravel layers of the Raritan and Magothy Formations. Recharge for these aquifers occurs primarily from local precipitation at outcrop areas (Roux, 2002).

1.2.3 Project Description

The scope of work for this project includes:

- Soil sampling, and
- Ground water depth measurements.

Based on a review of the sample results reported by Roux, the TRSR and applicable guidance, the RI activities will consist of delineation of PCBs, pesticides and VOCs. Other incidental contamination (e.g., low levels of arsenic and PAH) is not part of this RI and would not need to be addressed as long as the property continues to operate as an active rail yard.

Samples will be collected in onsite soil. In addition, two piezometers will be installed onsite in order to measure the depth to ground water with soil samples analyzed to determine if there is an uncontaminated interval between soil contamination and the top of the water table. Based on the results of the sampling program, additional offsite soil sampling and ground water sampling may be required. A summary of the sampling program is provided in Table 1. Table 2 provides a summary of the analytical methods for this project.

2.0 PROJECT ORGANIZATION

2.1 PROJECT TEAM

Name and contact information for the project team are provided below.

Name/Role	Organization	Phone Number
Marlene Lindhardt/ Project Manager	Amec Foster Wheeler	(732) 302-9500
TBD/LSRP	TBD	TBD
Ann Bernhardt/ Quality Control Manager	Amec Foster Wheeler	(503) 639-3400
Nick Della Fave/ Site Safety and Health Officer (SSHO)	Amec Foster Wheeler	(732) 302-9500
Stephen Posten/ Laboratory Manager	Amec Foster Wheeler, NJDEP Certification No. 18003	(732) 302-9500
Michael H. Leftin, Ph.D., Laboratory Director	IAL; NJDEP Certification No. 14751	(973) 361-4252

The laboratories that will be used for this project include:

- Amec Foster Wheeler
- Integrated Analytical Laboratories (IAL)

Amec Foster Wheeler field staff will collect samples and perform field analyses. Amec Foster Wheeler is certified to perform field analysis for specific conductance, turbidity, dissolved oxygen, pH, and temperature. Standard operating procedures (SOPs) for field analyses are included in Appendix A. Note that as of this date, no field analysis is planned; however field analyses of aqueous samples may be conducted in the future.

IAL of Randolph, New Jersey will perform laboratory analyses. IAL is certified by NJDEP for analyses to be used for this project.

2.2 SPECIAL TRAINING NEEDS/CERTIFICATION

Any individual working on an Amtrak site is required to have current Amtrak railroad safety training.

3.0 DATA QUALITY OBJECTIVES AND CRITERIA FOR MEASUREMENT DATA

3.1 PROJECT OBJECTIVES

The objectives of the project are to collect required data to satisfy the regulatory requirements for this project. These requirements include investigation and delineation of PCBs, pesticides and VOCs in soil to applicable NJDEP standards.

3.2 DATA QUALITY OBJECTIVES

Data quality objectives (DQOs) are intended to produce chemical analyses data of known quality (DKQ.) In order to obtain data of appropriate quality to meet investigation objectives, the laboratories selected by Amec Foster Wheeler will use USEPA SW-846 methods for soli and sediment analyses in accordance with applicable New Jersey deliverables requirements.

For the analysis of any samples for a parameter or category of parameters for which laboratory certification exists pursuant to N.J.A.C. 7:18, the laboratory will be certified for that specific parameter or category of parameters pursuant to N.J.A.C. 7:18.

DKQ requires the development of performance acceptance criteria that are expressed as data quality indicators (DQIs), including precision, accuracy (bias), representativeness, comparability, completeness, and sensitivity (PARCCS). These DQIs are discussed below and in the tables specific to the analytical methodologies required by NJDEP in the TRSR for this project. In each case, when possible, acceptance criteria are specified in the QAPP, which indicates “how good” the data will need to be for use, and to serve as an early warning system to allow corrective action to be taken in real-time before the entire project is completed. The acceptance criteria are included for each DQI. Tabular DQIs for the certified laboratory methods to be used for this project have been attached as Appendix B and listed below. For each method and parameter, PARCCS acceptance criteria are described for the field and laboratory operations.

- Table B-1 QAPP Worksheet All Matrices – Pesticides USEPA SW-846 8081A&B
- Table B-2 QAPP Worksheet All Matrices – PCB Aroclors USEPA SW-846 8082 and 8082A
- Table B-3 QAPP Worksheet All Matrices – VOAs by USEPA SW-846 8260C

Specific DQOs for field work are identified in the applicable NJDEP technical guidance documents. Laboratory DQOs include providing data at method detection limits (MDL) and laboratory reporting limits (RL), which should be less than the applicable action levels. The following sections list the applicable guidance document and regulatory requirements specific to this project.

3.3 TECHNICAL STANDARDS

The technical standards to be applied to this project are provided in the most recent, applicable NJDEP guidance documents including the following:

- Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria September 24, 2012, Version 1.0 (NJDEP, 2012a)
- Technical Guidance for Site Investigation of Soil, Remedial Investigation of Soil, and Remedial Action Verification Sampling for Soil, Version 1.1, August 1, 2012 (NJDEP, 2012b)
- Coordination of NJDEP and USEPA PCB Remediation Policies, Updated March 1, 2013 (NJDEP, 2013a)
- Field Sampling Procedures Manual, August 2005, Updated April 11, 2011 (NJDEP, 2005)

3.4 REGULATORY STANDARDS

The regulatory action levels to be met during this project are provided in the most recent, versions of applicable NJDEP regulations and guidance documents including the following:

- N.J.A.C. 7:26D Soil Remediation Standards
- Development of Site-Specific Impact to Ground Water Soil Remediation Standards Using the Soil-Water Partition Equation, Version 2.0 - November 2013, Table 1 Default Impact to Ground Water Soil Screening Levels for Contaminants (NJDEP, 2013b)
- 40 CFR 761.61(a - c). USEPA Toxic Substances Control Act

Site-specific criteria may be developed for the investigation and remediation according to applicable NJDEP guidance.

3.5 PRECISION

Precision is the measure of agreement among repeated measurements. The following procedures will be used to determine the precision of the data:

- Use the same analytical methods to perform repeated analyses on the same sample (laboratory or matrix duplicates)

Precision for laboratory and field measurements can be expressed as the relative percent difference (RPD) between two duplicate determinations or percent relative standard deviation (%RSD) between multiple determinations. Acceptance criteria for laboratory precision are specified in the method or laboratory SOP.

Acceptance criteria for field precision developed based on the needs of the project include:

Laboratory precision will be evaluated based on analyses of sample replicates and/or replicate spikes of samples. Poor overall precision may indicate field sample non-homogeneity, improper field sampling techniques, sample transport problems or analytical issues as reflected in the laboratory replicate analyses. Data will be evaluated on an ongoing basis so that if the cause of poor precision appears to be sampling procedures or laboratory method implementation, corrective actions will be taken. If project precision goals are not met, data must be interpreted accordingly and the uncertainty for specific locations or a specific parameter taken into account in the usage of the data. Relative percent differences will be averaged for all analytes detected above the quantitation limit (QL).

3.6 ACCURACY

Accuracy is the degree of agreement of a measured value with its true value. It should be noted that precise data may not be accurate data. Accuracy can be expressed as a percent recovery or percent deviation of the measurement with respect to its known or true value.

Accuracy will be determined through establishing acceptance criteria for spike recoveries (e.g., surrogate recoveries, laboratory control sample recoveries, matrix spike recoveries, reference material recoveries etc.) or allowable deviations for calibration (e.g., %RPD for calibration verification). Acceptance criteria for matrix spike measurements are expressed as a percent recovery and are specified in the analytical method or laboratory SOP.

For the purpose of this section, bias is defined as the constant or systematic distortion of a measurement process, different from random error, which manifests itself (usually in one direction) as a persistent positive or negative deviation from the known or true value (resulting ultimately in uncertainty with regard to an analytical result). This may be due to (but not limited to) improper sample/data collection, sample matrix, poorly calibrated analytical or sampling equipment, or limitations or errors in analytical methods and techniques.

In the case of an analytical test result(s) from an environmental sample containing an unknown concentration of a particular analyte, there will always be a “true” concentration and an associated uncertainty that is some representation of the extent of deviation that the test result has from that true value. Uncertainty should not be confused with accuracy, even though accuracy is a constituent of the total uncertainty of a measurement. Accuracy is simply how far off the analytical result is from the true value.

Accuracy and bias will be evaluated during data validation through review of quality control (QC) measurements such as calibration analyses, method blanks, interference check samples, surrogate recoveries, and laboratory control and matrix spikes. Potential bias to individual results as evidenced by exceedances of the control limits presented in this QAPP will be summarized and reviewed. Particular attention will be paid to any apparent trends or consistency in bias for a particular analyte or sample matrix. The resulting uncertainty in the data must be taken into account for the different uses planned.

3.7 REPRESENTATIVENESS

Representativeness is the extent to which measurements represent the site conditions. In general, the whole system, process, or situation of interest cannot be measured. Instead, sample locations, quantities, and analyses are chosen in order to capture a sufficiently broad and/or weighted view of the situation. The TRSR (N.J.A.C 7:26E 3.4(a)1; N.J.A.C 7:26E 3.5(a)1; and N.J.A.C 7:26E 3.6(b)1) requires the collection of samples biased towards suspected contamination (i.e., collect samples from areas of elevated photo-ionization detector [PID] readings, staining, odors, etc.).

Representativeness is the degree to which data accurately and precisely represent a parameter variation at a sampling point or an environmental condition. The results of all analyses will be used to evaluate the data to determine if the samples were collected in such a manner that the results appropriately describe the area investigated.

Sampling will be conducted in accordance with the NJDEP FSPM and the AGWST Techniques Guidance, as applicable. Sample locations will be selected based on Site knowledge and in accordance with applicable NJDEP guidance documents for sampling areas of concern. Specific sample intervals will be biased high based on visual observation or field monitoring instruments.

Representativeness of laboratory data will be achieved by following standardized procedures for subsampling. If an aqueous sample is subsampled for analysis, the sample will be mixed by inversion prior to removal of the analytical aliquot unless doing so would compromise analytical results.

3.8 COMPARABILITY

Comparability is defined as the extent to which data from one data set can be compared directly to similar or related data sets and/or decision-making standards. Historical data will be evaluated to determine whether they may be combined with data being collected in present time.

Comparability is the degree to which data from one study can be compared with data from other similar studies, reference values (such as background), screening values and remediation standards. Field procedures in accordance with the NJDEP FSPM will be implemented to promote comparability of collected samples. Comparability of laboratory results will be achieved by following standardized analytical procedures, using traceable reference materials, using Class A volumetric glassware or correctly calibrated pipettes for volumetric procedures, using correctly calibrated balances for gravimetric procedures, and following good laboratory practices.

Amec Foster Wheeler will insist on strict adherence to method QC and procedural requirements and the requirements of this QAPP, or proper documentation by the laboratory of deviations from the analytical methods. If undocumented method deviations are discovered during data validation, Amec Foster Wheeler chemists will evaluate potential

effects on data usability and comparability, and will contact the laboratory for corrective action.

3.9 COMPLETENESS

Completeness is a measure of the amount of usable data collected compared to the amount of data expected to be obtained. Three measures of completeness are defined:

- Sampling completeness, defined as the number of valid samples collected relative to the number of samples planned for collection;
- Analytical completeness, defined as the number of valid sample measurements relative to the number of valid samples collected; and
- Overall completeness, defined as the number of valid sample measurements relative to the number of samples planned for collection.

The data completeness is determined as the percentage of usable data points compared to the number of samples collected for a specific analysis or matrix. Lack of completeness may be the result of sample loss during transport or analysis or rejection due to unacceptable quality control results for the analysis. No data that are rejected based on the validation will be considered usable for project purposes. Data completeness will be evaluated with respect to each intended use. Lack of completeness for a data set may have different impacts based on use; for example, risk assessment versus flow and solute transport modeling.

3.10 SENSITIVITY

Sensitivity refers to the ability of an analytical procedure to quantify an analyte at a given concentration. The sensitivity requirements should be established such that the laboratory method RLs are at or below the relevant and applicable regulatory limits for each contaminant of concern for the project. For the purpose of this QAPP, the RL is defined as:

- Organics, the lowest initial calibration standard as adjusted for the dilution factor, sample weight/volume, and moisture content;
- Inorganics, the concentration of that analyte in the lowest level check standard (which could be the lowest calibration standard in a multi-point calibration curve).

Methods for analysis should be chosen to meet the sensitivity requirements for a project (e.g., compound- and matrix-specific). If however, the laboratory RLs exceed the project sensitivity requirements (i.e., the RL is greater than the relevant and applicable regulatory standard), the analytical methods may need to be adjusted (e.g., analysis conducted using a more sensitive method or sample preparation and analysis features adjusted to gain sensitivity) and/or the project objectives may need to be adjusted (i.e., certain contaminants of concern may not be able to be screened out during this phase of the evaluation)

The minimum concentrations that are required to achieve DKQ are defined by the applicable regulatory standard or screening levels. The regulatory action levels to be met during this

project are provided in the most recent, versions of applicable NJDEP regulations and guidance documents including the following:

- N.J.A.C. 7:26D Soil Remediation Standards (SRS)
- Development of Impact to Ground Water Soil Remediation Standards using the Soil-Water Partition Equation, Version 2.0 – November 2013 (Table 1) (NJDEP, 2013b)

Site-specific criteria may be developed for the investigation and remediation according to the applicable NJDEP guidance.

Reporting limits presented in this QAPP are in most cases defined by the methods and are set at the concentration of the lowest applicable regulatory standard or criterion. These limits may not be achievable for samples with significant interferences, and the usability of data in these cases may be limited. Reporting limits greater than screening levels or standards will not allow a demonstration of compliance with applicable action levels. Amec Foster Wheeler will review those instances where reporting limit objectives have not been met, and if the measurements at their respective reporting limits are considered critical for project purposes, resampling or other corrective measures may be taken.

4.0 INVESTIGATION PROCESS AND PROCEDURES

4.1 HISTORICAL INFORMATION/DATA

Based on information provided in the Roux documents, the Site is used as a "sleeper facility" for NJ Transit commuter trains. The facility provides minor routine maintenance (i.e., change brake pads, interior cleaning) and overnight storage for commuter rail cars. The Site is owned by Amtrak and leased to NJ Transit.

NJ Transit collected four soil samples from the track area in November 1999 to evaluate for the presence of PCBs. PCBs were detected at concentrations ranging between 519 mg/kg and 36,205 mg/kg, exceeding the NJDEP NRDCSRS of 2.0 mg/kg (Roux, 2002).

In order to prevent direct contact by workers with the PCB-impacted soil/ballast and to minimize the potential for migration of PCB contamination, NJ Transit placed a geotextile liner over the existing ballast between and within the railroad tracks and placed an additional one foot of clean ballast on top of the geotextile liner (Roux, 2002).

To both confirm the previous PCB soil findings and to evaluate for the presence of other potential contaminants, Roux Associates conducted soil sampling activities at the Site on October 18, 2001. The results of the October 2001 sampling activities were presented in the Roux RIWP, and are summarized below. Eight soil borings were completed to a depth of 2.5 feet bgs. Two soil samples were collected from each boring, one from the zero to 0.5 foot (0-0.5) interval in the first soil encountered below the geotextile liner and the second from 2.0 to 2.5 feet (2.0-2.5) below the first soil encountered below the geotextile liner. All 16 soil samples were analyzed for PCBs. PCB concentrations ranged from 440 mg/kg to 3.8 mg/kg in the (0-0.5) samples and from 160 mg/kg to 0.077 mg/kg in the (2.0-2.5) samples. The soil sample from the 0-0.5-ft interval from the track area exhibiting the highest PCB concentration and the soil sample from the 0-0.5-ft interval from the swale area exhibiting the highest PCB concentration were also analyzed for the priority pollutant list parameters with a library search (PP+40). Additional compounds exceeding the NJDEP standards were detected and included base neutral extractable compounds (BNs), specifically PAHs; arsenic; and pesticides (specifically dieldrin and P,P-DDT) (Roux, 2002).

Based on a review of the sample results reported by Roux, the TRSR and applicable guidance, the RI activities will consist of delineation of PCBs, pesticides and VOCs. Other incidental contamination (e.g., low levels of arsenic and PAH) is not part of this RI and would not need to be addressed as long as the property continues to operate as an active rail yard.

The most recent data discussed in the Roux documents was provided by Hampton Clarke Veritech, which is an NJDEP-certified laboratory. However, the analyses were performed in 2002 and earlier. Results were compared to soil cleanup criteria in effect at the time; however the current soil remediation standards differ for some parameters, In addition, the laboratory reporting levels were not always less than the current standards, so a result

reported as not detected in 2002 may be a detection when compared to current standards and current reporting limits using current analytical methods.

4.2 INVESTIGATION PROCESS DESIGN

Samples will be collected in onsite soil. In addition, two piezometers will be installed onsite in order to measure the depth to ground water with soil samples analyzed to determine if there is an uncontaminated interval between soil contamination and the top of the water table.

The previous Roux sample locations will be located in the field by a licensed surveyor. Proposed sample locations will be spotted based on the rationale provided in Table 1. A summary of the sampling program that includes the matrix type, analytical parameters, number of samples for each matrix, frequency of sample collection, number and frequency of field/trip blanks is provided in Table 2. Sample locations are shown on Figure 2.

4.2.1 Soil Sampling

Up to 31 soil borings to a maximum depth of 5 feet bgs will be advanced. Note that based on the Roux reports ground surface was considered the point below ballast; most of the Site is overlain by approximately two feet of ballast; therefore the actual maximum depth of the borings will be 7 feet. The number of samples per boring to be collected will be generally based upon the results reported in the Roux report for delineation purposes. See Table 1 for the anticipated sampling program. All samples will be analyzed for PCBs. In addition, samples will be analyzed for VOCs+15 and pesticides based on locations previously identified by Roux. VOC samples will be collected using Encore™ samplers.

4.2.2 Piezometers

Two piezometers will be installed at the site in order to determine the depth to the top of the water table. This information will be used to determine the interval of uncontaminated soil above the water table. If the interval is sufficient (minimum 2 feet above water table), impact to ground water soil screening levels will not be applicable to the site. No ground water samples or laboratory analysis are included in this proposal.

The piezometers will be installed to a depth of at least 5 feet below the top of the water table. The piezometers will be 2-inch PVC with a 10-foot screen located across the water table. The piezometers will be developed until free flowing. After allowing the piezometers to stand for at least 48 hours, Amec Foster Wheeler will return to the site to collect ground water level measurements.

A minimum of four soil samples will be collected from each boring prior to piezometer construction. Sample intervals will be determined in the field, based on visual observations, PID readings, and estimated depth to ground water.

4.3 INVESTIGATION METHODS

The investigation methods for each project component are discussed below. All project sampling will be performed in accordance with the NJDEP FSPM, the NJDEP AGWST Guidance, and other applicable NJDEP guidance documents.

4.3.1 Soil Sampling

4.3.1.1 Soil Borings

Soil borings will be advanced using Geoprobe® DPT drilling techniques equipped with a stainless steel Macro-Core® sampler lined with a 1.12-inch diameter PVC or acetate sleeve to collect soil samples with minimal disturbance. Soft-dig/air-knife techniques will be employed at all deeper sampling locations prior to test boring penetration. Soil samples will be obtained continuously in 5-foot intervals from the ground surface to the maximum depth at each location to be delineated. Upon recovery, the sample liner will be opened lengthwise with a knife and the entire core length will be screened with a PID. The soil core will be logged in accordance with the Burmeister Soil Classification System and photographed. Following the completion of each boring, the boring will be abandoned in accordance with N.J.A.C. 7:9D.

Upon recovery, the sample liner will be opened lengthwise with a knife and the entire core length screened with a PID. The soil core will be logged in accordance with the Burmeister and Unified Soil Classification Systems. In addition to logging the geologic descriptions, observations including color, moisture content, density, PID readings and noticeable stains were recorded by the geologist.

Soil samples for laboratory analysis will be collected using dedicated, disposable plastic scoops. Following the completion of each boring, a temporary well will be installed in the borehole, and all drilling equipment and tools will be decontaminated. Upon abandonment of the temporary wells, the PVC casing will be removed, and the borehole will be sealed with cement/bentonite grout.

4.3.1.2 Surface Samples

Shallow soil samples (i.e. up to 2 feet bgs) will be collected by hand auger, where possible. Soil samples for laboratory analysis will be collected using dedicated, disposable plastic scoops.

4.3.2 Ground Water Measurements

4.3.2.1 Piezometers

Soil cores will be obtained continuously in 5-foot increments from ground surface, advancing vertically to refusal or boring termination at an approximate depth of 25 feet bgs. Soil will be logged and samples collected as described above. Soil sample intervals will be determined in the field and will be biased based on visual contamination. Samples will include the 6-inch interval located two feet above the water table, as well as the 6-inch interval directly above the top of the water table. The purpose of these soil samples is to

determine if there is at least two feet between the deepest contaminated zone and the top of the water table.

The piezometers will be installed using a Geoprobe® drill rig. Piezometers will be constructed of 2-inch PVC casing with a 10-foot length of 0.010-inch slot PVC well screen set to straddle the ground water table. After the ground water has been allowed to equilibrate for at least 48 hours, Amec Foster Wheeler will return to the site to measure the depth to ground water using an oil/water interface probe.

4.4 FIELD QUALITY CONTROL

Table 2 included the planned QC samples for this project.

4.5 FIELD INSTRUMENT/EQUIPMENT CALIBRATION AND FREQUENCY

The following field instruments will be used for this project:

- MiniRae 2000/3000 – PID
- Solinst Interface Probe

Prior to the initiation of the field investigation, a preventative maintenance and calibration program will be implemented to ensure proper operation of the field instruments. The field personnel will be familiar with the maintenance, calibration, and operation of field equipment and will perform the prescribed field operating procedures outlined in the Operations Manuals accompanying each instrument.

Field instruments used during sampling will be checked for calibration consistent with manufacturer-recommended procedure. SOPs for field instruments are included in Appendix A.

4.6 INSPECTION/ACCEPTANCE OF SUPPLIES AND CONSUMABLES

The laboratory will supply all sample collection bottles and coolers to be used for this project. Upon receipt of the coolers, the contents will be inspected to ensure that the proper quantity, size and type of container have been provided. If any issues are found, i.e. missing/broken bottles, the laboratory will be contacted immediately for replacement containers.

4.7 SAMPLE HANDLING AND CUSTODY REQUIREMENTS

A summary of container types, holding times, and preservation requirements, (including temperature requirements) is provided in Table 2. Sample preservation, containers, and holding times are summarized in Appendix 2.1 of the FSPM. Samples will be tracked by use of chain-of-custody from the field to laboratory. The project chain of custody form and sample labels are included in Appendix C.

4.7.1 Field Chain of Custody Procedures

Chain-of-custody (COC) records will be used to document sample collection and shipment to the laboratories for analysis. The COC is an integral component of the sampling process, and represents the permanent record of sample holding and shipment. Forms will be completed when the samples are packaged for shipping to the laboratories. Until that time, the samples will be maintained in the custody of the Amec Foster Wheeler field team, that custody will include the identification of samplers in the field and personnel in the field office. Once the samples are packaged, the COC form will be placed in the cooler and sent with the samples for each shipment. If multiple coolers are sent to a single laboratory on a single day, one form will be completed for all samples per shipment.

Coolers will be packed with samples designated for a single laboratory. The COC record will identify the contents of each shipment and maintain the custodial integrity of the samples. The COC form will be crosschecked for errors and signed by the designated Amec Foster Wheeler field representative.

The Amec Foster Wheeler field representative will sign the “relinquished by” box and note the date, time, and air bill (if applicable). Until the samples are delivered, the custody of the samples will be the responsibility of the Amec Foster Wheeler field representative and will be kept in a secured area that is restricted to authorized personnel. A laboratory representative will check samples with their respective COC form(s) into the laboratory, and the form will be signed and dated appropriately. The Amec Foster Wheeler field representative or staff member will retain one copy of the signed COC form for the project files. The original COC form will be returned to the project manager with the analytical results to go into the project files.

The COC form is provided in Appendix D.

4.7.2 Laboratory Sample Custody Procedures

The COC form will be signed on receipt by the laboratory to complete the custody chain. The condition of the samples upon receipt by the laboratory will be documented on a cooler receipt log or sample condition upon receipt form. This form will note sample integrity, preservation, temperature, custody seal condition, and will note any discrepancies between information on the sample labels and that on the COC custody form.

4.7.3 Sample Identification Procedures

Each sample will be logged into the laboratory information management system (LIMS) by assigning it a unique sample number. This number and the field sample identification number will be recorded on the laboratory report. Samples will be stored and analyzed according to specified USEPA and/or NJDEP methods. The original COC form will be returned to Amec Foster Wheeler for permanent storage.

4.7.4 Laboratory Chain-of-Custody Procedures

Once the laboratory has logged in the samples, their progress through preparation and analysis will be tracked and monitored through the LIMS. The analysts will be required to

sign out samples from the sample storage area or refrigerator by entering their initials, date and time of sample removal. The samples will be taken to the appropriate analytical section for preparation and analysis where all procedures will be documented in laboratory notebooks or forms and on run logs. Dates of preparation and analysis will be entered into the LIMS. Sample results will be entered into the LIMS either through direct download from the instrument or manually. Unused sample portions and extracts will be returned to the sample storage area and signed back in. The sample or extract will remain in storage at the laboratory until the disposal time period is reached. Disposal information will be entered into the laboratory information system. Sample disposal will not occur until Amec Foster Wheeler confirms that all data have been fully validated and have provided written approval to permit sample disposal.

4.8 FIELD STORAGE AND TRANSPORT PROCEDURES

Samples will be collected, preserved, and transported in accordance to the FSPM and any method specific requirements. Sample preservation requirements are included in Table 2. All samples will be stored in coolers and transported to laboratories under COC, as previously described.

Samples will be transported to the laboratory by field courier, when possible. IAL will pick up samples from the Site at the end of each sampling day.

Compliance with United States Department of Transportation (USDOT) regulations and the International Air Transport Association (IATA) regulations governing the shipment of hazardous materials will be maintained, as applicable. These regulations, CFR 49 Parts 171 through 180 for USDOT and the Dangerous Goods Regulations (DGR) for IATA, describe proper marking, labeling, placarding, packaging, and shipment of hazardous materials, substances, and wastes. IATA regulations cover strictly air transportation, both domestic and international. DOT regulations cover all modes of transportation for shipments originating within the United States and imported to the United States.

This project is not expected to generate samples that would be classified as dangerous goods or hazardous materials.

5.0 ANALYTICAL LABORATORY REQUIREMENTS

5.1 PROJECT COMPOUNDS AND ANALYTICAL SUMMARY

The analytical methods to be used for this project include:

- PCB Aroclors USEPA SW-846 8082 and 8082A
- Pesticides USEPA SW-846 8081A&B
- Target Compound List (TCL) VOCs by USEPA SW-846 8260C with library search to report 15 tentatively identified compounds (TICs)

Table 2 includes the sample matrix and applicable standards. The method detection limit is dictated by the method and the laboratory reporting limit may vary depending on laboratory instruments and sample characteristics. These will be identified in the data deliverable package.

5.2 ANALYTICAL QUALITY CONTROL

QA/QC requirements for the analyses to be performed are specified by the analytical methods. Analytical methods are provided in Table 2.

All laboratories utilized for this project are required to maintain NJDEP laboratory certification and to comply with QA/QC requirements for each method.

Required laboratory QC checks, their required frequency, the established control limits, and the actions to be taken if the control limits are exceeded are summarized for the USEPA method listed in Appendix B.

The laboratory QA/QC procedures are provided in the individual laboratory QA Manuals. All laboratories to be used for this project are required to be certified by NJDEP for the methods they are utilizing.

5.3 LABORATORY DELIVERABLES

The laboratory deliverables for this project are dependent on the data generated and the requirements of the TRSR. Reduced laboratory deliverables will be provided for all analyses performed under this project.

Electronic data will be provided by the laboratory in the required HAZSITE electronic data deliverable (EDD) format as required by the TRSR and as detailed in the NJDEP Electronic Data Interchange (EDI) Manual, dated February 2013.

6.0 DATA REVIEW AND USABILITY

This section of the QAPP addresses various data assessment issues performed by samplers, laboratory, and independent reviewers. It includes the criteria for accepting, rejecting, or qualifying data as discussed in the Data Usability Assessment and Data Usability Evaluation Guidance Document. (NJDEP, 2014d)

6.1 DATA MANAGEMENT

Data acquired during this project include recording and transcribing field notes; logging and retrieval of field instrument data; transmittal of automated field and laboratory results; data transformation and reduction procedures; and data storage, retrieval and security issues throughout the project.

All data tables generated by Amec Foster Wheeler will be checked against the laboratory analytical data package.

6.2 DATA VERIFICATION AND USABILITY

Data review includes the following:

Field	**Lab**
Monitoring performed per SOPs or QAPP	Data entry and transcription errors
Field QC samples collected	Calculation/reduction errors
Chain of custody maintained	Holding time limits met
Deviations from QAPP/SOPs documented	Lab QC samples analyzed
	Deviations from QAPP/SOPs documented
	Proper sample storage
	Chain-of-Custody deviations documented

The laboratory data review process involves evaluation of both the results of the QC data and the professional judgment of the person(s) conducting the review. This application of technical knowledge and experience to the data evaluation is essential to ensuring the high quality of data. The laboratory has documented procedures, which are to be followed and must be accessible to all laboratory personnel. The laboratory generally reviews data in three steps before submittal:

- Level 1 Analyst/Peer Data Review – The analysts review the quality of their work based on an established set of guidelines. At a minimum, the review will ensure that appropriate preparation, analysis, and SOPs have been followed; analytical results are correct and complete; QC samples are within established control limits; and documentation is complete (for example, any anomalies have been documented).

- Level 2 Supervisory Data Review – A supervisor or data review specialist whose function is to provide independent review of the data package will perform this level of review. This review will also be conducted according to established guidelines (that is, method requirements and laboratory SOPs). The Level 2 review includes review of the qualitative and quantitative data and of documented anomalies.
- Level 3 Administrative Data Review – A laboratory QA/QC officer or program administrator performs the final data review before submittal. This level of review provides a total overview of the data package to ensure its consistency and compliance with project requirements.

The project laboratory QA/QC officer or designee will evaluate the quality of the work based on this QAPP and an established set of laboratory guidelines to ensure the following:

- Sample preparation information is correct and complete.
- Analysis information is correct and complete.
- Appropriate procedures have been followed.
- Analytical results are correct and complete.
- Laboratory QC check results are within appropriate QC limits.
- Special sample preparation and analytical requirements have been met.
- Documentation is complete (all anomalies in the preparation and analysis have been documented; holding times are documented).
- Laboratory qualifiers have been assigned to all samples with data usability limitations.

6.3 RECONCILIATION WITH USER REQUIREMENTS

The results obtained from the project will be reconciled with the overall requirements defined by the QAPP. This process is based on a systematic evaluation of the data compared to QAPP criteria.

The reconciliation process:

- Includes consideration of both field and laboratory issues;
- Focuses on the findings of the data review;
- Looks at the data quality actually achieved;
- Takes into account any problems and/or issues encountered during the process; and,
- May involve the averaging or other statistical treatments of data.

The table below lists some typical data verification and validation issues in the left column, along with their potential implications for data usability on the right.

Examples of Reconciling Data Quality Problems with Data Quality Goals	
Typical Data Verification and Validation Problems	**Resulting Data Usability Assessment Issues**
Matrix spike/matrix spike duplicate recoveries are below the acceptance criteria; there were unexpected matrix interferences.	Even with the low recoveries, did the data reveal enough information to be useful for decision-making?
Precision and bias criteria were not achieved. Initial calibration criteria (response factors, correlation coefficient) may not have been appropriate for these analytes.	Does a different method of analysis need to be used to obtain better quality data?
Some maximum allowable holding times have been exceeded. Thus, the results are either biased low or invalid.	Are the measured concentrations sufficiently above the action limits that the potential bias is not significant?
Because sample concentrations were higher than expected, the spike levels were not comparable with the unspiked concentrations, making the results essentially meaningless.	Are measured concentrations so far above the action limits that the low spike recoveries do not adversely affect the ability to confirm that the limits are exceeded?
Conditions in the field required that the sampling procedures be changed significantly.	Is there evidence to support the contention that the samples are still sufficiently representative?

7.0 ASSESSMENTS

Assessments include various reviews and audits conducted by independent individuals and/or organizations or self-assessments, designed to confirm that the QAPP has been followed throughout the project, to identify shortcomings or deviations, and to initiate corrective actions.

7.1 PERFORMANCE AND SYSTEM AUDITS

Proper communication between field personnel, project management personnel, and laboratory personnel will help to ensure that the proper methods and techniques are used throughout the project.

The QC manager, or designee, will initiate audits, select the audit team, and oversee audit implementation.

The field manager will supervise and check that samples are collected and handled in accordance with this QAPP and that documentation of work is adequate and complete.

The laboratory QA manager will ensure that the analytical laboratory follows in-house performance guidelines and will perform system audits under the in-house QA/QC guidelines. The laboratory will immediately deal with any irregularities found in the laboratory's performance or system audits. The laboratory QA manager or their designee will also conduct the following internal audits regularly:

Technical audit, including reviews of calibration and equipment monitoring records, laboratory logbooks, maintenance records, and instrument control charts

Data quality audit reviews, including all aspects of data collection, reporting, and review

Management systems audits verifying that management and supervisory staff effectively implement and monitor all QC activities necessary to support the laboratory QA program.

The Amec Foster Wheeler project manager is responsible for overseeing that the project performance satisfies the QA objectives set forth in this document. Reports and technical correspondence will be peer reviewed by qualified individuals before being finalized.

7.2 CORRECTIVE ACTION PROCESSES

Corrective actions include revising/updating the QAPP and adjusting field and/or laboratory procedures.

Audits and other assessments may find practices or procedures that do not conform to this QAPP. The following sections describe appropriate corrective actions for the various data management activities.

7.2.1 Field Corrective Action

The field manager will review the procedures being implemented in the field for consistency with the established protocols. Sample collection, preservation, labeling, etc., will be checked for completeness. Where procedures do not strictly comply with the established protocol, the deviations will be field documented and reported to the QA officer. Corrective actions will be defined and documented, as appropriate, by the Field Manager and reported to the Amec Foster Wheeler project manager and the QA officer. The documentation will become part of the project file.

7.2.2 Laboratory Corrective Action

The laboratory QA manager will be responsible for review of the data generated by their laboratory to ensure that all QC samples have been run as specified in the protocol. Recoveries of laboratory control sample (LCS), surrogate, and matrix spike (MS) samples will be reviewed for method accuracy. The relative per cent difference (RPD) of laboratory duplicates and matrix spike duplicates (MSD) samples will be reviewed for method precision. The results will be evaluated against the control limits and appropriate corrective action taken if warranted.

Laboratory personnel will be alerted that corrective actions are necessary if any of the following occur:

- The QC data are outside the warning or acceptance limit(s) for precision and/or accuracy established for LCSs. The laboratory QA manager will consult the project chemist or the QC manager to discuss out-of-control data sets.
- Blanks contain contaminants at concentrations exceeding the detection limit.
- Undesirable trends are detected in the LCS or MS percent recoveries, RPDs, or surrogate recoveries.
- Unusual changes in detection limits are observed.
- The laboratory QA manager detects deficiencies during internal or external audits, or from the results of performance evaluation samples.

If the analyst identifies any nonconformity in the analytical methodologies or QC sample results, the laboratory will implement corrective actions immediately. Specific corrective actions are outlined in the laboratory quality assurance manual (QAM).

The analyst will review the preparation or extraction procedures for possible errors check the instrument calibration, evaluate spike and calibration mixes, check instrument sensitivity, and initially handle corrective action procedures at the bench level. The analyst will immediately notify his/her supervisor of the identified problem and the investigation that is being conducted. If the problem persists or cannot be identified, the matter will be referred to the laboratory supervisor and laboratory QA manager, and if the data are impacted, the project chemist and QC manager will be provided a corrective action memo for inclusion in the project file.

Corrective action may include, but will not be limited to:

- Reanalyzing suspect samples if holding time permits
- Retrieving the archived sample for analysis
- Accepting data with acknowledged level of uncertainty (with consultation)
- Recalibrating analytical instruments
- Evaluating and attempting to identify data limitations
- Re-sampling

Working with the project chemist, the QA officer will be responsible for reviewing the laboratory data generated for this project and ensuring that all project QA objectives are met. If any nonconformance is found in field procedures, sample collection procedures, field documentation procedures, laboratory analytical and documentation procedures, and data evaluation and quality review procedures, the impact of the nonconformance on the overall project QA objectives will be assessed. Appropriate actions, possibly including reanalysis or resampling, will be recommended to the Amec Foster Wheeler project manager so that the project objectives can be accomplished. Data deemed unacceptable by the Amec Foster Wheeler project manager, after the implementation of the required corrective actions, will not be accepted and further follow-up corrective actions will be explored.

8.0 REPORTING, DOCUMENTS AND RECORDS

8.1 FIELD LOG BOOKS

Amec Foster Wheeler field staff will maintain a Site-specific field log book for proper documentation of all Site activities.

Field logbooks must be bound and should have numbered, water resistant pages. All pertinent information regarding the Site and sampling procedures will be documented. Notations will be made in logbook fashion, noting the time and date of all entries. At a minimum, recorded information will include:

- Name and exact location of Site
- Date and time of arrival and departure
- Affiliation of persons contacted
- Name of person keeping log
- Names of all persons on the Site
- Purpose of visit
- Relevant Site information (processes or products, waste generation, nature of spilled material)
- Composition and concentration of substance, if known; description of sampling plan
- Field instrument calibration information
- Location of sampling points (including justification)
- Geographically-referenced location of sample point
- Number of samples collected with volumes
- Preservation
- Method of sample collection and any factors that may affect its quality
- Date and time of sample collection and any factors that may affect its quality
- Name of collector
- All sample identification numbers
- Description of samples
- Weather conditions on the day of sampling and up to 48 hours previous and any field observations

8.2 DOCUMENTING SAMPLING POINTS

Sampling points will be documented for their exact location for purposes of future sampling. It is also necessary to document sample locations in an approved geographically referenced format per NJDEP Site Remediation Program (SRP) Electronic Data Interchange (EDI) requirements when submitting analytical results for those samples.

Documentation of sample locations for field notes can be accomplished through the use of a monument, measuring tape and compass. A monument should be chosen at each Site to act as a stationary reference point from which all sampling points can be measured using a compass and measuring tape.

When establishing a sampling point, follow this procedure:

1. Standing at the monument, facing sampling point, use the compass hairlines to determine degree of direction.
2. Line of sight should run from the monument, through both hairline needles on the compass, to the sampling point.
3. When first establishing the sampling point, record the degree and direction reading from the compass in the field notebook, along with the distance measurement, from the monument to the exact sampling point.

8.3 PHOTO-DOCUMENTATION

To the extent practicable, all sampling points should be documented on digital media. Photographs taken to document sampling points should include two or more reference points to facilitate relocating the point at a later date. Keeping a record of photographs taken is required. For each photograph taken, several items should be noted in the field notebook:

- Date
- Time
- Photographed by (name)
- Name of Site
- General direction faced and description of the subject taken
- Sequential number of the photograph

8.4 RECORDS MANAGEMENT

Documents and records will be generated by Amec Foster Wheeler and laboratory personnel. Amec Foster Wheeler documentation includes:

- Field notes that document sample collection and handling, equipment calibration records, and daily notes that could impact quality of the data being generated; and

- Assessment reports; and data reconciliation results and associated recommendations that are developed through the review of the laboratory deliverable packages.

Laboratory documentation includes sample collection and handling records; analytical logbooks; QC sample records; equipment calibration records; assessment reports; and data reconciliation results and associated recommendations. The pertinent information is provided to Amec Foster Wheeler in the laboratory deliverable.

All project data is maintained in project files, both hard copies and electronically. Electronic files are maintained on the Amec Foster Wheeler secure server, which is regularly backed up to ensure data is recoverable, if necessary.

9.0 REFERENCES

New Jersey Administrative Code 7:26C. Administrative Requirements for the Remediation of Contaminated Sites.

New Jersey Administrative Code 7:26D. Soil Remediation Standards

New Jersey Administrative Code 7:26E. Technical Requirements for Site Remediation.

New Jersey Geologic Survey, 2003. Physiographic Provinces of New Jersey Information Circular. Accessed at <http://www.state.nj.us/dep/njgs/enviroed/infocirc/provinces.pdf

New Jersey Statutes Annotated 58:C-1 et seq., Site Remediation Reform Act.

NJDEP, 2005. Field Sampling Procedures Manual, August, Updated April 2011.

NJDEP, 2012a. Technical Guidance for Site Investigation of Soil, Remedial Investigation of Soil, and Remedial Action Verification Sampling for Soil, Version 1.1, August 1

NJDEP, 2012b. Technical Guidance for the Attainment of Remediation Standards and Site-Specific Criteria, Version 1.0, September 24

NJDEP, 2013a. Coordination of NJDEP and USEPA PCB Remediation Policies, Updated March 1

NJDEP, 2013b. Development of Impact to Ground Water Soil Remediation Standards using the Soil-Water Partition Equation, Version 2.0, November

NJDEP, 2014a. Analytical Laboratory Data Generation, Assessment and Usability Technical Guidance, Version 1.0, April

NJDEP, 2014b. Quality Assurance Project Plan Technical Guidance, Version 1.0, April

NJDEP, 2014c. Data of Known Quality Protocols Technical Guidance, Version 1.0, April

NJDEP, 2014d. Data Quality Assessment and Data Usability Evaluation Technical Guidance, Version 1.0, April

NJDEP, Electronic Data Interchange Manual, **http://www.nj.gov/dep/srp/hazsite/docs**

Roux, 2002. Remedial Investigation Work Plan, March 6

Roux, undated. Draft Remedial Investigation Report

TABLES

Table 1 Summary of Sampling Program
East Barracks Rail Yard
Trenton, New Jersey

Area of Concern	Sample ID	Sample Depth (ft. bgs)	Analysis	Location	Sampling Method
East Barracks Rail Yard	E-1	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of A-3	Direct-Push Macro Cores
	E-2	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of B-9	Direct-Push Macro Cores
	E-3	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of B-11	Direct-Push Macro Cores
	E-4	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of A-14	Direct-Push Macro Cores
	E-5	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of PL-9	Direct-Push Macro Cores
	E-6	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of B-15	Direct-Push Macro Cores
	E-7	0.5-1; 2-2.5; 3-3.5; 4.5-5	PCBs, VOCs, Pesticides	Vertical delineation of D-13	Direct-Push Macro Cores
	E-8 through E-29	0.5-1; 2-2.5	PCBs	Perimeter	Direct-Push Macro Cores
	PZ-1 & PZ-2	TBD	PCBs	4-5 intervals to be selected in the field	Direct-Push Macro Cores

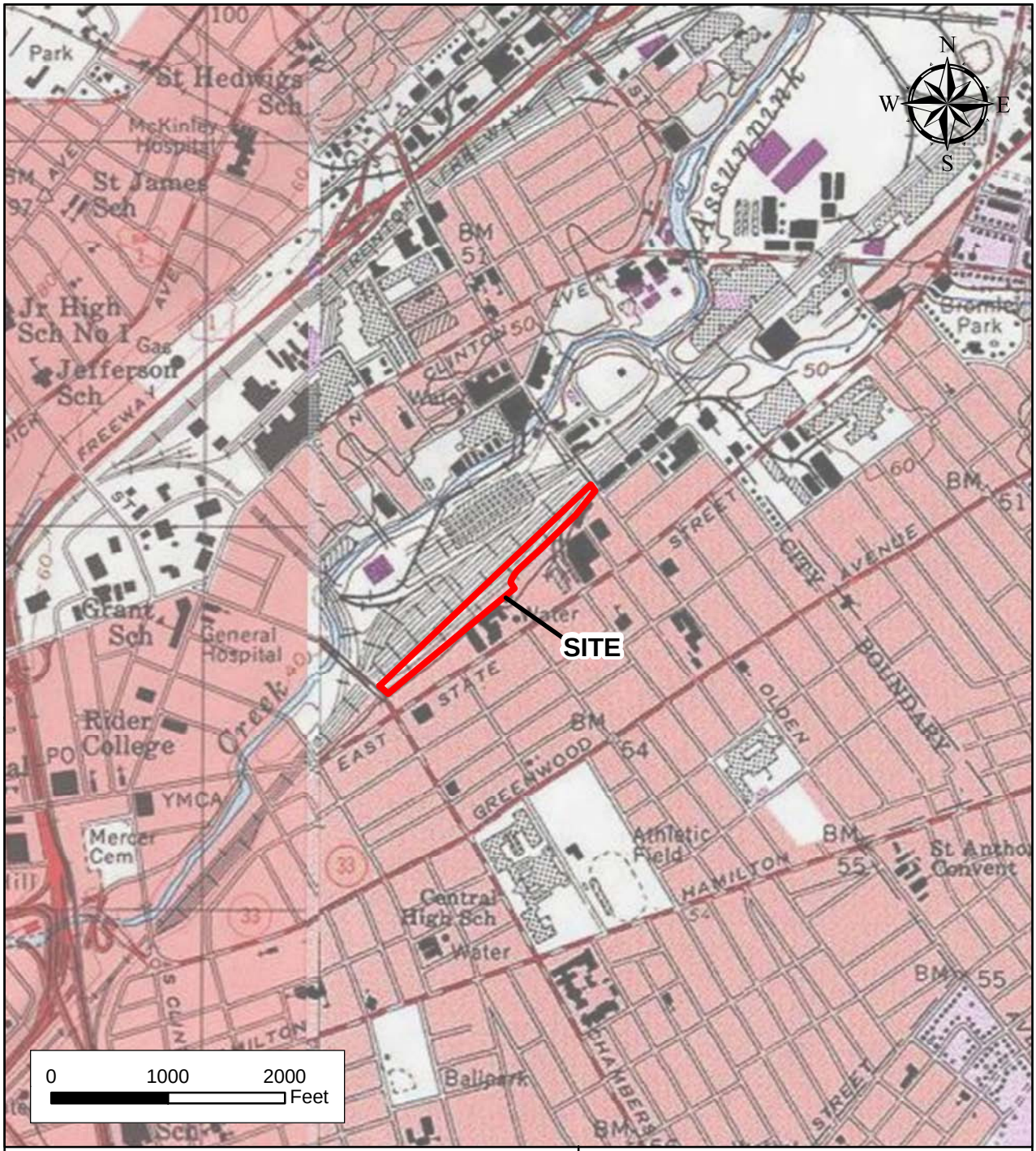
Notes:
bgs - below ground surface
PCBs - Polychlorinated Biphenyls

Table 2 Summary of Analytical Parameters
East Barracks Rail Yard
Trenton, New Jersey

	Parameter	Maximum Number of Samples	Number of Field Blanks	Number of Duplicates	Number of Trip Blanks	Analytical Method	Sample Preservation	Sample Container Volume & Type	Sample Holding Time
	PCBs	86	4	4	0	SW-846-8082A	Cool 4°C	4 oz GTLC	14 days to extract/ 40 days to analyze
	TCL VOCs+15	38	4	4	3	SW-846 8260C	Cool 4°C	Encore (3)	48 hours freeze/ 14 days to analyze
Matrix: Soil	Pesticides	38	4	4	0	SW-846 8081B	Cool 4°C	4 oz GTLC	14 days to extract/ 40 days to analyze

Notes:
PCB - Polychlorinated biphenyl

FIGURES



LEGEND

site location

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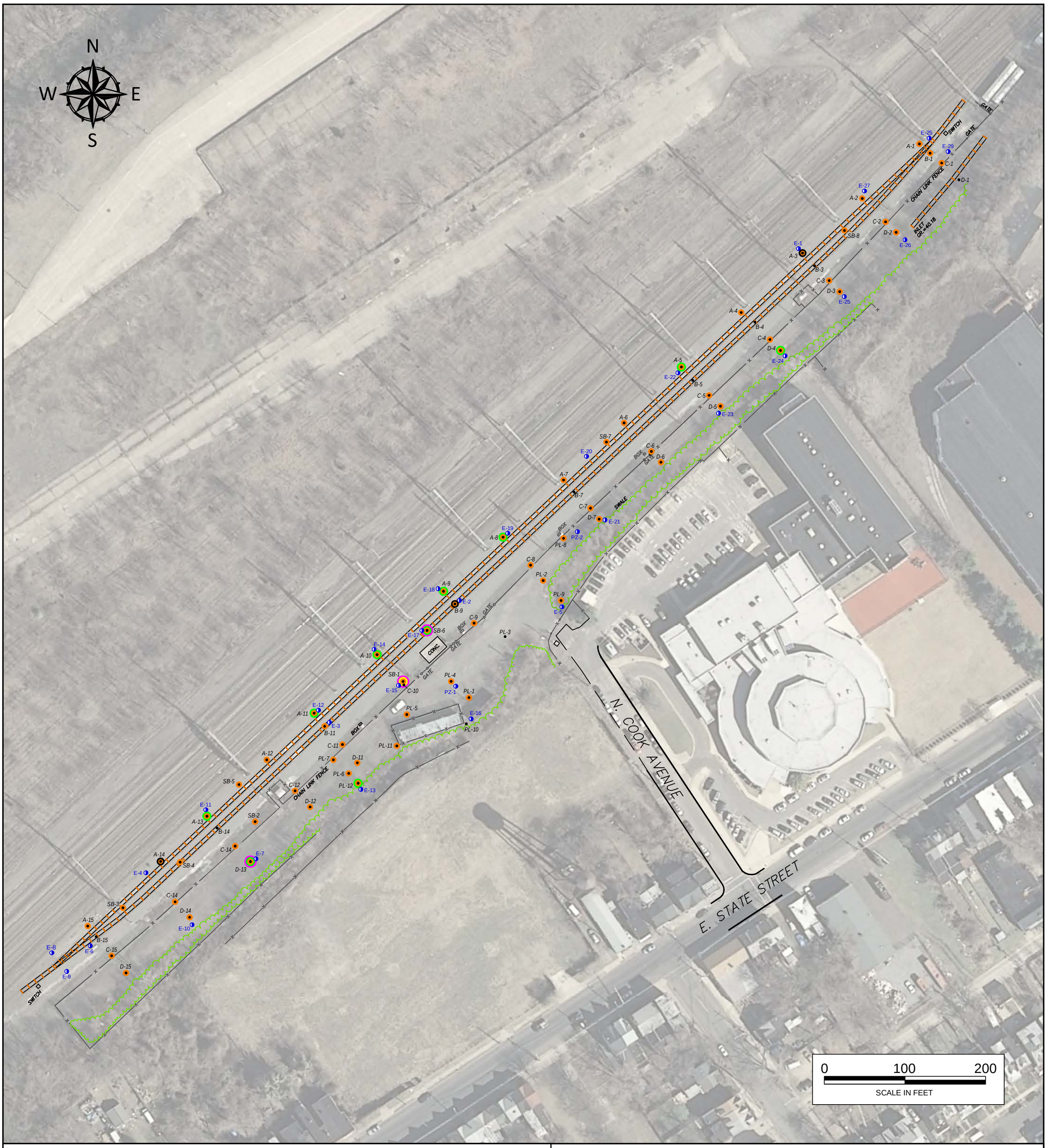
Figure 1

Site Location Map
East Barracks Rail Yard
Trenton, NJ

Source: US Topo Maps; Digital USGS Seamless Maps; ESRI Map Server, 2015

Rev. By: ML	Contract No: 277710568.0001	April 2015



Legend

- soil sample location
- proposed soil sample location
- PCB (0-0.5ft) > 0.2 mg\kg
- PCB (3-3.5ft) > 0.2 mg\kg
- VOC > SRS/IGW
- Pesticides > SRS/IGW
- Reporting Limit > Applicable standard for VOC/Pesticides

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Source:
State of New Jersey Office of Information Technology, Office of Geographic Information Systems, 2007.

Figure 2
Sampling Plan
Amtrak East Barracks Rail Yard
Trenton, New Jersey

Reviewed By: ML	Contract No. 277710568.0001	FEBRUARY 2015

APPENDIX A
FIELD INSTRUMENTS STANDARD OPERATING PROCEDURES

AMEC Environment & Infrastructure Standard Operating Procedure Title: CONDUCTIVITY-FIELD, Field Analysis of the Specific Conductance of Waters (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 08/29/2013 SOP Number COND_F02_Horiba_U-52_082913.doc Page 1 of 9 Approved

1. SCOPE AND APPLICATION

   1.1. This SOP is applicable to the field determination of specific conductance (conductivity) using Standard Methods (SM) 19th Edition 2510 B.

   1.2. This SOP is applicable to the field determination of specific conductance (COND), using a Horiba U-52 Multi Water Quality Checker equipped with a COND sensor probe.

2. METHOD SUMMARY

   2.1. This method determines the specific conductance of water samples using a conductivity meter with an electrode. Each time samples are analyzed for the purpose of regulatory reporting, both blank and calibration verification standards are analyzed.

   2.2. A duplicate is performed for each batch of 20 or less samples; the calculated RPD must be less than or equal to 20% (Section 10). Note that the Horiba U-52 is normally used by AMEC with a flow-through cell to assess stabilization of indicator parameters within the context of low-flow ground water sampling. Within that context, duplicate sampling is not performed in the field; however, performance of duplicate calibration analysis can be performed at the specified rate, and will be recorded in the laboratory or field log book.

3. INTERFERENCES

   3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with distilled or tap water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

   4.1. Horiba U-52

4.2. Clean Horiba transparent calibration cup provided (200 mL to lower fluid fill line)

4.3. Clean 50 mL reusable glass volumetric pipette (as necessary)

4.4. Clean 250 mL glass beaker (as necessary)

5. REAGENTS

5.1. Deionized water.

6. STANDARDS

6.1. Standard calibration solutions appropriate for manufacturer calibration ranges purchased from commercial vendor:

- 0.0 mS/m- 99.9 mS/m (0 umhos/cm- 999 umhos/cm);
- 0.090 S/m- 0.999 S/m (900 umhos/cm- 9,999 umhos/cm); and
- 0.90 S/m- 9.99 S/m (9,900 umhos/cm- 99,900 umhos/cm)

6.2. Initial 5-point calibration: Potassium chloride (KCI) standard calibration solutions to cover manufacturer calibration ranges (as above) and additional check standard solution (e.g., 2,000 umhos/cm or 2764 umhos/cm).

6.3. All calibration solutions shall be marked with the date received by the laboratory and the date first opened by the laboratory.

7. SAMPLE HANDLING AND PRESERVATION

7.1. Sample specific conductance should be measured as soon as possible.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

9. PROCEDURE

9.1. Zero Calibration (Manual Calibration)

- Wash the COND sensor two or three times using deionized water. Completely remove the water on the sensor and calibrate the instrument in the atmosphere.
- Press the control unit's CAL key to set the calibration mode. Press the down (▼) key to move the cursor to "Manual calibration", then press the ENTER key.
- In the parameter selection screen, move the cursor to "Cond", then press the ENTER key.
- Set the number of calibration points, then press the ENTER key. (Set for 2 points of calibration)
- Press the up (▲) and down (▼) keys to set the "Cond" value to 0.0 mS/m (0.000 mS/cm).
- Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration. Record reading in the logbook.
- Rinse with distilled or tap water between samples.

9.2. Span Calibration (Manual Calibration)

Calibrate meter with appropriate standard solution (within the range of 0.0 mS/m - 99.9 mS/m; 0.090 S/m - 0.999 S/m; or 0.90 S/m - 9.99 S/m) at 25 °C +/- 5 °C. ***Span calibration at AMEC is typically performed using 50 mS/m (500 umhos/cm) standard solution.***

- When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the first span calibration procedure.

- Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 50 mS/m (0.5 mS/cm) standard solution (for fresh water calibration).

- Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.

- Press the up (▲) and down (▼) keys to set the "Cond" value to 50 mS/m (0.5 mS/cm). Calibration range = 0 mS/m to 99.9 mS/m (0 mS/cm to 0.999 mS/cm).

- Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

- Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Record stable reading in the log book. Press the ENTER key to return to the calibration parameter selection screen.

9.3. Calibration Check

- Performed daily, or per use if less frequent.

- Wash the sensor two or three times using deionized water.

- Fill Horiba calibration beaker to lower mark (200 mL) with standard solution.

- Insert sensor into calibration beaker and record the reading.

- Check standard result must be within +/- 10% conductivity units; if not, instrument must be recalibrated per SOP Sections 9.1 and 9.2.

9.4. Initial (New Instrument) Calibration

9.4.1. A five point calibration is required on an initial (new instrument purchase) basis.

9.4.2. A separate initial Laboratory Log will be maintained for this purpose.

9.4.3. 5-Point Calibration Procedure is as follows:

- Perform Zero Calibration in accordance with Section 9.1.
- Perform Span Calibration in accordance with Section 9.2; however, perform the span calibration three times, using a standard calibration solution that falls within each of the three instrument calibration ranges (e.g., 500 umhos/cm for the 0.0 mS/m - 99.9 mS/m range; 5,000 umhos/cm for the 0.090 S/m - 0.999 S/m range; and 20,000 umhos/cm for the 0.90 S/m - 9.99 S/m.
- Record stabilized readings in the Laboratory Log.
- Press the MEAS key to return to the Measurement mode.
- Perform a calibration check using a check standard solution (e.g., 2,000 umhos/cm or 1409 umhos/cm), and record stabilized reading in the Laboratory Log.
- Check standard result must be within 10% +1- of true value.

9.4.4. Conductivity Cell Constant

- The Horiba instrument does not allow for direct read of the cell constant. The manufacturer reports a cell constant of 1.0 cm^{-1}.
- Calculate new instrument cell constant for the Horiba meter using Standard Methods 25108, as described for commercial probes that indicate conductivity directly and which contain a temperature sensor. The cell constant (C, cm-1) is defined as:

  C = (Ks x 1/Km) x (1+ (0.0191 x (T - 25)))

  Where,

  Ks = known solution value (standard solution) (uS/cm or umho/cm);

  Km = conductivity as measured (uS/cm or umho/cm);

  T = temperature in degrees Celsius

- Record calculated value in Laboratory Log

9.5. Data Processing:

Following calibration, obtain environmental sample data by reading digital COND units from meter display; record in field log book.

10. QUALITY CONTROL

10.1. A quality control batch sample analysis will be performed only when a regulatory reportable required.

Precision analysis is performed on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{\left|D_1 - D_2\right|}{\left[D_1 + D_2\right]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF- CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory

operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability. Reagent stock will be maintained to insure for compliance with manufacturer shelf life specifications. Where provided by the manufacturer, reagent expiration date will be clearly indicated on the reagent packaging.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Definitions:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interfering is not observed at or above the minimum quantization limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

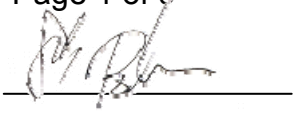
SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job**,** received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

15. REFERENCES

15.1 Multi Water Quality Checker, U-50 Series, Instruction Manual, Code GZ0000144342, HORIBA, September 2008.

15.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2510 B.

AMEC Environment & Infrastructure Standard Operating Procedure Title: DISSOLVED OXYGEN-FIELD, Field Analysis of the Dissolved Oxygen of Waters (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 08/29/13: SOP Number: DO_F02_Horiba_U-52_082913.doc Page 1 of 9  Approved

1. SCOPE AND APPLICATION

1.1. This SOP is applicable to the field determination of dissolved oxygen using Standard Methods (SM) 19th Edition 4500-O G.

1.2. This SOP is applicable to the field determination of dissolved oxygen (DO), using a Horiba U-52 Multi Water Quality Checker equipped with a DO sensor probe.

2. METHOD SUMMARY

2.1. This method determines the specific conductance of water samples using a conductivity meter with an electrode. Each time samples are analyzed for the purpose of regulatory reporting, both blank and calibration verification standards are analyzed.

2.2. A duplicate is performed for each batch of 20 or less samples; the calculated RPD must be less than or equal to 20% (Section 1 0). Note that the Horiba U-52 is normally used by AMEC with a flow-through cell to assess stabilization of indicator parameters within the context of low-flow ground water sampling. Within that context, duplicate sampling is not performed in the field; however, performance of duplicate calibration analysis can be performed at the specified rate, and will be recorded in the laboratory or field log book.

3. INTERFERENCES

3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with distilled or tap water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

4.1. Horiba U-52

4.2. Clean calibration beaker (1,000 mL volumetric). The transparent calibration cup included cannot be used to manually calibrate the DO

sensor. Use a suitable bottle in which the DO sensor can be immersed. The black calibration cup provided for auto cal can be used for this purpose.

4.3. Air pump for lab calibration. Wet paper towel for field calibration.

5. REAGENTS

5.1. Deionized water

5.2. Sodium sulfite (zero calibration solution)

5.3. Zero calibration solution shall be marked with the date received by the laboratory and the date first opened by the laboratory.

6. STANDARDS

6.1. Standard calibration (zero) liquid (sodium sulfite solution) – Dissolve 50 g of sodium sulfite to 1,000 mL in deionized water at 25^{o} C.

7. SAMPLE HANDLING AND PRESERVATION

7.1. Wait at least 20 minutes after turning the system power ON before calibrating the DO sensor.

7.2. Sample dissolved oxygen should be measured as soon as possible.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

9. PROCEDURE (Manual Calibration)

9.1. Zero Calibration

- Wash the Dissolved Oxygen (DO) sensor two or three times using deionized water.

- First, calibrate the zero point. Press the control unit's CAL key to set the calibration mode.

- Press the down (▼) key to move the cursor to "Manual calibration", then press the ENTER key.

- In the parameter selection screen, move the cursor to DO, then press the ENTER key. Set the number of calibration procedures, then press the ENTER key. (Set for two (2) calibration points.)

- Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the bottle of zero calibration solution.

- Press the up (▲) and down (▼) keys to set the DO value to 0.00 mg/L. Check that "Current measurement value" has stabilized. Record stabilized reading in the logbook then press the ENTER key to start calibration.

- When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the span calibration procedure. Record reading in the log book.

- Remove the sensor from the zero calibration solution and thoroughly rinse with deionized water.

9.2 Span Calibration

When calibrating in the lab, make a standard calibration liquid by pouring 1 to 2 liters of distilled or tap water into a suitably sized beaker or container. Using the air pump, feed air into the water and aerate the solution until oxygen is saturated (~ 1 hr).

When performing field calibration, a wet paper towel may be wrapped around the sensor probes in lieu of submerging the sensor probe in the span solution.

- When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the span calibration procedure.

- Submerge the sensor probe in the container filled with the span solution for lab calibration OR wrap the sensor probe with a wet paper towel if air calibrating in the field.

- Press the up (▲) and down (▼) keys to set the DO value to the saturated dissolved oxygen value of the water at that temperature. (***See tables below: For lab calibration use Table 1; for field calibration in air use Table 2).***

- Check that "Current measurement value" has stabilized. Record the reading then press the ENTER key to start calibration.

- Record the stable reading in the log book. Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.

Table 1: Laboratory Standard Calibration Liquid

Amounts of saturated dissolved oxygen in water at various temperatures (salinity=0.0%)

JIS K0101

Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)	Temp. (°C)	DO (mg/L)
0	14.16						
1	13.77	11	10.67	21	8.68	31	7.42
2	13.40	12	10.43	22	8.53	32	7.32
3	13.04	13	10.20	23	8.39	33	7.22
4	12.70	14	9.97	24	8.25	34	7.13
5	12.37	15	9.76	25	8.11	35	7.04
6	12.06	16	9.56	26	7.99	36	6.94
7	11.75	17	9.37	27	7.87	37	6.86
8	11.47	18	9.18	28	7.75	38	6.76
9	11.19	19	9.01	29	7.64	39	6.66
10	10.92	20	8.84	30	7.53	40	6.59

Table 2: Field Air Calibration

Air calibration value in adopting evaluation based on JIS K0101

Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)	Temp (°C)	DO (mg/L)
0	15.58						
1	15.15	11	11.74	21	9.55	31	8.16
2	14.74	12	11.47	22	9.38	32	8.05
3	14.34	13	11.22	23	9.23	33	7.94
4	13.97	14	10.97	24	9.08	34	7.84
5	13.61	15	10.74	25	8.92	35	7.74
6	13.27	16	10.52	26	8.79	36	7.63
7	12.93	17	10.31	27	8.66	37	7.55
8	12.62	18	10.10	28	8.53	38	7.44
9	12.31	19	9.91	29	8.40	39	7.35
10	12.01	20	9.72	30	8.28	40	7.25

9.3 Data Processing:

Following calibration, obtain environmental sample data by reading digital DO units from meter display; record in field log book.

10. QUALITY CONTROL

10.1. A quality control batch sample analysis will be performed only when a regulatory reportable is required.

Precision analysis is performed on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{\left|D_1 - D_2\right|}{\left[D_1 + D_2\right]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability. Reagent stock will be maintained to insure for compliance with manufacturer shelf life specifications. Where provided by the manufacturer, reagent expiration date will be clearly indicated on the reagent packaging.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult “Less is Better: Laboratory Chemical Management for Waste Reduction”, available from the American Chemical Society’s Department of Government

Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Definitions used within the laboratory:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

FIELD BLANK - this is any sample that is submitted from the field and is identified as a blank. This includes trip blanks, rinsates, equipment blanks, etc.

HOLDING TIME - the elapsed time expressed in days from the date of collection, or date of receipt, depending on the protocol.

LABORATORY RECEIPT DATE - the date on which a sample is received at the Contractor's facility, as recorded on the shipper's delivery receipt.

MATRIX - the predominant material of which the sample to be analyzed is composed.

METHOD DETECTION LIMIT (MDL) - the minimum concentration of a substance (an analyte) that can be measured with 99% confidence that the analyte concentration is greater than (40 CFR Part 136 Appendix B).

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interfering is not observed at or above the minimum quantization limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

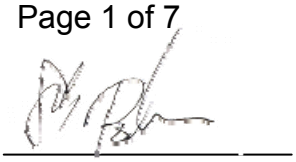
SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job**,** received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

15. REFERENCES

15.1 Multi Water Quality Checker, U-50 Series, Instruction Manual, CODE GZ0000144342, HORIBA, September 2008.

15.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 4500-O G.

AMEC Environment & Infrastructure Standard Operating Procedure Title: Oxidation Reduction Potential, Measurement of ORP in the Field (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 08/29/13 SOP Number: ORP_F02_Horiba_ U-52_082913.doc Page 1 of 7  Approved

1. SCOPE AND APPLICATION

   1.1. This SOP is applicable to the field determination of oxidation reduction potential (ORP) using Standard Methods (SM) 19th Edition 2580 B.

   1.2. This SOP is applicable to the field determination of ORP using a Horiba U-52 series Multi Water Quality Checker System equipped with pH/ORP/ TEMP/COND/DO/TURB sensor units. Horiba U-52.

   1.3. This procedure is for an operation check and maintenance of the ORP electrode; no calibration procedure is provided by the manufacturer.

2. METHOD SUMMARY

   2.1. The ORP of a water sample is used with a platinum electrode and is expressed in millivolts (mV).

3. APPARATUS AND MATERIALS

   3.1. Horiba U-52 Multi-parameter Water Quality Monitoring System

   3.2. 500 mL or equivalent beaker or container.

4. REAGENTS

   4.1. Distilled or tap water.

5. STANDARDS

   5.1. Horiba standard powder 160-22 or No, 160-51, or YSI 3682 Zobell Solution in dry form (“ORP Standard Solution” or ”3682 Solution” consisting of 75% Potassium Chloride, 14% Potassium Ferrocyanide Trihydrate, and 11% Potassium Ferricyanide by weight).

   5.2. All chemicals shall be marked with the date received by the laboratory and the date first opened by the laboratory.

6. SAFETY

6.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

6.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

6.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

6.4. Do not give a sudden shock to the sensor probe. The sensor will become damaged.

6.5. Do not remove the protection cover from the sensor probe before using.

6.6. The YSI 3682 Zobell Solution will react with acids to form harmful byproducts, including hydrocyanide gas.

7. INSTRUMENT PROPER OPERATION CHECK PROCEDURE

7.1. Reconstitute ORP Standard Powder (No. 160-22 or No. 160-51)

- Fill a clean beaker with one bag of ORP standard powder No. 160-22 or No. 160-51. Add 250 ml deionized water to the beaker containing the powder and agitate solution thoroughly. There will be some excess quinhydrone (a black powder) that floats on the surface when agitating the solution. If the prepared ORP standard solution is left in open air for one hour or more, the solution may be transformed. For this reason, ORP standard solution reconstituted from Horiba ORP standard powder 160-22 or 160-51 cannot be stored.

7.2. Alternatively, for YSI 3682 Zobell Solution in dry form:

- Add 125 +/- 5 ml deionized or distilled water to the amber bottle containing the dry 3682 Solution (125 ml typically fills the bottle to the bottom of the neck). Mark the label with the preparation date. The reconstituted solution has a maximum shelf life of 6 months (the shelf life of the dry product is 24 months). Store product below 40^{o} C.

7.3. Operating Procedure

- Fill the transparent calibration cup to the reference line with the standard solution.
- Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.
- Press the control unit's CAL key to set the calibration mode.
- Press the down (▼) key to move the cursor to "Manual calibration", then press the ENTER key.
- In the parameter selection screen, move the cursor to ORP, then press the ENTER key.
- Press the up (▲) and down (▼) keys to set the mV value of the ORP standard solution containing the submerged sensor probe at the measurement temperature.

For Horiba ORP standard solution 160-22 or 16051:

Temperature	160-22	16051
5	+274	+112
10	+271	+107
15	+267	+101
20	+263	+95
25	+258	+89
30	+254	+83
35	+249	+76
40	+244	+69

For YSI 3682 Zobell Solution:

TEMP in °C	Ag/AgC1 (4M KC1) in millivolts
-5	270.0
0	263.5
5	257.0
10	250.5
15	244.0
20	237.5
25	231.0
30	224.5
35	218.0
40	211.5
45	205.0
50	198.5

- Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

- Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter selection screen.

8. INSTRUMENT MAINTENANCE

8.1. Daily Maintenance

- pH/ORP sensor: Remove any visual contamination which is present by a piece of gauze dampened with detergent.

8.2. Monthly Maintenance for the pH/ORP Probe

- Replace the internal solution for the pH sensor probe. Remove the sensor from the sensor probe using the sensor spanner. Open the internal solution replenishment rubber stopper and remove the internal solution with a syringe. Pour the new solution (#330) to the level near the rubber stopper. Avoid air bubbles in

the solution. Air bubbles in the internal solution will impair the sensor's pressure compensation function. Shake the sensor to avoid air bubbles in the internal solution from remaining at the bottom of the sensor. Attach the sensor to the sensor probe.

8.3. Long Term Storage

- Remove the pH/ORP sensor from the sensor probe and check the internal solution replenishment port is closed. Attach a seal to the liquid junction and attach the rubber caps before storage.

9. POLLUTION PREVENTION

9.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

9.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability.

9.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

10. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all

release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

11. DEFINITIONS

The following is a list of commonly used Terms and Definitions:

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ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantization limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE NUMBER - a unique identification number designated to each sample.

12. REFERENCES

12.1 Multi-Parameter Water Quality Monitoring System, U-22XD, Operation Manual, HORIBA, September 2008.

12.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2580 B.

12.3 YSI 3682 Zobell Solution Instructions, Item # 605518, Yellow Springs, Ohio (Phone 800-765-4974)

AMEC Environment & Infrastructure Standard Operating Procedure Title: pH - FIELD, Field Analysis of the pH of Waters Electrochemically (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 07/03/2014 SOP Number: pH_F02_Horiba_U-52_070314.doc Page 1 of 8 Approved

1. SCOPE AND APPLICATION

1.1. This SOP is applicable to the field determination of pH using Standard Methods (SM) 19th Edition 4500 H^+ B.

1.2. This SOP is applicable to the field determination of pH using a Horiba U-52 Multi Water Quality Checker System equipped with a pH sensor.

2. METHOD SUMMARY

2.1. This method determines the pH of water samples using a U-52 meter with an electrode. Each time samples are analyzed for the purpose of regulatory reporting, blank and calibration verification standards are analyzed.

2.2. A duplicate is performed for each batch of 20 or less samples; the calculated RPD must be less than or equal to 20% (Section 10). Note that the Horiba U-52 is normally used by AMEC with a flow-through cell to assess stabilization of indicator parameters within the context of low-flow ground water sampling. Within that context, duplicate sampling is not performed in the field; however, performance of duplicate calibration analysis can be performed at the specified rate, and will be recorded in the laboratory or field log book.

3. INTERFERENCES

3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with distilled or tap water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

4.1. Horiba U-52

4.2. Clean Horiba calibration cup provided (200 mL to lower fluid fill line).

5. REAGENTS

5.1. Deionized water.

6. STANDARDS

6.1. Standard calibration buffer solutions (pH 4, 7, 10); purchased from commercial vendor (e.g., HACH, OAKTON).

6.2. All buffer solutions shall be marked with the date received by the laboratory and the date first opened by the laboratory.

7. SAMPLE HANDLING AND PRESERVATION

7.1. In the field, pH should be measured immediately after collecting the environmental sample.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

9. PROCEDURE

9.1. The Horiba U-52 allows for either a 1-point or 2-point calibration for pH. A 2-point calibration must be used at all times. For this reason, the 2-point calibration procedure below uses pH 4 and pH 10 standard calibration solutions.

9.2. Manual Calibration (2-Point Calibration)

- Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with pH 4 standard solution (200 ml).

- Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup.

- Press the control unit's CAL key to set the calibration mode.

- Press the down (▼) key to move the cursor to "Manual calibration", then press the ENTER key.

- In the parameter selection screen, move the cursor to "pH", then press the ENTER key.

- Set the number of calibration points (2), then press the ENTER key.

- Press the up (▲) and down (▼) keys to set the pH value of the pH 4 standard solution containing the submerged sensor probe at the measurement temperature **(r*efer to Table 1 below for OAKTON standard solutions or use adjustment on buffer solution bottle label*)**. Record set reading to 2 decimal places in log book.

- Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

- Press the ENTER key to start the span calibration procedure when the message "Cal complete. Press ENT to Span cal." appears.

- Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with pH 10 standard solution (200 ml).

- Wash the sensor probe 2 or 3 times in deionized water to remove any dirt, then submerge the sensor probe in the transparent calibration cup. Record stabilized reading.

- Press the up (▲) and down (▼) keys to set the pH value of the pH 10 standard solution containing the submerged sensor probe at the measurement temperature **(r*efer to Table 1 for OAKTON standard solutions or use adjustment on buffer solution bottle label*).** Record set reading to 2 decimal places in log book.

TABLE 1
pH Values of OAKTON Standard Buffer Solutions at Various Temperatures

Temp °C	pH 4 Standard Solution	pH 7 Standard Solution	pH 10 Standard Solution
0	4.01	7.11	10.32
5	4.01	7.09	10.25
10	4.00	7.06	10.18
15	4.00	7.04	10.12
20	4.00	7.01	10.06
25	4.01	7.00	10.02
30	4.01	6.98	9.97
35	4.02	6.98	9.93
40	4.03	6.97	9.89
45	4.04	6.97	9.86

- Check that "Measurement value" has stabilized, then press the ENTER key to start calibration.
- Calibration is finished when the message "Cal complete. ENT to manual cal menu." appears. Press the ENTER key to return to the calibration parameter.

9.2 Calibration Check

- Wash the sensor two or three times using distilled or tap water.
- Fill Horiba calibration beaker to lower mark (200 mL) with pH 7 buffer solution.
- Insert sensor into calibration beaker and record reading to two decimal places.
- Check standard result must be within 0.10 +/- pH units.

9.3 Recalibration Requirement (Sample Period > 3 Hr)

- If a period >3 hours elapses from the time of the initial calibration to sample measurement, a pH buffer check standard must be performed, as follows:

- Wash the sensor two or three times using distilled or tap water.
- Fill Horiba transparent calibration beaker to lower mark (200 mL) with pH 7 buffer solution.
- Insert sensor into calibration beaker and record reading.
- If the sensor reading differs by 0.2 +/- pH units from the standard buffer value, than the meter must be recalibrated per procedures 9.2 and 9.3.

9.4 Data Processing

- Following calibration, obtain environmental sample data by reading digital meter display (pH); record in the field log book to two decimal places.

10. QUALITY CONTROL

10.1. A quality control batch is opened only when required for a regulatory reportable.

10.2. Precision analysis is performed by implementing the above procedure on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{\left|D_1 - D_2\right|}{\left[D_1 + D_2\right]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLING OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult “Less is Better: Laboratory Chemical Management for Waste Reduction”, available from the American Chemical Society’s Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and

land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Definitions:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantization limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job**,** received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

15. REFERENCES

15.1 Multi Water Quality Checker, U-50 series, Instruction Manual, CODE GZ0000144342, HORIBA, September 2008.

15.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 4500-H^+ B.

AMEC Environment & Infrastructure Standard Operating Procedure Title: TEMPERATURE-FIELD, Measurement of Temperatures in the Field (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 06/10/2013 SOP Number: TEMP_F02_Horiba_U-52_061013.doc Page 1 of 5  Approved

1. SCOPE and APPLICATION

    1.1. This SOP is applicable to the field determination of temperature using Standard Methods (SM) 19th Edition 2550 B.

    1.2. This SOP is applicable to the field determination of temperature using a Horiba U-52Multi Water Quality Checker equipped with a TEMP sensor.

2. METHOD SUMMARY

    2.1. This method determines the temperature of water samples using a mercury-filled Celsius thermometer, providing a calibration setting for the instrument thermistor.

3. INTERFERENCES

    3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with DI or tap water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

    4.1. Horiba U-52

    4.2. AMEC NIST-certified thermometer (serial number # 4L2200)

    4.3. Clean sample container.

5. REAGENTS

    5.1. Deionized water.

6. SAFETY

    6.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

6.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

6.3. All questions pertaining to any safety procedure should be brought to the department supervisor or local AMEC Safety and Health Manager.

7. PROCEDURE (Temp Calibration)

- Temperature calibration is performed on a quarterly basis.
- Wash the sensor two or three times using deionized water.
- Fill a container with water and insert NIST thermometer into sample container; allow time for measured temperature to stabilize; record as the “Set” value.
- Insert the probe. Wait 5 minutes before starting calibration. Press the control unit’s CAL key to set the calibration mode.
- Press the down (▼) key to move the cursor to “manual calibration”, then press the ENTER key.
- In the parameter selection screen, move the cursor to ‘Temp” then press the ENTER key.
- Press the up (▼) and down (▲) keys to set the calibration value – the temperature of the water containing the submerged sensor probe (the “Set value”). Record reading in log book.
- Check that “Current measurement value” has stabilized, then press the ENTER key to start calibration.
- Calibration is finished when the message “Cal complete. CNT to measure” appears.

8. QUALITY CONTROL

8.1. For regulatory reportable data, a duplicate is analyzed every 20 samples or monthly whichever is more frequent. Primary and duplicate sample analysis must be +/- 1 ^{o}C. Routine instrument calibration is performed on a weekly basis.

9. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up. For further corrective actions and contingencies for handling out-of-control or unacceptable data see *"Out of Control Events Corrective Actions"* SOP.

10. POLLUTION PREVENTION

10.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

10.2 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

11. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory

Personnel", available from the American Chemical Society at the address listed above.

12. DEFINITIONS

The following is a list of commonly used Terms and Definitions used:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantitation limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job**,** received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

13. REFERENCES

13.1 Multi Water Quality Checker, U-50 Series, Instruction Manual, code GZ0000144342, HORIBA, September 2008.

13.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2550 B.

AMEC Environment & Infrastructure Standard Operating Procedure Title: TURBIDITY- FIELD, Field Analysis of the Turbidity of Waters (Horiba) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 08/29/13 SOP Number: TURBI_F02_Horiba _U-52_082913.doc Page 1 of 6  Approved

1. SCOPE AND APPLICATION

   1.1. This SOP is applicable to the field determination of turbidity using Standard Methods (SM) 2130 B.

   1.2. This SOP is applicable to the field determination of turbidity (TURB), using a Horiba U-52 Multi Water Quality Checker equipped with a TURB sensor .

2. METHOD SUMMARY

   2.1. This method determines the turbidity of water samples using a turbidity sensor with an electrode. Each time samples are analyzed for the purpose of regulatory reporting, a blank and calibration verification standards are analyzed. A duplicate is performed for each batch of 20 or less samples; the calculated RPD must be less than or equal to 20% (Section 10).

3. INTERFERENCES

   3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with DI or tap water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

   4.1. Horiba U-52

   4.2. Clean Horiba transparent calibration cup provided (200 mL to lower fluid fill line)

5. REAGENTS

   5.1. Deionized water.

6. STANDARDS

6.1. Turbidity calibration solution (800 NTU), purchased from commercial vendor.

6.2. Calibration solution shall be marked with the date received by the laboratory and the date first opened by the laboratory

7. SAMPLE HANDLING AND PRESERVATION

7.1. Applicable only to field measurement within a 15 minute period following sample collection.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

9. PROCEDURE

9.1. Zero Calibration (Manual Calibration)

Calibrate meter at each use with a standard at 25 ^{o}C +/- 3 ^{o}C.

- Press the control unit's CAL key to set the calibration mode.
- Press the down (▼) key to move the cursor to "Manual calibration", then press the ENTER key.
- In the parameter selection screen, move the cursor to "TURB", then press the ENTER key.
- Press the up (▲) and down (▼) keys to set the number of calibration points, then press the ENTER key. (Set for a 2 point calibration.)
- Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with deionized water.

- Wash the sensor probe two or three times using deionized water then submerge into the transparent calibration cup.

- Press the up (▲) and down (▼) keys to set the "TURB" value to 0.0 NTU. Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

- Record stabilized reading in the log book.

9.2 Span Calibration

Calibrate meter using 800 NTU turbidity calibration solution at 25^{o}C +/- 3 ^{o}C (or a standard solution of known concentration above 100 NTU).

- When the message "Cal complete. Press ENT to Span cal." appears, press the ENTER key to start the span calibration procedure.

- Wash the transparent calibration cup 2 or 3 times with deionized water, then fill it to the reference line with 800 NTU standard solution (or a standard solution of known concentration above 100 NTU).

- Wash the sensor two or three times using deionized water then submerge the sensor probe in the transparent calibration cup. Press the up (▲) and down (▼) keys to set the "TURB" value to 800 NTU, or to the known concentration of a standard solution above 100 NTU (U-52 Input range = 100 NTU to 1000 NTU).

- Check that "Current measurement value" has stabilized, then press the ENTER key to start calibration.

- Record stabilized reading in the log book.

- Calibration is finished when the message "Cal complete. ENT to manual menu." appears. Press the ENTER key to return to the calibration parameter selection screen.

9.3 Data Processing:

Following calibration, obtain environmental sample data by reading digital meter display (NTU); record in field log book.

10. QUALITY CONTROL

10.1. A quality control batch is opened only when required for a regulatory reportable; otherwise routine equipment calibration is performed on a weekly basis.

10.2. Precision analysis is performed by implementing the above procedure on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{\left|D_1 - D_2\right|}{\left[D_1 + D_2\right]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Definitions:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantization limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job**,** received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

15. REFERENCES

15.1 Multi Water Quality Checker, U-52 Series, Instruction Manual, CODE GZ0000144342, HORIBA, September 2008.

15.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2130 B.

AMEC Earth & Environmental Standard Operating Procedure Title: CONDUCTANCE- FIELD, Field Analysis of the Specific Conductance of Waters (YSI) Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 04/08/11 SOP Number COND_F01_YSI_04 0811.DOC Page 1 of 7 Approved

1. SCOPE AND APPLICATION

1.1. This SOP is applicable to the field determination of specific conductance using Standard Method (SM) 19th Edition 2510 B.

1.2. This SOP is applicable to the field determination of specific conductance using a YSI Model 63 handheld pH, Conductivity and Salinity Meter with temperature sensor.

1.3. This instrument is capable of measuring conductivity with an error not exceeding 1% or 1 umho/cm (1 uS/cm).

2. METHOD SUMMARY

2.1. This method determines the specific conductance of water samples using a conductivity meter with an electrode. Each time samples are analyzed for the purpose of a regulatory reportable, calibration verification standards are analyzed. A duplicate is performed for each batch of 20 or less samples; the calculated RPD must be less than or equal to 20% (Section 10).

3. INTERFERENCES

3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with distilled water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

4.1. YSI Model 63 handheld pH, Conductivity, Salinity and Temperature System Meter with pH sensor (incorporates temperature sensor and upper and lower conductivity sensor ports).

4.2. Platinum Coated Electrode

4.3. Clean sample container (250-300 ml cylindrical container). NOTE: Do not use 100 ml graduated cylinder for conductivity calibration (does not provide adequate mixing volume).

5. REAGENTS

5.1. Distilled or tap water.

6. STANDARDS

1.1. Standard calibration solutions appropriate for manufacturer calibration ranges purchased from commercial vendor:

- 0.0 mS/m – 99.9 mS/m (0 umhos/cm – 999 umhos/cm);
- 0.090 S/m – 0.999 S/m (900 umhos/cm – 9,999 umhos/cm); and
- 0.90 S/m – 9.99 S/m (9,900 umhos/cm - 99,900 umhos/cm)

1.2. Initial/annual 5-point calibration: Potassium chloride (KCl) standard calibration solutions to cover manufacturer calibration ranges (as above) and additional check standard solution (e.g., 2,000 umhos/cm or 1409 umhos/cm).

7. SAMPLE HANDLING AND PRESERVATION

7.1. Applicable only to field measurement within a 15 min. period following sample collection.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

8.4. Health and safety information can be obtained from Section 14, Appendix B of the YSI Model 63 Operations Manual and Material Safety Data Sheets (MSDS) provided by the conductivity standard solution manufacturer.

9. PROCEDURE

9.1. Standard Calibration Procedure

9.1.1. Calibrate meter with standard solution appropriate for expected range of field samples at 25°C; e.g. fresh water (0.0 mS/m – 99.9 mS/m); brackish water (0.090 S/m – 0.999 S/m); sea water (0.90 S/m – 9.99 S/m).

9.1.2. Use MODE key to advance instrument to display conductivity. Use appropriate standard solution given expected field conditions. Immerse clean cell in standard, completely covering probe. Allow 60 seconds for temperature reading to stabilize. Move probe vigorously from side to side to dislodge any air bubbles from electrodes. Press UP ARROW and DOWN ARROW keys at same time. CAL symbol will appear on bottom left of display. Adjust to appropriate conductivity using UP ARROW or DOWN ARROW keys. When stable press ENTER.

9.1.3. Wait for stable reading and record in logbook.

9.1.4. Rinse with distilled or tap water between samples.

9.2 Initial/Annual Calibration

9.2.1 A five point calibration is required on an initial/annual basis.

9.2.2 A separate initial/annual Laboratory Log will be maintained for this purpose.

9.2.3 5-Point Calibration Procedure is as follows:

- Perform Standard Calibration Procedure as described in Section 9.1.

- Perform four additional calibration checks with standard calibration solutions that range above and below the calibration standard set using the Standard Procedure. For example, if Standard Calibration is performed at 0.1 S/m (1,000 umhos/cm), perform calibration checks at 0.05 S/m (500 umhos/cm), 0.2 S/m (2,000 umhos/cm), 0.5 S/m (5,000 umhos/cm), and 2 S/m (20,000 umhos/cm).

- Record stabilized readings in the Laboratory Log.
- Check standard result must be within 10% +/- of true value.

9.2.4 Conductivity Cell Constant

- Record manufacturer specification for cell constant and allowable error; record instrument reading on Laboratory Log.

9.2. Data Processing:

9.2.1. Following calibration, obtain environmental sample data by reading digital meter display (note uS/cm or mS/cm); record in field log book.

10. QUALITY CONTROL

10.1. A quality control batch is opened only when required for a regulatory reportable; otherwise routine equipment calibration is performed on a weekly basis.

10.2. Precision analysis is performed by implementing the above Procedure on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{|D_1 - D_2|}{[D_1 + D_2]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W. Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Definitions used within the laboratory:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

MATRIX - the predominant material of which the sample to be analyzed is composed.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantitation limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job, received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

15. REFERENCES

15.1 YSI Model 63 Operations Manual, YSI Incorporated, Yellow Springs, Ohio, January 1998, 031178-A31178A.

15.2 Standard Methods for the Examination of Water and Wastewater , 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2510 B.

AMEC Earth & Environmental Standard Operating Procedure Title: PH WATER-FIELD, Field Analysis of pH for Waters Electrochemically Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 04/08/11 SOP Number PHW_F01_YSI_040811.DOC Page 1 of 8 Approved

1. SCOPE AND APPLICATION

   1.1. This SOP is applicable to the field determination of specific conductance using Standard Method (SM) 19 Edition 4500 - H^+ B.

   1.2. This SOP is applicable to the field determination of pH using a YSI Model 63 handheld pH, Conductivity and Salinity Meter with temperature sensor.

2. METHOD SUMMARY

   2.1. The pH of a water sample is determined electrometrically using a combination electrode. For each batch of samples a duplicate is analyzed and the RPD must be less than 20% (Section 10).

3. INTERFERENCES

   3.1. Coatings of oily materials or particulates can impair electrode response. Any coatings may be removed by wiping and rinsing with distilled water. Additional cleaning may be necessary as stated in the manufacturer's manuals.

4. APPARATUS AND MATERIALS

   4.1. Specimen cups

   4.2. Clean stainless steel stir bars (as necessary)

   4.3. YSI Model 63 handheld pH, Conductivity, Salinity and Temperature System Meter with pH sensor (incorporates temperature sensor and upper and lower conductivity sensor ports).

   4.4. 100 mL graduated cylinder or equivalent calibration vessel

5. REAGENTS

   5.1. Saturated Silver Chloride solution for filling the combination probe

   5.2. pH Cleaning Solution

5.3. Distilled or tap water.

6. STANDARDS

6.1. Standard calibration buffer solutions (pH 4 and 7); purchased from commercial vendor (e.g., HACH or OAKTON).

7. SAMPLE HANDLING AND PRESERVATION

7.1. Sample pH should be determined as soon as possible.

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or AMEC Safety and Health Manager.

8.4. Health and safety information can be obtained from Section 14, Appendix B of the YSI Model 63 Operations Manual and Material Safety Data Sheets (MSDS) provided by the pH buffer solution manufacturer.

9. PROCEDURE

9.1. The following precautions must be taken when performing this procedure:

9.1.1. Rinse probe well between measurements with deionized water.

9.1.2. Rinse probe with acetone if grease or oil coat glass electrode.

9.1.3. Do not alter samples in any way by filtering or diluting

9.2. Calibrate meter at each use per manufacturer instructions with pH=7 buffer and pH=4 buffer The last buffer reading should verify after calibration within 0.05 standard units of the actual value.

9.2.1. Two point calibration that brackets sample required for regulatory reportable.

9.2.2. Use MODE key to advance instrument to display pH.

9.2.3. Rinse probe with deionized water, carefully dry probe.

9.2.4. Immerse probe in 100 mL graduated cylinder containing 30 to 35 mL pH 7 buffer. Ensure pH and temperature sensors are completely covered.

9.2.5. Press UP ARROW and DOWN ARROW keys at same time. CAL symbol will appear on bottom display, STAND will be flashing and pH reading will show 7.00. Press ENTER key. Display will show CAL at the bottom, STAND will stop flashing, and pH calibration value will be shown with middle decimal point flashing. When reading is stable (does not change by 0.01 in 10 seconds), decimal point will stop flashing. Press and hold ENTER key to save calibration point. Record reading to two decimal places. SLOPE will appear on display (flashing). Single point calibration completed. Rinse probe with deionized water and dry.

9.2.6. Fill 100 mL graduated cylinder with 30 to 35 mL of pH 4 buffer solution. Ensure pH and temperature sensors are covered.

9.2.7. Press ENTER key. Display will show CAL at the bottom, SLOPE will stop flashing.

9.2.8. Left decimal point will flash if second pH buffer is less than the first; right decimal point will flash if second pH buffer is less than the first. When reading is stable, decimal point will stop flashing. Press and hold ENTER key to save calibration point. Record reading to two decimal places. 2-point calibration completed. Rinse probe with deionized water and dry.

9.2.9. Calibration readings must be within +/- 0.05 pH units. Results of calibration check must be recorded in field log or on laboratory calibration log. Additional calibration

check must be performed if > 3 hr elapses during sampling event.

9.3. Calibration Check

9.3.1. Wash the sensor two or three times using distilled or tap water.

9.3.2. Immerse probe in 100 mL graduated cylinder containing 30 to 35 mL pH 7 buffer. Ensure pH and temperature sensors are completely covered. Record reading to two decimal places.

9.3.3. If the sensor reading differs by 0.1 +/- pH units from the standard buffer value, than the meter must be recalibrated per procedures 9.1, 9.2 and 9.3.

9.4. Recalibration Requirement (Sample Period > 3Hr)

9.4.1. If a period >3 hours elapses from the time of the initial calibration to sample measurement, a pH buffer check standard must be perfomed, as follows:

9.4.2. Wash the sensor two or three times using distilled or tap water.

9.4.3. Immerse probe in 100 mL graduated cylinder containing 30 to 35 mL pH 7 buffer. Ensure pH and temperature sensors are completely covered. Record reading to two decimal places.

9.4.4. If the sensor reading differs by 0.2 +/- pH units from the standard buffer value, than the meter must be recalibrated per procedures 9.1, 9.2 and 9.3.

9.5. Data Processing:

9.5.1. Following calibration, obtain environmental sample data by reading digital pH units from meter display; record in field log book to two decimal places.

9.5.2.

10. QUALITY CONTROL.

10.1. A quality control batch sample analysis will be performed only when a regulatory reportable required.

Precision analysis is performed on a duplicate sample obtained from the sample batch. The RPD must be within the laboratory generated control limits (<20% RPD for field analysis of environmental samples).

$$\frac{|D_1 - D_2|}{[D_1 + D_2]/2} \cdot 100 = \text{RPD}$$

Where: D_1 = First sample value
D_2 = Second sample value (duplicate)
RPD = Relative percent difference (RPD)

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

12.2 The quantity of chemical purchased should be based on expected usage during its shelf life and disposal cost of unused material. Actual reagent preparation volumes should reflect anticipated usage and reagent stability. Reagent stock will be maintained to insure for compliance with manufacturer shelf life specifications. Where provided

by the manufacturer, reagent expiration date will be clearly indicated on the reagent packaging.

12.3 For information about pollution prevention that may be applicable to laboratories and research institutions, consult "Less is Better: Laboratory Chemical Management for Waste Reduction", available from the American Chemical Society's Department of Government Regulations and Science Policy, 1155 16th Street N.W., Washington D.C. 20036, (202) 872-4477.

13. WASTE MANAGEMENT

The U.S. Environmental Protection Agency requires that laboratory waste management practices conducted be consistent with all applicable rules and regulations. Excess reagents, samples, and method process wastes should be characterized and disposed of in an acceptable manner. The Agency urges laboratories to protect the air, water and land by minimizing and controlling all release from hoods, and bench operations, complying with the letter and spirit of any waste regulations, particularly the hazardous waste identification rules and land disposal restrictions. For further information on waste management consult the "Waste Management Manual for Laboratory Personnel", available from the American Chemical Society at the address listed above.

14. DEFINITIONS

The following is a list of commonly used Terms and Defintions used within the laboratory:

ALIQUOT - a measured portion of a sample, or solution, taken for sample preparation and/or analysis.

ANALYTE - the element or ion an analysis seeks to determine; the element of interest.

ANALYTICAL SAMPLE - any solution or media introduced into an instrument on which an analysis is performed excluding instrument calibration, initial *calibration* verification, initial calibration blank, continuing calibration verification and continuing calibration blank.

CHAIN OF CUSTODY (COC) - an unbroken trail of accountability that ensures the physical security of samples, data and records.

CONTAMINATION - a component of a sample or an extract that is not representative of the environmental source of the sample. Contamination may stem from other samples, sampling equipment, while in transit, from laboratory reagents, laboratory environment, or analytical instruments.

DAY - unless otherwise specified, day shall mean calendar day.

DUPLICATE - a second aliquot of a sample that is treated the same as the original sample in order to determine the precision of the method.

FIELD BLANK - this is any sample that is submitted from the field and is identified as a blank. This includes trip blanks, rinsates, equipment blanks, etc.

HOLDING TIME - the elapsed time expressed in days from the date of collection, or date of receipt, depending on the protocol.

LABORATORY RECEIPT DATE - the date on which a sample is received at the Contractor's facility, as recorded on the shipper's delivery receipt.

MATRIX - the predominant material of which the sample to be analyzed is composed.

METHOD DETECTION LIMIT (MDL) - the minimum concentration of a substance (an analyte) that can be measured with 99% confidence that the analyte concentration is greater than (40 CFR Part 136 Appendix B).

PERFORMANCE EVALUATION (PE) SAMPLE - a sample of known composition provided by a Third Party Contractor.

PROTOCOL - describes the exact procedures to be followed with respect to sample receipt and handling, analytical method of data reporting and deliverables, and document control.

QUALITY CONTROL SAMPLE - a solution obtained from an outside source having known concentration values to be used to verify the calibration standards.

REAGENT WATER - water in which an interferant is not observed at or above the minimum quantitation limit of the parameters of interest.

SAMPLE - a portion of material to be analyzed that is contained in single or multiple containers and identified by a unique sample number.

SAMPLE DELIVERY GROUP (SDG) - a unit within a single Case that is used to identify a group of samples for delivery. An SDG is a group of 20 or fewer field samples within a Laboratory Job, received over a specified time frame.

SAMPLE NUMBER - a unique identification number designated to each sample.

VALIDATED TIME OF SAMPLE RECEIPT (VTSR) - the date on which a sample is received at the facility, as recorded on the shipper's delivery receipt (chain of custody).

15. REFERENCES

15.1 YSI Model 63 Operations Manual, YSI Incorporated, Yellow Springs, Ohio, January 1998, 031178-A31178A.

15.2 Standard Methods for the Examination of Water and Wastewater , 19th Edition, American Public Health Association, Washington, DC, 1995, SM 4500 – H^+ B.

AMEC Earth & Environmental Standard Operating Procedure Title: TEMPERATURE-FIELD, Measurement of Temperatures in the Field Laboratory Director: Stephen Posten QA/QC Manager: Stephen Posten Laboratory Supervisor: Madhusudan Patel	Revision Date: 04/08/11 SOP Number TEMP_F01_YSI_04 0811.DOC Page 1 of 6 Approved

1. SCOPE and APPLICATION

   1.1. This SOP is applicable to the field determination of temperature using Standard Method (SM) 19 Edition 2550 B.

   1.2. Measurement is performed with a YSI Model 63 handheld pH, Conductivity, Salinity and Temperature System meter. Calibration (of meter to reference) shall be performed periodically based upon the intended application, with a minimum frequency of quarterly calibration.

2. METHOD SUMMARY

   2.1. This SOP identifies thermistor calibration relative to a N.I.S.T certified thermometer. AMEC calibration check consists of comparison of YSI Model 63 temperature reading relative to AMEC N.I.S.T certified thermometer serial number 2941. If a variance

3. INTERFERENCES

   3.1. NA

4. APPARATUS AND MATERIALS

   4.1. AMEC NIST-certified thermometer (serial number 2941).

   4.2. YSI Model 63 handheld pH, Conductivity, Salinity and Temperature System Meter with pH sensor (incorporates temperature sensor and upper and lower conductivity sensor ports).

   4.3. Large glass beaker (500 ml or1,000 ml volumetric

5. REAGENTS

   5.1. Distilled or tap water.

6. STANDARDS

   6.1. NA

7. SAMPLE HANDLING AND PRESERVATION

7.1. NA

8. SAFETY

8.1. Eye protection, lab coat and appropriate gloves must be worn while samples, standards, solvents, and reagents are being handled.

8.2. The analyst should follow all applicable items in the safety rules contained in the AMEC Corporate Safety, Health and Environment Manual.

8.3. All questions pertaining to any safety procedure should be brought to the department supervisor or local AMEC Safety and Health Manager.

9. PROCEDURE

9.1. Insert YSI Model 63 handheld pH, Conductivity, Salinity and Temperature System meter probe into beaker.

9.2. Insert N.I.S.T. certified thermometer into beaker.

9.3. Environmental Temperature Measurements

9.3.1. Environmental measurements may be made with a centigrade thermometer or thermistor that has been calibrated over the expected range of use by the procedures outlined above.

9.3.2. Readings are made after the thermometer and probe are immersed in water long enough to permit complete equilibration.

9.3.3. Results are reported to the nearest 0.1°C.

9.3.4. Record variance between YSI temperature reading and N.I.S.T. certified thermometer in laboratory log.

9.3.5. Note variance between YSI temperature reading and N.I.S.T. certified thermometer reading, and date of calibration, on body of YSI meter using adhesive label.

10. QUALITY CONTROL

10.1. N.I.S.T. traceable thermometer will be recalibrated in accordance with manufacturer specifications on an annual basis.

10.2. For regulatory reportable data, a duplicate is analyzed every 20 samples or monthly whichever is more frequent. Primary and duplicate sample analysis must be +/- 1° C. Temperature calibration is performed on a quarterly basis.

11. CORRECTIVE ACTIONS AND CONTINGENCIES FOR HANDLILNG OUT-OF-CONTROL OR UNACCEPTABLE DATA

Data that fails to meet minimum acceptance criteria will be annotated (flagged) with qualifiers and/or appropriate narrative comments defining the nature of the outage. For example, a data value from a QC batch from which duplicate sample precision has not been met will be flagged with an asterisk (*). If applicable, a Corrective Action Report will be initiated in order to provide for investigation and follow-up. For further corrective actions and contingencies for handling out-of-control or unacceptable data see *"Out of Control Events Corrective Actions"* SOP.

12. POLLUTION PREVENTION

12.1 Pollution prevention encompasses any technique that reduces or eliminates the quantity or toxicity of waste at the point of generation. Numerous opportunities for pollution prevention exist in laboratory operation. The USEPA has established a prevention hierarchy of environmental management techniques that places pollution prevention as the management option of first choice. Whenever feasible, laboratory personnel should use pollution prevention techniques to address their waste generation. When wastes cannot be feasibly reduced at the source, the agency recommends recycling as the next best option.

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15.2 Standard Methods for the Examination of Water and Wastewater, 19th Edition, American Public Health Association, Washington, DC, 1995, SM 2550 B.

APPENDIX B
QAPP WORKSHEETS

Table B-1 QAPP Worksheet All Matrices - Pesticides USEPA SW-846 8081A & B Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy/ Sensitivity	A	Method Blank	1 per extraction batch of up to 20 field samples (matrix-specific)	All Target compounds < RL, surrogates in criteria	Reanalyze and, if necessary, re-extract. Report non-conformance in narrative; compounds present in blank should be flagged "B" in samples, if detected.	Analyst
Accuracy	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples	Must contain all single-component target analytes, performed on Site field sample; 30-150% recovery for all compounds.	Evaluate LCS, unspiked sample, reanalyze, if necessary, and qualify data and narrate issue	Analyst/Data Reviewer
Precision	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples	Must contain all single-component target analytes, performed on Site field sample; 30-150% recovery for all compounds; RPD ≤ 30% for solids and RPD ≤ 20% for waters	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Accuracy	A	Laboratory Control Sample (LCS)	1 per extraction batch of up to 20 samples	Must contain all single-component target analytes, concentration should be the same as MS if appropriate, be matrix-matched, 40-140% recovery for all target analytes.	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Precision	A	Sample Duplicate (DUP)	1 per ≤ 20 field samples if an MS/MSD was not performed	Must be performed on a site sample, RPD ≤ 30% for solids and RPD ≤ 20% for waters for results > 2x RL	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Accuracy	A	Surrogates	Every sample including QC	Minimum of 2 (recommend TCMX and DCB); 30-150% recovery on both GC columns	Reanalyze, if necessary, qualify data	Analyst/Data Reviewer

Table B-1 QAPP Worksheet All Matrices - Pesticides USEPA SW-846 8081A & B Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	Internal Standards (IS) (optional)	Every sample including QC (optional)	Minimum of 1 IS , Areas 50-200% of CCV; RTs $\pm$ 30 sec from ICAL	Reanalyze and qualify data	Analyst/Data Reviewer
Accuracy	A	Endrin/DDT Breakdown	Before samples are analyzed and at the beginning of each 12 hour shift	% Breakdown ≤ 15% based on peak areas	Perform instrument maintenance; reanalyze until acceptable	Analyst
Accuracy	A	Initial Calibration (ICAL)	Initially and when CCV fails	Minimum 5-levels for single-component analytes and single-level for multi-component analytes using peak height or peak area; must contain all targets and lowest level ≤ RL; %RSD ≤ 20% or "r" ≥ 0.99 for all compounds; regression analysis, if used, must not be forced through the origin	Recalibrate as required by method; analysis cannot proceed without a valid initial calibration	Analyst
Accuracy	A	Continuing Calibration Verification(CCV)	Prior to samples, every 12 hours or every 20 samples, whichever is more frequent, and at the end of the analytical sequence	Concentration level near mid-point of ICAL curve containing all single-component target compounds; %D ≤ 20% and analytes fall within expected retention time windows; Multi-component analytes must be verified within 12 hours of being detected in a sample	Recalibrate as required by method; note outliers in narrative.	Analyst

Table B-1 QAPP Worksheet All Matrices - Pesticides USEPA SW-846 8081A & B Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	Quantitation	Every sample	RL ≤ results ≤ upper calibration range on a sample-specific basis; average response factors or curve-statistics generated from the ICAL must be used for quantitation and peak height or peak area, as used for ICAL, must be used for sample. Report the highest concentration from the two GC columns and results reported between the MDL and RL qualified "J"	Perform dilution to bring analyte within linear range, qualify data	Analyst/Data Reviewer
Precision	A	Quantitation	Every sample	RPD or %D ≤ 40% between two dissimilar GC Columns	Qualify result and narrate issue except if %D > 100%, then analyze sample at a secondary dilution and qualify data as necessary.	Analyst and Data Reviewer
Sensitivity	A	Reporting of Non-Detects	Every sample	Reported at the sample-specific RL which must be ≤ PRL	Potential data usability issue	Data Reviewer
Overall Precision & Representative-ness	S & A	Field Duplicate Samples [Site-specific QC]	1 per 20 field samples	RPD ≤ 30% for waters or RPD ≤ 50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Potential data usability issue	Data Reviewer
Accuracy (preservation)	S	Temperature Blank or other Cooler Temperature Reading	1 Temperature reading per cooler to be recorded upon receipt at lab	Cool to ≤ 6º C; allow for < 2º C if samples intact	Potential data usability issue	Data Reviewer

Table B-1 QAPP Worksheet All Matrices - Pesticides USEPA SW-846 8081A & B Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy/ Sensitivity	S & A	Holding Time (HT)	Every field sample	Aqueous samples extracted within 7 days of collection; extract analyzed within 40 days of extraction. Soil/Sediment samples extracted within 14 days of collection; extract analyzed within 40 days of extraction. If Soil/Sediment samples are frozen, HT arrested and extraction HT continues when thawed. Solid samples can be maintained frozen for 1 year from collection.	Potential data usability issue	Data Reviewer
Accuracy/ Sensitivity	S	Equipment Blank [Site-specific QC]	Not Required if using dedicated sampling equipment. If performing decon, collect 1 EB per 20 field samples collected by the same method	Target analytes < RL	Potential data usability issue	Data Reviewer
Data Completeness	S & A	Calculate from valid/usable data collected	Not applicable	$\geq$ 90% Overall	Potential data usability / data gap issue	Data Reviewer/ Investigator
Comparability	S & A	Based on Method (SOP) and QAPP/FSP protocols	Not applicable	Comparison between historical data for qualitative integrity of the data. Comparison between spatially similar samples.	Potential data usability issue	Data Reviewer/ Investigator

NOTES:

1. This table was prepared by NJDEP, April 2014 to be compliant with EPA Region 2 guidance, and meet the data quality needs of the Department.

2. Pesticide Compound analyses via USEPA SW-846 Method 8081A&B (*Quality Assurance and Quality Control Requirements for SW-846 Method 8081A and 8081B Chlorinated Pesticides by Gas Chromatography [GC])*.

Table B-2 QAPP Worksheet All Matrices (combined) - PCB Aroclors USEPA SW-846 8082 and 8082A Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy/ Sensitivity	A	Method Blank	1 per extraction batch of up to 20 field samples (matrix-specific)	All Target compounds < RL, surrogates in criteria	Reanalyze and, if necessary, re-extract. Report non-conformance in narrative; compounds present in blank should be flagged "B" in samples, if detected.	Analyst
Accuracy	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples	Must contain Aroclors 1016 and 1260, performed on Site field sample, 40-140% recovery	Evaluate LCS, unspiked sample, reanalyze, if necessary, and qualify data and narrate issue	Analyst/Data Reviewer
Precision	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples	Must contain Aroclors 1016 and 1260, performed on Site field sample; 40-140% recovery; RPD ≤ 30% for solids and RPD ≤ 20% for waters	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Accuracy	A	Laboratory Control Sample (LCS)	1 per extraction batch of up to 20 samples	Must contain Aroclors 1016 and 1260, be matrix-matched, 40-140% recovery	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Precision	A	Sample Duplicate (DUP)	1 per ≤ 20 field samples if an MS/MSD was not performed	Must be performed on a Site samples;, RPD ≤ 30% for solids and RPD ≤ 20% for waters for results > 2x RL	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer

Table B-2 QAPP Worksheet All Matrices (combined) - PCB Aroclors USEPA SW-846 8082 and 8082A Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	Surrogates	Every sample including QC	Minimum of 2 (recommend TCMX and DCB); 30-150% recovery on both GC columns	Reanalyze, if necessary, qualify data	Analyst/Data Reviewer
Accuracy	A	Initial Calibration (ICAL)	Initially and when CCV fails	Minimum 5-levels for Aroclors 1016 and 1260 and single-level at mid-point concentration for other Aroclors; 3-5 peaks of each Aroclor evaluated using peak height or peak area; lowest level ≤ RL; other Aroclors may be warranted for 5 point calibration if PCB contamination is known. %RSD ≤ 20% or "r" ≥ 0.99 for Aroclors 1016 and 1260; regression analysis, if used, must not be forced through the origin.	Recalibrate as required by method; analysis cannot proceed without a valid initial calibration	Analyst
Accuracy	A	Continuing Calibration Verification (CCV)	Prior to samples, every 12 hours or every 20 samples, whichever is more frequent, and at the end of the analytical sequence	Concentration level near mid-point of ICAL curve containing Aroclors 1016 and 1260; %D ≤ ± 20% and analytes fall within expected retention time windows; Aroclors other than 1016 and 1260 must be verified within 12 hours of being detected in a sample (unless I.S. quant technique is used)	Recalibrate as required by method; note outliers in narrative.	Analyst

Table B-2 QAPP Worksheet All Matrices (combined) - PCB Aroclors USEPA SW-846 8082 and 8082A Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	Quantitation	Every sample	RL ≦ results ≤ upper calibration range on a sample-specific basis; average response factors or curve-statistics generated from the ICAL must be used for quantitation and peak height or peak area, as used for ICAL, must be used for sample. Report the highest concentration from the two GC columns and results reported between the MDL and RL qualified "J"	Perform dilution to bring analyte within linear range, qualify data	Analyst/Data Reviewer
Precision	A	Quantitation	Every sample	RPD or %D ≤ 40% between two dissimilar GC Columns	Qualify result and narrate issue except if %D > 100% then analyze sample at a secondary dilution and qualify data as necessary.	Analyst and Data Reviewer
Sensitivity	A	Reporting of Non-Detects	Every sample	Reported at the sample-specific RL which must be ≤ PRL	Potential data usability issue	Data Reviewer
Overall Precision & Representative-ness	S & A	Field Duplicate Samples [Site-specific QC]	1 per 20 field samples	RPD ≤ 30% for waters or RPD ≤ 50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Potential data usability issue	Data Reviewer
Accuracy (preservation)	S	Temperature Blank or other Cooler Temperature Reading	1 Temperature reading per cooler to be recorded upon receipt at lab	Cool to ≤ 6° C; allow for < 2° C if samples intact	Potential data usability issue	Data Reviewer

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Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy/ Sensitivity	S & A	Holding Time (HT)	Every field sample	Aqueous samples extracted within 7 days of collection; extract analyzed within 40 days of extraction. Soil/Sediment samples extracted within 14 days of collection; extract analyzed within 40 days of extraction. If Soil/Sediment samples are frozen, HT arrested and extraction HT continues when thawed. Samples can be maintained frozen for 1 year from collection.	Potential data usability issue	Data Reviewer
Accuracy/ Sensitivity	S	Equipment Blank [Site-specific QC]	Not Required if using dedicated sampling equipment. If performing decontamination of equipment, collect 1 EB per 20 field samples collected by the same method.	Target analytes < RL	Potential data usability issue	Data Reviewer
Data Completeness	S & A	Calculate from valid/usable data collected	Not applicable	$\geq$ 90% Overall	Potential data usability / data gap issue	Data Reviewer/ Investigator
Comparability	S & A	Based on Method (SOP) and QAPP/FSP protocols	Not applicable	Comparison between historical data for qualitative integrity of the data. Comparison between spatially similar samples.	Potential data usability issue	Data Reviewer/ Investigator

NOTES:
1. This table was prepared by NJDEP, April 2014 to be compliant with EPA Region 2 guidance, and meet the data quality needs of the Department

2. PCB Aroclor Compound analysis via USEPA SW-846 Method 8082 and 8082A (*Quality Assurance and Quality Control Requirements for SW-846, Polychlorinated Biphenyls (PCBs) by Gas Chromatography [GC]).*

Table B-3 QAPP Worksheet All Matrices – VOAs by USEPA SW-846 8260C Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	BFB Tune	Every 12 hours	Method tune criteria based on criteria in Table 3 of USEPA-SW846 Method 8260C	Perform instrument maintenance; reanalyze until acceptable	Analyst
Accuracy	A	Initial Calibration (ICAL)	Initially and when CCV fails	Minimum 5-standards; must contain all targets and lowest standard ≤ RL; Full Scan: %RSD ≤ 20% for all compounds and minimum RF found in Table 4 or "r" ≥ 0.99; SIM: %RSD ≤ 20% and minimum RF found in Table 4 or "r" ≥ 0.99 for all compounds;	Recalibrate as required by method; analysis cannot proceed without a valid initial calibration	Analyst
Accuracy/ Sensitivity	A	Method Blank	1 per preparatory batch of up to 20 field samples (matrix-specific)	Targets analytes must be < RL except for common laboratory contaminates (acetone, methylene chloride and MEK) which must be < 5x RL, surrogates in criteria	Reanalyze and, if necessary, re-extract. Report non-conformance in narrative; compounds present in blank should be flagged "B" in samples, if detected.	Analyst
Accuracy	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples per matrix	Must contain all target analytes, performed on Site field sample, % recovery 70-130% except for difficult analytes** which must exhibit % recovery between 40-160%	Evaluate LCS, unspiked sample, reanalyze, if necessary, and qualify data and narrate issue	Analyst/Data Reviewer

Table B-3 QAPP Worksheet All Matrices – VOAs by USEPA SW-846 8260C Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Precision	A	Matrix Spike/ Matrix Spike Duplicate [Site-specific QC]	1 per ≤ 20 field samples per matrix	Must contain all target analytes, performed on Site field sample, recovery criteria same as MS; RPDs ≤ 20% for waters and ≤ 30% for solids	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Accuracy	A	Laboratory Control Sample (LCS)	1 per preparatory batch of up to 20 samples	Must contain all target analytes, be matrix-matched; % Recovery 70-130% except for difficult analytes ** must exhibit percent recoveries between 40-160%.	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Precision	A	Sample Duplicate (DUP)	1 per ≤ 20 field samples if a MS/MSD was not performed	Must be performed on a Site field sample. RPDs ≤ 20% for waters and ≤ 30% for solids for results > 2x RL	Reanalyze, if necessary, qualify data and narrate issues of non-conformance	Analyst/Data Reviewer
Accuracy	A	Surrogates	Every sample including QC	Minimum of 3 surrogates at retention times across GC run for all matrices; surrogates must be between 70-130% for all compounds.	Reanalyze, if necessary, qualify data	Analyst/Data Reviewer
Accuracy	A	Internal Standards (IS)	3 per sample including QC	Minimum of 3 IS , Areas 50-200% of the most recent midpoint CCV standard; RTs ± 30 sec. from midpoint ICAL standard	Reanalyze and qualify data	Analyst/Data Reviewer
Accuracy	A	Continuing Calibration Verification (CCV)	1 every 12 hour prior to analysis of samples	Concentration level near mid-point of ICAL curve containing all target compounds; *Full Scan and SIM*: min RRF criteria met; %D or % Drift ≤ 20% for all compounds	Recalibrate as required by method; note outliers in narrative.	Analyst

Table B-3 QAPP Worksheet All Matrices – VOAs by USEPA SW-846 8260C Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy	A	Quantitation	Every sample	RL ≤results ≤ upper calibration range on a sample-specific basis; IS must be used; and average response factors or curve-statistics generated from the ICAL must be used for quantitation. Results reported between the MDL and RL qualified "J"	Perform dilution to bring analyte within linear range, qualify data	Analyst/Data Reviewer
Sensitivity	A	Reporting of Non-Detects	Every sample	Reported at the sample-specific RL which must be ≤ PRL	Potential data usability issue	Data Reviewer
Overall Precision & Representative-ness	S & A	Field Duplicate Samples [Site-specific QC]	1 per 20 field samples	RPD ≤ 30% for waters or RPD ≤ 50% for solids w/results > 2x RL; Professional judgment for results < 2xRL	Potential data usability issue	Data Reviewer
Accuracy (preservation)	S	Temperature Blank or other Cooler Temperature Reading	1 Temperature reading per cooler to be recorded upon receipt at lab	≤ 6º C; allow for < 2º C if samples intact sample preservation per SW-846 Chapter 4 Table 4-1	Potential data usability issue	Data Reviewer
Accuracy/ Sensitivity	S & A	Holding Time (HT)	Every field sample	Analyses within 14 days of collection (7 days if unpreserved). Aqueous samples adjust pH to < 2 with HCL or per SW-846 Table 4-1 preservatives.	Potential data usability issue	Data Reviewer

Table B-3 QAPP Worksheet All Matrices – VOAs by USEPA SW-846 8260C Measurement Performance Criteria & QC Samples

Data Quality Indicator (DQI)	QC Measure for Sampling (S), Analytical (A), or both (S&A)	QC Sample or Activity	Frequency / Number	QC Acceptance Limits (Measurement Performance Criteria)	Corrective Action (CA)	Person(s) Responsible for CA
Accuracy/ Sensitivity	S	Equipment Blank [Site-specific QC]	Not required if using dedicated sampling equipment. If performing decontamination of equipment, collect 1 EB per 20 field samples collected by the same method	Target analytes < RL	Potential data usability issue	Data Reviewer
Data Completeness	S & A	Calculate from valid/usable data collected	Not applicable	≥ 90% Overall	Potential data usability / data gap issue	Data Reviewer/ Investigator
Comparability	S & A	Based on Method (SOP) and QAPP/FSP protocols	Not applicable	Comparison between historical data for qualitative integrity of the data. Comparison between spatially similar samples.	Potential data usability issue	Data Reviewer/ Investigator

NOTES:

1. This table was prepared by NJDEP, April 2014, to be compliant with EPA Region 2 guidance and meets the data quality needs of the Department.

2. Volatile Organic Compound analyses via USEPA SW-846 Method 8260C (*Quality Assurance and Quality Control Requirements for SW-846 Method 8260C* or 8260C *Volatile Organic Compounds by Gas Chromatography/Mass Spectroscopy [GC/MS]).*

** Potentially "difficult" analytes include: acetone, methyl ethyl ketone, 4-methyl-2-pentanone, 2-hexanone, dichlorodifluoromethane, bromomethane, chloromethane, carbon disulfide, 1,2-Dibromo-3-chloropropane, chloroethane, naphthalene, trichlorofluoromethane, and 1, 4-dioxane.

APPENDIX C
FIELD DATA FORMS

BORING NUMBER:

amec foster wheeler

CLIENT: _____ PROJECT NAME _____

PROJECT NUMBER: _____ PROJECT LOCATION _____

DATE: _____ TIME STARTED: _____ TIME COMPLETED: _____

DRILLING CONTRACTOR: _____ DRILLING METHOD: _____

PURPOSE: _____ DRILLER _____

GEOLOGIST _____ GROUND WATER LEVELS:

GROUND ELEV. _____ AT TIME OF DRILLING _____

NORTHING _____ EASTING _____ AFTER DRILLING _____

NOTES: _____

Depth Ft.	Recovery	PID Reading (ppm)	Sample Interval	USCS	GEOLOGIC DESCRIPTION	REMARKS
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

BORING NUMBER:

CLIENT: _____ PROJECT NAME _____

PROJECT NUMBER: _____ PROJECT LOCATION _____

Depth Ft.	Recovery	PID Reading (ppm)	Sample Interval	USCS	GEOLOGIC DESCRIPTION	REMARKS
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						

Water Level Measurements

Field Personnel: _____
Weather: _____
Date: _____

Well	Protective	Inner Casing	Ground Surface	Measuring Point	Depth to Water	Depth to NAPL	Time
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			
				Inner Casing			

APPENDIX D
CHAIN OF CUSTODY FORM

SHIP TO:

CHAIN OF CUSTODY

DATE: _____

COC #: _____

PAGE: _____ OF _____

Project Name:	Project Contact:	Bill To: AMEC E&I	Disposal Inst.: LAB
Project Number:	email:	285 Davidson Ave., suite 405	Ship Method: COURIER
Project Manager:	Phone Number: (732)-302-9500	Somerset, NJ 08873	**PO Number:**

Sample Information						**Methods for Analysis**																**RUSH**					
Lab Sample ID	**AMEC Sample ID**	Date Sampled	Time Sampled	Matrix	Sample Type	VO+15	BN+15 SIMS															24 Hour	48 Hour	72 Hour	5 Days	TOTAL BOTTLES	HOLD All Analyses

Sampler's Signature: **Date/Time:**

Relinquished By/Affiliation: **Date/Time:**

Received By: **Date/Time:**

Relinquished By/Affiliation: **Date/Time:**

Received By: **Date/Time:**

Relinquished By/Affiliation: **Date/Time:**

Received By (LAB): **Date/Time:**

For Lab Use

Does COC match samples: Y or N

Broken Container: Y or N

COC seal intact: Y or N

Other problems: Y or N

AMEC contacted: Y or N

Date contacted: _____

Cooler Temperature at receipt: _____ C

Comments:

H=Hold Analysis Request X=Analyze

Please put PO # liste above on Invoice.

NUMBER OF COOLERS SENT:

APPENDIX C
ANALYTICAL DATA PACKAGES

E15-05367
E15-05428
E15-05467
E16-09537
E16-09581
E17-02179

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK EAST BARRACKS**
IAL Case Number: **E15-05367**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

This report was finalized on July 10, 2015

* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E15-05367

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/23/2015@18:32

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
05367-001	E-3 (3.0-3.5)	3.0/3.5	6/23/2015@11:25	Soil	5
05367-002	E-3 (0.5-1.0)	0.5/1.0	6/23/2015@11:08	Soil	5
05367-003	E-3 (2.0-2.5)	2.0/2.5	6/23/2015@11:15	Soil	5
05367-004	E-3 (4.5-5.0)	4.5/5.0	6/23/2015@11:35	Soil	5
05367-005	E-18 (0.5-1.0)	0.5/1.0	6/23/2015@12:19	Soil	1
05367-006	E-18 (2.0-2.5)	2.0/2.5	6/23/2015@12:25	Soil	1
05367-007	E-4 (0.5-1.0)	0.5/1.0	6/23/2015@09:30	Soil	5
05367-008	E-4 (2.0-2.5)	2.0/2.5	6/23/2015@09:45	Soil	5
05367-009	E-4 (3.0-3.5)	3.0/3.5	6/23/2015@09:52	Soil	5
05367-010	E-4 (4.5-5.0)	4.5/5.0	6/23/2015@10:10	Soil	5
05367-011	E-11 (0.5-1.0)	0.5/1.0	6/23/2015@10:25	Soil	1
05367-012	E-11 (2.0-2.5)	2.0/2.5	6/23/2015@10:32	Soil	1
05367-013	E-12 (0.5-1.0)	0.5/1.0	6/23/2015@10:46	Soil	1
05367-014	E-12 (2.0-2.5)	2.0/2.5	6/23/2015@10:53	Soil	1
05367-015	E-14 (0.5-1.0)	0.5/1.0	6/23/2015@11:55	Soil	1
05367-016	E-14 (2.0-2.5)	2.0/2.5	6/23/2015@12:00	Soil	1
05367-017	E-16 (0.5-1.0)	0.5/1.0	6/22/2015@11:40	Soil	5
05367-018	E-16 (2.0-2.5)	2.0/2.5	6/22/2015@11:50	Soil	5
05367-019	PZ-2 (0.5-1.0)	0.5/1.0	6/22/2015@12:27	Soil	5
05367-020	PZ-2 (2.0-2.5)	2.0/2.5	6/22/2015@12:47	Soil	5
05367-021	PZ-2 (4.0-4.5)	4.0/4.5	6/22/2015@12:53	Soil	5
05367-022	PZ-2 (6.0-6.5)	6.0/6.5	6/22/2015@13:00	Soil	5
05367-023	X-1 (4.5-5.0)	4.5/5.0	6/23/2015	Soil	5
05367-024	X-2 (2.0-2.5)	2.0/2.5	6/23/2015	Soil	1
05367-025	E-8 (0.5-1.0)	0.5/1.0	6/23/2015@09:05	Soil	1
05367-026	E-8 (2.0-2.5)	2.0/2.5	6/23/2015@09:07	Soil	1
05367-027	E-17 (0.5-1.0)	0.5/1.0	6/23/2015@13:15	Soil	1
05367-028	E-17 (2.0-2.5)	2.0/2.5	6/23/2015@13:20	Soil	1
05367-029	E-9 (0.5-1.0)	0.5/1.0	6/23/2015@08:00	Soil	1
05367-030	E-9 (2.0-2.5)	2.0/2.5	6/23/2015@08:05	Soil	1
05367-031	PZ-1 (0.5-1.0)	0.5/1.0	6/22/2015@09:30	Soil	5
05367-032	PZ-1 (2.0-2.5)	2.0/2.5	6/22/2015@10:00	Soil	5
05367-033	PZ-1 (2.5-3.0)	2.5/3.0	6/22/2015@10:30	Soil	5
05367-034	PZ-1 (4.5-5.0)	4.5/5.0	6/22/2015@10:25	Soil	5
05367-035	E-5 (0.5-1.0)	0.5/1.0	6/22/2015@14:30	Soil	5
05367-036	E-5 (3.0-3.5)	3.0/3.5	6/22/2015@13:55	Soil	5
05367-037	E-5 (2.0-2.5)	2.0/2.5	6/22/2015@13:36	Soil	5
05367-038	E-5 (4.5-5.0)	4.5/5.0	6/22/2015@14:15	Soil	5
05367-039	E-6 (0.5-1.0)	0.5/1.0	6/23/2015@08:25	Soil	5
05367-040	FB-062215	n/a	6/23/2015@15:05	Aqueous	4
05367-041	E-6 (2.0-2.5)	2.0/2.5	6/23/2015@08:27	Soil	5
05367-042	E-6 (3.0-3.5)	3.0/3.5	6/23/2015@08:48	Soil	5
05367-043	E-6 (4.0-4.5)	4.0/4.5	6/23/2015@08:43	Soil	5
05367-044	TB-062315	n/a	6/23/2015	Aqueous	2

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

Integrated Analytical Laboratories, LLC. received forty-four (44) samples** from AMEC-SMRST (IAL SDG# **E15-05367**, Project: AMTRAK EAST BARRACKS) on June 23, 2015 for the analysis of :

(29) TCL VO + 15
(43) TCL PCB
(28) TCL Pesticides

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 8260C	**Batch: 150630**	**Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-05367
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-040	1	NA
E15-05367-044	1	NA

E15-05367 0004

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

Volatiles By 8260C — **Batch: L150630-01, L150630-02 Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.

E15-05367

- All samples were analyzed within holding time.
- 05367-001, 020, 022, 023, 031, 032, 033, 036-039, 042 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-001	1	NA
E15-05367-002	1	NA
E15-05367-003	1	NA
E15-05367-004	1	NA
E15-05367-007	1	NA
E15-05367-008	1	NA
E15-05367-009	1	NA
E15-05367-010	1	NA
E15-05367-017	1	NA
E15-05367-018	1	NA
E15-05367-019	1	NA
E15-05367-020	1	NA
E15-05367-021	1	NA
E15-05367-022	1	NA
E15-05367-023	1	NA
E15-05367-031	1	NA
E15-05367-032	1	NA
E15-05367-033	1	NA
E15-05367-034	1	NA
E15-05367-035	1	NA
E15-05367-036	1	NA
E15-05367-037	1	NA
E15-05367-038	1	NA
E15-05367-039	1	NA
E15-05367-041	1	NA
E15-05367-042	1	NA
E15-05367-043	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

PCB By 8082A	Batch: 150629-16	Matrix: Aqueous

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.
- The following samples were cleaned up using method 3660B to remove sulfur: 040.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-040	1	NA

E15-05367 0006

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

PCB By 8082A	Batch: 150630-12	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate (DCB2) percent recovery did not meet QC criteria due to matrix interference for sample 017. Surrogate for sample 002 was diluted out. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The RPD between the primary and secondary column was >40% for the following samples: #019,#020,#032. Per SW-846 8000C, the lower of the two concentrations was reported.
- The following samples were cleaned up using method 3665A: 001, 002, 017, 018, 019, 020, 021, 022, 031, 032, 033, 034, 035, 036, 037, 038.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 017, 018, 019, 020, 021, 022, 031, 032, 033, 034, 035, 036, 037, 038.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-001	1	NA
E15-05367-002	500	Target compound(s).
E15-05367-017	20	Target compound(s).
E15-05367-018	5	Target compound(s).
E15-05367-019	1	NA
E15-05367-020	1	NA
E15-05367-021	1	NA
E15-05367-022	1	NA
E15-05367-031	5	Target compound(s).
E15-05367-032	5	Target compound(s).
E15-05367-033	5	Target compound(s).
E15-05367-034	1	NA
E15-05367-035	100	Target compound(s).
E15-05367-036	2	Target compound(s).
E15-05367-037	10	Target compound(s).
E15-05367-038	2	Target compound(s).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

PCB By 8082A	Batch: 150701-07	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to coeluting with target compound. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 003, 004, 007, 008, 009, 010, 023, 039, 041, 042, 043.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-003	500	Target compound(s).
E15-05367-004	1	NA
E15-05367-007	500	Target compound(s).
E15-05367-008	10	Target compound(s).
E15-05367-009	10	Target compound(s).
E15-05367-010	20	Target compound(s).
E15-05367-023	20	Target compound(s).
E15-05367-039	20	Target compound(s).
E15-05367-041	1	NA
E15-05367-042	1	NA
E15-05367-043	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

PCB By 8082A | **Batch: 150701-08** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to coeluting with target compound. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 005, 006, 011, 012, 013, 014, 015, 016, 024, 025, 026, 027, 028, 029, 030.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-005	10	Target compound(s).
E15-05367-006	1	NA
E15-05367-011	10	Target compound(s).
E15-05367-012	1	NA
E15-05367-013	100	Target compound(s).
E15-05367-014	1	NA
E15-05367-015	20	Target compound(s).
E15-05367-016	1	NA
E15-05367-024	1	NA
E15-05367-025	1	NA
E15-05367-026	1	NA
E15-05367-027	200	Target compound(s).
E15-05367-028	1	NA
E15-05367-029	5	Target compound(s).
E15-05367-030	1	NA

Pesticide By 8081B | **Batch: 150629-16** | **Matrix: Aqueous**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-040	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

Pesticide By 8081B	Batch: 150630-12	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference for #017; #031; #032 and got diluted out for #002. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 017, 018, 019, 020, 021, 022, 031, 032, 033, 034, 035, 036, 037, 038.
- #002; #017; #018; #019; #020, #031; #035; #036; #037 failed NJ IGW QC criteria due to dilution.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-001	1	NA
E15-05367-002	200	Non-target compound(s).
E15-05367-017	5	Matrix Interference.
E15-05367-018	5	Matrix Interference.
E15-05367-019	5	Matrix Interference.
E15-05367-020	5	Matrix Interference.
E15-05367-021	1	NA
E15-05367-022	1	NA
E15-05367-031	10	Matrix Interference.
E15-05367-032	5	Matrix Interference.
E15-05367-033	5	Matrix Interference.
E15-05367-034	1	NA
E15-05367-035	20	Matrix Interference.
E15-05367-036	10	Matrix Interference.
E15-05367-037	20	Matrix Interference.
E15-05367-038	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05367

Pesticide By 8081B	Batch: 150701-07	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 003, 004, 007, 008, 009, 010, 023, 039, 041, 042, 043.

E15-05367

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05367-003	1	NA
E15-05367-004	1	NA
E15-05367-007	1	NA
E15-05367-008	1	NA
E15-05367-009	1	NA
E15-05367-010	1	NA
E15-05367-023	1	NA
E15-05367-039	1	NA
E15-05367-041	1	NA
E15-05367-042	1	NA
E15-05367-043	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

ASenno
Reviewed by

7/9/2015
Date

E15-05367 0011

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK EAST BARRACKS
IAL Project #: E15-05367
IAL Sample ID(s): E15-05367-001 ~ -044
Sampling Date(s): 6/23/2015

List of DKQP Method Used:
TCL VO by 8260C
TCL PCB by 8082A
TCL Pesticides by 8081B

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		X	
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?		X	
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		X	

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

	Lab ID:	05367-040			05367-044		
	Client ID:	FB-062215			TB-062315		
	Matrix:	Aqueous			Aqueous		
	Sampled Date	6/23/15			6/23/15		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(mg/L)*			*(mg/L)*		
TOTAL VO's:		ND			ND		
TOTAL TIC's:		ND			ND		
TOTAL VO's & TIC's:		ND			ND		
PCB's (Units)		*(mg/L)*			*(mg/L)*		
Aroclor-1016		ND		0.00002	~		~
Aroclor-1221		ND		0.00002	~		~
Aroclor-1232		ND		0.00002	~		~
Aroclor-1242		ND		0.00002	~		~
Aroclor-1248		ND		0.00002	~		~
Aroclor-1254		ND		0.00002	~		~
Aroclor-1260		ND		0.00002	~		~
Aroclor-1262		ND		0.00002	~		~
Aroclor-1268		ND		0.00002	~		~
PCBs		ND		0.00002	~		~
Pesticides (Units)		*(mg/L)*			*(mg/L)*		
alpha-BHC		ND		0.000005	~		~
beta-BHC		ND		0.000005	~		~
gamma-BHC (Lindane)		ND		0.000005	~		~
delta-BHC		ND		0.000005	~		~
Heptachlor		ND		0.000005	~		~
Aldrin		ND		0.000005	~		~
Heptachlor epoxide		ND		0.000005	~		~
Endosulfan I		ND		0.000005	~		~
4,4'-DDE		ND		0.000005	~		~
Dieldrin		ND		0.000005	~		~
Endrin		ND		0.000005	~		~
Endosulfan II		ND		0.000005	~		~
4,4'-DDD		ND		0.000005	~		~
Endrin aldehyde		ND		0.000005	~		~
Endosulfan sulfate		ND		0.000005	~		~
4,4'-DDT		ND		0.000005	~		~
Endrin ketone		ND		0.000005	~		~
Methoxychlor		ND		0.000005	~		~
alpha-Chlordane		ND		0.000005	~		~
gamma-Chlordane		ND		0.000005	~		~
Toxaphene		ND		0.00006	~		~
Endosulfan (I and II)		ND		0.000005	~		~
Chlordane (alpha and gamma)		ND		0.000005	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-001			05367-002			05367-003			05367-004		
Client ID:	E-3 (3.0-3.5)			E-3 (0.5-1.0)			E-3 (2.0-2.5)			E-3 (4.5-5.0)		
Depth:	3.0/3.5			0.5/1.0			2.0/2.5			4.5/5.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00372	C	0.00192	ND		0.0041	ND		0.00277	ND		0.00186
TOTAL VO's:	0.00372	C		ND			ND			ND		
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	0.00372	C		ND			ND			ND		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1221	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1232	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1242	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1248	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1254	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1260	0.037		0.000716	127	D	0.424	25.2	D	0.377	0.00624		0.000696
Aroclor-1262	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
Aroclor-1268	ND		0.000716	ND		0.424	ND		0.377	ND		0.000696
PCBs	0.037		0.000716	127	D	0.424	25.2	D	0.377	0.00624		0.000696
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
beta-BHC	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
gamma-BHC (Lindane)	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
delta-BHC	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Heptachlor	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Aldrin	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Heptachlor epoxide	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endosulfan I	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
4,4'-DDE	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Dieldrin	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endrin	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endosulfan II	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
4,4'-DDD	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endrin aldehyde	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endosulfan sulfate	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
4,4'-DDT	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Endrin ketone	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Methoxychlor	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
alpha-Chlordane	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
gamma-Chlordane	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Toxaphene	ND		0.00215	ND		0.509	ND		0.00226	ND		0.00209
Endosulfan (I and II)	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174
Chlordane (alpha and gamma)	ND		0.000179	ND		0.042	ND		0.000188	ND		0.000174

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-005			05367-006			05367-007			05367-008		
Client ID:	E-18 (0.5-1.0)			E-18 (2.0-2.5)			E-4 (0.5-1.0)			E-4 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
TOTAL VO's:	~		~	~		~	ND			ND		
TOTAL TIC's:	~		~	~		~	ND			ND		
TOTAL VO's & TIC's:	~		~	~		~	ND			ND		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1221	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1232	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1242	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1248	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1254	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1260	12.5	D	0.183	0.734		0.016	30.0	D	0.380	0.938	D	0.00702
Aroclor-1262	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
Aroclor-1268	ND		0.018	ND		0.016	ND		0.380	ND		0.000704
PCBs	12.5	D	0.183	0.734		0.016	30.0	D	0.380	0.938	D	0.00702
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	~		~	~		~	ND		0.00019	ND		0.000176
beta-BHC	~		~	~		~	ND		0.00019	ND		0.000176
gamma-BHC (Lindane)	~		~	~		~	ND		0.00019	ND		0.000176
delta-BHC	~		~	~		~	ND		0.00019	ND		0.000176
Heptachlor	~		~	~		~	ND		0.00019	ND		0.000176
Aldrin	~		~	~		~	ND		0.00019	ND		0.000176
Heptachlor epoxide	~		~	~		~	ND		0.00019	ND		0.000176
Endosulfan I	~		~	~		~	ND		0.00019	ND		0.000176
4,4'-DDE	~		~	~		~	ND		0.00019	ND		0.000176
Dieldrin	~		~	~		~	ND		0.00019	ND		0.000176
Endrin	~		~	~		~	ND		0.00019	ND		0.000176
Endosulfan II	~		~	~		~	ND		0.00019	ND		0.000176
4,4'-DDD	~		~	~		~	ND		0.00019	ND		0.000176
Endrin aldehyde	~		~	~		~	ND		0.00019	ND		0.000176
Endosulfan sulfate	~		~	~		~	ND		0.00019	ND		0.000176
4,4'-DDT	~		~	~		~	ND		0.00019	ND		0.000176
Endrin ketone	~		~	~		~	ND		0.00019	ND		0.000176
Methoxychlor	~		~	~		~	ND		0.00019	ND		0.000176
alpha-Chlordane	~		~	~		~	ND		0.00019	ND		0.000176
gamma-Chlordane	~		~	~		~	ND		0.00019	ND		0.000176
Toxaphene	~		~	~		~	ND		0.00228	ND		0.00211
Endosulfan (I and II)	~		~	~		~	ND		0.00019	ND		0.000176
Chlordane (alpha and gamma)	~		~	~		~	ND		0.00019	ND		0.000176

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-009			05367-010			05367-011			05367-012		
Client ID:	E-4 (3.0-3.5)			E-4 (4.5-5.0)			E-11 (0.5-1.0)			E-11 (2.0-2.5)		
Depth:	3.0/3.5			4.5/5.0			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
TOTAL VO's:	ND			ND			~		~	~		~
TOTAL TIC's:	ND			ND			~		~	~		~
TOTAL VO's & TIC's:	ND			ND			~		~	~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1221	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1232	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1242	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1248	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1254	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1260	0.827	D	0.00723	2.51	D	0.015	19.8	D	0.179	ND		0.015
Aroclor-1262	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
Aroclor-1268	ND		0.000724	ND		0.000736	ND		0.018	ND		0.015
PCBs	0.827	D	0.00723	2.51	D	0.015	19.8	D	0.179	ND		0.015
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000181	ND		0.000184	~		~	~		~
beta-BHC	ND		0.000181	ND		0.000184	~		~	~		~
gamma-BHC (Lindane)	ND		0.000181	ND		0.000184	~		~	~		~
delta-BHC	ND		0.000181	ND		0.000184	~		~	~		~
Heptachlor	ND		0.000181	ND		0.000184	~		~	~		~
Aldrin	ND		0.000181	ND		0.000184	~		~	~		~
Heptachlor epoxide	ND		0.000181	ND		0.000184	~		~	~		~
Endosulfan I	ND		0.000181	ND		0.000184	~		~	~		~
4,4'-DDE	ND		0.000181	ND		0.000184	~		~	~		~
Dieldrin	ND		0.000181	ND		0.000184	~		~	~		~
Endrin	ND		0.000181	ND		0.000184	~		~	~		~
Endosulfan II	ND		0.000181	ND		0.000184	~		~	~		~
4,4'-DDD	ND		0.000181	ND		0.000184	~		~	~		~
Endrin aldehyde	ND		0.000181	ND		0.000184	~		~	~		~
Endosulfan sulfate	ND		0.000181	ND		0.000184	~		~	~		~
4,4'-DDT	ND		0.000181	ND		0.000184	~		~	~		~
Endrin ketone	ND		0.000181	ND		0.000184	~		~	~		~
Methoxychlor	ND		0.000181	ND		0.000184	~		~	~		~
alpha-Chlordane	ND		0.000181	ND		0.000184	~		~	~		~
gamma-Chlordane	ND		0.000181	ND		0.000184	~		~	~		~
Toxaphene	ND		0.00217	ND		0.00221	~		~	~		~
Endosulfan (I and II)	ND		0.000181	ND		0.000184	~		~	~		~
Chlordane (alpha and gamma)	ND		0.000181	ND		0.000184	~		~	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-013			05367-014			05367-015			05367-016		
Client ID:	E-12 (0.5-1.0)			E-12 (2.0-2.5)			E-14 (0.5-1.0)			E-14 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1221	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1232	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1242	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1248	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1254	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1260	128	D	1.84	2.03		0.018	35.4	D	0.325	4.44		0.017
Aroclor-1262	ND		0.018	ND		0.018	ND		0.016	ND		0.017
Aroclor-1268	ND		0.018	ND		0.018	ND		0.016	ND		0.017
PCBs	128	D	1.84	2.03		0.018	35.4	D	0.325	4.44		0.017

Lab ID:	05367-017			05367-018			05367-019			05367-020		
Client ID:	E-16 (0.5-1.0)			E-16 (2.0-2.5)			PZ-2 (0.5-1.0)			PZ-2 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/22/15			6/22/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	ND		0.00253	ND		0.0023	ND		0.00313	0.00423	C	0.00333
TOTAL VO's:	ND			ND			ND			0.00423	C	
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	ND			ND			ND			0.00423	C	
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1221	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1232	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1242	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1248	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1254	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1260	1.74	D	0.016	ND		0.00405	0.150		0.000836	0.037		0.000824
Aroclor-1262	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
Aroclor-1268	ND		0.00163	ND		0.00405	ND		0.000836	ND		0.000824
PCBs	1.74	D	0.016	ND		0.00405	0.150		0.000836	0.037		0.000824
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
beta-BHC	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
gamma-BHC (Lindane)	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-017			05367-018			05367-019			05367-020		
Client ID:	E-16 (0.5-1.0)			E-16 (2.0-2.5)			PZ-2 (0.5-1.0)			PZ-2 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/22/15			6/22/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
delta-BHC	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Heptachlor	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Aldrin	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Heptachlor epoxide	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endosulfan I	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
4,4'-DDE	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Dieldrin	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endrin	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endosulfan II	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
4,4'-DDD	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endrin aldehyde	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endosulfan sulfate	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
4,4'-DDT	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Endrin ketone	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Methoxychlor	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
alpha-Chlordane	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
gamma-Chlordane	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Toxaphene	ND		0.012	ND		0.012	ND		0.013	ND		0.012
Endosulfan (I and II)	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103
Chlordane (alpha and gamma)	ND		0.00102	ND		0.00101	ND		0.00105	ND		0.00103

Lab ID:	05367-021			05367-022			05367-023			05367-024		
Client ID:	PZ-2 (4.0-4.5)			PZ-2 (6.0-6.5)			X-1 (4.5-5.0)			X-2 (2.0-2.5)		
Depth:	4.0/4.5			6.0/6.5			4.5/5.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	ND		0.00182	0.0022	C	0.00186	0.00277	C	0.00196	~		~
TOTAL VO's:	ND			0.0022	C		0.00277	C		~		~
TOTAL TIC's:	ND			ND			ND			~		~
TOTAL VO's & TIC's:	ND			0.0022	C		0.00277	C		~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1221	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1232	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1242	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1248	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1254	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1260	0.00423		0.000716	ND		0.000764	2.34	D	0.014	0.449		0.015
Aroclor-1262	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
Aroclor-1268	ND		0.000716	ND		0.000764	ND		0.000712	ND		0.015
PCBs	0.00423		0.000716	ND		0.000764	2.34	D	0.014	0.449		0.015
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000179	ND		0.000191	ND		0.000178	~		~
beta-BHC	ND		0.000179	ND		0.000191	ND		0.000178	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
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INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-021			05367-022			05367-023			05367-024		
Client ID:	PZ-2 (4.0-4.5)			PZ-2 (6.0-6.5)			X-1 (4.5-5.0)			X-2 (2.0-2.5)		
Depth:	4.0/4.5			6.0/6.5			4.5/5.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
gamma-BHC (Lindane)	ND		0.000179	ND		0.000191	ND		0.000178	~		~
delta-BHC	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Heptachlor	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Aldrin	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Heptachlor epoxide	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endosulfan I	ND		0.000179	ND		0.000191	ND		0.000178	~		~
4,4'-DDE	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Dieldrin	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endrin	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endosulfan II	ND		0.000179	ND		0.000191	ND		0.000178	~		~
4,4'-DDD	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endrin aldehyde	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endosulfan sulfate	ND		0.000179	ND		0.000191	ND		0.000178	~		~
4,4'-DDT	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Endrin ketone	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Methoxychlor	ND		0.000179	ND		0.000191	ND		0.000178	~		~
alpha-Chlordane	ND		0.000179	ND		0.000191	ND		0.000178	~		~
gamma-Chlordane	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Toxaphene	ND		0.00215	ND		0.00229	ND		0.00214	~		~
Endosulfan (I and II)	ND		0.000179	ND		0.000191	ND		0.000178	~		~
Chlordane (alpha and gamma)	ND		0.000179	ND		0.000191	ND		0.000178	~		~

Lab ID:	05367-025			05367-026			05367-027			05367-028		
Client ID:	E-8 (0.5-1.0)			E-8 (2.0-2.5)			E-17 (0.5-1.0)			E-17 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1221	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1232	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1242	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1248	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1254	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1260	4.05		0.016	ND		0.016	224	D	3.47	3.20		0.021
Aroclor-1262	ND		0.016	ND		0.016	ND		3.47	ND		0.021
Aroclor-1268	ND		0.016	ND		0.016	ND		3.47	ND		0.021
PCBs	4.05		0.016	ND		0.016	224	D	3.47	3.20		0.021

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-029			05367-030			05367-031			05367-032		
Client ID:	E-9 (0.5-1.0)			E-9 (2.0-2.5)			PZ-1 (0.5-1.0)			PZ-1 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/22/15			6/22/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	~		~	~		~	0.0044	C	0.00315	0.00382	C	0.00279
TOTAL VO's:	~		~	~		~	0.0044	C		0.00382	C	
TOTAL TIC's:	~		~	~		~	ND			ND		
TOTAL VO's & TIC's:	~		~	~		~	0.0044	C		0.00382	C	

Lab ID:	05367-029			05367-030			05367-031			05367-032		
Client ID:	E-9 (0.5-1.0)			E-9 (2.0-2.5)			PZ-1 (0.5-1.0)			PZ-1 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/23/15			6/23/15			6/22/15			6/22/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1221	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1232	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1242	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1248	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1254	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1260	8.25	D	0.085	0.144		0.016	1.33	D	0.00476	0.216	D	0.00392
Aroclor-1262	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
Aroclor-1268	ND		0.085	ND		0.016	ND		0.00476	ND		0.00392
PCBs	8.25	D	0.085	0.144		0.016	1.33	D	0.00476	0.216	D	0.00392
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	~		~	~		~	ND		0.00238	ND		0.00098
beta-BHC	~		~	~		~	ND		0.00238	ND		0.00098
gamma-BHC (Lindane)	~		~	~		~	ND		0.00238	ND		0.00098
delta-BHC	~		~	~		~	ND		0.00238	ND		0.00098
Heptachlor	~		~	~		~	ND		0.00238	ND		0.00098
Aldrin	~		~	~		~	ND		0.00238	ND		0.00098
Heptachlor epoxide	~		~	~		~	ND		0.00238	ND		0.00098
Endosulfan I	~		~	~		~	ND		0.00238	ND		0.00098
4,4'-DDE	~		~	~		~	ND		0.00238	ND		0.00098
Dieldrin	~		~	~		~	ND		0.00238	ND		0.00098
Endrin	~		~	~		~	ND		0.00238	ND		0.00098
Endosulfan II	~		~	~		~	ND		0.00238	ND		0.00098
4,4'-DDD	~		~	~		~	ND		0.00238	ND		0.00098
Endrin aldehyde	~		~	~		~	ND		0.00238	ND		0.00098
Endosulfan sulfate	~		~	~		~	ND		0.00238	ND		0.00098
4,4'-DDT	~		~	~		~	ND		0.00238	ND		0.00098
Endrin ketone	~		~	~		~	ND		0.00238	ND		0.00098
Methoxychlor	~		~	~		~	ND		0.00238	ND		0.00098
alpha-Chlordane	~		~	~		~	ND		0.00238	ND		0.00098
gamma-Chlordane	~		~	~		~	ND		0.00238	ND		0.00098
Toxaphene	~		~	~		~	ND		0.029	ND		0.012
Endosulfan (I and II)	~		~	~		~	ND		0.00238	ND		0.00098
Chlordane (alpha and gamma)	~		~	~		~	ND		0.00238	ND		0.00098

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ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-033			05367-034			05367-035			05367-036		
Client ID:	PZ-1 (2.5-3.0)			PZ-1 (4.5-5.0)			E-5 (0.5-1.0)			E-5 (3.0-3.5)		
Depth:	2.5/3.0			4.5/5.0			0.5/1.0			3.0/3.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/22/15			6/22/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00276	C	0.00222	ND		0.00184	ND		0.0022	0.00422	C	0.00329
TOTAL VO's:	0.00276	C		ND			ND			0.00422	C	
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	0.00276	C		ND			ND			0.00422	C	
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1221	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1232	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1242	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1248	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1254	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1260	0.225	D	0.00358	0.012		0.00074	6.35	D	0.082	0.103	D	0.00162
Aroclor-1262	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
Aroclor-1268	ND		0.00358	ND		0.00074	ND		0.00817	ND		0.00162
PCBs	0.225	D	0.00358	0.012		0.00074	6.35	D	0.082	0.103	D	0.00162
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
beta-BHC	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
gamma-BHC (Lindane)	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
delta-BHC	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Heptachlor	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Aldrin	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Heptachlor epoxide	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endosulfan I	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
4,4'-DDE	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Dieldrin	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endrin	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endosulfan II	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
4,4'-DDD	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endrin aldehyde	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endosulfan sulfate	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
4,4'-DDT	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Endrin ketone	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Methoxychlor	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
alpha-Chlordane	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
gamma-Chlordane	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Toxaphene	ND		0.011	ND		0.00222	ND		0.049	ND		0.024
Endosulfan (I and II)	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202
Chlordane (alpha and gamma)	ND		0.000895	ND		0.000185	ND		0.00409	ND		0.00202

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	05367-037			05367-038			05367-039			05367-041		
Client ID:	E-5 (2.0-2.5)			E-5 (4.5-5.0)			E-6 (0.5-1.0)			E-6 (2.0-2.5)		
Depth:	2.0/2.5			4.5/5.0			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/22/15			6/22/15			6/23/15			6/23/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00244	C	0.00208	0.00236	C	0.00196	0.00426	C	0.00356	ND		0.00208
TOTAL VO's:	0.00244	C		0.00236	C		0.00426	C		ND		
TOTAL TIC's:	ND			ND			ND			ND		
TOTAL VO's & TIC's:	0.00244	C		0.00236	C		0.00426	C		ND		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1221	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1232	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1242	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1248	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1254	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1260	0.247	D	0.00793	ND		0.00162	5.22	D	0.017	0.030		0.000704
Aroclor-1262	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
Aroclor-1268	ND		0.00793	ND		0.00162	ND		0.000832	ND		0.000704
PCBs	0.247	D	0.00793	ND		0.00162	5.22	D	0.017	0.030		0.000704
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
beta-BHC	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
gamma-BHC (Lindane)	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
delta-BHC	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Heptachlor	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Aldrin	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Heptachlor epoxide	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endosulfan I	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
4,4'-DDE	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Dieldrin	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endrin	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endosulfan II	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
4,4'-DDD	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endrin aldehyde	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endosulfan sulfate	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
4,4'-DDT	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Endrin ketone	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Methoxychlor	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
alpha-Chlordane	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
gamma-Chlordane	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Toxaphene	ND		0.048	ND		0.00244	ND		0.0025	ND		0.00211
Endosulfan (I and II)	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176
Chlordane (alpha and gamma)	ND		0.00397	ND		0.000203	ND		0.000208	ND		0.000176

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05367

Lab ID:	**05367-042**			**05367-043**		
Client ID:	**E-6 (3.0-3.5)**			**E-6 (4.0-4.5)**		
Depth:	**3.0/3.5**			**4.0/4.5**		
Matrix:	**Soil**			**Soil**		
Sampled Date	**6/23/15**			**6/23/15**		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00237	C	0.00212	ND		0.00196
TOTAL VO's:	0.00237	C		ND		
TOTAL TIC's:	ND			ND		
TOTAL VO's & TIC's:	0.00237	C		ND		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.0007	ND		0.000728
Aroclor-1221	ND		0.0007	ND		0.000728
Aroclor-1232	ND		0.0007	ND		0.000728
Aroclor-1242	ND		0.0007	ND		0.000728
Aroclor-1248	ND		0.0007	ND		0.000728
Aroclor-1254	ND		0.0007	ND		0.000728
Aroclor-1260	0.011		0.0007	0.00148	J	0.000728
Aroclor-1262	ND		0.0007	ND		0.000728
Aroclor-1268	ND		0.0007	ND		0.000728
PCBs	0.011		0.0007	0.00148	J	0.000728
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000175	ND		0.000182
beta-BHC	ND		0.000175	ND		0.000182
gamma-BHC (Lindane)	ND		0.000175	ND		0.000182
delta-BHC	ND		0.000175	ND		0.000182
Heptachlor	ND		0.000175	ND		0.000182
Aldrin	ND		0.000175	ND		0.000182
Heptachlor epoxide	ND		0.000175	ND		0.000182
Endosulfan I	ND		0.000175	ND		0.000182
4,4'-DDE	ND		0.000175	ND		0.000182
Dieldrin	ND		0.000175	ND		0.000182
Endrin	ND		0.000175	ND		0.000182
Endosulfan II	ND		0.000175	ND		0.000182
4,4'-DDD	ND		0.000175	ND		0.000182
Endrin aldehyde	ND		0.000175	ND		0.000182
Endosulfan sulfate	ND		0.000175	ND		0.000182
4,4'-DDT	ND		0.000175	ND		0.000182
Endrin ketone	ND		0.000175	ND		0.000182
Methoxychlor	ND		0.000175	ND		0.000182
alpha-Chlordane	ND		0.000175	ND		0.000182
gamma-Chlordane	ND		0.000175	ND		0.000182
Toxaphene	ND		0.0021	ND		0.00218
Endosulfan (I and II)	ND		0.000175	ND		0.000182
Chlordane (alpha and gamma)	ND		0.000175	ND		0.000182

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
J = Concentration detected at a value below the RL and above the MDL for target compounds.
For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-001
Client ID: E-3_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8487.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00097	0.000427
Chloromethane	ND		0.00097	0.000436
Vinyl chloride	ND		0.00097	0.000413
Bromomethane	ND		0.00194	0.000621
Chloroethane	ND		0.00097	0.000492
Trichlorofluoromethane	ND		0.00097	0.000789
1,1-Dichloroethene	ND		0.00097	0.000473
Acetone	ND		0.00485	0.000676
Carbon disulfide	ND		0.00097	0.000555
Methylene chloride	0.00372	C	0.00194	0.00192
trans-1,2-Dichloroethene	ND		0.00097	0.000363
Methyl tert-butyl ether (MTBE)	ND		0.00097	0.000362
1,1-Dichloroethane	ND		0.00097	0.000261
cis-1,2-Dichloroethene	ND		0.00097	0.000309
2-Butanone (MEK)	ND		0.00097	0.000726
Bromochloromethane	ND		0.00097	0.000409
Chloroform	ND		0.00097	0.000407
1,1,1-Trichloroethane	ND		0.00097	0.000424
Carbon tetrachloride	ND		0.00097	0.000648
1,2-Dichloroethane (EDC)	ND		0.00097	0.000338
Benzene	ND		0.00097	0.000264
Trichloroethene	ND		0.00097	0.000312
1,2-Dichloropropane	ND		0.00097	0.000343
1,4-Dioxane	ND		0.194	0.019
Bromodichloromethane	ND		0.00097	0.000405
cis-1,3-Dichloropropene	ND		0.00097	0.000388
4-Methyl-2-pentanone (MIBK)	ND		0.00097	0.000486

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-001
Client ID: E-3_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8487.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00097	0.000282
trans-1,3-Dichloropropene	ND		0.00097	0.000296
1,1,2-Trichloroethane	ND		0.00097	0.000228
Tetrachloroethene	ND		0.00097	0.00048
2-Hexanone	ND		0.00097	0.000561
Dibromochloromethane	ND		0.00097	0.000286
1,2-Dibromoethane (EDB)	ND		0.00097	0.000342
Chlorobenzene	ND		0.00097	0.000326
Ethylbenzene	ND		0.00097	0.000332
Total Xylenes	ND		0.00194	0.000779
Styrene	ND		0.00097	0.000347
Bromoform	ND		0.00097	0.000447
Isopropylbenzene	ND		0.00097	0.000425
1,1,2,2-Tetrachloroethane	ND		0.00097	0.00038
1,3-Dichlorobenzene	ND		0.00097	0.000457
1,4-Dichlorobenzene	ND		0.00097	0.000514
1,2-Dichlorobenzene	ND		0.00097	0.000468
1,2-Dibromo-3-chloropropane	ND		0.00097	0.00062
1,2,4-Trichlorobenzene	ND		0.00097	0.000427
1,2,3-Trichlorobenzene	ND		0.00097	0.000556
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00097	0.00067
Methyl acetate	ND		0.00485	0.000523
Cyclohexane	ND		0.00097	0.000503
Methylcyclohexane	ND		0.00097	0.000541
1,3-Dichloropropene (cis- and trans-)	ND		0.00097	0.000388
Total Target Compounds (52):	0.00372	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-001
Client ID: E-3_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8487.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.20

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-002
Client ID: E-3_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8488.D

GC/MS Column: DB-624
Sample wt/vol: 3.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 22.1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00207	0.000911
Chloromethane	ND		0.00207	0.000929
Vinyl chloride	ND		0.00207	0.000882
Bromomethane	ND		0.00414	0.00132
Chloroethane	ND		0.00207	0.00105
Trichlorofluoromethane	ND		0.00207	0.00168
1,1-Dichloroethene	ND		0.00207	0.00101
Acetone	ND		0.010	0.00144
Carbon disulfide	ND		0.00207	0.00118
Methylene chloride	ND		0.00414	0.0041
trans-1,2-Dichloroethene	ND		0.00207	0.000774
Methyl tert-butyl ether (MTBE)	ND		0.00207	0.000772
1,1-Dichloroethane	ND		0.00207	0.000557
cis-1,2-Dichloroethene	ND		0.00207	0.00066
2-Butanone (MEK)	ND		0.00207	0.00155
Bromochloromethane	ND		0.00207	0.000874
Chloroform	ND		0.00207	0.000869
1,1,1-Trichloroethane	ND		0.00207	0.000905
Carbon tetrachloride	ND		0.00207	0.00138
1,2-Dichloroethane (EDC)	ND		0.00207	0.00072
Benzene	ND		0.00207	0.000563
Trichloroethene	ND		0.00207	0.000667
1,2-Dichloropropane	ND		0.00207	0.000733
1,4-Dioxane	ND		0.414	0.040
Bromodichloromethane	ND		0.00207	0.000865
cis-1,3-Dichloropropene	ND		0.00207	0.000828
4-Methyl-2-pentanone (MIBK)	ND		0.00207	0.00104

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-002
Client ID: E-3_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8488.D

GC/MS Column: DB-624
Sample wt/vol: 3.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 22.1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00207	0.000602
trans-1,3-Dichloropropene	ND		0.00207	0.000631
1,1,2-Trichloroethane	ND		0.00207	0.000486
Tetrachloroethene	ND		0.00207	0.00102
2-Hexanone	ND		0.00207	0.0012
Dibromochloromethane	ND		0.00207	0.000611
1,2-Dibromoethane (EDB)	ND		0.00207	0.000731
Chlorobenzene	ND		0.00207	0.000696
Ethylbenzene	ND		0.00207	0.000708
Total Xylenes	ND		0.00414	0.00166
Styrene	ND		0.00207	0.000741
Bromoform	ND		0.00207	0.000954
Isopropylbenzene	ND		0.00207	0.000907
1,1,2,2-Tetrachloroethane	ND		0.00207	0.000811
1,3-Dichlorobenzene	ND		0.00207	0.000975
1,4-Dichlorobenzene	ND		0.00207	0.0011
1,2-Dichlorobenzene	ND		0.00207	0.000998
1,2-Dibromo-3-chloropropane	ND		0.00207	0.00132
1,2,4-Trichlorobenzene	ND		0.00207	0.000911
1,2,3-Trichlorobenzene	ND		0.00207	0.00119
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00207	0.00143
Methyl acetate	ND		0.010	0.00112
Cyclohexane	ND		0.00207	0.00107
Methylcyclohexane	ND		0.00207	0.00116
1,3-Dichloropropene (cis- and trans-)	ND		0.00207	0.000828

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0030

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-002
Client ID: E-3_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8488.D

GC/MS Column: DB-624
Sample wt/vol: 3.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 22.1

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-003
Client ID: E-3_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8489.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.0014	0.000616
Chloromethane	ND		0.0014	0.000629
Vinyl chloride	ND		0.0014	0.000596
Bromomethane	ND		0.0028	0.000896
Chloroethane	ND		0.0014	0.00071
Trichlorofluoromethane	ND		0.0014	0.00114
1,1-Dichloroethene	ND		0.0014	0.000683
Acetone	ND		0.007	0.000976
Carbon disulfide	ND		0.0014	0.000801
Methylene chloride	ND		0.0028	0.00277
trans-1,2-Dichloroethene	ND		0.0014	0.000524
Methyl tert-butyl ether (MTBE)	ND		0.0014	0.000522
1,1-Dichloroethane	ND		0.0014	0.000377
cis-1,2-Dichloroethene	ND		0.0014	0.000447
2-Butanone (MEK)	ND		0.0014	0.00105
Bromochloromethane	ND		0.0014	0.000591
Chloroform	ND		0.0014	0.000588
1,1,1-Trichloroethane	ND		0.0014	0.000612
Carbon tetrachloride	ND		0.0014	0.000935
1,2-Dichloroethane (EDC)	ND		0.0014	0.000487
Benzene	ND		0.0014	0.000381
Trichloroethene	ND		0.0014	0.000451
1,2-Dichloropropane	ND		0.0014	0.000496
1,4-Dioxane	ND		0.280	0.027
Bromodichloromethane	ND		0.0014	0.000585
cis-1,3-Dichloropropene	ND		0.0014	0.00056
4-Methyl-2-pentanone (MIBK)	ND		0.0014	0.000701

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-003
Client ID: E-3_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8489.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.0014	0.000407
trans-1,3-Dichloropropene	ND		0.0014	0.000427
1,1,2-Trichloroethane	ND		0.0014	0.000329
Tetrachloroethene	ND		0.0014	0.000693
2-Hexanone	ND		0.0014	0.000809
Dibromochloromethane	ND		0.0014	0.000413
1,2-Dibromoethane (EDB)	ND		0.0014	0.000494
Chlorobenzene	ND		0.0014	0.00047
Ethylbenzene	ND		0.0014	0.000479
Total Xylenes	ND		0.0028	0.00112
Styrene	ND		0.0014	0.000501
Bromoform	ND		0.0014	0.000645
Isopropylbenzene	ND		0.0014	0.000613
1,1,2,2-Tetrachloroethane	ND		0.0014	0.000549
1,3-Dichlorobenzene	ND		0.0014	0.000659
1,4-Dichlorobenzene	ND		0.0014	0.000742
1,2-Dichlorobenzene	ND		0.0014	0.000675
1,2-Dibromo-3-chloropropane	ND		0.0014	0.000895
1,2,4-Trichlorobenzene	ND		0.0014	0.000616
1,2,3-Trichlorobenzene	ND		0.0014	0.000802
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0014	0.000967
Methyl acetate	ND		0.007	0.000755
Cyclohexane	ND		0.0014	0.000727
Methylcyclohexane	ND		0.0014	0.000781
1,3-Dichloropropene (cis- and trans-)	ND		0.0014	0.00056

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-003
Client ID: E-3_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8489.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-004
Client ID: E-3_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8490.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00094	0.000414
Chloromethane	ND		0.00094	0.000422
Vinyl chloride	ND		0.00094	0.0004
Bromomethane	ND		0.00188	0.000602
Chloroethane	ND		0.00094	0.000477
Trichlorofluoromethane	ND		0.00094	0.000764
1,1-Dichloroethene	ND		0.00094	0.000459
Acetone	ND		0.0047	0.000655
Carbon disulfide	ND		0.00094	0.000538
Methylene chloride	ND		0.00188	0.00186
trans-1,2-Dichloroethene	ND		0.00094	0.000352
Methyl tert-butyl ether (MTBE)	ND		0.00094	0.000351
1,1-Dichloroethane	ND		0.00094	0.000253
cis-1,2-Dichloroethene	ND		0.00094	0.0003
2-Butanone (MEK)	ND		0.00094	0.000703
Bromochloromethane	ND		0.00094	0.000397
Chloroform	ND		0.00094	0.000395
1,1,1-Trichloroethane	ND		0.00094	0.000411
Carbon tetrachloride	ND		0.00094	0.000628
1,2-Dichloroethane (EDC)	ND		0.00094	0.000327
Benzene	ND		0.00094	0.000256
Trichloroethene	ND		0.00094	0.000303
1,2-Dichloropropane	ND		0.00094	0.000333
1,4-Dioxane	ND		0.188	0.018
Bromodichloromethane	ND		0.00094	0.000393
cis-1,3-Dichloropropene	ND		0.00094	0.000376
4-Methyl-2-pentanone (MIBK)	ND		0.00094	0.000471

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-004
Client ID: E-3_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8490.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00094	0.000274
trans-1,3-Dichloropropene	ND		0.00094	0.000287
1,1,2-Trichloroethane	ND		0.00094	0.000221
Tetrachloroethene	ND		0.00094	0.000465
2-Hexanone	ND		0.00094	0.000543
Dibromochloromethane	ND		0.00094	0.000277
1,2-Dibromoethane (EDB)	ND		0.00094	0.000332
Chlorobenzene	ND		0.00094	0.000316
Ethylbenzene	ND		0.00094	0.000321
Total Xylenes	ND		0.00188	0.000755
Styrene	ND		0.00094	0.000337
Bromoform	ND		0.00094	0.000433
Isopropylbenzene	ND		0.00094	0.000412
1,1,2,2-Tetrachloroethane	ND		0.00094	0.000368
1,3-Dichlorobenzene	ND		0.00094	0.000443
1,4-Dichlorobenzene	ND		0.00094	0.000498
1,2-Dichlorobenzene	ND		0.00094	0.000453
1,2-Dibromo-3-chloropropane	ND		0.00094	0.000601
1,2,4-Trichlorobenzene	ND		0.00094	0.000414
1,2,3-Trichlorobenzene	ND		0.00094	0.000539
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00094	0.00065
Methyl acetate	ND		0.0047	0.000507
Cyclohexane	ND		0.00094	0.000488
Methylcyclohexane	ND		0.00094	0.000525
1,3-Dichloropropene (cis- and trans-)	ND		0.00094	0.000376

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-004
Client ID: E-3_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8490.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-007
Client ID: E-4_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8491.D

GC/MS Column: DB-624
Sample wt/vol: 4.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00134	0.00059
Chloromethane	ND		0.00134	0.000602
Vinyl chloride	ND		0.00134	0.000571
Bromomethane	ND		0.00268	0.000858
Chloroethane	ND		0.00134	0.000679
Trichlorofluoromethane	ND		0.00134	0.00109
1,1-Dichloroethene	ND		0.00134	0.000654
Acetone	ND		0.0067	0.000934
Carbon disulfide	ND		0.00134	0.000766
Methylene chloride	ND		0.00268	0.00265
trans-1,2-Dichloroethene	ND		0.00134	0.000501
Methyl tert-butyl ether (MTBE)	ND		0.00134	0.0005
1,1-Dichloroethane	ND		0.00134	0.00036
cis-1,2-Dichloroethene	ND		0.00134	0.000427
2-Butanone (MEK)	ND		0.00134	0.001
Bromochloromethane	ND		0.00134	0.000565
Chloroform	ND		0.00134	0.000563
1,1,1-Trichloroethane	ND		0.00134	0.000586
Carbon tetrachloride	ND		0.00134	0.000895
1,2-Dichloroethane (EDC)	ND		0.00134	0.000466
Benzene	ND		0.00134	0.000364
Trichloroethene	ND		0.00134	0.000431
1,2-Dichloropropane	ND		0.00134	0.000474
1,4-Dioxane	ND		0.268	0.026
Bromodichloromethane	ND		0.00134	0.00056
cis-1,3-Dichloropropene	ND		0.00134	0.000536
4-Methyl-2-pentanone (MIBK)	ND		0.00134	0.000671

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-007
Client ID: E-4_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8491.D

GC/MS Column: DB-624
Sample wt/vol: 4.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00134	0.00039
trans-1,3-Dichloropropene	ND		0.00134	0.000409
1,1,2-Trichloroethane	ND		0.00134	0.000315
Tetrachloroethene	ND		0.00134	0.000663
2-Hexanone	ND		0.00134	0.000775
Dibromochloromethane	ND		0.00134	0.000395
1,2-Dibromoethane (EDB)	ND		0.00134	0.000473
Chlorobenzene	ND		0.00134	0.00045
Ethylbenzene	ND		0.00134	0.000458
Total Xylenes	ND		0.00268	0.00108
Styrene	ND		0.00134	0.00048
Bromoform	ND		0.00134	0.000618
Isopropylbenzene	ND		0.00134	0.000587
1,1,2,2-Tetrachloroethane	ND		0.00134	0.000525
1,3-Dichlorobenzene	ND		0.00134	0.000631
1,4-Dichlorobenzene	ND		0.00134	0.00071
1,2-Dichlorobenzene	ND		0.00134	0.000646
1,2-Dibromo-3-chloropropane	ND		0.00134	0.000856
1,2,4-Trichlorobenzene	ND		0.00134	0.00059
1,2,3-Trichlorobenzene	ND		0.00134	0.000768
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00134	0.000926
Methyl acetate	ND		0.0067	0.000722
Cyclohexane	ND		0.00134	0.000695
Methylcyclohexane	ND		0.00134	0.000748
1,3-Dichloropropene (cis- and trans-)	ND		0.00134	0.000536

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-007
Client ID: E-4_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8491.D

GC/MS Column: DB-624
Sample wt/vol: 4.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.1

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-008
Client ID: E-4_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8492.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00103	0.000453
Chloromethane	ND		0.00103	0.000462
Vinyl chloride	ND		0.00103	0.000439
Bromomethane	ND		0.00206	0.000659
Chloroethane	ND		0.00103	0.000522
Trichlorofluoromethane	ND		0.00103	0.000837
1,1-Dichloroethene	ND		0.00103	0.000503
Acetone	ND		0.00515	0.000718
Carbon disulfide	ND		0.00103	0.000589
Methylene chloride	ND		0.00206	0.00204
trans-1,2-Dichloroethene	ND		0.00103	0.000385
Methyl tert-butyl ether (MTBE)	ND		0.00103	0.000384
1,1-Dichloroethane	ND		0.00103	0.000277
cis-1,2-Dichloroethene	ND		0.00103	0.000329
2-Butanone (MEK)	ND		0.00103	0.00077
Bromochloromethane	ND		0.00103	0.000435
Chloroform	ND		0.00103	0.000433
1,1,1-Trichloroethane	ND		0.00103	0.00045
Carbon tetrachloride	ND		0.00103	0.000688
1,2-Dichloroethane (EDC)	ND		0.00103	0.000358
Benzene	ND		0.00103	0.00028
Trichloroethene	ND		0.00103	0.000332
1,2-Dichloropropane	ND		0.00103	0.000365
1,4-Dioxane	ND		0.206	0.020
Bromodichloromethane	ND		0.00103	0.000431
cis-1,3-Dichloropropene	ND		0.00103	0.000412
4-Methyl-2-pentanone (MIBK)	ND		0.00103	0.000516

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-008
Client ID: E-4_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8492.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00103	0.0003
trans-1,3-Dichloropropene	ND		0.00103	0.000314
1,1,2-Trichloroethane	ND		0.00103	0.000242
Tetrachloroethene	ND		0.00103	0.00051
2-Hexanone	ND		0.00103	0.000595
Dibromochloromethane	ND		0.00103	0.000304
1,2-Dibromoethane (EDB)	ND		0.00103	0.000364
Chlorobenzene	ND		0.00103	0.000346
Ethylbenzene	ND		0.00103	0.000352
Total Xylenes	ND		0.00206	0.000827
Styrene	ND		0.00103	0.000369
Bromoform	ND		0.00103	0.000475
Isopropylbenzene	ND		0.00103	0.000451
1,1,2,2-Tetrachloroethane	ND		0.00103	0.000404
1,3-Dichlorobenzene	ND		0.00103	0.000485
1,4-Dichlorobenzene	ND		0.00103	0.000546
1,2-Dichlorobenzene	ND		0.00103	0.000496
1,2-Dibromo-3-chloropropane	ND		0.00103	0.000658
1,2,4-Trichlorobenzene	ND		0.00103	0.000453
1,2,3-Trichlorobenzene	ND		0.00103	0.00059
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00103	0.000712
Methyl acetate	ND		0.00515	0.000555
Cyclohexane	ND		0.00103	0.000535
Methylcyclohexane	ND		0.00103	0.000575
1,3-Dichloropropene (cis- and trans-)	ND		0.00103	0.000412

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-008
Client ID: E-4_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8492.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-009
Client ID: E-4_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8493.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00111	0.000488
Chloromethane	ND		0.00111	0.000498
Vinyl chloride	ND		0.00111	0.000473
Bromomethane	ND		0.00222	0.00071
Chloroethane	ND		0.00111	0.000563
Trichlorofluoromethane	ND		0.00111	0.000902
1,1-Dichloroethene	ND		0.00111	0.000542
Acetone	ND		0.00555	0.000774
Carbon disulfide	ND		0.00111	0.000635
Methylene chloride	ND		0.00222	0.0022
trans-1,2-Dichloroethene	ND		0.00111	0.000415
Methyl tert-butyl ether (MTBE)	ND		0.00111	0.000414
1,1-Dichloroethane	ND		0.00111	0.000299
cis-1,2-Dichloroethene	ND		0.00111	0.000354
2-Butanone (MEK)	ND		0.00111	0.00083
Bromochloromethane	ND		0.00111	0.000468
Chloroform	ND		0.00111	0.000466
1,1,1-Trichloroethane	ND		0.00111	0.000485
Carbon tetrachloride	ND		0.00111	0.000741
1,2-Dichloroethane (EDC)	ND		0.00111	0.000386
Benzene	ND		0.00111	0.000302
Trichloroethene	ND		0.00111	0.000357
1,2-Dichloropropane	ND		0.00111	0.000393
1,4-Dioxane	ND		0.222	0.022
Bromodichloromethane	ND		0.00111	0.000464
cis-1,3-Dichloropropene	ND		0.00111	0.000444
4-Methyl-2-pentanone (MIBK)	ND		0.00111	0.000556

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-009
Client ID: E-4_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8493.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00111	0.000323
trans-1,3-Dichloropropene	ND		0.00111	0.000339
1,1,2-Trichloroethane	ND		0.00111	0.000261
Tetrachloroethene	ND		0.00111	0.000549
2-Hexanone	ND		0.00111	0.000642
Dibromochloromethane	ND		0.00111	0.000327
1,2-Dibromoethane (EDB)	ND		0.00111	0.000392
Chlorobenzene	ND		0.00111	0.000373
Ethylbenzene	ND		0.00111	0.00038
Total Xylenes	ND		0.00222	0.000891
Styrene	ND		0.00111	0.000397
Bromoform	ND		0.00111	0.000512
Isopropylbenzene	ND		0.00111	0.000486
1,1,2,2-Tetrachloroethane	ND		0.00111	0.000435
1,3-Dichlorobenzene	ND		0.00111	0.000523
1,4-Dichlorobenzene	ND		0.00111	0.000588
1,2-Dichlorobenzene	ND		0.00111	0.000535
1,2-Dibromo-3-chloropropane	ND		0.00111	0.000709
1,2,4-Trichlorobenzene	ND		0.00111	0.000488
1,2,3-Trichlorobenzene	ND		0.00111	0.000636
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00111	0.000767
Methyl acetate	ND		0.00555	0.000598
Cyclohexane	ND		0.00111	0.000576
Methylcyclohexane	ND		0.00111	0.000619
1,3-Dichloropropene (cis- and trans-)	ND		0.00111	0.000444

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0045

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-009
Client ID: E-4_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8493.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-010
Client ID: E-4_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8522.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00117	0.000515
Chloromethane	ND		0.00117	0.000525
Vinyl chloride	ND		0.00117	0.000498
Bromomethane	ND		0.00234	0.000749
Chloroethane	ND		0.00117	0.000593
Trichlorofluoromethane	ND		0.00117	0.000951
1,1-Dichloroethene	ND		0.00117	0.000571
Acetone	ND		0.00585	0.000815
Carbon disulfide	ND		0.00117	0.000669
Methylene chloride	ND		0.00234	0.00232
trans-1,2-Dichloroethene	ND		0.00117	0.000438
Methyl tert-butyl ether (MTBE)	ND		0.00117	0.000436
1,1-Dichloroethane	ND		0.00117	0.000315
cis-1,2-Dichloroethene	ND		0.00117	0.000373
2-Butanone (MEK)	ND		0.00117	0.000875
Bromochloromethane	ND		0.00117	0.000494
Chloroform	ND		0.00117	0.000491
1,1,1-Trichloroethane	ND		0.00117	0.000511
Carbon tetrachloride	ND		0.00117	0.000782
1,2-Dichloroethane (EDC)	ND		0.00117	0.000407
Benzene	ND		0.00117	0.000318
Trichloroethene	ND		0.00117	0.000377
1,2-Dichloropropane	ND		0.00117	0.000414
1,4-Dioxane	ND		0.234	0.023
Bromodichloromethane	ND		0.00117	0.000489
cis-1,3-Dichloropropene	ND		0.00117	0.000468
4-Methyl-2-pentanone (MIBK)	ND		0.00117	0.000586

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-010
Client ID: E-4_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8522.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00117	0.00034
trans-1,3-Dichloropropene	ND		0.00117	0.000357
1,1,2-Trichloroethane	ND		0.00117	0.000275
Tetrachloroethene	ND		0.00117	0.000579
2-Hexanone	ND		0.00117	0.000676
Dibromochloromethane	ND		0.00117	0.000345
1,2-Dibromoethane (EDB)	ND		0.00117	0.000413
Chlorobenzene	ND		0.00117	0.000393
Ethylbenzene	ND		0.00117	0.0004
Total Xylenes	ND		0.00234	0.00094
Styrene	ND		0.00117	0.000419
Bromoform	ND		0.00117	0.000539
Isopropylbenzene	ND		0.00117	0.000512
1,1,2,2-Tetrachloroethane	ND		0.00117	0.000459
1,3-Dichlorobenzene	ND		0.00117	0.000551
1,4-Dichlorobenzene	ND		0.00117	0.00062
1,2-Dichlorobenzene	ND		0.00117	0.000564
1,2-Dibromo-3-chloropropane	ND		0.00117	0.000748
1,2,4-Trichlorobenzene	ND		0.00117	0.000515
1,2,3-Trichlorobenzene	ND		0.00117	0.00067
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00117	0.000808
Methyl acetate	ND		0.00585	0.000631
Cyclohexane	ND		0.00117	0.000607
Methylcyclohexane	ND		0.00117	0.000653
1,3-Dichloropropene (cis- and trans-)	ND		0.00117	0.000468

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0048

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-010
Client ID: E-4_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8522.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-017
Client ID: E-16_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8495.D

GC/MS Column: DB-624
Sample wt/vol: 4.8g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00128	0.000563
Chloromethane	ND		0.00128	0.000575
Vinyl chloride	ND		0.00128	0.000545
Bromomethane	ND		0.00256	0.000819
Chloroethane	ND		0.00128	0.000649
Trichlorofluoromethane	ND		0.00128	0.00104
1,1-Dichloroethene	ND		0.00128	0.000625
Acetone	ND		0.0064	0.000892
Carbon disulfide	ND		0.00128	0.000732
Methylene chloride	ND		0.00256	0.00253
trans-1,2-Dichloroethene	ND		0.00128	0.000479
Methyl tert-butyl ether (MTBE)	ND		0.00128	0.000477
1,1-Dichloroethane	ND		0.00128	0.000344
cis-1,2-Dichloroethene	ND		0.00128	0.000408
2-Butanone (MEK)	ND		0.00128	0.000957
Bromochloromethane	ND		0.00128	0.00054
Chloroform	ND		0.00128	0.000538
1,1,1-Trichloroethane	ND		0.00128	0.000559
Carbon tetrachloride	ND		0.00128	0.000855
1,2-Dichloroethane (EDC)	ND		0.00128	0.000445
Benzene	ND		0.00128	0.000348
Trichloroethene	ND		0.00128	0.000412
1,2-Dichloropropane	ND		0.00128	0.000453
1,4-Dioxane	ND		0.256	0.025
Bromodichloromethane	ND		0.00128	0.000535
cis-1,3-Dichloropropene	ND		0.00128	0.000512
4-Methyl-2-pentanone (MIBK)	ND		0.00128	0.000641

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-017
Client ID: E-16_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8495.D

GC/MS Column: DB-624
Sample wt/vol: 4.8g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00128	0.000372
trans-1,3-Dichloropropene	ND		0.00128	0.00039
1,1,2-Trichloroethane	ND		0.00128	0.000301
Tetrachloroethene	ND		0.00128	0.000634
2-Hexanone	ND		0.00128	0.00074
Dibromochloromethane	ND		0.00128	0.000378
1,2-Dibromoethane (EDB)	ND		0.00128	0.000452
Chlorobenzene	ND		0.00128	0.00043
Ethylbenzene	ND		0.00128	0.000438
Total Xylenes	ND		0.00256	0.00103
Styrene	ND		0.00128	0.000458
Bromoform	ND		0.00128	0.00059
Isopropylbenzene	ND		0.00128	0.000561
1,1,2,2-Tetrachloroethane	ND		0.00128	0.000502
1,3-Dichlorobenzene	ND		0.00128	0.000603
1,4-Dichlorobenzene	ND		0.00128	0.000678
1,2-Dichlorobenzene	ND		0.00128	0.000617
1,2-Dibromo-3-chloropropane	ND		0.00128	0.000818
1,2,4-Trichlorobenzene	ND		0.00128	0.000563
1,2,3-Trichlorobenzene	ND		0.00128	0.000733
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00128	0.000884
Methyl acetate	ND		0.0064	0.00069
Cyclohexane	ND		0.00128	0.000664
Methylcyclohexane	ND		0.00128	0.000714
1,3-Dichloropropene (cis- and trans-)	ND		0.00128	0.000512

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0051

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-017
Client ID: E-16_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8495.D

GC/MS Column: DB-624
Sample wt/vol: 4.8g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-018
Client ID: E-16_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8496.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00116	0.00051
Chloromethane	ND		0.00116	0.000521
Vinyl chloride	ND		0.00116	0.000494
Bromomethane	ND		0.00232	0.000742
Chloroethane	ND		0.00116	0.000588
Trichlorofluoromethane	ND		0.00116	0.000943
1,1-Dichloroethene	ND		0.00116	0.000566
Acetone	ND		0.0058	0.000809
Carbon disulfide	ND		0.00116	0.000664
Methylene chloride	ND		0.00232	0.0023
trans-1,2-Dichloroethene	ND		0.00116	0.000434
Methyl tert-butyl ether (MTBE)	ND		0.00116	0.000433
1,1-Dichloroethane	ND		0.00116	0.000312
cis-1,2-Dichloroethene	ND		0.00116	0.00037
2-Butanone (MEK)	ND		0.00116	0.000868
Bromochloromethane	ND		0.00116	0.00049
Chloroform	ND		0.00116	0.000487
1,1,1-Trichloroethane	ND		0.00116	0.000507
Carbon tetrachloride	ND		0.00116	0.000775
1,2-Dichloroethane (EDC)	ND		0.00116	0.000404
Benzene	ND		0.00116	0.000316
Trichloroethene	ND		0.00116	0.000374
1,2-Dichloropropane	ND		0.00116	0.000411
1,4-Dioxane	ND		0.232	0.023
Bromodichloromethane	ND		0.00116	0.000485
cis-1,3-Dichloropropene	ND		0.00116	0.000464
4-Methyl-2-pentanone (MIBK)	ND		0.00116	0.000581

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-018
Client ID: E-16_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8496.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00116	0.000338
trans-1,3-Dichloropropene	ND		0.00116	0.000354
1,1,2-Trichloroethane	ND		0.00116	0.000273
Tetrachloroethene	ND		0.00116	0.000574
2-Hexanone	ND		0.00116	0.00067
Dibromochloromethane	ND		0.00116	0.000342
1,2-Dibromoethane (EDB)	ND		0.00116	0.000409
Chlorobenzene	ND		0.00116	0.00039
Ethylbenzene	ND		0.00116	0.000397
Total Xylenes	ND		0.00232	0.000931
Styrene	ND		0.00116	0.000415
Bromoform	ND		0.00116	0.000535
Isopropylbenzene	ND		0.00116	0.000508
1,1,2,2-Tetrachloroethane	ND		0.00116	0.000455
1,3-Dichlorobenzene	ND		0.00116	0.000546
1,4-Dichlorobenzene	ND		0.00116	0.000615
1,2-Dichlorobenzene	ND		0.00116	0.000559
1,2-Dibromo-3-chloropropane	ND		0.00116	0.000741
1,2,4-Trichlorobenzene	ND		0.00116	0.00051
1,2,3-Trichlorobenzene	ND		0.00116	0.000665
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00116	0.000802
Methyl acetate	ND		0.0058	0.000625
Cyclohexane	ND		0.00116	0.000602
Methylcyclohexane	ND		0.00116	0.000647
1,3-Dichloropropene (cis- and trans-)	ND		0.00116	0.000464

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0054

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-018
Client ID: E-16_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8496.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-019
Client ID: PZ-2_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8497.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.8

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00158	0.000695
Chloromethane	ND		0.00158	0.000709
Vinyl chloride	ND		0.00158	0.000673
Bromomethane	ND		0.00316	0.00101
Chloroethane	ND		0.00158	0.000801
Trichlorofluoromethane	ND		0.00158	0.00128
1,1-Dichloroethene	ND		0.00158	0.000771
Acetone	ND		0.0079	0.0011
Carbon disulfide	ND		0.00158	0.000904
Methylene chloride	ND		0.00316	0.00313
trans-1,2-Dichloroethene	ND		0.00158	0.000591
Methyl tert-butyl ether (MTBE)	ND		0.00158	0.000589
1,1-Dichloroethane	ND		0.00158	0.000425
cis-1,2-Dichloroethene	ND		0.00158	0.000504
2-Butanone (MEK)	ND		0.00158	0.00118
Bromochloromethane	ND		0.00158	0.000667
Chloroform	ND		0.00158	0.000664
1,1,1-Trichloroethane	ND		0.00158	0.00069
Carbon tetrachloride	ND		0.00158	0.00106
1,2-Dichloroethane (EDC)	ND		0.00158	0.00055
Benzene	ND		0.00158	0.00043
Trichloroethene	ND		0.00158	0.000509
1,2-Dichloropropane	ND		0.00158	0.000559
1,4-Dioxane	ND		0.316	0.031
Bromodichloromethane	ND		0.00158	0.00066
cis-1,3-Dichloropropene	ND		0.00158	0.000632
4-Methyl-2-pentanone (MIBK)	ND		0.00158	0.000792

E15-05367 0056

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-019
Client ID: PZ-2_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8497.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.8

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00158	0.00046
trans-1,3-Dichloropropene	ND		0.00158	0.000482
1,1,2-Trichloroethane	ND		0.00158	0.000371
Tetrachloroethene	ND		0.00158	0.000782
2-Hexanone	ND		0.00158	0.000913
Dibromochloromethane	ND		0.00158	0.000466
1,2-Dibromoethane (EDB)	ND		0.00158	0.000558
Chlorobenzene	ND		0.00158	0.000531
Ethylbenzene	ND		0.00158	0.00054
Total Xylenes	ND		0.00316	0.00127
Styrene	ND		0.00158	0.000566
Bromoform	ND		0.00158	0.000728
Isopropylbenzene	ND		0.00158	0.000692
1,1,2,2-Tetrachloroethane	ND		0.00158	0.000619
1,3-Dichlorobenzene	ND		0.00158	0.000744
1,4-Dichlorobenzene	ND		0.00158	0.000837
1,2-Dichlorobenzene	ND		0.00158	0.000762
1,2-Dibromo-3-chloropropane	ND		0.00158	0.00101
1,2,4-Trichlorobenzene	ND		0.00158	0.000695
1,2,3-Trichlorobenzene	ND		0.00158	0.000905
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00158	0.00109
Methyl acetate	ND		0.0079	0.000852
Cyclohexane	ND		0.00158	0.00082
Methylcyclohexane	ND		0.00158	0.000882
1,3-Dichloropropene (cis- and trans-)	ND		0.00158	0.000632

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-019
Client ID: PZ-2_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8497.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.8

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-020
Client ID: PZ-2_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8498.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00168	0.000739
Chloromethane	ND		0.00168	0.000754
Vinyl chloride	ND		0.00168	0.000716
Bromomethane	ND		0.00336	0.00108
Chloroethane	ND		0.00168	0.000852
Trichlorofluoromethane	ND		0.00168	0.00137
1,1-Dichloroethene	ND		0.00168	0.00082
Acetone	ND		0.0084	0.00117
Carbon disulfide	ND		0.00168	0.000961
Methylene chloride	0.00423	C	0.00336	0.00333
trans-1,2-Dichloroethene	ND		0.00168	0.000628
Methyl tert-butyl ether (MTBE)	ND		0.00168	0.000627
1,1-Dichloroethane	ND		0.00168	0.000452
cis-1,2-Dichloroethene	ND		0.00168	0.000536
2-Butanone (MEK)	ND		0.00168	0.00126
Bromochloromethane	ND		0.00168	0.000709
Chloroform	ND		0.00168	0.000706
1,1,1-Trichloroethane	ND		0.00168	0.000734
Carbon tetrachloride	ND		0.00168	0.00112
1,2-Dichloroethane (EDC)	ND		0.00168	0.000585
Benzene	ND		0.00168	0.000457
Trichloroethene	ND		0.00168	0.000541
1,2-Dichloropropane	ND		0.00168	0.000595
1,4-Dioxane	ND		0.336	0.033
Bromodichloromethane	ND		0.00168	0.000702
cis-1,3-Dichloropropene	ND		0.00168	0.000672
4-Methyl-2-pentanone (MIBK)	ND		0.00168	0.000842

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-020
Client ID: PZ-2_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8498.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00168	0.000489
trans-1,3-Dichloropropene	ND		0.00168	0.000512
1,1,2-Trichloroethane	ND		0.00168	0.000395
Tetrachloroethene	ND		0.00168	0.000832
2-Hexanone	ND		0.00168	0.000971
Dibromochloromethane	ND		0.00168	0.000496
1,2-Dibromoethane (EDB)	ND		0.00168	0.000593
Chlorobenzene	ND		0.00168	0.000564
Ethylbenzene	ND		0.00168	0.000575
Total Xylenes	ND		0.00336	0.00135
Styrene	ND		0.00168	0.000601
Bromoform	ND		0.00168	0.000774
Isopropylbenzene	ND		0.00168	0.000736
1,1,2,2-Tetrachloroethane	ND		0.00168	0.000659
1,3-Dichlorobenzene	ND		0.00168	0.000791
1,4-Dichlorobenzene	ND		0.00168	0.00089
1,2-Dichlorobenzene	ND		0.00168	0.00081
1,2-Dibromo-3-chloropropane	ND		0.00168	0.00107
1,2,4-Trichlorobenzene	ND		0.00168	0.000739
1,2,3-Trichlorobenzene	ND		0.00168	0.000963
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00168	0.00116
Methyl acetate	ND		0.0084	0.000906
Cyclohexane	ND		0.00168	0.000872
Methylcyclohexane	ND		0.00168	0.000937
1,3-Dichloropropene (cis- and trans-)	ND		0.00168	0.000672
Total Target Compounds (52):	0.00423	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-020
Client ID: PZ-2_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8498.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-021
Client ID: PZ-2_(4.0-4.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8499.D

GC/MS Column: DB-624
Sample wt/vol: 5.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.70

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00092	0.000405
Chloromethane	ND		0.00092	0.000413
Vinyl chloride	ND		0.00092	0.000392
Bromomethane	ND		0.00184	0.000589
Chloroethane	ND		0.00092	0.000466
Trichlorofluoromethane	ND		0.00092	0.000748
1,1-Dichloroethene	ND		0.00092	0.000449
Acetone	ND		0.0046	0.000641
Carbon disulfide	ND		0.00092	0.000526
Methylene chloride	ND		0.00184	0.00182
trans-1,2-Dichloroethene	ND		0.00092	0.000344
Methyl tert-butyl ether (MTBE)	ND		0.00092	0.000343
1,1-Dichloroethane	ND		0.00092	0.000247
cis-1,2-Dichloroethene	ND		0.00092	0.000293
2-Butanone (MEK)	ND		0.00092	0.000688
Bromochloromethane	ND		0.00092	0.000388
Chloroform	ND		0.00092	0.000386
1,1,1-Trichloroethane	ND		0.00092	0.000402
Carbon tetrachloride	ND		0.00092	0.000615
1,2-Dichloroethane (EDC)	ND		0.00092	0.00032
Benzene	ND		0.00092	0.00025
Trichloroethene	ND		0.00092	0.000296
1,2-Dichloropropane	ND		0.00092	0.000326
1,4-Dioxane	ND		0.184	0.018
Bromodichloromethane	ND		0.00092	0.000385
cis-1,3-Dichloropropene	ND		0.00092	0.000368
4-Methyl-2-pentanone (MIBK)	ND		0.00092	0.000461

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-021
Client ID: PZ-2_(4.0-4.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8499.D

GC/MS Column: DB-624
Sample wt/vol: 5.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.70

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00092	0.000268
trans-1,3-Dichloropropene	ND		0.00092	0.000281
1,1,2-Trichloroethane	ND		0.00092	0.000216
Tetrachloroethene	ND		0.00092	0.000455
2-Hexanone	ND		0.00092	0.000532
Dibromochloromethane	ND		0.00092	0.000271
1,2-Dibromoethane (EDB)	ND		0.00092	0.000325
Chlorobenzene	ND		0.00092	0.000309
Ethylbenzene	ND		0.00092	0.000315
Total Xylenes	ND		0.00184	0.000739
Styrene	ND		0.00092	0.000329
Bromoform	ND		0.00092	0.000424
Isopropylbenzene	ND		0.00092	0.000403
1,1,2,2-Tetrachloroethane	ND		0.00092	0.000361
1,3-Dichlorobenzene	ND		0.00092	0.000433
1,4-Dichlorobenzene	ND		0.00092	0.000488
1,2-Dichlorobenzene	ND		0.00092	0.000443
1,2-Dibromo-3-chloropropane	ND		0.00092	0.000588
1,2,4-Trichlorobenzene	ND		0.00092	0.000405
1,2,3-Trichlorobenzene	ND		0.00092	0.000527
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00092	0.000636
Methyl acetate	ND		0.0046	0.000496
Cyclohexane	ND		0.00092	0.000477
Methylcyclohexane	ND		0.00092	0.000513
1,3-Dichloropropene (cis- and trans-)	ND		0.00092	0.000368

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-021
Client ID: PZ-2_(4.0-4.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8499.D

GC/MS Column: DB-624
Sample wt/vol: 5.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.70

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-022
Client ID: PZ-2_(6.0-6.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8500.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00094	0.000414
Chloromethane	ND		0.00094	0.000422
Vinyl chloride	ND		0.00094	0.0004
Bromomethane	ND		0.00188	0.000602
Chloroethane	ND		0.00094	0.000477
Trichlorofluoromethane	ND		0.00094	0.000764
1,1-Dichloroethene	ND		0.00094	0.000459
Acetone	ND		0.0047	0.000655
Carbon disulfide	ND		0.00094	0.000538
Methylene chloride	0.0022	C	0.00188	0.00186
trans-1,2-Dichloroethene	ND		0.00094	0.000352
Methyl tert-butyl ether (MTBE)	ND		0.00094	0.000351
1,1-Dichloroethane	ND		0.00094	0.000253
cis-1,2-Dichloroethene	ND		0.00094	0.0003
2-Butanone (MEK)	ND		0.00094	0.000703
Bromochloromethane	ND		0.00094	0.000397
Chloroform	ND		0.00094	0.000395
1,1,1-Trichloroethane	ND		0.00094	0.000411
Carbon tetrachloride	ND		0.00094	0.000628
1,2-Dichloroethane (EDC)	ND		0.00094	0.000327
Benzene	ND		0.00094	0.000256
Trichloroethene	ND		0.00094	0.000303
1,2-Dichloropropane	ND		0.00094	0.000333
1,4-Dioxane	ND		0.188	0.018
Bromodichloromethane	ND		0.00094	0.000393
cis-1,3-Dichloropropene	ND		0.00094	0.000376
4-Methyl-2-pentanone (MIBK)	ND		0.00094	0.000471

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-022
Client ID: PZ-2_(6.0-6.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: L8500.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00094	0.000274
trans-1,3-Dichloropropene	ND		0.00094	0.000287
1,1,2-Trichloroethane	ND		0.00094	0.000221
Tetrachloroethene	ND		0.00094	0.000465
2-Hexanone	ND		0.00094	0.000543
Dibromochloromethane	ND		0.00094	0.000277
1,2-Dibromoethane (EDB)	ND		0.00094	0.000332
Chlorobenzene	ND		0.00094	0.000316
Ethylbenzene	ND		0.00094	0.000321
Total Xylenes	ND		0.00188	0.000755
Styrene	ND		0.00094	0.000337
Bromoform	ND		0.00094	0.000433
Isopropylbenzene	ND		0.00094	0.000412
1,1,2,2-Tetrachloroethane	ND		0.00094	0.000368
1,3-Dichlorobenzene	ND		0.00094	0.000443
1,4-Dichlorobenzene	ND		0.00094	0.000498
1,2-Dichlorobenzene	ND		0.00094	0.000453
1,2-Dibromo-3-chloropropane	ND		0.00094	0.000601
1,2,4-Trichlorobenzene	ND		0.00094	0.000414
1,2,3-Trichlorobenzene	ND		0.00094	0.000539
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00094	0.00065
Methyl acetate	ND		0.0047	0.000507
Cyclohexane	ND		0.00094	0.000488
Methylcyclohexane	ND		0.00094	0.000525
1,3-Dichloropropene (cis- and trans-)	ND		0.00094	0.000376
Total Target Compounds (52):	0.0022	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-022
Client ID: PZ-2_(6.0-6.5)
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: L8500.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-023
Client ID: X-1_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8501.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00099	0.000436
Chloromethane	ND		0.00099	0.000445
Vinyl chloride	ND		0.00099	0.000422
Bromomethane	ND		0.00198	0.000634
Chloroethane	ND		0.00099	0.000502
Trichlorofluoromethane	ND		0.00099	0.000805
1,1-Dichloroethene	ND		0.00099	0.000483
Acetone	ND		0.00495	0.00069
Carbon disulfide	ND		0.00099	0.000566
Methylene chloride	0.00277	C	0.00198	0.00196
trans-1,2-Dichloroethene	ND		0.00099	0.00037
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000369
1,1-Dichloroethane	ND		0.00099	0.000266
cis-1,2-Dichloroethene	ND		0.00099	0.000316
2-Butanone (MEK)	ND		0.00099	0.000741
Bromochloromethane	ND		0.00099	0.000418
Chloroform	ND		0.00099	0.000416
1,1,1-Trichloroethane	ND		0.00099	0.000433
Carbon tetrachloride	ND		0.00099	0.000661
1,2-Dichloroethane (EDC)	ND		0.00099	0.000345
Benzene	ND		0.00099	0.000269
Trichloroethene	ND		0.00099	0.000319
1,2-Dichloropropane	ND		0.00099	0.00035
1,4-Dioxane	ND		0.198	0.019
Bromodichloromethane	ND		0.00099	0.000414
cis-1,3-Dichloropropene	ND		0.00099	0.000396
4-Methyl-2-pentanone (MIBK)	ND		0.00099	0.000496

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-023
Client ID: X-1_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8501.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00099	0.000288
trans-1,3-Dichloropropene	ND		0.00099	0.000302
1,1,2-Trichloroethane	ND		0.00099	0.000233
Tetrachloroethene	ND		0.00099	0.00049
2-Hexanone	ND		0.00099	0.000572
Dibromochloromethane	ND		0.00099	0.000292
1,2-Dibromoethane (EDB)	ND		0.00099	0.000349
Chlorobenzene	ND		0.00099	0.000333
Ethylbenzene	ND		0.00099	0.000339
Total Xylenes	ND		0.00198	0.000795
Styrene	ND		0.00099	0.000354
Bromoform	ND		0.00099	0.000456
Isopropylbenzene	ND		0.00099	0.000434
1,1,2,2-Tetrachloroethane	ND		0.00099	0.000388
1,3-Dichlorobenzene	ND		0.00099	0.000466
1,4-Dichlorobenzene	ND		0.00099	0.000525
1,2-Dichlorobenzene	ND		0.00099	0.000477
1,2-Dibromo-3-chloropropane	ND		0.00099	0.000633
1,2,4-Trichlorobenzene	ND		0.00099	0.000436
1,2,3-Trichlorobenzene	ND		0.00099	0.000567
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00099	0.000684
Methyl acetate	ND		0.00495	0.000534
Cyclohexane	ND		0.00099	0.000514
Methylcyclohexane	ND		0.00099	0.000552
1,3-Dichloropropene (cis- and trans-)	ND		0.00099	0.000396
Total Target Compounds (52):	0.00277	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-023
Client ID: X-1_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8501.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-031
Client ID: PZ-1_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8510.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 30.2

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00159	0.0007
Chloromethane	ND		0.00159	0.000714
Vinyl chloride	ND		0.00159	0.000677
Bromomethane	ND		0.00318	0.00102
Chloroethane	ND		0.00159	0.000806
Trichlorofluoromethane	ND		0.00159	0.00129
1,1-Dichloroethene	ND		0.00159	0.000776
Acetone	ND		0.00795	0.00111
Carbon disulfide	ND		0.00159	0.000909
Methylene chloride	0.0044	C	0.00318	0.00315
trans-1,2-Dichloroethene	ND		0.00159	0.000595
Methyl tert-butyl ether (MTBE)	ND		0.00159	0.000593
1,1-Dichloroethane	ND		0.00159	0.000428
cis-1,2-Dichloroethene	ND		0.00159	0.000507
2-Butanone (MEK)	ND		0.00159	0.00119
Bromochloromethane	ND		0.00159	0.000671
Chloroform	ND		0.00159	0.000668
1,1,1-Trichloroethane	ND		0.00159	0.000695
Carbon tetrachloride	ND		0.00159	0.00106
1,2-Dichloroethane (EDC)	ND		0.00159	0.000553
Benzene	ND		0.00159	0.000432
Trichloroethene	ND		0.00159	0.000512
1,2-Dichloropropane	ND		0.00159	0.000563
1,4-Dioxane	ND		0.318	0.031
Bromodichloromethane	ND		0.00159	0.000665
cis-1,3-Dichloropropene	ND		0.00159	0.000636
4-Methyl-2-pentanone (MIBK)	ND		0.00159	0.000797

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-031
Client ID: PZ-1_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8510.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 30.2

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00159	0.000463
trans-1,3-Dichloropropene	ND		0.00159	0.000485
1,1,2-Trichloroethane	ND		0.00159	0.000374
Tetrachloroethene	ND		0.00159	0.000787
2-Hexanone	ND		0.00159	0.000919
Dibromochloromethane	ND		0.00159	0.000469
1,2-Dibromoethane (EDB)	ND		0.00159	0.000561
Chlorobenzene	ND		0.00159	0.000534
Ethylbenzene	ND		0.00159	0.000544
Total Xylenes	ND		0.00318	0.00128
Styrene	ND		0.00159	0.000569
Bromoform	ND		0.00159	0.000733
Isopropylbenzene	ND		0.00159	0.000696
1,1,2,2-Tetrachloroethane	ND		0.00159	0.000623
1,3-Dichlorobenzene	ND		0.00159	0.000749
1,4-Dichlorobenzene	ND		0.00159	0.000843
1,2-Dichlorobenzene	ND		0.00159	0.000766
1,2-Dibromo-3-chloropropane	ND		0.00159	0.00102
1,2,4-Trichlorobenzene	ND		0.00159	0.0007
1,2,3-Trichlorobenzene	ND		0.00159	0.000911
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00159	0.0011
Methyl acetate	ND		0.00795	0.000857
Cyclohexane	ND		0.00159	0.000825
Methylcyclohexane	ND		0.00159	0.000887
1,3-Dichloropropene (cis- and trans-)	ND		0.00159	0.000636
Total Target Compounds (52):	0.0044	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-031
Client ID: PZ-1_(0.5-1.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8510.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 30.2

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-032
Client ID: PZ-1_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8511.D

GC/MS Column: DB-624
Sample wt/vol: 4.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00141	0.00062
Chloromethane	ND		0.00141	0.000633
Vinyl chloride	ND		0.00141	0.000601
Bromomethane	ND		0.00282	0.000902
Chloroethane	ND		0.00141	0.000715
Trichlorofluoromethane	ND		0.00141	0.00115
1,1-Dichloroethene	ND		0.00141	0.000688
Acetone	ND		0.00705	0.000983
Carbon disulfide	ND		0.00141	0.000807
Methylene chloride	0.00382	C	0.00282	0.00279
trans-1,2-Dichloroethene	ND		0.00141	0.000527
Methyl tert-butyl ether (MTBE)	ND		0.00141	0.000526
1,1-Dichloroethane	ND		0.00141	0.000379
cis-1,2-Dichloroethene	ND		0.00141	0.00045
2-Butanone (MEK)	ND		0.00141	0.00105
Bromochloromethane	ND		0.00141	0.000595
Chloroform	ND		0.00141	0.000592
1,1,1-Trichloroethane	ND		0.00141	0.000616
Carbon tetrachloride	ND		0.00141	0.000942
1,2-Dichloroethane (EDC)	ND		0.00141	0.000491
Benzene	ND		0.00141	0.000384
Trichloroethene	ND		0.00141	0.000454
1,2-Dichloropropane	ND		0.00141	0.000499
1,4-Dioxane	ND		0.282	0.027
Bromodichloromethane	ND		0.00141	0.000589
cis-1,3-Dichloropropene	ND		0.00141	0.000564
4-Methyl-2-pentanone (MIBK)	ND		0.00141	0.000706

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-032
Client ID: PZ-1_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8511.D

GC/MS Column: DB-624
Sample wt/vol: 4.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00141	0.00041
trans-1,3-Dichloropropene	ND		0.00141	0.00043
1,1,2-Trichloroethane	ND		0.00141	0.000331
Tetrachloroethene	ND		0.00141	0.000698
2-Hexanone	ND		0.00141	0.000815
Dibromochloromethane	ND		0.00141	0.000416
1,2-Dibromoethane (EDB)	ND		0.00141	0.000498
Chlorobenzene	ND		0.00141	0.000474
Ethylbenzene	ND		0.00141	0.000482
Total Xylenes	ND		0.00282	0.00113
Styrene	ND		0.00141	0.000505
Bromoform	ND		0.00141	0.00065
Isopropylbenzene	ND		0.00141	0.000618
1,1,2,2-Tetrachloroethane	ND		0.00141	0.000553
1,3-Dichlorobenzene	ND		0.00141	0.000664
1,4-Dichlorobenzene	ND		0.00141	0.000747
1,2-Dichlorobenzene	ND		0.00141	0.00068
1,2-Dibromo-3-chloropropane	ND		0.00141	0.000901
1,2,4-Trichlorobenzene	ND		0.00141	0.00062
1,2,3-Trichlorobenzene	ND		0.00141	0.000808
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00141	0.000974
Methyl acetate	ND		0.00705	0.00076
Cyclohexane	ND		0.00141	0.000732
Methylcyclohexane	ND		0.00141	0.000787
1,3-Dichloropropene (cis- and trans-)	ND		0.00141	0.000564
Total Target Compounds (52):	0.00382	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-032
Client ID: PZ-1_(2.0-2.5)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8511.D

GC/MS Column: DB-624
Sample wt/vol: 4.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.6

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-033
Client ID: PZ-1_(2.5-3.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8512.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00112	0.000493
Chloromethane	ND		0.00112	0.000503
Vinyl chloride	ND		0.00112	0.000477
Bromomethane	ND		0.00224	0.000717
Chloroethane	ND		0.00112	0.000568
Trichlorofluoromethane	ND		0.00112	0.000911
1,1-Dichloroethene	ND		0.00112	0.000547
Acetone	ND		0.0056	0.000781
Carbon disulfide	ND		0.00112	0.000641
Methylene chloride	0.00276	C	0.00224	0.00222
trans-1,2-Dichloroethene	ND		0.00112	0.000419
Methyl tert-butyl ether (MTBE)	ND		0.00112	0.000418
1,1-Dichloroethane	ND		0.00112	0.000301
cis-1,2-Dichloroethene	ND		0.00112	0.000357
2-Butanone (MEK)	ND		0.00112	0.000838
Bromochloromethane	ND		0.00112	0.000473
Chloroform	ND		0.00112	0.00047
1,1,1-Trichloroethane	ND		0.00112	0.000489
Carbon tetrachloride	ND		0.00112	0.000748
1,2-Dichloroethane (EDC)	ND		0.00112	0.00039
Benzene	ND		0.00112	0.000305
Trichloroethene	ND		0.00112	0.000361
1,2-Dichloropropane	ND		0.00112	0.000396
1,4-Dioxane	ND		0.224	0.022
Bromodichloromethane	ND		0.00112	0.000468
cis-1,3-Dichloropropene	ND		0.00112	0.000448
4-Methyl-2-pentanone (MIBK)	ND		0.00112	0.000561

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-033
Client ID: PZ-1_(2.5-3.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8512.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00112	0.000326
trans-1,3-Dichloropropene	ND		0.00112	0.000342
1,1,2-Trichloroethane	ND		0.00112	0.000263
Tetrachloroethene	ND		0.00112	0.000554
2-Hexanone	ND		0.00112	0.000647
Dibromochloromethane	ND		0.00112	0.00033
1,2-Dibromoethane (EDB)	ND		0.00112	0.000395
Chlorobenzene	ND		0.00112	0.000376
Ethylbenzene	ND		0.00112	0.000383
Total Xylenes	ND		0.00224	0.000899
Styrene	ND		0.00112	0.000401
Bromoform	ND		0.00112	0.000516
Isopropylbenzene	ND		0.00112	0.000491
1,1,2,2-Tetrachloroethane	ND		0.00112	0.000439
1,3-Dichlorobenzene	ND		0.00112	0.000528
1,4-Dichlorobenzene	ND		0.00112	0.000594
1,2-Dichlorobenzene	ND		0.00112	0.00054
1,2-Dibromo-3-chloropropane	ND		0.00112	0.000716
1,2,4-Trichlorobenzene	ND		0.00112	0.000493
1,2,3-Trichlorobenzene	ND		0.00112	0.000642
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00112	0.000774
Methyl acetate	ND		0.0056	0.000604
Cyclohexane	ND		0.00112	0.000581
Methylcyclohexane	ND		0.00112	0.000625
1,3-Dichloropropene (cis- and trans-)	ND		0.00112	0.000448
Total Target Compounds (52):	0.00276	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-033
Client ID: PZ-1_(2.5-3.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8512.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-034
Client ID: PZ-1_(4.5-5.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8513.D

GC/MS Column: DB-624
Sample wt/vol: 6.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00093	0.000409
Chloromethane	ND		0.00093	0.000418
Vinyl chloride	ND		0.00093	0.000396
Bromomethane	ND		0.00186	0.000595
Chloroethane	ND		0.00093	0.000472
Trichlorofluoromethane	ND		0.00093	0.000756
1,1-Dichloroethene	ND		0.00093	0.000454
Acetone	ND		0.00465	0.000648
Carbon disulfide	ND		0.00093	0.000532
Methylene chloride	ND		0.00186	0.00184
trans-1,2-Dichloroethene	ND		0.00093	0.000348
Methyl tert-butyl ether (MTBE)	ND		0.00093	0.000347
1,1-Dichloroethane	ND		0.00093	0.00025
cis-1,2-Dichloroethene	ND		0.00093	0.000297
2-Butanone (MEK)	ND		0.00093	0.000696
Bromochloromethane	ND		0.00093	0.000392
Chloroform	ND		0.00093	0.000391
1,1,1-Trichloroethane	ND		0.00093	0.000406
Carbon tetrachloride	ND		0.00093	0.000621
1,2-Dichloroethane (EDC)	ND		0.00093	0.000324
Benzene	ND		0.00093	0.000253
Trichloroethene	ND		0.00093	0.000299
1,2-Dichloropropane	ND		0.00093	0.000329
1,4-Dioxane	ND		0.186	0.018
Bromodichloromethane	ND		0.00093	0.000389
cis-1,3-Dichloropropene	ND		0.00093	0.000372
4-Methyl-2-pentanone (MIBK)	ND		0.00093	0.000466

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-034
Client ID: PZ-1_(4.5-5.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8513.D

GC/MS Column: DB-624
Sample wt/vol: 6.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00093	0.000271
trans-1,3-Dichloropropene	ND		0.00093	0.000284
1,1,2-Trichloroethane	ND		0.00093	0.000219
Tetrachloroethene	ND		0.00093	0.00046
2-Hexanone	ND		0.00093	0.000538
Dibromochloromethane	ND		0.00093	0.000274
1,2-Dibromoethane (EDB)	ND		0.00093	0.000328
Chlorobenzene	ND		0.00093	0.000312
Ethylbenzene	ND		0.00093	0.000318
Total Xylenes	ND		0.00186	0.000747
Styrene	ND		0.00093	0.000333
Bromoform	ND		0.00093	0.000429
Isopropylbenzene	ND		0.00093	0.000407
1,1,2,2-Tetrachloroethane	ND		0.00093	0.000365
1,3-Dichlorobenzene	ND		0.00093	0.000438
1,4-Dichlorobenzene	ND		0.00093	0.000493
1,2-Dichlorobenzene	ND		0.00093	0.000448
1,2-Dibromo-3-chloropropane	ND		0.00093	0.000594
1,2,4-Trichlorobenzene	ND		0.00093	0.000409
1,2,3-Trichlorobenzene	ND		0.00093	0.000533
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00093	0.000643
Methyl acetate	ND		0.00465	0.000501
Cyclohexane	ND		0.00093	0.000483
Methylcyclohexane	ND		0.00093	0.000519
1,3-Dichloropropene (cis- and trans-)	ND		0.00093	0.000372

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

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INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-034
Client ID: PZ-1_(4.5-5.0)
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8513.D

GC/MS Column: DB-624
Sample wt/vol: 6.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-035
Client ID: E-5_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8514.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00111	0.000488
Chloromethane	ND		0.00111	0.000498
Vinyl chloride	ND		0.00111	0.000473
Bromomethane	ND		0.00222	0.00071
Chloroethane	ND		0.00111	0.000563
Trichlorofluoromethane	ND		0.00111	0.000902
1,1-Dichloroethene	ND		0.00111	0.000542
Acetone	ND		0.00555	0.000774
Carbon disulfide	ND		0.00111	0.000635
Methylene chloride	ND		0.00222	0.0022
trans-1,2-Dichloroethene	ND		0.00111	0.000415
Methyl tert-butyl ether (MTBE)	ND		0.00111	0.000414
1,1-Dichloroethane	ND		0.00111	0.000299
cis-1,2-Dichloroethene	ND		0.00111	0.000354
2-Butanone (MEK)	ND		0.00111	0.00083
Bromochloromethane	ND		0.00111	0.000468
Chloroform	ND		0.00111	0.000466
1,1,1-Trichloroethane	ND		0.00111	0.000485
Carbon tetrachloride	ND		0.00111	0.000741
1,2-Dichloroethane (EDC)	ND		0.00111	0.000386
Benzene	ND		0.00111	0.000302
Trichloroethene	ND		0.00111	0.000357
1,2-Dichloropropane	ND		0.00111	0.000393
1,4-Dioxane	ND		0.222	0.022
Bromodichloromethane	ND		0.00111	0.000464
cis-1,3-Dichloropropene	ND		0.00111	0.000444
4-Methyl-2-pentanone (MIBK)	ND		0.00111	0.000556

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-035
Client ID: E-5_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8514.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00111	0.000323
trans-1,3-Dichloropropene	ND		0.00111	0.000339
1,1,2-Trichloroethane	ND		0.00111	0.000261
Tetrachloroethene	ND		0.00111	0.000549
2-Hexanone	ND		0.00111	0.000642
Dibromochloromethane	ND		0.00111	0.000327
1,2-Dibromoethane (EDB)	ND		0.00111	0.000392
Chlorobenzene	ND		0.00111	0.000373
Ethylbenzene	ND		0.00111	0.00038
Total Xylenes	ND		0.00222	0.000891
Styrene	ND		0.00111	0.000397
Bromoform	ND		0.00111	0.000512
Isopropylbenzene	ND		0.00111	0.000486
1,1,2,2-Tetrachloroethane	ND		0.00111	0.000435
1,3-Dichlorobenzene	ND		0.00111	0.000523
1,4-Dichlorobenzene	ND		0.00111	0.000588
1,2-Dichlorobenzene	ND		0.00111	0.000535
1,2-Dibromo-3-chloropropane	ND		0.00111	0.000709
1,2,4-Trichlorobenzene	ND		0.00111	0.000488
1,2,3-Trichlorobenzene	ND		0.00111	0.000636
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00111	0.000767
Methyl acetate	ND		0.00555	0.000598
Cyclohexane	ND		0.00111	0.000576
Methylcyclohexane	ND		0.00111	0.000619
1,3-Dichloropropene (cis- and trans-)	ND		0.00111	0.000444

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-035
Client ID: E-5_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8514.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-036
Client ID: E-5_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8515.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00166	0.00073
Chloromethane	ND		0.00166	0.000745
Vinyl chloride	ND		0.00166	0.000707
Bromomethane	ND		0.00332	0.00106
Chloroethane	ND		0.00166	0.000842
Trichlorofluoromethane	ND		0.00166	0.00135
1,1-Dichloroethene	ND		0.00166	0.00081
Acetone	ND		0.0083	0.00116
Carbon disulfide	ND		0.00166	0.00095
Methylene chloride	0.00422	C	0.00332	0.00329
trans-1,2-Dichloroethene	ND		0.00166	0.000621
Methyl tert-butyl ether (MTBE)	ND		0.00166	0.000619
1,1-Dichloroethane	ND		0.00166	0.000447
cis-1,2-Dichloroethene	ND		0.00166	0.00053
2-Butanone (MEK)	ND		0.00166	0.00124
Bromochloromethane	ND		0.00166	0.000701
Chloroform	ND		0.00166	0.000697
1,1,1-Trichloroethane	ND		0.00166	0.000725
Carbon tetrachloride	ND		0.00166	0.00111
1,2-Dichloroethane (EDC)	ND		0.00166	0.000578
Benzene	ND		0.00166	0.000452
Trichloroethene	ND		0.00166	0.000535
1,2-Dichloropropane	ND		0.00166	0.000588
1,4-Dioxane	ND		0.332	0.032
Bromodichloromethane	ND		0.00166	0.000694
cis-1,3-Dichloropropene	ND		0.00166	0.000664
4-Methyl-2-pentanone (MIBK)	ND		0.00166	0.000832

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-036
Client ID: E-5_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8515.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00166	0.000483
trans-1,3-Dichloropropene	ND		0.00166	0.000506
1,1,2-Trichloroethane	ND		0.00166	0.00039
Tetrachloroethene	ND		0.00166	0.000822
2-Hexanone	ND		0.00166	0.000959
Dibromochloromethane	ND		0.00166	0.00049
1,2-Dibromoethane (EDB)	ND		0.00166	0.000586
Chlorobenzene	ND		0.00166	0.000558
Ethylbenzene	ND		0.00166	0.000568
Total Xylenes	ND		0.00332	0.00133
Styrene	ND		0.00166	0.000594
Bromoform	ND		0.00166	0.000765
Isopropylbenzene	ND		0.00166	0.000727
1,1,2,2-Tetrachloroethane	ND		0.00166	0.000651
1,3-Dichlorobenzene	ND		0.00166	0.000782
1,4-Dichlorobenzene	ND		0.00166	0.00088
1,2-Dichlorobenzene	ND		0.00166	0.0008
1,2-Dibromo-3-chloropropane	ND		0.00166	0.00106
1,2,4-Trichlorobenzene	ND		0.00166	0.00073
1,2,3-Trichlorobenzene	ND		0.00166	0.000951
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00166	0.00115
Methyl acetate	ND		0.0083	0.000895
Cyclohexane	ND		0.00166	0.000862
Methylcyclohexane	ND		0.00166	0.000926
1,3-Dichloropropene (cis- and trans-)	ND		0.00166	0.000664
Total Target Compounds (52):	0.00422	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-036
Client ID: E-5_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8515.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-037
Client ID: E-5_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8516.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00105	0.000462
Chloromethane	ND		0.00105	0.000471
Vinyl chloride	ND		0.00105	0.000447
Bromomethane	ND		0.0021	0.000672
Chloroethane	ND		0.00105	0.000532
Trichlorofluoromethane	ND		0.00105	0.000854
1,1-Dichloroethene	ND		0.00105	0.000512
Acetone	ND		0.00525	0.000732
Carbon disulfide	ND		0.00105	0.000601
Methylene chloride	0.00244	C	0.0021	0.00208
trans-1,2-Dichloroethene	ND		0.00105	0.000393
Methyl tert-butyl ether (MTBE)	ND		0.00105	0.000392
1,1-Dichloroethane	ND		0.00105	0.000282
cis-1,2-Dichloroethene	ND		0.00105	0.000335
2-Butanone (MEK)	ND		0.00105	0.000785
Bromochloromethane	ND		0.00105	0.000443
Chloroform	ND		0.00105	0.000441
1,1,1-Trichloroethane	ND		0.00105	0.000459
Carbon tetrachloride	ND		0.00105	0.000701
1,2-Dichloroethane (EDC)	ND		0.00105	0.000365
Benzene	ND		0.00105	0.000286
Trichloroethene	ND		0.00105	0.000338
1,2-Dichloropropane	ND		0.00105	0.000372
1,4-Dioxane	ND		0.210	0.021
Bromodichloromethane	ND		0.00105	0.000439
cis-1,3-Dichloropropene	ND		0.00105	0.00042
4-Methyl-2-pentanone (MIBK)	ND		0.00105	0.000526

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-037
Client ID: E-5_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8516.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00105	0.000306
trans-1,3-Dichloropropene	ND		0.00105	0.00032
1,1,2-Trichloroethane	ND		0.00105	0.000247
Tetrachloroethene	ND		0.00105	0.00052
2-Hexanone	ND		0.00105	0.000607
Dibromochloromethane	ND		0.00105	0.00031
1,2-Dibromoethane (EDB)	ND		0.00105	0.000371
Chlorobenzene	ND		0.00105	0.000353
Ethylbenzene	ND		0.00105	0.000359
Total Xylenes	ND		0.0021	0.000843
Styrene	ND		0.00105	0.000376
Bromoform	ND		0.00105	0.000484
Isopropylbenzene	ND		0.00105	0.00046
1,1,2,2-Tetrachloroethane	ND		0.00105	0.000412
1,3-Dichlorobenzene	ND		0.00105	0.000495
1,4-Dichlorobenzene	ND		0.00105	0.000557
1,2-Dichlorobenzene	ND		0.00105	0.000506
1,2-Dibromo-3-chloropropane	ND		0.00105	0.000671
1,2,4-Trichlorobenzene	ND		0.00105	0.000462
1,2,3-Trichlorobenzene	ND		0.00105	0.000602
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00105	0.000726
Methyl acetate	ND		0.00525	0.000566
Cyclohexane	ND		0.00105	0.000545
Methylcyclohexane	ND		0.00105	0.000586
1,3-Dichloropropene (cis- and trans-)	ND		0.00105	0.00042
Total Target Compounds (52):	0.00244	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-037
Client ID: E-5_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8516.D

GC/MS Column: DB-624
Sample wt/vol: 5.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.2

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-038
Client ID: E-5_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8517.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00099	0.000436
Chloromethane	ND		0.00099	0.000445
Vinyl chloride	ND		0.00099	0.000422
Bromomethane	ND		0.00198	0.000634
Chloroethane	ND		0.00099	0.000502
Trichlorofluoromethane	ND		0.00099	0.000805
1,1-Dichloroethene	ND		0.00099	0.000483
Acetone	ND		0.00495	0.00069
Carbon disulfide	ND		0.00099	0.000566
Methylene chloride	0.00236	C	0.00198	0.00196
trans-1,2-Dichloroethene	ND		0.00099	0.00037
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000369
1,1-Dichloroethane	ND		0.00099	0.000266
cis-1,2-Dichloroethene	ND		0.00099	0.000316
2-Butanone (MEK)	ND		0.00099	0.000741
Bromochloromethane	ND		0.00099	0.000418
Chloroform	ND		0.00099	0.000416
1,1,1-Trichloroethane	ND		0.00099	0.000433
Carbon tetrachloride	ND		0.00099	0.000661
1,2-Dichloroethane (EDC)	ND		0.00099	0.000345
Benzene	ND		0.00099	0.000269
Trichloroethene	ND		0.00099	0.000319
1,2-Dichloropropane	ND		0.00099	0.00035
1,4-Dioxane	ND		0.198	0.019
Bromodichloromethane	ND		0.00099	0.000414
cis-1,3-Dichloropropene	ND		0.00099	0.000396
4-Methyl-2-pentanone (MIBK)	ND		0.00099	0.000496

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-038
Client ID: E-5_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8517.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00099	0.000288
trans-1,3-Dichloropropene	ND		0.00099	0.000302
1,1,2-Trichloroethane	ND		0.00099	0.000233
Tetrachloroethene	ND		0.00099	0.00049
2-Hexanone	ND		0.00099	0.000572
Dibromochloromethane	ND		0.00099	0.000292
1,2-Dibromoethane (EDB)	ND		0.00099	0.000349
Chlorobenzene	ND		0.00099	0.000333
Ethylbenzene	ND		0.00099	0.000339
Total Xylenes	ND		0.00198	0.000795
Styrene	ND		0.00099	0.000354
Bromoform	ND		0.00099	0.000456
Isopropylbenzene	ND		0.00099	0.000434
1,1,2,2-Tetrachloroethane	ND		0.00099	0.000388
1,3-Dichlorobenzene	ND		0.00099	0.000466
1,4-Dichlorobenzene	ND		0.00099	0.000525
1,2-Dichlorobenzene	ND		0.00099	0.000477
1,2-Dibromo-3-chloropropane	ND		0.00099	0.000633
1,2,4-Trichlorobenzene	ND		0.00099	0.000436
1,2,3-Trichlorobenzene	ND		0.00099	0.000567
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00099	0.000684
Methyl acetate	ND		0.00495	0.000534
Cyclohexane	ND		0.00099	0.000514
Methylcyclohexane	ND		0.00099	0.000552
1,3-Dichloropropene (cis- and trans-)	ND		0.00099	0.000396
Total Target Compounds (52):	0.00236	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-038
Client ID: E-5_(4.5-5.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8517.D

GC/MS Column: DB-624
Sample wt/vol: 6.2g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-039
Client ID: E-6_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8518.D

GC/MS Column: DB-624
Sample wt/vol: 3.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.5

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.0018	0.000792
Chloromethane	ND		0.0018	0.000808
Vinyl chloride	ND		0.0018	0.000767
Bromomethane	ND		0.0036	0.00115
Chloroethane	ND		0.0018	0.000913
Trichlorofluoromethane	ND		0.0018	0.00146
1,1-Dichloroethene	ND		0.0018	0.000878
Acetone	ND		0.009	0.00125
Carbon disulfide	ND		0.0018	0.00103
Methylene chloride	0.00426	C	0.0036	0.00356
trans-1,2-Dichloroethene	ND		0.0018	0.000673
Methyl tert-butyl ether (MTBE)	ND		0.0018	0.000671
1,1-Dichloroethane	ND		0.0018	0.000484
cis-1,2-Dichloroethene	ND		0.0018	0.000574
2-Butanone (MEK)	ND		0.0018	0.00135
Bromochloromethane	ND		0.0018	0.00076
Chloroform	ND		0.0018	0.000756
1,1,1-Trichloroethane	ND		0.0018	0.000787
Carbon tetrachloride	ND		0.0018	0.0012
1,2-Dichloroethane (EDC)	ND		0.0018	0.000626
Benzene	ND		0.0018	0.00049
Trichloroethene	ND		0.0018	0.00058
1,2-Dichloropropane	ND		0.0018	0.000637
1,4-Dioxane	ND		0.360	0.035
Bromodichloromethane	ND		0.0018	0.000752
cis-1,3-Dichloropropene	ND		0.0018	0.00072
4-Methyl-2-pentanone (MIBK)	ND		0.0018	0.000902

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-039
Client ID: E-6_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8518.D

GC/MS Column: DB-624
Sample wt/vol: 3.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.5

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.0018	0.000524
trans-1,3-Dichloropropene	ND		0.0018	0.000549
1,1,2-Trichloroethane	ND		0.0018	0.000423
Tetrachloroethene	ND		0.0018	0.000891
2-Hexanone	ND		0.0018	0.00104
Dibromochloromethane	ND		0.0018	0.000531
1,2-Dibromoethane (EDB)	ND		0.0018	0.000635
Chlorobenzene	ND		0.0018	0.000605
Ethylbenzene	ND		0.0018	0.000616
Total Xylenes	ND		0.0036	0.00145
Styrene	ND		0.0018	0.000644
Bromoform	ND		0.0018	0.00083
Isopropylbenzene	ND		0.0018	0.000788
1,1,2,2-Tetrachloroethane	ND		0.0018	0.000706
1,3-Dichlorobenzene	ND		0.0018	0.000848
1,4-Dichlorobenzene	ND		0.0018	0.000954
1,2-Dichlorobenzene	ND		0.0018	0.000868
1,2-Dibromo-3-chloropropane	ND		0.0018	0.00115
1,2,4-Trichlorobenzene	ND		0.0018	0.000792
1,2,3-Trichlorobenzene	ND		0.0018	0.00103
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.0018	0.00124
Methyl acetate	ND		0.009	0.00097
Cyclohexane	ND		0.0018	0.000934
Methylcyclohexane	ND		0.0018	0.001
1,3-Dichloropropene (cis- and trans-)	ND		0.0018	0.00072
Total Target Compounds (52):	0.00426	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-039
Client ID: E-6_(0.5-1.0)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8518.D

GC/MS Column: DB-624
Sample wt/vol: 3.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.5

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-040
Client ID: FB-062215
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: G4811.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000685
Chloromethane	ND		0.001	0.000493
Vinyl chloride	ND		0.001	0.000463
Bromomethane	ND		0.001	0.000684
Chloroethane	ND		0.001	0.000829
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000491
Acetone	ND		0.005	0.00143
Carbon disulfide	ND		0.001	0.000505
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.000544
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000491
1,1-Dichloroethane	ND		0.001	0.000358
cis-1,2-Dichloroethene	ND		0.001	0.000479
2-Butanone (MEK)	ND		0.001	0.000872
Bromochloromethane	ND		0.001	0.000636
Chloroform	ND		0.001	0.000511
1,1,1-Trichloroethane	ND		0.001	0.000485
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000573
Benzene	ND		0.001	0.000388
Trichloroethene	ND		0.001	0.000357
1,2-Dichloropropane	ND		0.001	0.000556
1,4-Dioxane	ND		0.200	0.083
Bromodichloromethane	ND		0.001	0.000526
cis-1,3-Dichloropropene	ND		0.001	0.000441
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-040
Client ID: FB-062215
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Data file: G4811.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00037
trans-1,3-Dichloropropene	ND		0.001	0.000416
1,1,2-Trichloroethane	ND		0.001	0.000633
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000693
Dibromochloromethane	ND		0.001	0.000516
1,2-Dibromoethane (EDB)	ND		0.001	0.000677
Chlorobenzene	ND		0.001	0.000395
Ethylbenzene	ND		0.001	0.00042
Total Xylenes	ND		0.002	0.00104
Styrene	ND		0.001	0.00037
Bromoform	ND		0.001	0.000663
Isopropylbenzene	ND		0.001	0.000581
1,1,2,2-Tetrachloroethane	ND		0.001	0.000691
1,3-Dichlorobenzene	ND		0.001	0.000416
1,4-Dichlorobenzene	ND		0.001	0.000409
1,2-Dichlorobenzene	ND		0.001	0.000401
1,2-Dibromo-3-chloropropane	ND		0.001	0.00093
1,2,4-Trichlorobenzene	ND		0.001	0.000483
1,2,3-Trichlorobenzene	ND		0.001	0.000449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000972
Methyl acetate	ND		0.001	0.000897
Cyclohexane	ND		0.002	0.000818
Methylcyclohexane	ND		0.001	0.000773
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-040
Client ID: FB-062215
Date Received: 06/23/2015
Date Analyzed: 06/30/2015
Date File: G4811.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	Column/Septa bleed	0	J	9.26

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-041
Client ID: E-6_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8519.D

GC/MS Column: DB-624
Sample wt/vol: 5.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00105	0.000462
Chloromethane	ND		0.00105	0.000471
Vinyl chloride	ND		0.00105	0.000447
Bromomethane	ND		0.0021	0.000672
Chloroethane	ND		0.00105	0.000532
Trichlorofluoromethane	ND		0.00105	0.000854
1,1-Dichloroethene	ND		0.00105	0.000512
Acetone	ND		0.00525	0.000732
Carbon disulfide	ND		0.00105	0.000601
Methylene chloride	ND		0.0021	0.00208
trans-1,2-Dichloroethene	ND		0.00105	0.000393
Methyl tert-butyl ether (MTBE)	ND		0.00105	0.000392
1,1-Dichloroethane	ND		0.00105	0.000282
cis-1,2-Dichloroethene	ND		0.00105	0.000335
2-Butanone (MEK)	ND		0.00105	0.000785
Bromochloromethane	ND		0.00105	0.000443
Chloroform	ND		0.00105	0.000441
1,1,1-Trichloroethane	ND		0.00105	0.000459
Carbon tetrachloride	ND		0.00105	0.000701
1,2-Dichloroethane (EDC)	ND		0.00105	0.000365
Benzene	ND		0.00105	0.000286
Trichloroethene	ND		0.00105	0.000338
1,2-Dichloropropane	ND		0.00105	0.000372
1,4-Dioxane	ND		0.210	0.021
Bromodichloromethane	ND		0.00105	0.000439
cis-1,3-Dichloropropene	ND		0.00105	0.00042
4-Methyl-2-pentanone (MIBK)	ND		0.00105	0.000526

E15-05367 0101

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-041
Client ID: E-6_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8519.D

GC/MS Column: DB-624
Sample wt/vol: 5.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00105	0.000306
trans-1,3-Dichloropropene	ND		0.00105	0.00032
1,1,2-Trichloroethane	ND		0.00105	0.000247
Tetrachloroethene	ND		0.00105	0.00052
2-Hexanone	ND		0.00105	0.000607
Dibromochloromethane	ND		0.00105	0.00031
1,2-Dibromoethane (EDB)	ND		0.00105	0.000371
Chlorobenzene	ND		0.00105	0.000353
Ethylbenzene	ND		0.00105	0.000359
Total Xylenes	ND		0.0021	0.000843
Styrene	ND		0.00105	0.000376
Bromoform	ND		0.00105	0.000484
Isopropylbenzene	ND		0.00105	0.00046
1,1,2,2-Tetrachloroethane	ND		0.00105	0.000412
1,3-Dichlorobenzene	ND		0.00105	0.000495
1,4-Dichlorobenzene	ND		0.00105	0.000557
1,2-Dichlorobenzene	ND		0.00105	0.000506
1,2-Dibromo-3-chloropropane	ND		0.00105	0.000671
1,2,4-Trichlorobenzene	ND		0.00105	0.000462
1,2,3-Trichlorobenzene	ND		0.00105	0.000602
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00105	0.000726
Methyl acetate	ND		0.00525	0.000566
Cyclohexane	ND		0.00105	0.000545
Methylcyclohexane	ND		0.00105	0.000586
1,3-Dichloropropene (cis- and trans-)	ND		0.00105	0.00042

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0102

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-041
Client ID: E-6_(2.0-2.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8519.D

GC/MS Column: DB-624
Sample wt/vol: 5.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-042
Client ID: E-6_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8520.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00107	0.000471
Chloromethane	ND		0.00107	0.00048
Vinyl chloride	ND		0.00107	0.000456
Bromomethane	ND		0.00214	0.000685
Chloroethane	ND		0.00107	0.000542
Trichlorofluoromethane	ND		0.00107	0.00087
1,1-Dichloroethene	ND		0.00107	0.000522
Acetone	ND		0.00535	0.000746
Carbon disulfide	ND		0.00107	0.000612
Methylene chloride	0.00237	C	0.00214	0.00212
trans-1,2-Dichloroethene	ND		0.00107	0.0004
Methyl tert-butyl ether (MTBE)	ND		0.00107	0.000399
1,1-Dichloroethane	ND		0.00107	0.000288
cis-1,2-Dichloroethene	ND		0.00107	0.000341
2-Butanone (MEK)	ND		0.00107	0.0008
Bromochloromethane	ND		0.00107	0.000452
Chloroform	ND		0.00107	0.000449
1,1,1-Trichloroethane	ND		0.00107	0.000468
Carbon tetrachloride	ND		0.00107	0.000715
1,2-Dichloroethane (EDC)	ND		0.00107	0.000372
Benzene	ND		0.00107	0.000291
Trichloroethene	ND		0.00107	0.000345
1,2-Dichloropropane	ND		0.00107	0.000379
1,4-Dioxane	ND		0.214	0.021
Bromodichloromethane	ND		0.00107	0.000447
cis-1,3-Dichloropropene	ND		0.00107	0.000428
4-Methyl-2-pentanone (MIBK)	ND		0.00107	0.000536

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-042
Client ID: E-6_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8520.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00107	0.000311
trans-1,3-Dichloropropene	ND		0.00107	0.000326
1,1,2-Trichloroethane	ND		0.00107	0.000251
Tetrachloroethene	ND		0.00107	0.00053
2-Hexanone	ND		0.00107	0.000618
Dibromochloromethane	ND		0.00107	0.000316
1,2-Dibromoethane (EDB)	ND		0.00107	0.000378
Chlorobenzene	ND		0.00107	0.00036
Ethylbenzene	ND		0.00107	0.000366
Total Xylenes	ND		0.00214	0.000859
Styrene	ND		0.00107	0.000383
Bromoform	ND		0.00107	0.000493
Isopropylbenzene	ND		0.00107	0.000469
1,1,2,2-Tetrachloroethane	ND		0.00107	0.000419
1,3-Dichlorobenzene	ND		0.00107	0.000504
1,4-Dichlorobenzene	ND		0.00107	0.000567
1,2-Dichlorobenzene	ND		0.00107	0.000516
1,2-Dibromo-3-chloropropane	ND		0.00107	0.000684
1,2,4-Trichlorobenzene	ND		0.00107	0.000471
1,2,3-Trichlorobenzene	ND		0.00107	0.000613
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00107	0.000739
Methyl acetate	ND		0.00535	0.000577
Cyclohexane	ND		0.00107	0.000555
Methylcyclohexane	ND		0.00107	0.000597
1,3-Dichloropropene (cis- and trans-)	ND		0.00107	0.000428
Total Target Compounds (52):	0.00237	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-042
Client ID: E-6_(3.0-3.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8520.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-043
Client ID: E-6_(4.0-4.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8521.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.0

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00099	0.000436
Chloromethane	ND		0.00099	0.000445
Vinyl chloride	ND		0.00099	0.000422
Bromomethane	ND		0.00198	0.000634
Chloroethane	ND		0.00099	0.000502
Trichlorofluoromethane	ND		0.00099	0.000805
1,1-Dichloroethene	ND		0.00099	0.000483
Acetone	ND		0.00495	0.00069
Carbon disulfide	ND		0.00099	0.000566
Methylene chloride	ND		0.00198	0.00196
trans-1,2-Dichloroethene	ND		0.00099	0.00037
Methyl tert-butyl ether (MTBE)	ND		0.00099	0.000369
1,1-Dichloroethane	ND		0.00099	0.000266
cis-1,2-Dichloroethene	ND		0.00099	0.000316
2-Butanone (MEK)	ND		0.00099	0.000741
Bromochloromethane	ND		0.00099	0.000418
Chloroform	ND		0.00099	0.000416
1,1,1-Trichloroethane	ND		0.00099	0.000433
Carbon tetrachloride	ND		0.00099	0.000661
1,2-Dichloroethane (EDC)	ND		0.00099	0.000345
Benzene	ND		0.00099	0.000269
Trichloroethene	ND		0.00099	0.000319
1,2-Dichloropropane	ND		0.00099	0.00035
1,4-Dioxane	ND		0.198	0.019
Bromodichloromethane	ND		0.00099	0.000414
cis-1,3-Dichloropropene	ND		0.00099	0.000396
4-Methyl-2-pentanone (MIBK)	ND		0.00099	0.000496

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-043
Client ID: E-6_(4.0-4.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: L8521.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.0

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00099	0.000288
trans-1,3-Dichloropropene	ND		0.00099	0.000302
1,1,2-Trichloroethane	ND		0.00099	0.000233
Tetrachloroethene	ND		0.00099	0.00049
2-Hexanone	ND		0.00099	0.000572
Dibromochloromethane	ND		0.00099	0.000292
1,2-Dibromoethane (EDB)	ND		0.00099	0.000349
Chlorobenzene	ND		0.00099	0.000333
Ethylbenzene	ND		0.00099	0.000339
Total Xylenes	ND		0.00198	0.000795
Styrene	ND		0.00099	0.000354
Bromoform	ND		0.00099	0.000456
Isopropylbenzene	ND		0.00099	0.000434
1,1,2,2-Tetrachloroethane	ND		0.00099	0.000388
1,3-Dichlorobenzene	ND		0.00099	0.000466
1,4-Dichlorobenzene	ND		0.00099	0.000525
1,2-Dichlorobenzene	ND		0.00099	0.000477
1,2-Dibromo-3-chloropropane	ND		0.00099	0.000633
1,2,4-Trichlorobenzene	ND		0.00099	0.000436
1,2,3-Trichlorobenzene	ND		0.00099	0.000567
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00099	0.000684
Methyl acetate	ND		0.00495	0.000534
Cyclohexane	ND		0.00099	0.000514
Methylcyclohexane	ND		0.00099	0.000552
1,3-Dichloropropene (cis- and trans-)	ND		0.00099	0.000396

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-043
Client ID: E-6_(4.0-4.5)/
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: L8521.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.0

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-044
Client ID: TB-062315
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: G4812.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000685
Chloromethane	ND		0.001	0.000493
Vinyl chloride	ND		0.001	0.000463
Bromomethane	ND		0.001	0.000684
Chloroethane	ND		0.001	0.000829
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000491
Acetone	ND		0.005	0.00143
Carbon disulfide	ND		0.001	0.000505
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.000544
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000491
1,1-Dichloroethane	ND		0.001	0.000358
cis-1,2-Dichloroethene	ND		0.001	0.000479
2-Butanone (MEK)	ND		0.001	0.000872
Bromochloromethane	ND		0.001	0.000636
Chloroform	ND		0.001	0.000511
1,1,1-Trichloroethane	ND		0.001	0.000485
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000573
Benzene	ND		0.001	0.000388
Trichloroethene	ND		0.001	0.000357
1,2-Dichloropropane	ND		0.001	0.000556
1,4-Dioxane	ND		0.200	0.083
Bromodichloromethane	ND		0.001	0.000526
cis-1,3-Dichloropropene	ND		0.001	0.000441
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05367-044
Client ID: TB-062315
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Data file: G4812.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00037
trans-1,3-Dichloropropene	ND		0.001	0.000416
1,1,2-Trichloroethane	ND		0.001	0.000633
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000693
Dibromochloromethane	ND		0.001	0.000516
1,2-Dibromoethane (EDB)	ND		0.001	0.000677
Chlorobenzene	ND		0.001	0.000395
Ethylbenzene	ND		0.001	0.00042
Total Xylenes	ND		0.002	0.00104
Styrene	ND		0.001	0.00037
Bromoform	ND		0.001	0.000663
Isopropylbenzene	ND		0.001	0.000581
1,1,2,2-Tetrachloroethane	ND		0.001	0.000691
1,3-Dichlorobenzene	ND		0.001	0.000416
1,4-Dichlorobenzene	ND		0.001	0.000409
1,2-Dichlorobenzene	ND		0.001	0.000401
1,2-Dibromo-3-chloropropane	ND		0.001	0.00093
1,2,4-Trichlorobenzene	ND		0.001	0.000483
1,2,3-Trichlorobenzene	ND		0.001	0.000449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000972
Methyl acetate	ND		0.001	0.000897
Cyclohexane	ND		0.002	0.000818
Methylcyclohexane	ND		0.001	0.000773
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05367-044
Client ID: TB-062315
Date Received: 06/23/2015
Date Analyzed: 07/01/2015
Date File: G4812.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-001
Client ID: E-3_(3.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5543.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00179	0.000716
Aroclor-1221	ND		0.00179	0.000716
Aroclor-1232	ND		0.00179	0.000716
Aroclor-1242	ND		0.00179	0.000716
Aroclor-1248	ND		0.00179	0.000716
Aroclor-1254	ND		0.00179	0.000716
Aroclor-1260	0.037		0.00179	0.000716
Aroclor-1262	ND		0.00179	0.000716
Aroclor-1268	ND		0.00179	0.000716
PCBs	0.037		0.00179	0.000716

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0113

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-002
Client ID: E-3_(0.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/07/2015
Data file: R5579.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.25g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 500
% Moisture: 22.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		1.06	0.424
Aroclor-1221	ND		1.06	0.424
Aroclor-1232	ND		1.06	0.424
Aroclor-1242	ND		1.06	0.424
Aroclor-1248	ND		1.06	0.424
Aroclor-1254	ND		1.06	0.424
Aroclor-1260	127	D	1.06	0.424
Aroclor-1262	ND		1.06	0.424
Aroclor-1268	ND		1.06	0.424
PCBs	127	D	1.06	0.424

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0114

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-003
Client ID: E-3_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3132.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.40g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 500
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.942	0.377
Aroclor-1221	ND		0.942	0.377
Aroclor-1232	ND		0.942	0.377
Aroclor-1242	ND		0.942	0.377
Aroclor-1248	ND		0.942	0.377
Aroclor-1254	ND		0.942	0.377
Aroclor-1260	25.2	D	0.942	0.377
Aroclor-1262	ND		0.942	0.377
Aroclor-1268	ND		0.942	0.377
PCBs	25.2	D	0.942	0.377

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0115

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-004
Client ID: E-3_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3079.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.95g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00174	0.000696
Aroclor-1221	ND		0.00174	0.000696
Aroclor-1232	ND		0.00174	0.000696
Aroclor-1242	ND		0.00174	0.000696
Aroclor-1248	ND		0.00174	0.000696
Aroclor-1254	ND		0.00174	0.000696
Aroclor-1260	0.00624		0.00174	0.000696
Aroclor-1262	ND		0.00174	0.000696
Aroclor-1268	ND		0.00174	0.000696
PCBs	0.00624		0.00174	0.000696

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0116

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-005
Client ID: E-18_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y2998.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.11g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.046	0.018
Aroclor-1221	ND		0.046	0.018
Aroclor-1232	ND		0.046	0.018
Aroclor-1242	ND		0.046	0.018
Aroclor-1248	ND		0.046	0.018
Aroclor-1254	ND		0.046	0.018
Aroclor-1260	11.6	E	0.046	0.018
Aroclor-1262	ND		0.046	0.018
Aroclor-1268	ND		0.046	0.018
PCBs	11.6	E	0.046	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0117

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-005DL
Client ID: E-18_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3050.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.11g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 14.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.457	0.183
Aroclor-1221	ND		0.457	0.183
Aroclor-1232	ND		0.457	0.183
Aroclor-1242	ND		0.457	0.183
Aroclor-1248	ND		0.457	0.183
Aroclor-1254	ND		0.457	0.183
Aroclor-1260	12.5	D	0.457	0.183
Aroclor-1262	ND		0.457	0.183
Aroclor-1268	ND		0.457	0.183
PCBs	12.5	D	0.457	0.183

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0118

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-006
Client ID: E-18_(2.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y2999.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	0.734		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	0.734		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0119

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-007
Client ID: E-4_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3133.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.26g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 500
% Moisture: 13.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.951	0.380
Aroclor-1221	ND		0.951	0.380
Aroclor-1232	ND		0.951	0.380
Aroclor-1242	ND		0.951	0.380
Aroclor-1248	ND		0.951	0.380
Aroclor-1254	ND		0.951	0.380
Aroclor-1260	30.0	D	0.951	0.380
Aroclor-1262	ND		0.951	0.380
Aroclor-1268	ND		0.951	0.380
PCBs	30.0	D	0.951	0.380

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0120

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-008
Client ID: E-4_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3081.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.96g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00176	0.000704
Aroclor-1221	ND		0.00176	0.000704
Aroclor-1232	ND		0.00176	0.000704
Aroclor-1242	ND		0.00176	0.000704
Aroclor-1248	ND		0.00176	0.000704
Aroclor-1254	ND		0.00176	0.000704
Aroclor-1260	0.912	E	0.00176	0.000704
Aroclor-1262	ND		0.00176	0.000704
Aroclor-1268	ND		0.00176	0.000704
PCBs	0.912	E	0.00176	0.000704

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0121

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-008DL
Client ID: E-4_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3134.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.96g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.018	0.00702
Aroclor-1221	ND		0.018	0.00702
Aroclor-1232	ND		0.018	0.00702
Aroclor-1242	ND		0.018	0.00702
Aroclor-1248	ND		0.018	0.00702
Aroclor-1254	ND		0.018	0.00702
Aroclor-1260	0.938	D	0.018	0.00702
Aroclor-1262	ND		0.018	0.00702
Aroclor-1268	ND		0.018	0.00702
PCBs	0.938	D	0.018	0.00702

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0122

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-009
Client ID: E-4_(3.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3082.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.07g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00181	0.000724
Aroclor-1221	ND		0.00181	0.000724
Aroclor-1232	ND		0.00181	0.000724
Aroclor-1242	ND		0.00181	0.000724
Aroclor-1248	ND		0.00181	0.000724
Aroclor-1254	ND		0.00181	0.000724
Aroclor-1260	0.766	E	0.00181	0.000724
Aroclor-1262	ND		0.00181	0.000724
Aroclor-1268	ND		0.00181	0.000724
PCBs	0.766	E	0.00181	0.000724

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0123

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-009DL
Client ID: E-4_(3.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3135.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.07g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.018	0.00723
Aroclor-1221	ND		0.018	0.00723
Aroclor-1232	ND		0.018	0.00723
Aroclor-1242	ND		0.018	0.00723
Aroclor-1248	ND		0.018	0.00723
Aroclor-1254	ND		0.018	0.00723
Aroclor-1260	0.827	D	0.018	0.00723
Aroclor-1262	ND		0.018	0.00723
Aroclor-1268	ND		0.018	0.00723
PCBs	0.827	D	0.018	0.00723

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0124

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-010
Client ID: E-4_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3083.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.01g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00184	0.000736
Aroclor-1221	ND		0.00184	0.000736
Aroclor-1232	ND		0.00184	0.000736
Aroclor-1242	ND		0.00184	0.000736
Aroclor-1248	ND		0.00184	0.000736
Aroclor-1254	ND		0.00184	0.000736
Aroclor-1260	1.99	E	0.00184	0.000736
Aroclor-1262	ND		0.00184	0.000736
Aroclor-1268	ND		0.00184	0.000736
PCBs	1.99	E	0.00184	0.000736

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0125

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-010DL
Client ID: E-4_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3136.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.01g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	2.51	D	0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	2.51	D	0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0126

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-011
Client ID: E-11_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3000.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.48g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	20.6	E	0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	20.6	E	0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0127

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-011DL
Client ID: E-11_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3051.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.48g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.447	0.179
Aroclor-1221	ND		0.447	0.179
Aroclor-1232	ND		0.447	0.179
Aroclor-1242	ND		0.447	0.179
Aroclor-1248	ND		0.447	0.179
Aroclor-1254	ND		0.447	0.179
Aroclor-1260	19.8	D	0.447	0.179
Aroclor-1262	ND		0.447	0.179
Aroclor-1268	ND		0.447	0.179
PCBs	19.8	D	0.447	0.179

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0128

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-012
Client ID: E-11_(2.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3001.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.84g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	ND		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	ND		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0129

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-013
Client ID: E-12_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3004.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.046	0.018
Aroclor-1221	ND		0.046	0.018
Aroclor-1232	ND		0.046	0.018
Aroclor-1242	ND		0.046	0.018
Aroclor-1248	ND		0.046	0.018
Aroclor-1254	ND		0.046	0.018
Aroclor-1260	98.4	E	0.046	0.018
Aroclor-1262	ND		0.046	0.018
Aroclor-1268	ND		0.046	0.018
PCBs	98.4	E	0.046	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0130

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-013DL
Client ID: E-12_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3052.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 100
% Moisture: 17.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		4.59	1.84
Aroclor-1221	ND		4.59	1.84
Aroclor-1232	ND		4.59	1.84
Aroclor-1242	ND		4.59	1.84
Aroclor-1248	ND		4.59	1.84
Aroclor-1254	ND		4.59	1.84
Aroclor-1260	128	D	4.59	1.84
Aroclor-1262	ND		4.59	1.84
Aroclor-1268	ND		4.59	1.84
PCBs	128	D	4.59	1.84

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0131

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-014
Client ID: E-12_(2.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3005.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.25g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	2.03		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	2.03		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0132

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-015
Client ID: E-14_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3006.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	33.9	E	0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	33.9	E	0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0133

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-015DL
Client ID: E-14_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3053.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 12.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.813	0.325
Aroclor-1221	ND		0.813	0.325
Aroclor-1232	ND		0.813	0.325
Aroclor-1242	ND		0.813	0.325
Aroclor-1248	ND		0.813	0.325
Aroclor-1254	ND		0.813	0.325
Aroclor-1260	35.4	D	0.813	0.325
Aroclor-1262	ND		0.813	0.325
Aroclor-1268	ND		0.813	0.325
PCBs	35.4	D	0.813	0.325

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0134

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-016
Client ID: E-14_(2.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3007.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	4.44		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	4.44		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0135

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-017
Client ID: E-16_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5529.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.29g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00407	0.00163
Aroclor-1221	ND		0.00407	0.00163
Aroclor-1232	ND		0.00407	0.00163
Aroclor-1242	ND		0.00407	0.00163
Aroclor-1248	ND		0.00407	0.00163
Aroclor-1254	ND		0.00407	0.00163
Aroclor-1260	1.56	E	0.00407	0.00163
Aroclor-1262	ND		0.00407	0.00163
Aroclor-1268	ND		0.00407	0.00163
PCBs	1.56	E	0.00407	0.00163

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0136

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-017DL
Client ID: E-16_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5545.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.29g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	1.74	D	0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	1.74	D	0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0137

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-018
Client ID: E-16_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5530.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.010	0.00405
Aroclor-1221	ND		0.010	0.00405
Aroclor-1232	ND		0.010	0.00405
Aroclor-1242	ND		0.010	0.00405
Aroclor-1248	ND		0.010	0.00405
Aroclor-1254	ND		0.010	0.00405
Aroclor-1260	ND		0.010	0.00405
Aroclor-1262	ND		0.010	0.00405
Aroclor-1268	ND		0.010	0.00405
PCBs	ND		0.010	0.00405

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0138

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-019
Client ID: PZ-2_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5531.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00209	0.000836
Aroclor-1221	ND		0.00209	0.000836
Aroclor-1232	ND		0.00209	0.000836
Aroclor-1242	ND		0.00209	0.000836
Aroclor-1248	ND		0.00209	0.000836
Aroclor-1254	ND		0.00209	0.000836
Aroclor-1260	0.150		0.00209	0.000836
Aroclor-1262	ND		0.00209	0.000836
Aroclor-1268	ND		0.00209	0.000836
PCBs	0.150		0.00209	0.000836

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0139

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-020
Client ID: PZ-2_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5532.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.22g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00206	0.000824
Aroclor-1221	ND		0.00206	0.000824
Aroclor-1232	ND		0.00206	0.000824
Aroclor-1242	ND		0.00206	0.000824
Aroclor-1248	ND		0.00206	0.000824
Aroclor-1254	ND		0.00206	0.000824
Aroclor-1260	0.037		0.00206	0.000824
Aroclor-1262	ND		0.00206	0.000824
Aroclor-1268	ND		0.00206	0.000824
PCBs	0.037		0.00206	0.000824

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0140

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-021
Client ID: PZ-2_(4.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5533.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00179	0.000716
Aroclor-1221	ND		0.00179	0.000716
Aroclor-1232	ND		0.00179	0.000716
Aroclor-1242	ND		0.00179	0.000716
Aroclor-1248	ND		0.00179	0.000716
Aroclor-1254	ND		0.00179	0.000716
Aroclor-1260	0.00423		0.00179	0.000716
Aroclor-1262	ND		0.00179	0.000716
Aroclor-1268	ND		0.00179	0.000716
PCBs	0.00423		0.00179	0.000716

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0141

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-022
Client ID: PZ-2_(6.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5534.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.55g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00191	0.000764
Aroclor-1221	ND		0.00191	0.000764
Aroclor-1232	ND		0.00191	0.000764
Aroclor-1242	ND		0.00191	0.000764
Aroclor-1248	ND		0.00191	0.000764
Aroclor-1254	ND		0.00191	0.000764
Aroclor-1260	ND		0.00191	0.000764
Aroclor-1262	ND		0.00191	0.000764
Aroclor-1268	ND		0.00191	0.000764
PCBs	ND		0.00191	0.000764

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0142

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-023
Client ID: X-1_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3084.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.11g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00178	0.000712
Aroclor-1221	ND		0.00178	0.000712
Aroclor-1232	ND		0.00178	0.000712
Aroclor-1242	ND		0.00178	0.000712
Aroclor-1248	ND		0.00178	0.000712
Aroclor-1254	ND		0.00178	0.000712
Aroclor-1260	2.32	E	0.00178	0.000712
Aroclor-1262	ND		0.00178	0.000712
Aroclor-1268	ND		0.00178	0.000712
PCBs	2.32	E	0.00178	0.000712

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0143

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-023DL
Client ID: X-1_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3137.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.11g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.036	0.014
Aroclor-1221	ND		0.036	0.014
Aroclor-1232	ND		0.036	0.014
Aroclor-1242	ND		0.036	0.014
Aroclor-1248	ND		0.036	0.014
Aroclor-1254	ND		0.036	0.014
Aroclor-1260	2.34	D	0.036	0.014
Aroclor-1262	ND		0.036	0.014
Aroclor-1268	ND		0.036	0.014
PCBs	2.34	D	0.036	0.014

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0144

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-024
Client ID: X-2_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3008.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.64g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.449		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.449		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0145

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-025
Client ID: E-8_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3009.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.65g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	4.05		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	4.05		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0146

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-026
Client ID: E-8_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3010.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.74g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0147

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-027
Client ID: E-17_(0.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3057.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 18.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		8.67	3.47
Aroclor-1221	ND		8.67	3.47
Aroclor-1232	ND		8.67	3.47
Aroclor-1242	ND		8.67	3.47
Aroclor-1248	ND		8.67	3.47
Aroclor-1254	ND		8.67	3.47
Aroclor-1260	224	D	8.67	3.47
Aroclor-1262	ND		8.67	3.47
Aroclor-1268	ND		8.67	3.47
PCBs	224	D	8.67	3.47

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0148

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-028
Client ID: E-17_(2.
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3012.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 28.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.052	0.021
Aroclor-1221	ND		0.052	0.021
Aroclor-1232	ND		0.052	0.021
Aroclor-1242	ND		0.052	0.021
Aroclor-1248	ND		0.052	0.021
Aroclor-1254	ND		0.052	0.021
Aroclor-1260	3.20		0.052	0.021
Aroclor-1262	ND		0.052	0.021
Aroclor-1268	ND		0.052	0.021
PCBs	3.20		0.052	0.021

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0149

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-029
Client ID: E-9_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3058.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.74g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 18.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.212	0.085
Aroclor-1221	ND		0.212	0.085
Aroclor-1232	ND		0.212	0.085
Aroclor-1242	ND		0.212	0.085
Aroclor-1248	ND		0.212	0.085
Aroclor-1254	ND		0.212	0.085
Aroclor-1260	8.25	D	0.212	0.085
Aroclor-1262	ND		0.212	0.085
Aroclor-1268	ND		0.212	0.085
PCBs	8.25	D	0.212	0.085

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0150

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-030
Client ID: E-9_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3014.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.33g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	0.144		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	0.144		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0151

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-031
Client ID: PZ-1_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5535.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 30.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.012	0.00476
Aroclor-1221	ND		0.012	0.00476
Aroclor-1232	ND		0.012	0.00476
Aroclor-1242	ND		0.012	0.00476
Aroclor-1248	ND		0.012	0.00476
Aroclor-1254	ND		0.012	0.00476
Aroclor-1260	1.33	D	0.012	0.00476
Aroclor-1262	ND		0.012	0.00476
Aroclor-1268	ND		0.012	0.00476
PCBs	1.33	D	0.012	0.00476

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0152

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-032
Client ID: PZ-1_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5536.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 15.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.0098	0.00392
Aroclor-1221	ND		0.0098	0.00392
Aroclor-1232	ND		0.0098	0.00392
Aroclor-1242	ND		0.0098	0.00392
Aroclor-1248	ND		0.0098	0.00392
Aroclor-1254	ND		0.0098	0.00392
Aroclor-1260	0.216	D	0.0098	0.00392
Aroclor-1262	ND		0.0098	0.00392
Aroclor-1268	ND		0.0098	0.00392
PCBs	0.216	D	0.0098	0.00392

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0153

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-033
Client ID: PZ-1_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5537.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00895	0.00358
Aroclor-1221	ND		0.00895	0.00358
Aroclor-1232	ND		0.00895	0.00358
Aroclor-1242	ND		0.00895	0.00358
Aroclor-1248	ND		0.00895	0.00358
Aroclor-1254	ND		0.00895	0.00358
Aroclor-1260	0.225	D	0.00895	0.00358
Aroclor-1262	ND		0.00895	0.00358
Aroclor-1268	ND		0.00895	0.00358
PCBs	0.225	D	0.00895	0.00358

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0154

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-034
Client ID: PZ-1_(4.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5538.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.65g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00185	0.00074
Aroclor-1221	ND		0.00185	0.00074
Aroclor-1232	ND		0.00185	0.00074
Aroclor-1242	ND		0.00185	0.00074
Aroclor-1248	ND		0.00185	0.00074
Aroclor-1254	ND		0.00185	0.00074
Aroclor-1260	0.012		0.00185	0.00074
Aroclor-1262	ND		0.00185	0.00074
Aroclor-1268	ND		0.00185	0.00074
PCBs	0.012		0.00185	0.00074

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0155

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-035
Client ID: E-5_(0.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5539.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.020	0.00817
Aroclor-1221	ND		0.020	0.00817
Aroclor-1232	ND		0.020	0.00817
Aroclor-1242	ND		0.020	0.00817
Aroclor-1248	ND		0.020	0.00817
Aroclor-1254	ND		0.020	0.00817
Aroclor-1260	6.94	E	0.020	0.00817
Aroclor-1262	ND		0.020	0.00817
Aroclor-1268	ND		0.020	0.00817
PCBs	6.94	E	0.020	0.00817

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0156

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-035DL
Client ID: E-5_(0.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5546.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 100
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.204	0.082
Aroclor-1221	ND		0.204	0.082
Aroclor-1232	ND		0.204	0.082
Aroclor-1242	ND		0.204	0.082
Aroclor-1248	ND		0.204	0.082
Aroclor-1254	ND		0.204	0.082
Aroclor-1260	6.35	D	0.204	0.082
Aroclor-1262	ND		0.204	0.082
Aroclor-1268	ND		0.204	0.082
PCBs	6.35	D	0.204	0.082

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0157

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-036
Client ID: E-5_(3.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5540.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00405	0.00162
Aroclor-1221	ND		0.00405	0.00162
Aroclor-1232	ND		0.00405	0.00162
Aroclor-1242	ND		0.00405	0.00162
Aroclor-1248	ND		0.00405	0.00162
Aroclor-1254	ND		0.00405	0.00162
Aroclor-1260	0.103	D	0.00405	0.00162
Aroclor-1262	ND		0.00405	0.00162
Aroclor-1268	ND		0.00405	0.00162
PCBs	0.103	D	0.00405	0.00162

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-037
Client ID: E-5_(2.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5541.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.09g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 16.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.020	0.00793
Aroclor-1221	ND		0.020	0.00793
Aroclor-1232	ND		0.020	0.00793
Aroclor-1242	ND		0.020	0.00793
Aroclor-1248	ND		0.020	0.00793
Aroclor-1254	ND		0.020	0.00793
Aroclor-1260	0.247	D	0.020	0.00793
Aroclor-1262	ND		0.020	0.00793
Aroclor-1268	ND		0.020	0.00793
PCBs	0.247	D	0.020	0.00793

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0159

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-038
Client ID: E-5_(4.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5542.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00406	0.00162
Aroclor-1221	ND		0.00406	0.00162
Aroclor-1232	ND		0.00406	0.00162
Aroclor-1242	ND		0.00406	0.00162
Aroclor-1248	ND		0.00406	0.00162
Aroclor-1254	ND		0.00406	0.00162
Aroclor-1260	ND		0.00406	0.00162
Aroclor-1262	ND		0.00406	0.00162
Aroclor-1268	ND		0.00406	0.00162
PCBs	ND		0.00406	0.00162

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0160

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-039
Client ID: E-6_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3085.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00208	0.000832
Aroclor-1221	ND		0.00208	0.000832
Aroclor-1232	ND		0.00208	0.000832
Aroclor-1242	ND		0.00208	0.000832
Aroclor-1248	ND		0.00208	0.000832
Aroclor-1254	ND		0.00208	0.000832
Aroclor-1260	3.31	E	0.00208	0.000832
Aroclor-1262	ND		0.00208	0.000832
Aroclor-1268	ND		0.00208	0.000832
PCBs	3.31	E	0.00208	0.000832

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0161

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-039DL
Client ID: E-6_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3138.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 20.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	5.22	D	0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	5.22	D	0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0162

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-040
Client ID: FB-06221
Date Received: 06/23/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5419.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0163

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-041
Client ID: E-6_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3086.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00176	0.000704
Aroclor-1221	ND		0.00176	0.000704
Aroclor-1232	ND		0.00176	0.000704
Aroclor-1242	ND		0.00176	0.000704
Aroclor-1248	ND		0.00176	0.000704
Aroclor-1254	ND		0.00176	0.000704
Aroclor-1260	0.030		0.00176	0.000704
Aroclor-1262	ND		0.00176	0.000704
Aroclor-1268	ND		0.00176	0.000704
PCBs	0.030		0.00176	0.000704

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0164

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-042
Client ID: E-6_(3.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3087.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.56g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00175	0.0007
Aroclor-1221	ND		0.00175	0.0007
Aroclor-1232	ND		0.00175	0.0007
Aroclor-1242	ND		0.00175	0.0007
Aroclor-1248	ND		0.00175	0.0007
Aroclor-1254	ND		0.00175	0.0007
Aroclor-1260	0.011		0.00175	0.0007
Aroclor-1262	ND		0.00175	0.0007
Aroclor-1268	ND		0.00175	0.0007
PCBs	0.011		0.00175	0.0007

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0165

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05367-043
Client ID: E-6_(4.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3088.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.57g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00182	0.000728
Aroclor-1221	ND		0.00182	0.000728
Aroclor-1232	ND		0.00182	0.000728
Aroclor-1242	ND		0.00182	0.000728
Aroclor-1248	ND		0.00182	0.000728
Aroclor-1254	ND		0.00182	0.000728
Aroclor-1260	0.00148	J	0.00182	0.000728
Aroclor-1262	ND		0.00182	0.000728
Aroclor-1268	ND		0.00182	0.000728
PCBs	0.00148	J	0.00182	0.000728

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0166

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-001
Client ID: E-3_(3.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V1001.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.20

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000358	0.000179
beta-BHC	ND		0.000358	0.000179
gamma-BHC (Lindane)	ND		0.000358	0.000179
delta-BHC	ND		0.000358	0.000179
Heptachlor	ND		0.000358	0.000179
Aldrin	ND		0.000358	0.000179
Heptachlor epoxide	ND		0.000358	0.000179
Endosulfan I	ND		0.000358	0.000179
4,4'-DDE	ND		0.000358	0.000179
Dieldrin	ND		0.000358	0.000179
Endrin	ND		0.000358	0.000179
Endosulfan II	ND		0.000358	0.000179
4,4'-DDD	ND		0.000358	0.000179
Endrin aldehyde	ND		0.000358	0.000179
Endosulfan sulfate	ND		0.000358	0.000179
4,4'-DDT	ND		0.000358	0.000179
Endrin ketone	ND		0.000358	0.000179
Methoxychlor	ND		0.000358	0.000179
alpha-Chlordane	ND		0.000358	0.000179
gamma-Chlordane	ND		0.000358	0.000179
Toxaphene	ND		0.00448	0.00215
Endosulfan (I and II)	ND		0.000358	0.000179
Chlordane (alpha and gamma)	ND		0.000358	0.000179

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-002
Client ID: E-3_(0.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/07/2015
Data file: V1009.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.25g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 22.1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.085	0.042
beta-BHC	ND		0.085	0.042
gamma-BHC (Lindane)	ND		0.085	0.042
delta-BHC	ND		0.085	0.042
Heptachlor	ND		0.085	0.042
Aldrin	ND		0.085	0.042
Heptachlor epoxide	ND		0.085	0.042
Endosulfan I	ND		0.085	0.042
4,4'-DDE	ND		0.085	0.042
Dieldrin	ND		0.085	0.042
Endrin	ND		0.085	0.042
Endosulfan II	ND		0.085	0.042
4,4'-DDD	ND		0.085	0.042
Endrin aldehyde	ND		0.085	0.042
Endosulfan sulfate	ND		0.085	0.042
4,4'-DDT	ND		0.085	0.042
Endrin ketone	ND		0.085	0.042
Methoxychlor	ND		0.085	0.042
alpha-Chlordane	ND		0.085	0.042
gamma-Chlordane	ND		0.085	0.042
Toxaphene	ND		1.06	0.509
Endosulfan (I and II)	ND		0.085	0.042
Chlordane (alpha and gamma)	ND		0.085	0.042

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-003
Client ID: E-3_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9958.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.40g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000376	0.000188
beta-BHC	ND		0.000376	0.000188
gamma-BHC (Lindane)	ND		0.000376	0.000188
delta-BHC	ND		0.000376	0.000188
Heptachlor	ND		0.000376	0.000188
Aldrin	ND		0.000376	0.000188
Heptachlor epoxide	ND		0.000376	0.000188
Endosulfan I	ND		0.000376	0.000188
4,4'-DDE	ND		0.000376	0.000188
Dieldrin	ND		0.000376	0.000188
Endrin	ND		0.000376	0.000188
Endosulfan II	ND		0.000376	0.000188
4,4'-DDD	ND		0.000376	0.000188
Endrin aldehyde	ND		0.000376	0.000188
Endosulfan sulfate	ND		0.000376	0.000188
4,4'-DDT	ND		0.000376	0.000188
Endrin ketone	ND		0.000376	0.000188
Methoxychlor	ND		0.000376	0.000188
alpha-Chlordane	ND		0.000376	0.000188
gamma-Chlordane	ND		0.000376	0.000188
Toxaphene	ND		0.0047	0.00226
Endosulfan (I and II)	ND		0.000376	0.000188
Chlordane (alpha and gamma)	ND		0.000376	0.000188

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-004
Client ID: E-3_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9959.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.95g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000348	0.000174
beta-BHC	ND		0.000348	0.000174
gamma-BHC (Lindane)	ND		0.000348	0.000174
delta-BHC	ND		0.000348	0.000174
Heptachlor	ND		0.000348	0.000174
Aldrin	ND		0.000348	0.000174
Heptachlor epoxide	ND		0.000348	0.000174
Endosulfan I	ND		0.000348	0.000174
4,4'-DDE	ND		0.000348	0.000174
Dieldrin	ND		0.000348	0.000174
Endrin	ND		0.000348	0.000174
Endosulfan II	ND		0.000348	0.000174
4,4'-DDD	ND		0.000348	0.000174
Endrin aldehyde	ND		0.000348	0.000174
Endosulfan sulfate	ND		0.000348	0.000174
4,4'-DDT	ND		0.000348	0.000174
Endrin ketone	ND		0.000348	0.000174
Methoxychlor	ND		0.000348	0.000174
alpha-Chlordane	ND		0.000348	0.000174
gamma-Chlordane	ND		0.000348	0.000174
Toxaphene	ND		0.00435	0.00209
Endosulfan (I and II)	ND		0.000348	0.000174
Chlordane (alpha and gamma)	ND		0.000348	0.000174

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-007
Client ID: E-4_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9960.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.26g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00038	0.00019
beta-BHC	ND		0.00038	0.00019
gamma-BHC (Lindane)	ND		0.00038	0.00019
delta-BHC	ND		0.00038	0.00019
Heptachlor	ND		0.00038	0.00019
Aldrin	ND		0.00038	0.00019
Heptachlor epoxide	ND		0.00038	0.00019
Endosulfan I	ND		0.00038	0.00019
4,4'-DDE	ND		0.00038	0.00019
Dieldrin	ND		0.00038	0.00019
Endrin	ND		0.00038	0.00019
Endosulfan II	ND		0.00038	0.00019
4,4'-DDD	ND		0.00038	0.00019
Endrin aldehyde	ND		0.00038	0.00019
Endosulfan sulfate	ND		0.00038	0.00019
4,4'-DDT	ND		0.00038	0.00019
Endrin ketone	ND		0.00038	0.00019
Methoxychlor	ND		0.00038	0.00019
alpha-Chlordane	ND		0.00038	0.00019
gamma-Chlordane	ND		0.00038	0.00019
Toxaphene	ND		0.00475	0.00228
Endosulfan (I and II)	ND		0.00038	0.00019
Chlordane (alpha and gamma)	ND		0.00038	0.00019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-008
Client ID: E-4_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9961.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.96g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000352	0.000176
beta-BHC	ND		0.000352	0.000176
gamma-BHC (Lindane)	ND		0.000352	0.000176
delta-BHC	ND		0.000352	0.000176
Heptachlor	ND		0.000352	0.000176
Aldrin	ND		0.000352	0.000176
Heptachlor epoxide	ND		0.000352	0.000176
Endosulfan I	ND		0.000352	0.000176
4,4'-DDE	ND		0.000352	0.000176
Dieldrin	ND		0.000352	0.000176
Endrin	ND		0.000352	0.000176
Endosulfan II	ND		0.000352	0.000176
4,4'-DDD	ND		0.000352	0.000176
Endrin aldehyde	ND		0.000352	0.000176
Endosulfan sulfate	ND		0.000352	0.000176
4,4'-DDT	ND		0.000352	0.000176
Endrin ketone	ND		0.000352	0.000176
Methoxychlor	ND		0.000352	0.000176
alpha-Chlordane	ND		0.000352	0.000176
gamma-Chlordane	ND		0.000352	0.000176
Toxaphene	ND		0.0044	0.00211
Endosulfan (I and II)	ND		0.000352	0.000176
Chlordane (alpha and gamma)	ND		0.000352	0.000176

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-009
Client ID: E-4_(3.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9962.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.07g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.00

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000362	0.000181
beta-BHC	ND		0.000362	0.000181
gamma-BHC (Lindane)	ND		0.000362	0.000181
delta-BHC	ND		0.000362	0.000181
Heptachlor	ND		0.000362	0.000181
Aldrin	ND		0.000362	0.000181
Heptachlor epoxide	ND		0.000362	0.000181
Endosulfan I	ND		0.000362	0.000181
4,4'-DDE	ND		0.000362	0.000181
Dieldrin	ND		0.000362	0.000181
Endrin	ND		0.000362	0.000181
Endosulfan II	ND		0.000362	0.000181
4,4'-DDD	ND		0.000362	0.000181
Endrin aldehyde	ND		0.000362	0.000181
Endosulfan sulfate	ND		0.000362	0.000181
4,4'-DDT	ND		0.000362	0.000181
Endrin ketone	ND		0.000362	0.000181
Methoxychlor	ND		0.000362	0.000181
alpha-Chlordane	ND		0.000362	0.000181
gamma-Chlordane	ND		0.000362	0.000181
Toxaphene	ND		0.00453	0.00217
Endosulfan (I and II)	ND		0.000362	0.000181
Chlordane (alpha and gamma)	ND		0.000362	0.000181

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-010
Client ID: E-4_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9963.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.01g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000368	0.000184
beta-BHC	ND		0.000368	0.000184
gamma-BHC (Lindane)	ND		0.000368	0.000184
delta-BHC	ND		0.000368	0.000184
Heptachlor	ND		0.000368	0.000184
Aldrin	ND		0.000368	0.000184
Heptachlor epoxide	ND		0.000368	0.000184
Endosulfan I	ND		0.000368	0.000184
4,4'-DDE	ND		0.000368	0.000184
Dieldrin	ND		0.000368	0.000184
Endrin	ND		0.000368	0.000184
Endosulfan II	ND		0.000368	0.000184
4,4'-DDD	ND		0.000368	0.000184
Endrin aldehyde	ND		0.000368	0.000184
Endosulfan sulfate	ND		0.000368	0.000184
4,4'-DDT	ND		0.000368	0.000184
Endrin ketone	ND		0.000368	0.000184
Methoxychlor	ND		0.000368	0.000184
alpha-Chlordane	ND		0.000368	0.000184
gamma-Chlordane	ND		0.000368	0.000184
Toxaphene	ND		0.0046	0.00221
Endosulfan (I and II)	ND		0.000368	0.000184
Chlordane (alpha and gamma)	ND		0.000368	0.000184

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-017
Client ID: E-16_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0987.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.29g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00203	0.00102
beta-BHC	ND		0.00203	0.00102
gamma-BHC (Lindane)	ND		0.00203	0.00102
delta-BHC	ND		0.00203	0.00102
Heptachlor	ND		0.00203	0.00102
Aldrin	ND		0.00203	0.00102
Heptachlor epoxide	ND		0.00203	0.00102
Endosulfan I	ND		0.00203	0.00102
4,4'-DDE	ND		0.00203	0.00102
Dieldrin	ND		0.00203	0.00102
Endrin	ND		0.00203	0.00102
Endosulfan II	ND		0.00203	0.00102
4,4'-DDD	ND		0.00203	0.00102
Endrin aldehyde	ND		0.00203	0.00102
Endosulfan sulfate	ND		0.00203	0.00102
4,4'-DDT	ND		0.00203	0.00102
Endrin ketone	ND		0.00203	0.00102
Methoxychlor	ND		0.00203	0.00102
alpha-Chlordane	ND		0.00203	0.00102
gamma-Chlordane	ND		0.00203	0.00102
Toxaphene	ND		0.025	0.012
Endosulfan (I and II)	ND		0.00203	0.00102
Chlordane (alpha and gamma)	ND		0.00203	0.00102

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-018
Client ID: E-16_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0988.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00202	0.00101
beta-BHC	ND		0.00202	0.00101
gamma-BHC (Lindane)	ND		0.00202	0.00101
delta-BHC	ND		0.00202	0.00101
Heptachlor	ND		0.00202	0.00101
Aldrin	ND		0.00202	0.00101
Heptachlor epoxide	ND		0.00202	0.00101
Endosulfan I	ND		0.00202	0.00101
4,4'-DDE	ND		0.00202	0.00101
Dieldrin	ND		0.00202	0.00101
Endrin	ND		0.00202	0.00101
Endosulfan II	ND		0.00202	0.00101
4,4'-DDD	ND		0.00202	0.00101
Endrin aldehyde	ND		0.00202	0.00101
Endosulfan sulfate	ND		0.00202	0.00101
4,4'-DDT	ND		0.00202	0.00101
Endrin ketone	ND		0.00202	0.00101
Methoxychlor	ND		0.00202	0.00101
alpha-Chlordane	ND		0.00202	0.00101
gamma-Chlordane	ND		0.00202	0.00101
Toxaphene	ND		0.025	0.012
Endosulfan (I and II)	ND		0.00202	0.00101
Chlordane (alpha and gamma)	ND		0.00202	0.00101

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-019
Client ID: PZ-2_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0989.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 20.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00209	0.00105
beta-BHC	ND		0.00209	0.00105
gamma-BHC (Lindane)	ND		0.00209	0.00105
delta-BHC	ND		0.00209	0.00105
Heptachlor	ND		0.00209	0.00105
Aldrin	ND		0.00209	0.00105
Heptachlor epoxide	ND		0.00209	0.00105
Endosulfan I	ND		0.00209	0.00105
4,4'-DDE	ND		0.00209	0.00105
Dieldrin	ND		0.00209	0.00105
Endrin	ND		0.00209	0.00105
Endosulfan II	ND		0.00209	0.00105
4,4'-DDD	ND		0.00209	0.00105
Endrin aldehyde	ND		0.00209	0.00105
Endosulfan sulfate	ND		0.00209	0.00105
4,4'-DDT	ND		0.00209	0.00105
Endrin ketone	ND		0.00209	0.00105
Methoxychlor	ND		0.00209	0.00105
alpha-Chlordane	ND		0.00209	0.00105
gamma-Chlordane	ND		0.00209	0.00105
Toxaphene	ND		0.026	0.013
Endosulfan (I and II)	ND		0.00209	0.00105
Chlordane (alpha and gamma)	ND		0.00209	0.00105

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-020
Client ID: PZ-2_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0990.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.22g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00206	0.00103
beta-BHC	ND		0.00206	0.00103
gamma-BHC (Lindane)	ND		0.00206	0.00103
delta-BHC	ND		0.00206	0.00103
Heptachlor	ND		0.00206	0.00103
Aldrin	ND		0.00206	0.00103
Heptachlor epoxide	ND		0.00206	0.00103
Endosulfan I	ND		0.00206	0.00103
4,4'-DDE	ND		0.00206	0.00103
Dieldrin	ND		0.00206	0.00103
Endrin	ND		0.00206	0.00103
Endosulfan II	ND		0.00206	0.00103
4,4'-DDD	ND		0.00206	0.00103
Endrin aldehyde	ND		0.00206	0.00103
Endosulfan sulfate	ND		0.00206	0.00103
4,4'-DDT	ND		0.00206	0.00103
Endrin ketone	ND		0.00206	0.00103
Methoxychlor	ND		0.00206	0.00103
alpha-Chlordane	ND		0.00206	0.00103
gamma-Chlordane	ND		0.00206	0.00103
Toxaphene	ND		0.026	0.012
Endosulfan (I and II)	ND		0.00206	0.00103
Chlordane (alpha and gamma)	ND		0.00206	0.00103

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-021
Client ID: PZ-2_(4.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0991.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.70

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000358	0.000179
beta-BHC	ND		0.000358	0.000179
gamma-BHC (Lindane)	ND		0.000358	0.000179
delta-BHC	ND		0.000358	0.000179
Heptachlor	ND		0.000358	0.000179
Aldrin	ND		0.000358	0.000179
Heptachlor epoxide	ND		0.000358	0.000179
Endosulfan I	ND		0.000358	0.000179
4,4'-DDE	ND		0.000358	0.000179
Dieldrin	ND		0.000358	0.000179
Endrin	ND		0.000358	0.000179
Endosulfan II	ND		0.000358	0.000179
4,4'-DDD	ND		0.000358	0.000179
Endrin aldehyde	ND		0.000358	0.000179
Endosulfan sulfate	ND		0.000358	0.000179
4,4'-DDT	ND		0.000358	0.000179
Endrin ketone	ND		0.000358	0.000179
Methoxychlor	ND		0.000358	0.000179
alpha-Chlordane	ND		0.000358	0.000179
gamma-Chlordane	ND		0.000358	0.000179
Toxaphene	ND		0.00448	0.00215
Endosulfan (I and II)	ND		0.000358	0.000179
Chlordane (alpha and gamma)	ND		0.000358	0.000179

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-022
Client ID: PZ-2_(6.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0992.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.55g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000382	0.000191
beta-BHC	ND		0.000382	0.000191
gamma-BHC (Lindane)	ND		0.000382	0.000191
delta-BHC	ND		0.000382	0.000191
Heptachlor	ND		0.000382	0.000191
Aldrin	ND		0.000382	0.000191
Heptachlor epoxide	ND		0.000382	0.000191
Endosulfan I	ND		0.000382	0.000191
4,4'-DDE	ND		0.000382	0.000191
Dieldrin	ND		0.000382	0.000191
Endrin	ND		0.000382	0.000191
Endosulfan II	ND		0.000382	0.000191
4,4'-DDD	ND		0.000382	0.000191
Endrin aldehyde	ND		0.000382	0.000191
Endosulfan sulfate	ND		0.000382	0.000191
4,4'-DDT	ND		0.000382	0.000191
Endrin ketone	ND		0.000382	0.000191
Methoxychlor	ND		0.000382	0.000191
alpha-Chlordane	ND		0.000382	0.000191
gamma-Chlordane	ND		0.000382	0.000191
Toxaphene	ND		0.00478	0.00229
Endosulfan (I and II)	ND		0.000382	0.000191
Chlordane (alpha and gamma)	ND		0.000382	0.000191

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-023
Client ID: X-1_(4.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9964.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.11g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000356	0.000178
beta-BHC	ND		0.000356	0.000178
gamma-BHC (Lindane)	ND		0.000356	0.000178
delta-BHC	ND		0.000356	0.000178
Heptachlor	ND		0.000356	0.000178
Aldrin	ND		0.000356	0.000178
Heptachlor epoxide	ND		0.000356	0.000178
Endosulfan I	ND		0.000356	0.000178
4,4'-DDE	ND		0.000356	0.000178
Dieldrin	ND		0.000356	0.000178
Endrin	ND		0.000356	0.000178
Endosulfan II	ND		0.000356	0.000178
4,4'-DDD	ND		0.000356	0.000178
Endrin aldehyde	ND		0.000356	0.000178
Endosulfan sulfate	ND		0.000356	0.000178
4,4'-DDT	ND		0.000356	0.000178
Endrin ketone	ND		0.000356	0.000178
Methoxychlor	ND		0.000356	0.000178
alpha-Chlordane	ND		0.000356	0.000178
gamma-Chlordane	ND		0.000356	0.000178
Toxaphene	ND		0.00445	0.00214
Endosulfan (I and II)	ND		0.000356	0.000178
Chlordane (alpha and gamma)	ND		0.000356	0.000178

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-031
Client ID: PZ-1_(0.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0993.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 30.2

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00475	0.00238
beta-BHC	ND		0.00475	0.00238
gamma-BHC (Lindane)	ND		0.00475	0.00238
delta-BHC	ND		0.00475	0.00238
Heptachlor	ND		0.00475	0.00238
Aldrin	ND		0.00475	0.00238
Heptachlor epoxide	ND		0.00475	0.00238
Endosulfan I	ND		0.00475	0.00238
4,4'-DDE	ND		0.00475	0.00238
Dieldrin	ND		0.00475	0.00238
Endrin	ND		0.00475	0.00238
Endosulfan II	ND		0.00475	0.00238
4,4'-DDD	ND		0.00475	0.00238
Endrin aldehyde	ND		0.00475	0.00238
Endosulfan sulfate	ND		0.00475	0.00238
4,4'-DDT	ND		0.00475	0.00238
Endrin ketone	ND		0.00475	0.00238
Methoxychlor	ND		0.00475	0.00238
alpha-Chlordane	ND		0.00475	0.00238
gamma-Chlordane	ND		0.00475	0.00238
Toxaphene	ND		0.059	0.029
Endosulfan (I and II)	ND		0.00475	0.00238
Chlordane (alpha and gamma)	ND		0.00475	0.00238

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-032
Client ID: PZ-1_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0994.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 15.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00196	0.00098
beta-BHC	ND		0.00196	0.00098
gamma-BHC (Lindane)	ND		0.00196	0.00098
delta-BHC	ND		0.00196	0.00098
Heptachlor	ND		0.00196	0.00098
Aldrin	ND		0.00196	0.00098
Heptachlor epoxide	ND		0.00196	0.00098
Endosulfan I	ND		0.00196	0.00098
4,4'-DDE	ND		0.00196	0.00098
Dieldrin	ND		0.00196	0.00098
Endrin	ND		0.00196	0.00098
Endosulfan II	ND		0.00196	0.00098
4,4'-DDD	ND		0.00196	0.00098
Endrin aldehyde	ND		0.00196	0.00098
Endosulfan sulfate	ND		0.00196	0.00098
4,4'-DDT	ND		0.00196	0.00098
Endrin ketone	ND		0.00196	0.00098
Methoxychlor	ND		0.00196	0.00098
alpha-Chlordane	ND		0.00196	0.00098
gamma-Chlordane	ND		0.00196	0.00098
Toxaphene	ND		0.025	0.012
Endosulfan (I and II)	ND		0.00196	0.00098
Chlordane (alpha and gamma)	ND		0.00196	0.00098

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-033
Client ID: PZ-1_(2.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0995.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00179	0.000895
beta-BHC	ND		0.00179	0.000895
gamma-BHC (Lindane)	ND		0.00179	0.000895
delta-BHC	ND		0.00179	0.000895
Heptachlor	ND		0.00179	0.000895
Aldrin	ND		0.00179	0.000895
Heptachlor epoxide	ND		0.00179	0.000895
Endosulfan I	ND		0.00179	0.000895
4,4'-DDE	ND		0.00179	0.000895
Dieldrin	ND		0.00179	0.000895
Endrin	ND		0.00179	0.000895
Endosulfan II	ND		0.00179	0.000895
4,4'-DDD	ND		0.00179	0.000895
Endrin aldehyde	ND		0.00179	0.000895
Endosulfan sulfate	ND		0.00179	0.000895
4,4'-DDT	ND		0.00179	0.000895
Endrin ketone	ND		0.00179	0.000895
Methoxychlor	ND		0.00179	0.000895
alpha-Chlordane	ND		0.00179	0.000895
gamma-Chlordane	ND		0.00179	0.000895
Toxaphene	ND		0.022	0.011
Endosulfan (I and II)	ND		0.00179	0.000895
Chlordane (alpha and gamma)	ND		0.00179	0.000895

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-034
Client ID: PZ-1_(4.
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0996.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.65g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00037	0.000185
beta-BHC	ND		0.00037	0.000185
gamma-BHC (Lindane)	ND		0.00037	0.000185
delta-BHC	ND		0.00037	0.000185
Heptachlor	ND		0.00037	0.000185
Aldrin	ND		0.00037	0.000185
Heptachlor epoxide	ND		0.00037	0.000185
Endosulfan I	ND		0.00037	0.000185
4,4'-DDE	ND		0.00037	0.000185
Dieldrin	ND		0.00037	0.000185
Endrin	ND		0.00037	0.000185
Endosulfan II	ND		0.00037	0.000185
4,4'-DDD	ND		0.00037	0.000185
Endrin aldehyde	ND		0.00037	0.000185
Endosulfan sulfate	ND		0.00037	0.000185
4,4'-DDT	ND		0.00037	0.000185
Endrin ketone	ND		0.00037	0.000185
Methoxychlor	ND		0.00037	0.000185
alpha-Chlordane	ND		0.00037	0.000185
gamma-Chlordane	ND		0.00037	0.000185
Toxaphene	ND		0.00463	0.00222
Endosulfan (I and II)	ND		0.00037	0.000185
Chlordane (alpha and gamma)	ND		0.00037	0.000185

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-035
Client ID: E-5_(0.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0997.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 19.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00817	0.00409
beta-BHC	ND		0.00817	0.00409
gamma-BHC (Lindane)	ND		0.00817	0.00409
delta-BHC	ND		0.00817	0.00409
Heptachlor	ND		0.00817	0.00409
Aldrin	ND		0.00817	0.00409
Heptachlor epoxide	ND		0.00817	0.00409
Endosulfan I	ND		0.00817	0.00409
4,4'-DDE	ND		0.00817	0.00409
Dieldrin	ND		0.00817	0.00409
Endrin	ND		0.00817	0.00409
Endosulfan II	ND		0.00817	0.00409
4,4'-DDD	ND		0.00817	0.00409
Endrin aldehyde	ND		0.00817	0.00409
Endosulfan sulfate	ND		0.00817	0.00409
4,4'-DDT	ND		0.00817	0.00409
Endrin ketone	ND		0.00817	0.00409
Methoxychlor	ND		0.00817	0.00409
alpha-Chlordane	ND		0.00817	0.00409
gamma-Chlordane	ND		0.00817	0.00409
Toxaphene	ND		0.102	0.049
Endosulfan (I and II)	ND		0.00817	0.00409
Chlordane (alpha and gamma)	ND		0.00817	0.00409

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-036
Client ID: E-5_(3.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0998.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 18.4

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00405	0.00202
beta-BHC	ND		0.00405	0.00202
gamma-BHC (Lindane)	ND		0.00405	0.00202
delta-BHC	ND		0.00405	0.00202
Heptachlor	ND		0.00405	0.00202
Aldrin	ND		0.00405	0.00202
Heptachlor epoxide	ND		0.00405	0.00202
Endosulfan I	ND		0.00405	0.00202
4,4'-DDE	ND		0.00405	0.00202
Dieldrin	ND		0.00405	0.00202
Endrin	ND		0.00405	0.00202
Endosulfan II	ND		0.00405	0.00202
4,4'-DDD	ND		0.00405	0.00202
Endrin aldehyde	ND		0.00405	0.00202
Endosulfan sulfate	ND		0.00405	0.00202
4,4'-DDT	ND		0.00405	0.00202
Endrin ketone	ND		0.00405	0.00202
Methoxychlor	ND		0.00405	0.00202
alpha-Chlordane	ND		0.00405	0.00202
gamma-Chlordane	ND		0.00405	0.00202
Toxaphene	ND		0.051	0.024
Endosulfan (I and II)	ND		0.00405	0.00202
Chlordane (alpha and gamma)	ND		0.00405	0.00202

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-037
Client ID: E-5_(2.0
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0999.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.09g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 16.2

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00793	0.00397
beta-BHC	ND		0.00793	0.00397
gamma-BHC (Lindane)	ND		0.00793	0.00397
delta-BHC	ND		0.00793	0.00397
Heptachlor	ND		0.00793	0.00397
Aldrin	ND		0.00793	0.00397
Heptachlor epoxide	ND		0.00793	0.00397
Endosulfan I	ND		0.00793	0.00397
4,4'-DDE	ND		0.00793	0.00397
Dieldrin	ND		0.00793	0.00397
Endrin	ND		0.00793	0.00397
Endosulfan II	ND		0.00793	0.00397
4,4'-DDD	ND		0.00793	0.00397
Endrin aldehyde	ND		0.00793	0.00397
Endosulfan sulfate	ND		0.00793	0.00397
4,4'-DDT	ND		0.00793	0.00397
Endrin ketone	ND		0.00793	0.00397
Methoxychlor	ND		0.00793	0.00397
alpha-Chlordane	ND		0.00793	0.00397
gamma-Chlordane	ND		0.00793	0.00397
Toxaphene	ND		0.099	0.048
Endosulfan (I and II)	ND		0.00793	0.00397
Chlordane (alpha and gamma)	ND		0.00793	0.00397

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-038
Client ID: E-5_(4.5
Date Received: 06/23/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V1000.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000406	0.000203
beta-BHC	ND		0.000406	0.000203
gamma-BHC (Lindane)	ND		0.000406	0.000203
delta-BHC	ND		0.000406	0.000203
Heptachlor	ND		0.000406	0.000203
Aldrin	ND		0.000406	0.000203
Heptachlor epoxide	ND		0.000406	0.000203
Endosulfan I	ND		0.000406	0.000203
4,4'-DDE	ND		0.000406	0.000203
Dieldrin	ND		0.000406	0.000203
Endrin	ND		0.000406	0.000203
Endosulfan II	ND		0.000406	0.000203
4,4'-DDD	ND		0.000406	0.000203
Endrin aldehyde	ND		0.000406	0.000203
Endosulfan sulfate	ND		0.000406	0.000203
4,4'-DDT	ND		0.000406	0.000203
Endrin ketone	ND		0.000406	0.000203
Methoxychlor	ND		0.000406	0.000203
alpha-Chlordane	ND		0.000406	0.000203
gamma-Chlordane	ND		0.000406	0.000203
Toxaphene	ND		0.00508	0.00244
Endosulfan (I and II)	ND		0.000406	0.000203
Chlordane (alpha and gamma)	ND		0.000406	0.000203

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-039
Client ID: E-6_(0.5
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9965.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000416	0.000208
beta-BHC	ND		0.000416	0.000208
gamma-BHC (Lindane)	ND		0.000416	0.000208
delta-BHC	ND		0.000416	0.000208
Heptachlor	ND		0.000416	0.000208
Aldrin	ND		0.000416	0.000208
Heptachlor epoxide	ND		0.000416	0.000208
Endosulfan I	ND		0.000416	0.000208
4,4'-DDE	ND		0.000416	0.000208
Dieldrin	ND		0.000416	0.000208
Endrin	ND		0.000416	0.000208
Endosulfan II	ND		0.000416	0.000208
4,4'-DDD	ND		0.000416	0.000208
Endrin aldehyde	ND		0.000416	0.000208
Endosulfan sulfate	ND		0.000416	0.000208
4,4'-DDT	ND		0.000416	0.000208
Endrin ketone	ND		0.000416	0.000208
Methoxychlor	ND		0.000416	0.000208
alpha-Chlordane	ND		0.000416	0.000208
gamma-Chlordane	ND		0.000416	0.000208
Toxaphene	ND		0.0052	0.0025
Endosulfan (I and II)	ND		0.000416	0.000208
Chlordane (alpha and gamma)	ND		0.000416	0.000208

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-040
Client ID: FB-06221
Date Received: 06/23/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: O9874.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00001	0.000005
beta-BHC	ND		0.00001	0.000005
gamma-BHC (Lindane)	ND		0.00001	0.000005
delta-BHC	ND		0.00001	0.000005
Heptachlor	ND		0.00001	0.000005
Aldrin	ND		0.00001	0.000005
Heptachlor epoxide	ND		0.00001	0.000005
Endosulfan I	ND		0.00001	0.000005
4,4'-DDE	ND		0.00001	0.000005
Dieldrin	ND		0.00001	0.000005
Endrin	ND		0.00001	0.000005
Endosulfan II	ND		0.00001	0.000005
4,4'-DDD	ND		0.00001	0.000005
Endrin aldehyde	ND		0.00001	0.000005
Endosulfan sulfate	ND		0.00001	0.000005
4,4'-DDT	ND		0.00001	0.000005
Endrin ketone	ND		0.00001	0.000005
Methoxychlor	ND		0.00001	0.000005
alpha-Chlordane	ND		0.00001	0.000005
gamma-Chlordane	ND		0.00001	0.000005
Toxaphene	ND		0.000125	0.00006
Endosulfan (I and II)	ND		0.00001	0.000005
Chlordane (alpha and gamma)	ND		0.00001	0.000005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-041
Client ID: E-6_(2.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9966.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.90

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000352	0.000176
beta-BHC	ND		0.000352	0.000176
gamma-BHC (Lindane)	ND		0.000352	0.000176
delta-BHC	ND		0.000352	0.000176
Heptachlor	ND		0.000352	0.000176
Aldrin	ND		0.000352	0.000176
Heptachlor epoxide	ND		0.000352	0.000176
Endosulfan I	ND		0.000352	0.000176
4,4'-DDE	ND		0.000352	0.000176
Dieldrin	ND		0.000352	0.000176
Endrin	ND		0.000352	0.000176
Endosulfan II	ND		0.000352	0.000176
4,4'-DDD	ND		0.000352	0.000176
Endrin aldehyde	ND		0.000352	0.000176
Endosulfan sulfate	ND		0.000352	0.000176
4,4'-DDT	ND		0.000352	0.000176
Endrin ketone	ND		0.000352	0.000176
Methoxychlor	ND		0.000352	0.000176
alpha-Chlordane	ND		0.000352	0.000176
gamma-Chlordane	ND		0.000352	0.000176
Toxaphene	ND		0.0044	0.00211
Endosulfan (I and II)	ND		0.000352	0.000176
Chlordane (alpha and gamma)	ND		0.000352	0.000176

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-042
Client ID: E-6_(3.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9967.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.56g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00035	0.000175
beta-BHC	ND		0.00035	0.000175
gamma-BHC (Lindane)	ND		0.00035	0.000175
delta-BHC	ND		0.00035	0.000175
Heptachlor	ND		0.00035	0.000175
Aldrin	ND		0.00035	0.000175
Heptachlor epoxide	ND		0.00035	0.000175
Endosulfan I	ND		0.00035	0.000175
4,4'-DDE	ND		0.00035	0.000175
Dieldrin	ND		0.00035	0.000175
Endrin	ND		0.00035	0.000175
Endosulfan II	ND		0.00035	0.000175
4,4'-DDD	ND		0.00035	0.000175
Endrin aldehyde	ND		0.00035	0.000175
Endosulfan sulfate	ND		0.00035	0.000175
4,4'-DDT	ND		0.00035	0.000175
Endrin ketone	ND		0.00035	0.000175
Methoxychlor	ND		0.00035	0.000175
alpha-Chlordane	ND		0.00035	0.000175
gamma-Chlordane	ND		0.00035	0.000175
Toxaphene	ND		0.00438	0.0021
Endosulfan (I and II)	ND		0.00035	0.000175
Chlordane (alpha and gamma)	ND		0.00035	0.000175

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05367-043
Client ID: E-6_(4.0
Date Received: 06/23/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9968.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.57g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.0

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000364	0.000182
beta-BHC	ND		0.000364	0.000182
gamma-BHC (Lindane)	ND		0.000364	0.000182
delta-BHC	ND		0.000364	0.000182
Heptachlor	ND		0.000364	0.000182
Aldrin	ND		0.000364	0.000182
Heptachlor epoxide	ND		0.000364	0.000182
Endosulfan I	ND		0.000364	0.000182
4,4'-DDE	ND		0.000364	0.000182
Dieldrin	ND		0.000364	0.000182
Endrin	ND		0.000364	0.000182
Endosulfan II	ND		0.000364	0.000182
4,4'-DDD	ND		0.000364	0.000182
Endrin aldehyde	ND		0.000364	0.000182
Endosulfan sulfate	ND		0.000364	0.000182
4,4'-DDT	ND		0.000364	0.000182
Endrin ketone	ND		0.000364	0.000182
Methoxychlor	ND		0.000364	0.000182
alpha-Chlordane	ND		0.000364	0.000182
gamma-Chlordane	ND		0.000364	0.000182
Toxaphene	ND		0.00455	0.00218
Endosulfan (I and II)	ND		0.000364	0.000182
Chlordane (alpha and gamma)	ND		0.000364	0.000182

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA150630b	AQUEOUS	G4807.D	100	98	96
05549-001	AQUEOUS	G4808.D	102	97	96
05556-022	AQUEOUS	G4809.D	100	99	97
05557-018	AQUEOUS	G4810.D	100	99	96
05367-040	AQUEOUS	G4811.D	101	99	97
05367-044	AQUEOUS	G4812.D	101	96	98
05394-002	AQUEOUS	G4813.D	102	96	95
05394-001	AQUEOUS	G4814.D	103	94	95
05396-003	AQUEOUS	G4815.D	102	99	95
05396-004	AQUEOUS	G4816.D	101	98	96
05396-001	AQUEOUS	G4817.D	101	94	94
05396-002	AQUEOUS	G4818.D	103	96	95
05407-001	AQUEOUS	G4819.D	102	95	99
05426-001	AQUEOUS	G4820.D	105	95	95
05348-003	AQUEOUS	G4821.D	103	96	95
05348-005	AQUEOUS	G4822.D	105	99	96
05348-001	AQUEOUS	G4823.D	103	95	97
05348-002	AQUEOUS	G4824.D	101	97	96
05348-004	AQUEOUS	G4825.D	103	97	98
LCSA150630b	AQUEOUS	G4826.D	99	99	101
5549-01MS	AQUEOUS	G4827.D	101	100	100
5549-001MSD	AQUEOUS	G4828.D	103	98	100

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	59-138	43-133
SMC2 = Toluene-d8	50 ppb	70-130	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	70-130	42-152	45-145

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

D Surrogate diluted out

M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/01/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKS150630-02	SOIL	L8506.D	95	98	94
LCSS150630-02	SOIL	L8507.D	99	103	102
LCSDS150630-02	SOIL	L8508.D	97	102	101
05367-031	SOIL	L8510.D	92	98	92
05367-032	SOIL	L8511.D	95	98	93
05367-033	SOIL	L8512.D	94	98	92
05367-034	SOIL	L8513.D	96	98	93
05367-035	SOIL	L8514.D	97	97	92
05367-036	SOIL	L8515.D	99	98	90
05367-037	SOIL	L8516.D	91	97	90
05367-038	SOIL	L8517.D	93	98	91
05367-039	SOIL	L8518.D	96	98	90
05367-041	SOIL	L8519.D	98	98	94
05367-042	SOIL	L8520.D	95	98	92
05367-043	SOIL	L8521.D	94	98	93
05367-010	SOIL	L8522.D	104	96	94
05589-001	SOIL	L8524.D	113	98	95

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	43-161	45-153
SMC2 = Toluene-d8	50 ppb	70-130	45-158	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	44-157	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Lab Sample ID	Matrix	File ID	SMC1	#	SMC2	#	SMC3	#
BLKS150630-01	SOIL	L8481.D	98		97		95	
LCSS150630-01	SOIL	L8482.D	97		101		101	
LCSDS150630-01	SOIL	L8483.D	95		101		100	
05166-030	SOIL	L8485.D	109		97		97	
05183-004DUP	SOIL	L8486.D	0	*$	0	*$	0	*$
05367-001	SOIL	L8487.D	95		97		95	
05367-002	SOIL	L8488.D	90		98		92	
05367-003	SOIL	L8489.D	89		98		92	
05367-004	SOIL	L8490.D	92		98		92	
05367-007	SOIL	L8491.D	93		98		93	
05367-008	SOIL	L8492.D	96		98		93	
05367-009	SOIL	L8493.D	95		98		94	
05367-017	SOIL	L8495.D	94		97		93	
05367-018	SOIL	L8496.D	97		99		93	
05367-019	SOIL	L8497.D	97		97		91	
05367-020	SOIL	L8498.D	94		97		92	
05367-021	SOIL	L8499.D	95		100		92	
05367-022	SOIL	L8500.D	93		97		91	
05367-023	SOIL	L8501.D	94		97		93	

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	43-161	45-153
SMC2 = Toluene-d8	50 ppb	70-130	45-158	48-157
SMC3 = Bromofluorobenzene	50 ppb	70-130	44-157	47-154

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA150630b
Date Received: NA
Date Analyzed: 07/01/2015
LCS Data file: G4826.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	41.6	83	
Chloromethane	50.0	0.0	40.4	81	
Vinyl chloride	50.0	0.0	45.9	92	
Bromomethane	50.0	0.0	51.8	104	
Chloroethane	50.0	0.0	51.2	102	
Trichlorofluoromethane	50.0	0.0	42.2	84	
Acrolein	150	0.0	128.6	86	
1,1-Dichloroethene	50.0	0.0	49.2	98	
Acetone	50.0	0.0	52.0	104	
Carbon disulfide	50.0	0.0	46.2	92	
Vinyl acetate	50.0	0.0	36.6	73	
Methylene chloride	50.0	0.0	51.0	102	
Acrylonitrile	150.0	0.0	144.7	96	
tert-Butyl alcohol (TBA)	100.0	0.5	96.5	96	
trans-1,2-Dichloroethene	50.0	0.0	50.8	102	
Methyl tert-butyl ether (MTBE)	50.0	0.0	51.4	103	
1,1-Dichloroethane	50.0	0.0	52.0	104	
Diisopropyl ether (DIPE)	50.0	0.0	52.7	105	
cis-1,2-Dichloroethene	50.0	0.0	50.9	102	
2,2-Dichloropropane	50.0	0.0	41.7	83	
2-Butanone (MEK)	50.0	0.0	48.9	98	
Bromochloromethane	50.0	0.0	50.0	100	
Chloroform	50.0	0.0	51.1	102	
1,1,1-Trichloroethane	50.0	0.0	51.4	103	
Carbon tetrachloride	50.0	0.0	49.8	100	
1,1-Dichloropropene	50.0	0.0	50.3	101	
1,2-Dichloroethane (EDC)	50.0	0.0	50.3	101	
Benzene	50.0	0.0	51.1	102	
Trichloroethene	50.0	0.0	56.1	112	
1,2-Dichloropropane	50.0	0.0	51.4	103	
Dibromomethane	50.0	0.0	50.6	101	
1,4-Dioxane	1500	0.0	1203	80	
Bromodichloromethane	50.0	0.0	48.2	96	
2-Chloroethyl vinyl ether	50.0	0.0	53.5	107	
cis-1,3-Dichloropropene	50.0	0.0	40.6	81	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	52.8	106	
Toluene	50.0	0.0	50.3	101	
trans-1,3-Dichloropropene	50.0	0.0	38.9	78	
1,1,2-Trichloroethane	50.0	0.0	48.4	97	
Tetrachloroethene	50.0	0.0	48.6	97	
1,3-Dichloropropane	50.0	0.0	50.0	100	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150630b
Date Received: NA
Date Analyzed: 07/01/2015
LCS Data file: G4826.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	50.0	100	
Dibromochloromethane	50.0	0.0	44.2	88	
1,2-Dibromoethane (EDB)	50.0	0.0	49.8	100	
Chlorobenzene	50.0	0.0	51.0	102	
1,1,1,2-Tetrachloroethane	50.0	0.0	50.3	101	
Ethylbenzene	50.0	0.0	50.9	102	
m,p-Xylene	100.0	0.0	103.1	103	
o-Xylene	50.0	0.0	51.2	102	
Styrene	50.0	0.0	51.5	103	
Bromoform	50.0	0.0	38.6	77	
Isopropylbenzene	50.0	0.0	53.4	107	
1,1,2,2-Tetrachloroethane	50.0	0.0	43.1	86	
Bromobenzene	50.0	0.0	49.1	98	
1,2,3-Trichloropropane	50.0	0.0	49.2	98	
n-Propylbenzene	50.0	0.0	49.7	99	
2-Chlorotoluene	50.0	0.0	50.5	101	
1,3,5-Trimethylbenzene	50.0	0.0	51.1	102	
4-Chlorotoluene	50.0	0.0	50.5	101	
tert-Butylbenzene	50.0	0.0	52.2	104	
1,2,4-Trimethylbenzene	50.0	0.0	50.8	102	
sec-Butylbenzene	50.0	0.0	51.0	102	
1,3-Dichlorobenzene	50.0	0.0	47.9	96	
4-Isopropyltoluene	50.0	0.0	50.5	101	
1,4-Dichlorobenzene	50.0	0.0	47.4	95	
n-Butylbenzene	50.0	0.0	49.5	99	
1,2-Dichlorobenzene	50.0	0.0	48.1	96	
1,2-Dibromo-3-chloropropane	50.0	0.0	49.0	98	
1,2,4-Trichlorobenzene	50.0	0.0	50.1	100	
Hexachlorobutadiene	50.0	0.0	46.9	94	
Naphthalene	50.0	0.0	55.0	110	
1,2,3-Trichlorobenzene	50.0	0.0	51.0	102	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	52.9	106	
Methyl acetate	50.0	0.0	56.8	114	
Cyclohexane	50.0	0.0	56.0	112	
Methylcyclohexane	50.0	0.0	54.1	108	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150630b
Date Received: NA
Date Analyzed: 07/01/2015
LCS Data file: G4826.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
MS Data file: L8507.D
MSD Data file: L8508.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	51.1	102		49.9	100		2	
Chloromethane	50.0	0.0	45.5	91		47.0	94		3	
Vinyl chloride	50.0	0.0	45.5	91		46.9	94		3	
Bromomethane	50.0	0.0	62.8	126		60.5	121		4	
Chloroethane	50.0	0.0	46.8	94		46.8	94		0	
Trichlorofluoromethane	50.0	0.0	45.6	91		45.0	90		1	
Acrolein	150	0.0	113	75		112	75		1	
1,1-Dichloroethene	50.0	0.0	47.0	94		47.2	94		0	
Acetone	50.0	0.0	45.4	91		46.6	93		3	
Carbon disulfide	50.0	0.0	52.5	105		52.9	106		1	
Vinyl acetate	50.0	0.0	39.6	79		38.4	77		3	
Methylene chloride	50.0	0.0	45.6	91		44.4	89		3	
Acrylonitrile	150	0.0	152	101		167	111		9	
tert-Butyl alcohol (TBA)	100	0.0	77.4	77		78.8	79		2	
trans-1,2-Dichloroethene	50.0	0.0	46.1	92		45.8	92		1	
Methyl tert-butyl ether (MTBE)	50.0	0.0	46.5	93		46.5	93		0	
1,1-Dichloroethane	50.0	0.0	45.4	91		44.9	90		1	
Diisopropyl ether (DIPE)	50.0	0.0	50.6	101		50.4	101		0	
cis-1,2-Dichloroethene	50.0	0.0	49.7	99		49.1	98		1	
2,2-Dichloropropane	50.0	0.0	40.1	80		39.5	79		2	
2-Butanone (MEK)	50.0	0.0	44.5	89		44.9	90		1	
Bromochloromethane	50.0	0.0	47.8	96		47.6	95		0	
Chloroform	50.0	0.0	46.4	93		45.5	91		2	
1,1,1-Trichloroethane	50.0	0.0	46.8	94		46.4	93		1	
Carbon tetrachloride	50.0	0.0	48.6	97		48.1	96		1	
1,1-Dichloropropene	50.0	0.0	45.6	91		45.6	91		0	
1,2-Dichloroethane (EDC)	50.0	0.0	47.1	94		46.1	92		2	
Benzene	50.0	0.0	48.3	97		48.5	97		0	
Trichloroethene	50.0	0.0	51.7	103		53.1	106		3	
1,2-Dichloropropane	50.0	0.0	47.6	95		48.3	97		1	
Dibromomethane	50.0	0.0	49.4	99		49.3	99		0	
1,4-Dioxane	1,500	0.0	1221	81		1413	94		15	
Bromodichloromethane	50.0	0.0	53.4	107		53.7	107		1	
2-Chloroethyl vinyl ether	50.0	0.0	47.7	95		48.6	97		2	
cis-1,3-Dichloropropene	50.0	0.0	45.3	91		45.9	92		1	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	46.8	94		48.5	97		4	
Toluene	50.0	0.0	46.5	93		46.9	94		1	
trans-1,3-Dichloropropene	50.0	0.0	49.9	100		50.7	101		2	
1,1,2-Trichloroethane	50.0	0.0	49.0	98		49.3	99		1	
Tetrachloroethene	50.0	0.0	45.8	92		46.3	93		1	
1,3-Dichloropropane	50.0	0.0	50.9	102		51.2	102		1	

E15-05367 0203

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
MS Data file: L8507.D
MSD Data file: L8508.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	45.9	92		47.8	96		4	
Dibromochloromethane	50.0	0.0	54.7	109		55.4	111		1	
1,2-Dibromoethane (EDB)	50.0	0.0	51.4	103		51.9	104		1	
Chlorobenzene	50.0	0.0	46.0	92		46.6	93		1	
1,1,1,2-Tetrachloroethane	50.0	0.0	51.0	102		50.9	102		0	
Ethylbenzene	50.0	0.0	47.6	95		48.0	96		1	
m,p-Xylene	100	0.0	93.3	93		94.6	95		1	
o-Xylene	50.0	0.0	52.3	105		52.6	105		1	
Styrene	50.0	0.0	52.2	104		52.5	105		1	
Bromoform	50.0	0.0	48.0	96		47.6	95		1	
Isopropylbenzene	50.0	0.0	51.3	103		52.0	104		1	
1,1,2,2-Tetrachloroethane	50.0	0.0	40.5	81		39.7	79		2	
Bromobenzene	50.0	0.0	48.1	96		48.1	96		0	
1,2,3-Trichloropropane	50.0	0.0	46.7	93		46.7	93		0	
n-Propylbenzene	50.0	0.0	47.5	95		48.1	96		1	
2-Chlorotoluene	50.0	0.0	47.2	94		47.5	95		1	
1,3,5-Trimethylbenzene	50.0	0.0	49.1	98		49.4	99		1	
4-Chlorotoluene	50.0	0.0	45.8	92		45.9	92		0	
tert-Butylbenzene	50.0	0.0	47.3	95		47.6	95		1	
1,2,4-Trimethylbenzene	50.0	0.0	48.2	96		48.8	98		1	
sec-Butylbenzene	50.0	0.0	49.1	98		49.0	98		0	
1,3-Dichlorobenzene	50.0	0.0	47.1	94		47.2	94		0	
4-Isopropyltoluene	50.0	0.0	47.7	95		48.0	96		1	
1,4-Dichlorobenzene	50.0	0.0	46.1	92		46.4	93		1	
n-Butylbenzene	50.0	0.0	48.1	96		48.8	98		1	
1,2-Dichlorobenzene	50.0	0.0	47.8	96		48.2	96		1	
1,2-Dibromo-3-chloropropane	50.0	0.0	43.0	86		41.6	83		3	
1,2,4-Trichlorobenzene	50.0	0.0	47.3	95		47.9	96		1	
Hexachlorobutadiene	50.0	0.0	42.1	84		42.9	86		2	
Naphthalene	50.0	0.0	50.0	100		52.1	104		4	
1,2,3-Trichlorobenzene	50.0	0.0	49.1	98		50.5	101		3	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	44.5	89		45.1	90		1	
Methyl acetate	50.0	0.0	46.5	93		46.5	93		0	
Cyclohexane	50.0	0.0	44.4	89		44.6	89		0	
Methylcyclohexane	50.0	0.0	46.2	92		46.6	93		1	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
MS Data file: L8507.D
MSD Data file: L8508.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05367 0205

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
MS Data file: L8482.D
MSD Data file: L8483.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
Dichlorodifluoromethane	50.0	0.0	52.3	105		51.0	102	3
Chloromethane	50.0	0.0	44.3	89		43.7	87	1
Vinyl chloride	50.0	0.0	43.6	87		42.9	86	2
Bromomethane	50.0	0.0	57.7	115		56.2	112	3
Chloroethane	50.0	0.0	43.6	87		42.3	85	3
Trichlorofluoromethane	50.0	0.0	41.3	83		41.0	82	1
Acrolein	150	0.0	125	83		107	71	16
1,1-Dichloroethene	50.0	0.0	44.0	88		43.3	87	2
Acetone	50.0	0.0	41.3	83		39.7	79	4
Carbon disulfide	50.0	0.0	49.1	98		48.2	96	2
Vinyl acetate	50.0	0.0	48.5	97		45.8	92	6
Methylene chloride	50.0	0.0	40.5	81		40.1	80	1
Acrylonitrile	150	0.0	156	104		134	89	15
tert-Butyl alcohol (TBA)	100	0.0	77.4	77		72.6	73	6
trans-1,2-Dichloroethene	50.0	0.0	45.0	90		43.6	87	3
Methyl tert-butyl ether (MTBE)	50.0	0.0	46.1	92		44.2	88	4
1,1-Dichloroethane	50.0	0.0	44.4	89		42.9	86	3
Diisopropyl ether (DIPE)	50.0	0.0	49.9	100		48.4	97	3
cis-1,2-Dichloroethene	50.0	0.0	48.2	96		46.4	93	4
2,2-Dichloropropane	50.0	0.0	45.8	92		43.6	87	5
2-Butanone (MEK)	50.0	0.0	44.9	90		40.9	82	9
Bromochloromethane	50.0	0.0	45.7	91		43.9	88	4
Chloroform	50.0	0.0	43.9	88		42.6	85	3
1,1,1-Trichloroethane	50.0	0.0	45.8	92		44.7	89	2
Carbon tetrachloride	50.0	0.0	47.3	95		46.3	93	2
1,1-Dichloropropene	50.0	0.0	45.6	91		44.3	89	3
1,2-Dichloroethane (EDC)	50.0	0.0	43.7	87		41.4	83	5
Benzene	50.0	0.0	47.2	94		45.2	90	4
Trichloroethene	50.0	0.0	45.9	92		44.7	89	3
1,2-Dichloropropane	50.0	0.0	45.6	91		44.2	88	3
Dibromomethane	50.0	0.0	46.4	93		44.5	89	4
1,4-Dioxane	1,500	0.0	1484	99		1179	79	23
Bromodichloromethane	50.0	0.0	50.0	100		48.3	97	3
2-Chloroethyl vinyl ether	50.0	0.0	47.4	95		44.7	89	6
cis-1,3-Dichloropropene	50.0	0.0	45.3	91		43.3	87	5
4-Methyl-2-pentanone (MIBK)	50.0	0.0	47.1	94		44.0	88	7
Toluene	50.0	0.0	45.3	91		44.1	88	3
trans-1,3-Dichloropropene	50.0	0.0	50.3	101		48.3	97	4
1,1,2-Trichloroethane	50.0	0.0	46.4	93		44.3	89	5
Tetrachloroethene	50.0	0.0	45.6	91		44.7	89	2
1,3-Dichloropropane	50.0	0.0	48.3	97		45.8	92	5

E15-05367 0206

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
MS Data file: L8482.D
MSD Data file: L8483.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	47.1	94		43.3	87		8	
Dibromochloromethane	50.0	0.0	51.3	103		49.5	99		4	
1,2-Dibromoethane (EDB)	50.0	0.0	48.9	98		46.5	93		5	
Chlorobenzene	50.0	0.0	44.9	90		43.6	87		3	
1,1,1,2-Tetrachloroethane	50.0	0.0	48.2	96		46.9	94		3	
Ethylbenzene	50.0	0.0	47.7	95		45.7	91		4	
m,p-Xylene	100	0.0	93.0	93		90.2	90		3	
o-Xylene	50.0	0.0	51.8	104		49.8	100		4	
Styrene	50.0	0.0	51.2	102		49.7	99		3	
Bromoform	50.0	0.0	45.1	90		43.1	86		5	
Isopropylbenzene	50.0	0.0	51.2	102		49.9	100		3	
1,1,2,2-Tetrachloroethane	50.0	0.0	45.8	92		42.5	85		7	
Bromobenzene	50.0	0.0	46.6	93		45.0	90		3	
1,2,3-Trichloropropane	50.0	0.0	44.7	89		42.2	84		6	
n-Propylbenzene	50.0	0.0	48.3	97		46.7	93		3	
2-Chlorotoluene	50.0	0.0	46.7	93		44.9	90		4	
1,3,5-Trimethylbenzene	50.0	0.0	48.8	98		47.2	94		3	
4-Chlorotoluene	50.0	0.0	45.8	92		43.9	88		4	
tert-Butylbenzene	50.0	0.0	47.0	94		45.8	92		3	
1,2,4-Trimethylbenzene	50.0	0.0	48.2	96		46.8	94		3	
sec-Butylbenzene	50.0	0.0	49.2	98		47.7	95		3	
1,3-Dichlorobenzene	50.0	0.0	46.3	93		44.6	89		4	
4-Isopropyltoluene	50.0	0.0	48.1	96		47.0	94		2	
1,4-Dichlorobenzene	50.0	0.0	45.5	91		44.4	89		2	
n-Butylbenzene	50.0	0.0	50.1	100		49.2	98		2	
1,2-Dichlorobenzene	50.0	0.0	46.6	93		44.9	90		4	
1,2-Dibromo-3-chloropropane	50.0	0.0	41.4	83		39.1	78		6	
1,2,4-Trichlorobenzene	50.0	0.0	51.7	103		50.5	101		2	
Hexachlorobutadiene	50.0	0.0	43.7	87		42.7	85		2	
Naphthalene	50.0	0.0	50.3	101		48.8	98		3	
1,2,3-Trichlorobenzene	50.0	0.0	50.7	101		49.6	99		2	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	41.3	83		41.3	83		0	
Methyl acetate	50.0	0.0	44.1	88		41.2	82		7	
Cyclohexane	50.0	0.0	45.1	90		44.4	89		2	
Methylcyclohexane	50.0	0.0	46.5	93		45.7	91		2	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05367 0207

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
MS Data file: L8482.D
MSD Data file: L8483.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05367 0208

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 05549-001
Client ID: BASEMENT_SUM
Date Received: NA
Date Analyzed: 07/01/2015
MS Data file: G4827.D
MSD Data file: G4828.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	40.4	81		40.2	80		0	
Chloromethane	50.0	0.0	39.8	80		41.8	84		5	
Vinyl chloride	50.0	0.0	42.1	84		44.9	90		6	
Bromomethane	50.0	0.0	49.6	99		51.1	102		3	
Chloroethane	50.0	0.0	49.6	99		50.7	101		2	
Trichlorofluoromethane	50.0	0.0	39.0	78		36.2	72		7	
Acrolein	150	0.0	136	91		159	106		16	
1,1-Dichloroethene	50.0	0.0	45.9	92		48.0	96		4	
Acetone	50.0	0.0	52.6	105		54.5	109		4	
Carbon disulfide	50.0	0.0	44.0	88		47.7	95		8	
Vinyl acetate	50.0	0.0	43.6	87		36.5	73		18	
Methylene chloride	50.0	0.0	50.2	100		51.6	103		3	
Acrylonitrile	150	0.0	149	99		151	101		1	
tert-Butyl alcohol (TBA)	100	0.0	94.8	95		96.5	97		2	
trans-1,2-Dichloroethene	50.0	0.0	48.9	98		50.7	101		4	
Methyl tert-butyl ether (MTBE)	50.0	0.0	51.9	104		53.2	106		2	
1,1-Dichloroethane	50.0	0.0	51.0	102		51.7	103		1	
Diisopropyl ether (DIPE)	50.0	0.0	53.0	106		54.1	108		2	
cis-1,2-Dichloroethene	50.0	0.0	50.7	101		51.3	103		1	
2,2-Dichloropropane	50.0	0.0	39.3	79		41.4	83		5	
2-Butanone (MEK)	50.0	0.0	50.3	101		49.0	98		3	
Bromochloromethane	50.0	0.0	50.9	102		51.4	103		1	
Chloroform	50.0	0.0	50.7	101		51.4	103		1	
1,1,1-Trichloroethane	50.0	0.0	48.1	96		51.1	102		6	
Carbon tetrachloride	50.0	0.0	45.6	91		48.6	97		6	
1,1-Dichloropropene	50.0	0.0	46.5	93		48.3	97		4	
1,2-Dichloroethane (EDC)	50.0	0.0	51.2	102		50.8	102		1	
Benzene	50.0	0.0	51.1	102		50.0	100		2	
Trichloroethene	50.0	0.0	55.1	110		55.1	110		0	
1,2-Dichloropropane	50.0	0.0	51.7	103		50.3	101		3	
Dibromomethane	50.0	0.0	51.7	103		50.6	101		2	
1,4-Dioxane	1,500	0.0	1208	81		1151	77		5	
Bromodichloromethane	50.0	0.0	49.8	100		48.6	97		2	
2-Chloroethyl vinyl ether	50.0	0.0	0.0	0	*$	0.0	0	*$	NC	*$
cis-1,3-Dichloropropene	50.0	0.0	43.9	88		43.0	86		2	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	53.7	107		52.2	104		3	
Toluene	50.0	0.0	49.6	99		48.2	96		3	
trans-1,3-Dichloropropene	50.0	0.0	42.7	85		41.4	83		3	
1,1,2-Trichloroethane	50.0	0.0	49.9	100		47.7	95		5	
Tetrachloroethene	50.0	0.0	45.6	91		45.4	91		0	
1,3-Dichloropropane	50.0	0.0	50.7	101		47.3	95		7	

E15-05367 0209

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05549-001
Client ID: BASEMENT_SUM
Date Received: NA
Date Analyzed: 07/01/2015
MS Data file: G4827.D
MSD Data file: G4828.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	51.6	103		48.9	98		5	
Dibromochloromethane	50.0	0.0	46.4	93		44.9	90		3	
1,2-Dibromoethane (EDB)	50.0	0.0	50.8	102		47.8	96		6	
Chlorobenzene	50.0	0.0	50.3	101		50.2	100		0	
1,1,1,2-Tetrachloroethane	50.0	0.0	51.0	102		50.4	101		1	
Ethylbenzene	50.0	0.0	49.2	98		49.1	98		0	
m,p-Xylene	100	0.5	100.6	100		101.1	101		0	
o-Xylene	50.0	0.0	50.4	101		50.8	102		1	
Styrene	50.0	0.0	50.9	102		50.3	101		1	
Bromoform	50.0	0.0	41.2	82		40.0	80		3	
Isopropylbenzene	50.0	0.0	50.7	101		51.8	104		2	
1,1,2,2-Tetrachloroethane	50.0	0.0	42.8	86		41.8	84		2	
Bromobenzene	50.0	0.0	49.3	99		48.6	97		1	
1,2,3-Trichloropropane	50.0	0.0	49.5	99		48.2	96		3	
n-Propylbenzene	50.0	0.0	47.4	95		48.1	96		1	
2-Chlorotoluene	50.0	0.0	49.3	99		49.8	100		1	
1,3,5-Trimethylbenzene	50.0	0.0	49.7	99		50.0	100		1	
4-Chlorotoluene	50.0	0.0	49.3	99		49.8	100		1	
tert-Butylbenzene	50.0	0.0	49.5	99		50.0	100		1	
1,2,4-Trimethylbenzene	50.0	0.0	49.9	100		49.7	99		0	
sec-Butylbenzene	50.0	0.0	47.8	96		49.0	98		2	
1,3-Dichlorobenzene	50.0	0.0	47.7	95		47.3	95		1	
4-Isopropyltoluene	50.0	0.0	47.5	95		48.2	96		1	
1,4-Dichlorobenzene	50.0	0.0	47.3	95		46.7	93		1	
n-Butylbenzene	50.0	0.0	45.8	92		46.5	93		2	
1,2-Dichlorobenzene	50.0	0.0	48.2	96		48.0	96		0	
1,2-Dibromo-3-chloropropane	50.0	0.0	49.6	99		47.9	96		3	
1,2,4-Trichlorobenzene	50.0	0.0	49.7	99		49.8	100		0	
Hexachlorobutadiene	50.0	0.0	43.5	87		46.7	93		7	
Naphthalene	50.0	0.0	54.9	110		54.7	109		0	
1,2,3-Trichlorobenzene	50.0	0.0	51.6	103		51.5	103		0	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	38.0	76		38.1	76		0	
Methyl acetate	50.0	0.0	56.7	113		57.8	116		2	
Cyclohexane	50.0	0.0	41.1	82		39.3	79		4	
Methylcyclohexane	50.0	0.0	38.9	78		37.4	75		4	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05367 0210

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05549-001
Client ID: BASEMENT_SUM
Date Received: NA
Date Analyzed: 07/01/2015
MS Data file: G4827.D
MSD Data file: G4828.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: G4807.D

Instrument ID: MSD_G

Date Analyzed: 06/30/2015

Time Analyzed: 21:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
BASEMENT_SUM	05549-001	06/30/2015	22:11
FB_062515	05556-022	06/30/2015	22:39
FB062615	05557-018	06/30/2015	23:07
FB-062215	05367-040	06/30/2015	23:36
TB-062315	05367-044	07/01/2015	0:04
MW-1_TRIP	05394-002	07/01/2015	0:32
MW-1	05394-001	07/01/2015	1:00
FIELD_BLANK	05396-003	07/01/2015	1:28
TB	05396-004	07/01/2015	1:56
MW-1	05396-001	07/01/2015	2:24
MW-2	05396-002	07/01/2015	2:52
MW-1	05407-001	07/01/2015	3:20
MW-1/9.7	05426-001	07/01/2015	3:48
RW-3	05348-003	07/01/2015	4:16
MW-7	05348-005	07/01/2015	4:44
RW-1	05348-001	07/01/2015	5:12
RW-2	05348-002	07/01/2015	5:40
RW-4	05348-004	07/01/2015	6:08
LCSA150630b	LCSA150630b	07/01/2015	6:36
5549-001MS	5549-01MS	07/01/2015	7:05
5549-001MSD	5549-001MSD	07/01/2015	7:33

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L8506.D

Instrument ID: MSD_L

Date Analyzed: 07/01/2015

Time Analyzed: 02:31

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCS-50PPB	LCSS150630-02	07/01/2015	3:01
LCSD-50PPB	LCSDS150630-02	07/01/2015	3:31
PZ-1_(0.5-1.0)	05367-031	07/01/2015	4:31
PZ-1_(2.0-2.5)	05367-032	07/01/2015	5:01
PZ-1_(2.5-3.0)	05367-033	07/01/2015	5:31
PZ-1_(4.5-5.0)	05367-034	07/01/2015	6:00
E-5_(0.5-1.0)/	05367-035	07/01/2015	6:30
E-5_(3.0-3.5)/	05367-036	07/01/2015	6:59
E-5_(2.0-2.5)/	05367-037	07/01/2015	7:29
E-5_(4.5-5.0)/	05367-038	07/01/2015	7:58
E-6_(0.5-1.0)/	05367-039	07/01/2015	8:28
E-6_(2.0-2.5)/	05367-041	07/01/2015	8:58
E-6_(3.0-3.5)/	05367-042	07/01/2015	9:28
E-6_(4.0-4.5)/	05367-043	07/01/2015	9:58
E-4_(4.5-5.0)/	05367-010	07/01/2015	10:28
15-109	05589-001	07/01/2015	11:28

VOLATILE METHOD BLANK SUMMARY

Lab File ID: L8481.D

Instrument ID: MSD_L

Date Analyzed: 06/30/2015

Time Analyzed: 14:05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCS-50PPB	LCSS150630-01	06/30/2015	14:35
LCSD-50PPB	LCSDS150630-01	06/30/2015	15:04
SB-222	05166-030	06/30/2015	16:04
SS-4/6-6.5	05183-004DUP	06/30/2015	16:34
E-3_(3.0-3.5)/	05367-001	06/30/2015	17:04
E-3_(0.5-1.0)/	05367-002	06/30/2015	17:34
E-3_(2.0-2.5)/	05367-003	06/30/2015	18:03
E-3_(4.5-5.0)/	05367-004	06/30/2015	18:33
E-4_(0.5-1.0)/	05367-007	06/30/2015	19:03
E-4_(2.0-2.5)/	05367-008	06/30/2015	19:32
E-4_(3.0-3.5)/	05367-009	06/30/2015	20:02
E-16_(0.5-1.0)	05367-017	06/30/2015	21:02
E-16_(2.0-2.5)	05367-018	06/30/2015	21:31
PZ-2_(0.5-1.0)	05367-019	06/30/2015	22:01
PZ-2_(2.0-2.5)	05367-020	06/30/2015	22:31
PZ-2_(4.0-4.5)	05367-021	06/30/2015	23:01
PZ-2_(6.0-6.5)	05367-022	06/30/2015	23:31
X-1_(4.5-5.0)/	05367-023	07/01/2015	0:01

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G4728.D

Inst ID: MSD_G

BFB Injection Date: 06/29/2015

BFB Injection Time: 9:11

m/z	Ion Abudance Criteria	%Relative Abundance
50	15 - 40.0% of mass 95	22.4
75	30.0 - 60.0% of mass 95	49.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Great than 50.0% of mass 95	67.5
175	5.0 - 9.0% of mass 174	5.1 (7.5)1
176	95.0 - 101.0% of mass 174	64.3 (95.3)1
177	5.0 - 9.0% of mass 176	4.2 (6.6)2
	1-Value is % mass 174	2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC100	ICC100	G4733.D	06/29/2015	11:33
ICC001	ICC001	G4729.D	06/29/2015	9:40
ICC002	ICC002	G4730.D	06/29/2015	10:08
ICC005	ICC005	G4731.D	06/29/2015	10:37
ICC020	ICC020	G4732.D	06/29/2015	11:05
ICC150	ICC150	G4734.D	06/29/2015	12:02
ICC200	ICC200	G4735.D	06/29/2015	12:30
ICV100	ICV100	G4737.D	06/29/2015	13:26
BLKA150629a	BLKA150629a	G4739.D	06/29/2015	14:22
MW-2	05262-4DL	G4740.D	06/29/2015	14:50
MW-6	05262-6DL	G4741.D	06/29/2015	15:19
MW-4	05262-7DL	G4742.D	06/29/2015	15:47
MW-1	05341-1DL	G4743.D	06/29/2015	16:15
TW-2/13.75	05466-001	G4744.D	06/29/2015	16:43
TW-3/13.30	05466-002	G4745.D	06/29/2015	17:12
TWP-1	05199-010	G4746.D	06/29/2015	17:40
TWP-2	05199-011	G4747.D	06/29/2015	18:08
TWP-3	05199-012	G4748.D	06/29/2015	18:36
LCSA150629a	LCSA150629a	G4750.D	06/29/2015	19:04
5466-002MS	5466-002MS	G4751.D	06/29/2015	19:32

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G4728.D

Inst ID: MSD_G

BFB Injection Date : 06/29/201

BFB Injection Time: 9:11

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.4			
75	30.0 - 60.0% of mass 95	49.3			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	67.5			
175	5.0 - 9.0% of mass 174	5.1	(	7.5	)1
176	95.0 - 101.0% of mass 174	64.3	(	95.3	)1
177	5.0 - 9.0% of mass 176	4.2	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
5466-002MSD	5466-002MSD	G4752.D	06/29/2015	20:00

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G4804.D

Inst ID: MSD_G

BFB Injection Date: 06/30/2015

BFB Injection Time: 20:19

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	21.3			
75	30.0 - 60.0% of mass 95	47.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	67.4			
175	5.0 - 9.0% of mass 174	5.3	(	7.8	)1
176	95.0 - 101.0% of mass 174	66.0	(	97.9	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	G4805.D	06/30/2015	20:47
BLKA150630b	BLKA150630b	G4807.D	06/30/2015	21:43
BASEMENT_SUM	05549-001	G4808.D	06/30/2015	22:11
FB_062515	05556-022	G4809.D	06/30/2015	22:39
FB062615	05557-018	G4810.D	06/30/2015	23:07
FB-062215	05367-040	G4811.D	06/30/2015	23:36
TB-062315	05367-044	G4812.D	07/01/2015	0:04
MW-1_TRIP	05394-002	G4813.D	07/01/2015	0:32
MW-1	05394-001	G4814.D	07/01/2015	1:00
FIELD_BLANK	05396-003	G4815.D	07/01/2015	1:28
TB	05396-004	G4816.D	07/01/2015	1:56
MW-1	05396-001	G4817.D	07/01/2015	2:24
MW-2	05396-002	G4818.D	07/01/2015	2:52
MW-1	05407-001	G4819.D	07/01/2015	3:20
MW-1/9.7	05426-001	G4820.D	07/01/2015	3:48
RW-3	05348-003	G4821.D	07/01/2015	4:16
MW-7	05348-005	G4822.D	07/01/2015	4:44
RW-1	05348-001	G4823.D	07/01/2015	5:12
RW-2	05348-002	G4824.D	07/01/2015	5:40
RW-4	05348-004	G4825.D	07/01/2015	6:08

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: G4804.D

BFB Injection Date : 06/30/201

Inst ID: MSD_G

BFB Injection Time: 20:19

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	21.3			
75	30.0 - 60.0% of mass 95	47.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	67.4			
175	5.0 - 9.0% of mass 174	5.3	(	7.8	)1
176	95.0 - 101.0% of mass 174	66.0	(	97.9	)1
177	5.0 - 9.0% of mass 176	4.4	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
LCSA150630b	LCSA150630b	G4826.D	07/01/2015	6:36
5549-001MS	5549-01MS	G4827.D	07/01/2015	7:05
5549-001MSD	5549-001MSD	G4828.D	07/01/2015	7:33

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L8415.D

Inst ID: MSD_L

BFB Injection Date: 06/26/2015

BFB Injection Time: 12:52

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.2			
75	30.0 - 60.0% of mass 95	46.1			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	85.8			
175	5.0 - 9.0% of mass 174	6.2	(	7.2	)1
176	95.0 - 101.0% of mass 174	83.3	(	97.1	)1
177	5.0 - 9.0% of mass 176	5.4	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	L8417.D	06/26/2015	14:56
ICC1	ICC1	L8418.D	06/26/2015	15:33
ICC5	ICC5	L8420.D	06/26/2015	16:40
ICC20	ICC20	L8421.D	06/26/2015	17:09
ICC100	ICC100	L8422.D	06/26/2015	17:39
ICC200	ICC200	L8423.D	06/26/2015	18:09
ICC150	ICC150	L8424.D	06/26/2015	18:39
ICV100	ICV100	L8427.D	06/26/2015	20:08

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L8502.D

Inst ID: MSD_L

BFB Injection Date: 07/01/2015

BFB Injection Time: 0:31

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.5			
75	30.0 - 60.0% of mass 95	47.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.9			
173	Less than 2.0% of mass 174	0.3	(	0.4	)1
174	Great than 50.0% of mass 95	84.1			
175	5.0 - 9.0% of mass 174	6.1	(	7.3	)1
176	95.0 - 101.0% of mass 174	82.0	(	97.5	)1
177	5.0 - 9.0% of mass 176	5.3	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L8504.D	07/01/2015	1:31
BLKS15063002	BLKS150630-02	L8506.D	07/01/2015	2:31
LCS-50PPB	LCSS150630-02	L8507.D	07/01/2015	3:01
LCSD-50PPB	LCSDS150630-02	L8508.D	07/01/2015	3:31
PZ-1_(0.5-1.0)	05367-031	L8510.D	07/01/2015	4:31
PZ-1_(2.0-2.5)	05367-032	L8511.D	07/01/2015	5:01
PZ-1_(2.5-3.0)	05367-033	L8512.D	07/01/2015	5:31
PZ-1_(4.5-5.0)	05367-034	L8513.D	07/01/2015	6:00
E-5_(0.5-1.0)/	05367-035	L8514.D	07/01/2015	6:30
E-5_(3.0-3.5)/	05367-036	L8515.D	07/01/2015	6:59
E-5_(2.0-2.5)/	05367-037	L8516.D	07/01/2015	7:29
E-5_(4.5-5.0)/	05367-038	L8517.D	07/01/2015	7:58
E-6_(0.5-1.0)/	05367-039	L8518.D	07/01/2015	8:28
E-6_(2.0-2.5)/	05367-041	L8519.D	07/01/2015	8:58
E-6_(3.0-3.5)/	05367-042	L8520.D	07/01/2015	9:28
E-6_(4.0-4.5)/	05367-043	L8521.D	07/01/2015	9:58
E-4_(4.5-5.0)/	05367-010	L8522.D	07/01/2015	10:28
15-109	05589-001	L8524.D	07/01/2015	11:28

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: L8478.D

Inst ID: MSD_L

BFB Injection Date: 06/30/2015

BFB Injection Time: 12:36

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	15.6			
75	30.0 - 60.0% of mass 95	47.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.9			
173	Less than 2.0% of mass 174	0.4	(	0.5	)1
174	Great than 50.0% of mass 95	77.1			
175	5.0 - 9.0% of mass 174	5.5	(	7.1	)1
176	95.0 - 101.0% of mass 174	73.8	(	95.7	)1
177	5.0 - 9.0% of mass 176	5.0	(	6.8	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	L8479.D	06/30/2015	13:06
BLKS150630-01	BLKS150630-01	L8481.D	06/30/2015	14:05
LCS-50PPB	LCSS150630-01	L8482.D	06/30/2015	14:35
LCSD-50PPB	LCSDS150630-01	L8483.D	06/30/2015	15:04
SB-222	05166-030	L8485.D	06/30/2015	16:04
SS-4/6-6.5	05183-004DUP	L8486.D	06/30/2015	16:34
E-3_(3.0-3.5)/	05367-001	L8487.D	06/30/2015	17:04
E-3_(0.5-1.0)/	05367-002	L8488.D	06/30/2015	17:34
E-3_(2.0-2.5)/	05367-003	L8489.D	06/30/2015	18:03
E-3_(4.5-5.0)/	05367-004	L8490.D	06/30/2015	18:33
E-4_(0.5-1.0)/	05367-007	L8491.D	06/30/2015	19:03
E-4_(2.0-2.5)/	05367-008	L8492.D	06/30/2015	19:32
E-4_(3.0-3.5)/	05367-009	L8493.D	06/30/2015	20:02
E-16_(0.5-1.0)	05367-017	L8495.D	06/30/2015	21:02
E-16_(2.0-2.5)	05367-018	L8496.D	06/30/2015	21:31
PZ-2_(0.5-1.0)	05367-019	L8497.D	06/30/2015	22:01
PZ-2_(2.0-2.5)	05367-020	L8498.D	06/30/2015	22:31
PZ-2_(4.0-4.5)	05367-021	L8499.D	06/30/2015	23:01
PZ-2_(6.0-6.5)	05367-022	L8500.D	06/30/2015	23:31
X-1_(4.5-5.0)/	05367-023	L8501.D	07/01/2015	0:01

Response Factor Report MSD_G

Method Path : C:\MSDCHEM\1\METHODS\
Method File : G8062915.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Mon Jun 29 14:17:01 2015
Response Via : Initial Calibration

Calibration Files
1 =G4729.D 2 =G4730.D 5 =G4731.D
20 =G4732.D 100 =G4733.D 150 =G4734.D 200 =G4735.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
						ISTD					
1)	I	Pentafluorobenzene									
2)	T	Dichlorodifluorom	0.392	0.536	0.534	0.535	0.453	0.434	0.402	0.469	13.77
3)	P	Chloromethane	0.708	0.799	0.831	0.786	0.752	0.759	0.746	0.769	5.22
4)	C	Vinyl chloride	0.575	0.678	0.697	0.710	0.618	0.623	0.595	0.642	8.16
5)	T	Bromomethane	0.236	0.300	0.296	0.307	0.259	0.275	0.242	0.274	10.49
6)	T	Chloroethane	0.309	0.346	0.359	0.367	0.324	0.340	0.339	0.341	5.81
7)	T	Trichlorofluorome	0.257	0.349	0.389	0.468	0.452	0.466	0.458	0.406	19.59
8)	T	Acrolein	0.134	0.127	0.119	0.134	0.129	0.129	0.128	0.129	4.06
9)	MC	1,1-Dichloroethen	0.382	0.441	0.435	0.451	0.394	0.408	0.406	0.417	6.21
10)	T	Acetone			0.309	0.272	0.248	0.241	0.239	0.262	11.25
11)	T	Carbon disulfide	1.018	1.195	1.111	1.131	1.080	1.097	1.064	1.099	5.04
12)	T	Vinyl acetate	1.935	2.328	2.321	2.623	2.535	2.624	2.518	2.412	10.14
13)	T	Methylene chlorid		0.468	0.684	0.626	0.597	0.616	0.599	0.598	11.94
14)	T	Acrylonitrile	0.318	0.305	0.304	0.333	0.315	0.323	0.314	0.316	3.17
15)	T	tert-Butyl alcoho		0.093	0.076	0.079	0.078	0.074	0.076	0.079	8.45
16)	T	trans-1,2-Dichlor	0.459	0.533	0.540	0.559	0.522	0.531	0.516	0.523	5.99
17)	T	Methyl tert-butyl	1.415	1.740	1.750	1.763	1.741	1.782	1.749	1.706	7.57
18)	P	1,1-Dichloroethan	0.918	1.084	1.102	1.116	1.069	1.103	1.077	1.067	6.33
19)	T	Diisopropyl ether	1.798	2.243	2.298	2.393	2.316	2.395	2.319	2.252	9.19
20)	T	cis-1,2-Dichloroe	0.494	0.591	0.606	0.617	0.590	0.609	0.592	0.585	7.12
21)	T	2,2-Dichloropropa	0.326	0.403	0.404	0.409	0.402	0.361	0.333	0.377	9.57
22)	T	2-Butanone (MEK)	0.379	0.377	0.355	0.381	0.362	0.367	0.367	0.369	2.59
23)	T	Bromochloromethan	0.218	0.281	0.277	0.283	0.269	0.278	0.270	0.268	8.43
24)	T	Tetrahydrofuran								0.000	-1.00
25)	C	Chloroform	0.826	0.946	0.972	0.993	0.936	0.974	0.949	0.942	5.82
26)	T	1,1,1-Trichloroet	0.581	0.710	0.707	0.734	0.683	0.702	0.677	0.685	7.21
27)	T	Carbon tetrachlor	0.540	0.607	0.621	0.645	0.583	0.618	0.587	0.600	5.67
28)	T	1,1-Dichloroprope	0.621	0.764	0.742	0.749	0.668	0.704	0.676	0.703	7.36
29)	T	1,2-Dichloroethan	0.706	0.852	0.820	0.833	0.797	0.830	0.806	0.806	5.90
30)	S	1,2-Dichloroethan	0.641	0.659	0.640	0.636	0.634	0.639	0.641	0.641	1.26
						ISTD					
31)	I	1,4-Difluorobenzene									
32)	M	Benzene	1.174	1.378	1.438	1.466	1.372	1.415	1.379	1.375	6.93
33)	M	Trichloroethene	0.292	0.344	0.340	0.347	0.322	0.335	0.329	0.330	5.70
34)	C	1,2-Dichloropropa	0.340	0.398	0.401	0.418	0.388	0.411	0.404	0.394	6.48
35)	T	Dibromomethane	0.177	0.221	0.215	0.222	0.212	0.222	0.220	0.213	7.52
36)	T	1,4-Dioxane	0.004	0.004	0.003	0.003	0.003	0.003	0.004	0.003	14.96
37)	T	Bromodichlorometh	0.405	0.427	0.439	0.460	0.444	0.470	0.469	0.445	5.36
38)	T	2-Chloroethyl vin	0.141	0.104	0.122	0.129	0.166	0.179	0.168	0.144	19.21
39)	T	cis-1,3-Dichlorop	0.389	0.463	0.487	0.555	0.556	0.601	0.593	0.521	14.83
40)	T	4-Methyl-2-pentan	0.399	0.454	0.431	0.468	0.458	0.457	0.464	0.447	5.45
41)	S	Toluene-d8	1.206	1.214	1.211	1.194	1.192	1.214	1.210	1.206	0.76
42)	MC	Toluene	0.718	0.855	0.870	0.895	0.833	0.873	0.847	0.841	6.88
43)	T	trans-1,3-Dichlor	0.350	0.397	0.426	0.501	0.508	0.552	0.545	0.469	16.65
44)	T	1,1,2-Trichloroet	0.249	0.281	0.274	0.282	0.266	0.280	0.276	0.273	4.30
45)	T	Tetrachloroethene	0.268	0.320	0.317	0.317	0.281	0.294	0.281	0.297	7.09
46)	T	1,3-Dichloropropa	0.489	0.581	0.555	0.578	0.549	0.578	0.568	0.557	5.79
47)	T	2-Hexanone	0.305	0.339	0.303	0.344	0.335	0.342	0.355	0.332	6.05
48)	T	Dibromochlorometh	0.260	0.294	0.302	0.323	0.319	0.345	0.342	0.312	9.47
49)	T	1,2-Dibromoethane	0.254	0.315	0.316	0.326	0.313	0.331	0.327	0.312	8.44
						ISTD					
50)	I	Chlorobenzene-d5									
51)	MP	Chlorobenzene	0.903	1.024	1.013	1.045	0.969	1.007	0.981	0.992	4.72
52)	T	1,1,1,2-Tetrachlo	0.284	0.327	0.330	0.339	0.337	0.349	0.343	0.330	6.49
53)	C	Ethylbenzene	1.494	1.679	1.717	1.805	1.673	1.748	1.698	1.688	5.73

Response Factor Report MSD_G

Method Path : C:\MSDCHEM\1\METHODS\
Method File : G8062915.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Mon Jun 29 14:17:01 2015
Response Via : Initial Calibration

Calibration Files
1 =G4729.D 2 =G4730.D 5 =G4731.D
20 =G4732.D 100 =G4733.D 150 =G4734.D 200 =G4735.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
54)	T	m,p-Xylene	0.566	0.651	0.656	0.707	0.645	0.662	0.634	0.646	6.52
55)	T	o-Xylene		0.649	0.649	0.708	0.652	0.667	0.641	0.661	3.72
56)	T	Styrene	0.908	1.057	1.094	1.216	1.123	1.173	1.128	1.100	9.00
57)	P	Bromoform	0.157	0.180	0.174	0.201	0.206	0.225	0.226	0.196	13.41
58)	T	Isopropylbenzene	1.280	1.528	1.575	1.730	1.603	1.646	1.584	1.564	8.97
59)	S	Bromofluorobenzen	0.548	0.543	0.537	0.551	0.542	0.549	0.548	0.545	0.91
60)	P	1,1,2,2-Tetrachlo	0.492	0.533	0.484	0.499	0.484	0.492	0.488	0.496	3.47
61)	T	Bromobenzene	0.382	0.425	0.415	0.432	0.402	0.419	0.407	0.412	4.02
62)	T	1,2,3-Trichloropr	0.463	0.482	0.459	0.454	0.429	0.440	0.437	0.452	4.01
63)	T	n-Propylbenzene	1.845	2.076	2.010	2.143	1.945	2.026	1.938	1.997	4.91
64)	T	2-Chlorotoluene	1.113	1.299	1.263	1.324	1.232	1.289	1.239	1.251	5.53
65)	T	1,3,5-Trimethylbe	1.192	1.385	1.396	1.504	1.383	1.419	1.344	1.374	6.87
66)	T	4-Chlorotoluene	1.113	1.299	1.263	1.324	1.232	1.289	1.239	1.251	5.53
67)	T	tert-Butylbenzene	0.897	1.061	1.088	1.211	1.092	1.122	1.068	1.077	8.72
68)	T	1,2,4-Trimethylbe	1.176	1.370	1.400	1.496	1.383	1.433	1.370	1.375	7.17
69)	T	sec-Butylbenzene	1.334	1.598	1.612	1.768	1.581	1.631	1.537	1.580	8.22
70)	T	1,3-Dichlorobenze	0.729	0.850	0.795	0.822	0.751	0.791	0.759	0.785	5.37
71)	T	4-Isopropyltoluen	1.053	1.245	1.303	1.390	1.259	1.302	1.220	1.253	8.29
72)	T	1,4-Dichlorobenze	0.761	0.841	0.789	0.819	0.747	0.788	0.755	0.786	4.44
73)	T	n-Butylbenzene	1.070	1.182	1.226	1.340	1.207	1.230	1.159	1.202	6.81
74)	T	1,2-Dichlorobenze	0.736	0.825	0.775	0.799	0.723	0.740	0.716	0.759	5.43
75)	T	1,2-Dibromo-3-chl	0.080	0.093	0.075	0.085	0.084	0.085	0.087	0.084	6.64
76)	T	1,2,4-Trichlorobe	0.446	0.478	0.468	0.495	0.465	0.476	0.447	0.468	3.70
77)	T	Hexachlorobutadie	0.143	0.168	0.161	0.160	0.142	0.147	0.135	0.151	8.02
78)	T	Naphthalene	1.129	1.231	1.197	1.294	1.294	1.284	1.246	1.239	4.89
79)	T	1,2,3-Trichlorobe	0.397	0.433	0.419	0.423	0.411	0.412	0.393	0.412	3.44
80)	T	1,1,2-Trichloro-1	0.198	0.226	0.235	0.242	0.206	0.197	0.187	0.213	9.98
81)	T	Methyl acetate	0.344	0.446	0.435	0.448	0.431	0.422	0.422	0.421	8.47
82)	T	Cyclohexane		0.671	0.668	0.712	0.629	0.624	0.589	0.649	6.70
83)	T	Methylcyclohexane	0.423	0.481	0.498	0.547	0.470	0.469	0.434	0.475	8.67
84)		Pentane								0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-29-15\
Data File : G4737.D
Acq On : 29 Jun 2015 13:26
Operator : Sylvia
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 29 14:21:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	0.469	0.412	12.2	90	-0.01
3	P	Chloromethane	0.769	0.682	11.3	89	0.00
4	C	Vinyl chloride	0.642	0.556	13.4	89	0.00
5	T	Bromomethane	0.274	0.258	5.8	98	-0.02
6	T	Chloroethane	0.341	0.304	10.9	93	-0.02
7	T	Trichlorofluoromethane	0.406	0.411	-1.2	90	0.02
8	T	Acrolein	0.129	0.121	6.2	93	0.00
9	MC	1,1-Dichloroethene	0.417	0.362	13.2	91	-0.01
10	T	Acetone	0.262	0.246	6.1	98	0.00
11	T	Carbon disulfide	1.099	0.971	11.6	89	-0.04
12	T	Vinyl acetate	2.412	2.397	0.6	93	0.00
13	T	Methylene chloride	0.598	0.573	4.2	95	-0.01
14	T	Acrylonitrile	0.316	0.311	1.6	97	0.00
15	T	tert-Butyl alcohol (TBA)	0.079	0.076	3.8	96	0.00
16	T	trans-1,2-Dichloroethene	0.523	0.475	9.2	90	0.00
17	T	Methyl tert-butyl ether (MT	1.706	1.716	-0.6	97	-0.02
18	P	1,1-Dichloroethane	1.067	0.991	7.1	91	0.00
19	T	Diisopropyl ether (DIPE)	2.252	2.222	1.3	95	0.00
20	T	cis-1,2-Dichloroethene	0.585	0.553	5.5	93	-0.01
21	T	2,2-Dichloropropane	0.377	0.329	12.7	81	0.00
22	T	2-Butanone (MEK)	0.369	0.358	3.0	97	-0.01
23	T	Bromochloromethane	0.268	0.259	3.4	95	0.00
24	T	Tetrahydrofuran	0.000	0.000	0.0	89	0.00
25	C	Chloroform	0.942	0.878	6.8	93	0.00
26	T	1,1,1-Trichloroethane	0.685	0.623	9.1	90	0.00
27	T	Carbon tetrachloride	0.600	0.540	10.0	91	0.00
28	T	1,1-Dichloropropene	0.703	0.615	12.5	91	0.00
29	T	1,2-Dichloroethane (EDC)	0.806	0.780	3.2	97	0.00
30	S	1,2-Dichloroethane-d4	0.641	0.637	0.6	99	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
32	M	Benzene	1.375	1.279	7.0	92	-0.01
33	M	Trichloroethene	0.330	0.300	9.1	92	0.01
34	C	1,2-Dichloropropane	0.394	0.376	4.6	96	0.00
35	T	Dibromomethane	0.213	0.210	1.4	98	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	104	0.00
37	T	Bromodichloromethane	0.445	0.428	3.8	95	0.00
38	T	2-Chloroethyl vinyl ether	0.144	0.166	-15.3	99	-0.01
39	T	cis-1,3-Dichloropropene	0.521	0.543	-4.2	97	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.447	0.450	-0.7	97	0.00
41	S	Toluene-d8	1.206	1.211	-0.4	100	0.00
42	MC	Toluene	0.841	0.781	7.1	93	0.00
43	T	trans-1,3-Dichloropropene	0.469	0.502	-7.0	98	0.00
44	T	1,1,2-Trichloroethane	0.273	0.265	2.9	99	0.00
45	T	Tetrachloroethene	0.297	0.260	12.5	91	0.00
46	T	1,3-Dichloropropane	0.557	0.546	2.0	98	0.00
47	T	2-Hexanone	0.332	0.333	-0.3	98	0.00

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-29-15\
Data File : G4737.D
Acq On : 29 Jun 2015 13:26
Operator : Sylvia
Sample : ICV100,ICV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 29 14:21:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
48	T	Dibromochloromethane	0.312	0.316	-1.3	98	0.00
49	T	1,2-Dibromoethane (EDB)	0.312	0.315	-1.0	99	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	100	0.00
51	MP	Chlorobenzene	0.992	0.916	7.7	95	0.00
52	T	1,1,1,2-Tetrachloroethane	0.330	0.319	3.3	95	0.00
53	C	Ethylbenzene	1.688	1.562	7.5	93	0.00
54	T	m,p-Xylene	0.646	0.599	7.3	93	0.00
55	T	o-Xylene	0.661	0.611	7.6	94	0.00
56	T	Styrene	1.100	1.074	2.4	96	0.00
57	P	Bromoform	0.196	0.203	-3.6	98	0.00
58	T	Isopropylbenzene	1.564	1.468	6.1	92	0.00
59	S	Bromofluorobenzene	0.545	0.547	-0.4	101	0.00
60	P	1,1,2,2-Tetrachloroethane	0.496	0.472	4.8	97	0.00
61	T	Bromobenzene	0.412	0.385	6.6	96	0.00
62	T	1,2,3-Trichloropropane	0.452	0.424	6.2	99	0.00
63	T	n-Propylbenzene	1.997	1.803	9.7	93	0.00
64	T	2-Chlorotoluene	1.251	1.154	7.8	94	0.00
65	T	1,3,5-Trimethylbenzene	1.374	1.289	6.2	93	0.00
66	T	4-Chlorotoluene	1.251	1.154	7.8	94	0.00
67	T	tert-Butylbenzene	1.077	1.018	5.5	93	0.00
68	T	1,2,4-Trimethylbenzene	1.375	1.297	5.7	94	0.00
69	T	sec-Butylbenzene	1.580	1.463	7.4	92	0.00
70	T	1,3-Dichlorobenzene	0.785	0.713	9.2	95	0.00
71	T	4-Isopropyltoluene	1.253	1.169	6.7	93	0.00
72	T	1,4-Dichlorobenzene	0.786	0.719	8.5	96	0.00
73	T	n-Butylbenzene	1.202	1.106	8.0	92	0.00
74	T	1,2-Dichlorobenzene	0.759	0.694	8.6	96	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.082	2.4	97	0.00
76	T	1,2,4-Trichlorobenzene	0.468	0.441	5.8	95	0.00
77	T	Hexachlorobutadiene	0.151	0.132	12.6	93	0.00
78	T	Naphthalene	1.239	1.237	0.2	96	0.00
79	T	1,2,3-Trichlorobenzene	0.412	0.390	5.3	95	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.213	0.186	12.7	90	0.00
81	T	Methyl acetate	0.421	0.422	-0.2	98	-0.01
82	T	Cyclohexane	0.649	0.566	12.8	90	0.00
83	T	Methylcyclohexane	0.475	0.428	9.9	91	0.00
84		Pentane	0.000	0.000	0.0	127	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E15-05367 0225

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4805.D
Acq On : 30 Jun 2015 20:47
Operator : Sylvia
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 01 08:44:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	94	0.00
2	T	Dichlorodifluoromethane	0.469	0.426	9.2	88	0.00
3	P	Chloromethane	0.769	0.660	14.2	83	0.00
4	C	Vinyl chloride	0.642	0.622	3.1	95	0.01
5	T	Bromomethane	0.274	0.296	-8.0	107	-0.01
6	T	Chloroethane	0.341	0.353	-3.5	103	-0.01
7	T	Trichlorofluoromethane	0.406	0.394	3.0	82	0.02
8	T	Acrolein	0.129	0.096	25.6#	70	0.00
9	MC	1,1-Dichloroethene	0.417	0.414	0.7	99	0.00
10	T	Acetone	0.262	0.251	4.2	95	0.00
11	T	Carbon disulfide	1.099	1.086	1.2	95	-0.02
12	T	Vinyl acetate	2.412	2.154	10.7	80	0.00
13	T	Methylene chloride	0.598	0.601	-0.5	95	0.00
14	T	Acrylonitrile	0.316	0.317	-0.3	95	0.00
15	T	tert-Butyl alcohol (TBA)	0.079	0.075	5.1	91	0.00
16	T	trans-1,2-Dichloroethene	0.523	0.535	-2.3	96	0.00
17	T	Methyl tert-butyl ether (MT	1.706	1.720	-0.8	93	-0.01
18	P	1,1-Dichloroethane	1.067	1.098	-2.9	97	0.00
19	T	Diisopropyl ether (DIPE)	2.252	2.329	-3.4	95	0.00
20	T	cis-1,2-Dichloroethene	0.585	0.594	-1.5	95	0.00
21	T	2,2-Dichloropropane	0.377	0.323	14.3	75	0.00
22	T	2-Butanone (MEK)	0.369	0.360	2.4	94	0.00
23	T	Bromochloromethane	0.268	0.265	1.1	93	0.00
24	T	Tetrahydrofuran	0.000	0.000	0.0	109	0.00
25	C	Chloroform	0.942	0.947	-0.5	95	0.00
26	T	1,1,1-Trichloroethane	0.685	0.724	-5.7	100	0.00
27	T	Carbon tetrachloride	0.600	0.630	-5.0	102	0.00
28	T	1,1-Dichloropropene	0.703	0.722	-2.7	102	0.00
29	T	1,2-Dichloroethane (EDC)	0.806	0.788	2.2	93	0.00
30	S	1,2-Dichloroethane-d4	0.641	0.637	0.6	95	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
32	M	Benzene	1.375	1.392	-1.2	95	0.00
33	M	Trichloroethene	0.330	0.344	-4.2	100	0.01
34	C	1,2-Dichloropropane	0.394	0.394	0.0	95	0.00
35	T	Dibromomethane	0.213	0.209	1.9	92	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	78	0.00
37	T	Bromodichloromethane	0.445	0.435	2.2	92	0.00
38	T	2-Chloroethyl vinyl ether	0.144	0.178	-23.6#	100	0.00
39	T	cis-1,3-Dichloropropene	0.521	0.519	0.4	87	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.447	0.447	0.0	91	0.00
41	S	Toluene-d8	1.206	1.193	1.1	94	0.00
42	MC	Toluene	0.841	0.830	1.3	93	0.00
43	T	trans-1,3-Dichloropropene	0.469	0.463	1.3	85	0.00
44	T	1,1,2-Trichloroethane	0.273	0.260	4.8	92	0.00
45	T	Tetrachloroethene	0.297	0.288	3.0	96	0.00
46	T	1,3-Dichloropropane	0.557	0.538	3.4	92	0.00
47	T	2-Hexanone	0.332	0.324	2.4	91	0.00
48	T	Dibromochloromethane	0.312	0.304	2.6	89	0.00
49	T	1,2-Dibromoethane (EDB)	0.312	0.300	3.8	90	0.00

E15-05367 0226

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4805.D
Acq On : 30 Jun 2015 20:47
Operator : Sylvia
Sample : CCV100,CCV100,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 01 08:44:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51	MP	Chlorobenzene	0.992	0.982	1.0	93	0.00
52	T	1,1,1,2-Tetrachloroethane	0.330	0.337	-2.1	92	0.00
53	C	Ethylbenzene	1.688	1.740	-3.1	95	0.00
54	T	m,p-Xylene	0.646	0.662	-2.5	94	0.00
55	T	o-Xylene	0.661	0.663	-0.3	93	0.00
56	T	Styrene	1.100	1.129	-2.6	92	0.00
57	P	Bromoform	0.196	0.190	3.1	84	0.00
58	T	Isopropylbenzene	1.564	1.658	-6.0	95	0.00
59	S	Bromofluorobenzene	0.545	0.549	-0.7	93	0.00
60	P	1,1,2,2-Tetrachloroethane	0.496	0.455	8.3	86	0.00
61	T	Bromobenzene	0.412	0.397	3.6	91	0.00
62	T	1,2,3-Trichloropropane	0.452	0.425	6.0	91	0.00
63	T	n-Propylbenzene	1.997	2.003	-0.3	94	0.00
64	T	2-Chlorotoluene	1.251	1.252	-0.1	93	0.00
65	T	1,3,5-Trimethylbenzene	1.374	1.406	-2.3	93	0.00
66	T	4-Chlorotoluene	1.251	1.252	-0.1	93	0.00
67	T	tert-Butylbenzene	1.077	1.121	-4.1	94	0.00
68	T	1,2,4-Trimethylbenzene	1.375	1.385	-0.7	92	0.00
69	T	sec-Butylbenzene	1.580	1.656	-4.8	96	0.00
70	T	1,3-Dichlorobenzene	0.785	0.735	6.4	90	0.00
71	T	4-Isopropyltoluene	1.253	1.282	-2.3	93	0.00
72	T	1,4-Dichlorobenzene	0.786	0.732	6.9	90	0.00
73	T	n-Butylbenzene	1.202	1.215	-1.1	92	0.00
74	T	1,2-Dichlorobenzene	0.759	0.701	7.6	89	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.080	4.8	87	0.00
76	T	1,2,4-Trichlorobenzene	0.468	0.437	6.6	86	0.00
77	T	Hexachlorobutadiene	0.151	0.144	4.6	93	0.00
78	T	Naphthalene	1.239	1.248	-0.7	88	0.00
79	T	1,2,3-Trichlorobenzene	0.412	0.397	3.6	88	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.213	0.233	-9.4	104	0.01
81	T	Methyl acetate	0.421	0.463	-10.0	99	0.00
82	T	Cyclohexane	0.649	0.738	-13.7	108	0.00
83	T	Methylcyclohexane	0.475	0.541	-13.9	106	0.00
84		Pentane	0.000	0.000	0.0	169	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E15-05367 0227

Response Factor Report MSD-L

Method Path : C:\MSDCHEM\1\METHODS\
Method File : LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Mon Jun 29 12:35:01 2015
Response Via : Initial Calibration

6/29/15 LWG 6/29/15

Calibration Files
1 =L8418.D 2 =L8417.D 5 =L8420.D
20 =L8421.D 100 =L8422.D 150 =L8424.D 200 =L8423.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.684	0.736	0.690	0.732	0.671	0.624	0.652	0.684	5.88
3)	TP	Chloromethane	0.480	0.423	0.453	0.396	0.384	0.364	0.390	0.413	10.06
4)	C	Vinyl chloride	0.500	0.505	0.529	0.473	0.449	0.423	0.449	0.475	7.89
5)	T	Bromomethane		0.278	0.256	0.257	0.255	0.199	0.181	0.238	16.20
6)	T	Chloroethane	0.288	0.310	0.259	0.263	0.233	0.200	0.187	0.249	18.05
7)	T	Trichlorofluorome	0.862	0.871	0.766	0.709	0.666	0.608	0.628	0.730	14.64
8)	T	Acrolein		0.030	0.023	0.028	0.027	0.025	0.027	0.027	9.49
9)	MC	1,1-Dichloroethen	0.446	0.464	0.474	0.433	0.406	0.380	0.396	0.428	8.29
10)	T	Acetone			0.137	0.122	0.107	0.099	0.098	0.113	14.90
11)	T	Carbon disulfide	1.078	1.060	0.976	1.118	1.232	1.189	1.238	1.127	8.64
12)	T	Vinyl acetate	1.288	1.284	1.185	1.228	1.194	1.162	1.158	1.214	4.48
13)	T	Methylene chlorid		0.565	0.533	0.520	0.417	0.392	0.395	0.471	16.44
14)	T	Acrylonitrile		0.144	0.099	0.114	0.129	0.127	0.138	0.125	13.05
15)	T	tert-Butyl alcoho	0.036	0.037	0.038	0.028	0.029	0.030	0.030	0.033	13.56
16)	T	trans-1,2-Dichlor	0.870	0.850	0.726	0.692	0.660	0.637	0.647	0.726	13.30
17)	T	Methyl tert-butyl	1.556	1.502	1.326	1.331	1.355	1.392	1.351	1.402	6.49
18)	TP	1,1-Dichloroethan	1.375	1.330	1.187	1.108	1.059	1.050	1.050	1.166	11.76
19)	T	Diisopropyl ether	1.525	1.641	1.567	1.649	1.570	1.579	1.542	1.582	2.96
20)	T	cis-1,2-Dichloroe	0.765	0.740	0.704	0.722	0.685	0.665	0.661	0.706	5.51
21)	T	2,2-Dichloropropa	0.619	0.610	0.566	0.621	0.608	0.592	0.592	0.601	3.21
22)	T	2-Butanone (MEK)	0.302	0.252	0.232	0.229	0.218	0.212	0.206	0.236	13.93
23)	T	Bromochloromethan	0.394	0.369	0.330	0.319	0.307	0.308	0.307	0.333	10.45
25)	C	Chloroform	1.444	1.393	1.231	1.163	1.079	1.059	1.068	1.205	13.16
26)	T	1,1,1-Trichloroet	0.994	1.036	0.945	0.949	0.932	0.910	0.938	0.958	4.49
27)	T	Carbon tetrachlor	0.899	0.892	0.868	0.883	0.861	0.833	0.856	0.870	2.64
28)	T	1,1-Dichloroprope	1.113	1.064	0.968	0.965	0.894	0.863	0.868	0.962	10.10
29)	T	1,2-Dichloroethan	0.982	0.921	0.797	0.748	0.708	0.689	0.677	0.789	15.12
30)	S	1,2-Dichloroethan	0.531	0.516	0.511	0.512	0.511	0.501	0.502	0.512	1.95
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.919	1.897	1.698	1.733	1.539	1.473	1.443	1.672	11.60
33)	M	Trichloroethene	0.525	0.528	0.450	0.445	0.424	0.411	0.411	0.456	11.05
34)	C	1,2-Dichloropropa	0.456	0.455	0.393	0.381	0.341	0.331	0.321	0.383	14.64
35)	T	Dibromomethane	0.255	0.237	0.227	0.219	0.208	0.205	0.203	0.222	8.60
36)	T	1,4-Dioxane	0.005	0.003	0.003	0.003	0.003	0.003	0.003	0.003	17.29
37)	T	Bromodichlorometh	0.461	0.461	0.429	0.466	0.476	0.479	0.481	0.465	3.86
38)	T	2-Chloroethyl vin	0.191	0.194	0.184	0.158	0.183	0.188	0.185	0.183	6.42
39)	T	cis-1,3-Dichlorop	0.706	0.611	0.603	0.512	0.553	0.558	0.561	0.586	10.61
40)	T	4-Methyl-2-pentan	0.308	0.269	0.264	0.253	0.268	0.270	0.263	0.271	6.47
41)	S	Toluene-d8	1.129	1.132	1.139	1.141	1.144	1.139	1.148	1.139	0.57
42)	MC	Toluene	1.265	1.212	1.197	1.093	0.974	0.931	0.928	1.086	13.14
43)	T	trans-1,3-Dichlor	0.409	0.368	0.447	0.402	0.470	0.484	0.484	0.438	10.35
44)	T	1,1,2-Trichloroet	0.308	0.299	0.263	0.263	0.249	0.244	0.242	0.267	9.89
45)	T	Tetrachloroethene	0.497	0.556	0.495	0.465	0.409	0.389	0.391	0.458	13.87
46)	T	1,3-Dichloropropa	0.574	0.548	0.510	0.510	0.475	0.458	0.440	0.502	9.58
47)	T	2-Hexanone	0.238	0.188	0.205	0.187	0.202	0.205	0.201	0.204	8.28
48)	T	Dibromochlorometh	0.278	0.352	0.301	0.318	0.351	0.357	0.356	0.330	9.62
49)	T	1,2-Dibromoethane	0.318	0.306	0.292	0.296	0.300	0.303	0.299	0.302	2.86
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	TP	Chlorobenzene	1.610	1.434	1.496	1.381	1.237	1.207	1.200	1.366	11.60
52)	T	1,1,1,2-Tetrachlo	0.439	0.455	0.432	0.458	0.442	0.435	0.429	0.441	2.54

53)	C	Ethylbenzene	2.305	2.429	2.342	2.385	2.127	2.018	1.996	2.229	8.03
54)	T	m,p-Xylene	0.920	1.028	0.959	0.934	0.811	0.750	0.727	0.876	13.01
55)	T	o-Xylene	0.658	0.766	0.812	0.863	0.790	0.736	0.717	0.763	8.78
56)	T	Styrene	1.144	1.365	1.406	1.446	1.297	1.205	1.169	1.290	9.31
57)	TP	Bromoform	0.271	0.276	0.266	0.200	0.238	0.244	0.242	0.248	10.47
58)	T	Isopropylbenzene	1.714	1.963	2.150	2.387	2.172	2.070	2.048	2.072	9.96
59)	S	Bromofluorobenzen	0.486	0.489	0.490	0.498	0.486	0.490	0.486	0.489	0.86
60)	TP	1,1,2,2-Tetrachlo	0.562	0.555	0.470	0.477	0.439	0.412	0.400	0.474	13.61
61)	T	Bromobenzene	0.644	0.644	0.580	0.581	0.509	0.490	0.481	0.561	12.32
62)	T	1,2,3-Trichloropr	0.508	0.486	0.422	0.422	0.390	0.379	0.371	0.425	12.48
63)	T	n-Propylbenzene	2.624	2.880	2.817	2.894	2.556	2.408	2.379	2.651	8.17
64)	T	2-Chlorotoluene	1.646	1.801	1.653	1.667	1.491	1.433	1.414	1.586	9.02
65)	T	1,3,5-Trimethylbe	1.742	2.006	2.008	2.057	1.822	1.700	1.657	1.856	8.90
66)	T	4-Chlorotoluene	2.078	2.251	2.066	1.957	1.667	1.547	1.497	1.866	15.76
67)	T	tert-Butylbenzene	1.708	1.925	1.597	1.802	1.652	1.571	1.575	1.690	7.85
68)	T	1,2,4-Trimethylbe	1.809	2.103	2.088	2.074	1.841	1.757	1.748	1.917	8.53
69)	T	sec-Butylbenzene	2.205	2.563	2.581	2.752	2.475	2.325	2.317	2.460	7.68
70)	T	1,3-Dichlorobenze	1.234	1.226	1.240	1.196	1.037	0.995	0.988	1.131	10.42
71)	T	4-Isopropyltoluen	1.970	2.268	2.273	2.364	2.148	2.035	2.019	2.154	7.03
72)	T	1,4-Dichlorobenze	1.275	1.310	1.245	1.193	1.028	0.995	0.983	1.147	12.28
73)	T	n-Butylbenzene	0.932	1.071	1.119	1.170	1.011	0.920	0.888	1.016	10.65
74)	T	1,2-Dichlorobenze	1.088	1.106	1.160	1.082	0.896	0.851	0.823	1.001	13.85
75)	T	1,2-Dibromo-3-chl	0.089	0.086	0.090	0.062	0.072	0.074	0.074	0.078	13.45
76)	T	1,2,4-Trichlorobe	0.623	0.651	0.695	0.727	0.710	0.683	0.668	0.680	5.23
77)	T	Hexachlorobutadie	0.546	0.558	0.476	0.477	0.415	0.398	0.394	0.466	14.55
78)	T	Naphthalene	1.581	1.391	1.453	1.530	1.559	1.579	1.503	1.514	4.67
79)	T	1,2,3-Trichlorobe	0.597	0.651	0.636	0.702	0.642	0.637	0.611	0.639	5.21
80)	T	1,1,2-Trichloro-1	0.387	0.335	0.353	0.330	0.295	0.269	0.282	0.322	13.08
81)	T	Methyl acetate			0.214	0.204	0.194	0.184	0.183	0.196	6.80
82)	T	Cyclohexane	0.782	0.796	0.781	0.771	0.672	0.642	0.652	0.728	9.46
83)	T	Methylcyclohexane	0.612	0.649	0.643	0.644	0.577	0.541	0.537	0.600	8.14

(#) = Out of Range ### Number of calibration levels exceeded format ###

LS062615.M Mon Jun 29 12:35:37 2015

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-26-15\
Data File : L8427.D
Acq On : 26 Jun 2015 20:08
Operator : XING
Sample : ICV100,ICV100,S,5g,0
Misc :
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 29 12:37:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.684	0.659	3.7	99	0.00
3	TP	Chloromethane	0.413	0.379	8.2	99	0.00
4	C	Vinyl chloride	0.475	0.439	7.6	98	0.00
5	T	Bromomethane	0.238	0.234	1.7	92	0.00
6	T	Chloroethane	0.249	0.223	10.4	96	0.00
7	T	Trichlorofluoromethane	0.730	0.656	10.1	99	0.00
8	T	Acrolein	0.027	0.031	-14.8	116	0.00
9	MC	1,1-Dichloroethene	0.428	0.400	6.5	99	0.00
10	T	Acetone	0.113	0.116	-2.7	109	0.00
11	T	Carbon disulfide	1.127	1.215	-7.8	99	0.00
12	T	Vinyl acetate	1.214	1.153	5.0	97	0.00
13	T	Methylene chloride	0.471	0.412	12.5	99	0.00
14	T	Acrylonitrile	0.125	0.149	-19.2	116	0.00
15	T	tert-Butyl alcohol (TBA)	0.033	0.033	0.0	115	0.00
16	T	trans-1,2-Dichloroethene	0.726	0.660	9.1	100	0.00
17	T	Methyl tert-butyl ether (MT	1.402	1.428	-1.9	106	0.00
18	TP	1,1-Dichloroethane	1.166	1.070	8.2	101	-0.01
19	T	Diisopropyl ether (DIPE)	1.582	1.613	-2.0	103	0.00
20	T	cis-1,2-Dichloroethene	0.706	0.692	2.0	102	0.00
21	T	2,2-Dichloropropane	0.601	0.575	4.3	95	0.00
22	T	2-Butanone (MEK)	0.236	0.240	-1.7	111	0.00
23	T	Bromochloromethane	0.333	0.317	4.8	104	0.00
25	C	Chloroform	1.205	1.100	8.7	102	0.00
26	T	1,1,1-Trichloroethane	0.958	0.934	2.5	101	0.00
27	T	Carbon tetrachloride	0.870	0.869	0.1	101	0.00
28	T	1,1-Dichloropropene	0.962	0.900	6.4	101	0.00
29	T	1,2-Dichloroethane (EDC)	0.789	0.729	7.6	103	0.00
30	S	1,2-Dichloroethane-d4	0.512	0.523	-2.1	103	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
32	M	Benzene	1.672	1.546	7.5	101	0.00
33	M	Trichloroethene	0.456	0.435	4.6	104	0.00
34	C	1,2-Dichloropropane	0.383	0.347	9.4	103	0.00
35	T	Dibromomethane	0.222	0.217	2.3	106	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	113	0.00
37	T	Bromodichloromethane	0.465	0.492	-5.8	104	0.00
38	T	2-Chloroethyl vinyl ether	0.183	0.197	-7.7	109	0.00
39	T	cis-1,3-Dichloropropene	0.586	0.568	3.1	104	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.271	0.296	-9.2	111	0.00
41	S	Toluene-d8	1.139	1.145	-0.5	101	0.00
42	MC	Toluene	1.086	0.986	9.2	102	0.00
43	T	trans-1,3-Dichloropropene	0.438	0.488	-11.4	105	0.00
44	T	1,1,2-Trichloroethane	0.267	0.259	3.0	105	0.00
45	T	Tetrachloroethene	0.458	0.411	10.3	101	0.00
46	T	1,3-Dichloropropane	0.502	0.498	0.8	106	0.00

47	T	2-Hexanone	0.204	0.227	-11.3	113	0.00
48	T	Dibromochloromethane	0.330	0.366	-10.9	105	0.00
49	T	1,2-Dibromoethane (EDB)	0.302	0.320	-6.0	108	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
51	TP	Chlorobenzene	1.366	1.245	8.9	103	0.00
52	T	1,1,1,2-Tetrachloroethane	0.441	0.448	-1.6	104	0.00
53	C	Ethylbenzene	2.229	2.129	4.5	102	0.00
54	T	m,p-Xylene	0.876	0.804	8.2	101	0.00
55	T	o-Xylene	0.763	0.787	-3.1	102	0.00
56	T	Styrene	1.290	1.311	-1.6	103	0.00
57	TP	Bromoform	0.248	0.255	-2.8	109	0.00
58	T	Isopropylbenzene	2.072	2.170	-4.7	102	0.00
59	S	Bromofluorobenzene	0.489	0.494	-1.0	104	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.474	0.450	5.1	105	0.00
61	T	Bromobenzene	0.561	0.514	8.4	103	0.00
62	T	1,2,3-Trichloropropane	0.425	0.413	2.8	108	0.00
63	T	n-Propylbenzene	2.651	2.555	3.6	102	0.00
64	T	2-Chlorotoluene	1.586	1.500	5.4	103	0.00
65	T	1,3,5-Trimethylbenzene	1.856	1.800	3.0	101	-0.01
66	T	4-Chlorotoluene	1.866	1.669	10.6	102	0.00
67	T	tert-Butylbenzene	1.690	1.653	2.2	102	0.00
68	T	1,2,4-Trimethylbenzene	1.917	1.866	2.7	103	0.00
69	T	sec-Butylbenzene	2.460	2.463	-0.1	102	-0.01
70	T	1,3-Dichlorobenzene	1.131	1.044	7.7	103	0.00
71	T	4-Isopropyltoluene	2.154	2.109	2.1	100	0.00
72	T	1,4-Dichlorobenzene	1.147	1.047	8.7	104	0.00
73	T	n-Butylbenzene	1.016	1.000	1.6	101	0.00
74	T	1,2-Dichlorobenzene	1.001	0.909	9.2	104	0.00
75	T	1,2-Dibromo-3-chloropropane	0.078	0.079	-1.3	112	0.00
76	T	1,2,4-Trichlorobenzene	0.680	0.703	-3.4	101	0.00
77	T	Hexachlorobutadiene	0.466	0.410	12.0	101	0.00
78	T	Naphthalene	1.514	1.657	-9.4	108	0.00
79	T	1,2,3-Trichlorobenzene	0.639	0.658	-3.0	105	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.322	0.287	10.9	99	0.00
81	T	Methyl acetate	0.196	0.201	-2.6	106	0.00
82	T	Cyclohexane	0.728	0.668	8.2	101	0.00
83	T	Methylcyclohexane	0.600	0.571	4.8	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LS062615.M Mon Jun 29 12:37:34 2015

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8504.D
Acq On : 1 Jul 2015 1:31
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Jul 01 14:48:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.684	0.683	0.1	103	0.00
3	TP	Chloromethane	0.413	0.400	3.1	106	0.00
4	C	Vinyl chloride	0.475	0.445	6.3	101	0.00
5	T	Bromomethane	0.238	0.242	-1.7	96	0.00
6	T	Chloroethane	0.249	0.224	10.0	98	0.00
7	T	Trichlorofluoromethane	0.730	0.655	10.3	100	0.00
8	T	Acrolein	0.027	0.026	3.7	98	-0.01
9	MC	1,1-Dichloroethene	0.428	0.405	5.4	101	0.00
10	T	Acetone	0.113	0.112	0.9	107	0.00
11	T	Carbon disulfide	1.127	1.229	-9.1	101	0.00
12	T	Vinyl acetate	1.214	0.996	18.0	85	0.00
13	T	Methylene chloride	0.471	0.421	10.6	102	0.00
14	T	Acrylonitrile	0.125	0.145	-16.0	115	0.00
15	T	tert-Butyl alcohol (TBA)	0.033	0.029	12.1	102	0.00
16	T	trans-1,2-Dichloroethene	0.726	0.665	8.4	102	0.00
17	T	Methyl tert-butyl ether (MT	1.402	1.416	-1.0	106	0.00
18	TP	1,1-Dichloroethane	1.166	1.076	7.7	103	0.00
19	T	Diisopropyl ether (DIPE)	1.582	1.660	-4.9	107	0.00
20	T	cis-1,2-Dichloroethene	0.706	0.713	-1.0	106	0.00
21	T	2,2-Dichloropropane	0.601	0.512	14.8	85	0.00
22	T	2-Butanone (MEK)	0.236	0.228	3.4	106	0.00
23	T	Bromochloromethane	0.333	0.330	0.9	109	0.00
25	C	Chloroform	1.205	1.124	6.7	106	0.00
26	T	1,1,1-Trichloroethane	0.958	0.922	3.8	101	0.00
27	T	Carbon tetrachloride	0.870	0.865	0.6	102	0.00
28	T	1,1-Dichloropropene	0.962	0.890	7.5	101	0.00
29	T	1,2-Dichloroethane (EDC)	0.789	0.750	4.9	108	0.00
30	S	1,2-Dichloroethane-d4	0.512	0.515	-0.6	102	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.00
32	M	Benzene	1.672	1.590	4.9	104	0.00
33	M	Trichloroethene	0.456	0.475	-4.2	113	0.00
34	C	1,2-Dichloropropane	0.383	0.363	5.2	107	0.00
35	T	Dibromomethane	0.222	0.228	-2.7	111	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	115	0.00
37	T	Bromodichloromethane	0.465	0.520	-11.8	110	0.00
38	T	2-Chloroethyl vinyl ether	0.183	0.199	-8.7	110	0.00
39	T	cis-1,3-Dichloropropene	0.586	0.578	1.4	105	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.271	0.290	-7.0	109	0.00
41	S	Toluene-d8	1.139	1.163	-2.1	103	0.00
42	MC	Toluene	1.086	1.006	7.4	104	0.00
43	T	trans-1,3-Dichloropropene	0.438	0.496	-13.2	106	0.00
44	T	1,1,2-Trichloroethane	0.267	0.272	-1.9	110	0.00
45	T	Tetrachloroethene	0.458	0.412	10.0	102	0.00
46	T	1,3-Dichloropropane	0.502	0.520	-3.6	110	0.00

47	T	2-Hexanone	0.204	0.219	-7.4	109	0.00
48	T	Dibromochloromethane	0.330	0.393	-19.1	113	0.00
49	T	1,2-Dibromoethane (EDB)	0.302	0.334	-10.6	112	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
51	TP	Chlorobenzene	1.366	1.247	8.7	107	0.00
52	T	1,1,1,2-Tetrachloroethane	0.441	0.450	-2.0	108	0.00
53	C	Ethylbenzene	2.229	2.076	6.9	104	0.00
54	T	m,p-Xylene	0.876	0.790	9.8	104	0.00
55	T	o-Xylene	0.763	0.774	-1.4	104	0.00
56	T	Styrene	1.290	1.310	-1.6	108	0.00
57	TP	Bromoform	0.248	0.261	-5.2	117	0.00
58	T	Isopropylbenzene	2.072	2.092	-1.0	103	0.00
59	S	Bromofluorobenzene	0.489	0.493	-0.8	108	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.474	0.394	16.9	96	0.00
61	T	Bromobenzene	0.561	0.527	6.1	111	0.00
62	T	1,2,3-Trichloropropane	0.425	0.408	4.0	112	0.00
63	T	n-Propylbenzene	2.651	2.479	6.5	103	0.00
64	T	2-Chlorotoluene	1.586	1.475	7.0	105	0.00
65	T	1,3,5-Trimethylbenzene	1.856	1.748	5.8	102	0.00
66	T	4-Chlorotoluene	1.866	1.634	12.4	104	0.00
67	T	tert-Butylbenzene	1.690	1.596	5.6	103	0.00
68	T	1,2,4-Trimethylbenzene	1.917	1.822	5.0	105	0.00
69	T	sec-Butylbenzene	2.460	2.348	4.6	101	0.00
70	T	1,3-Dichlorobenzene	1.131	1.026	9.3	105	0.00
71	T	4-Isopropyltoluene	2.154	2.024	6.0	100	0.00
72	T	1,4-Dichlorobenzene	1.147	1.042	9.2	108	0.00
73	T	n-Butylbenzene	1.016	0.943	7.2	99	0.00
74	T	1,2-Dichlorobenzene	1.001	0.921	8.0	110	0.00
75	T	1,2-Dibromo-3-chloropropane	0.078	0.075	3.8	111	0.00
76	T	1,2,4-Trichlorobenzene	0.680	0.664	2.4	100	-0.01
77	T	Hexachlorobutadiene	0.466	0.384	17.6	99	0.00
78	T	Naphthalene	1.514	1.619	-6.9	111	0.00
79	T	1,2,3-Trichlorobenzene	0.639	0.640	-0.2	106	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.322	0.275	14.6	100	0.00
81	T	Methyl acetate	0.196	0.190	3.1	104	0.00
82	T	Cyclohexane	0.728	0.630	13.5	100	0.01
83	T	Methylcyclohexane	0.600	0.537	10.5	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LS062615.M Wed Jul 01 14:48:47 2015 RPT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8479.D
Acq On : 30 Jun 2015 13:06
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 30 14:30:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	107	0.00
2	T	Dichlorodifluoromethane	0.684	0.776	-13.5	123	-0.01
3	TP	Chloromethane	0.413	0.405	1.9	113	0.00
4	C	Vinyl chloride	0.475	0.450	5.3	107	0.00
5	T	Bromomethane	0.238	0.241	-1.3	101	0.00
6	T	Chloroethane	0.249	0.226	9.2	104	0.00
7	T	Trichlorofluoromethane	0.730	0.654	10.4	105	0.00
8	T	Acrolein	0.027	0.025	7.4	97	0.00
9	MC	1,1-Dichloroethene	0.428	0.402	6.1	106	-0.01
10	T	Acetone	0.113	0.096	15.0	96	0.00
11	T	Carbon disulfide	1.127	1.236	-9.7	107	0.00
12	T	Vinyl acetate	1.214	1.254	-3.3	112	0.00
13	T	Methylene chloride	0.471	0.392	16.8	100	0.00
14	T	Acrylonitrile	0.125	0.129	-3.2	107	0.00
15	T	tert-Butyl alcohol (TBA)	0.033	0.027	18.2	99	0.00
16	T	trans-1,2-Dichloroethene	0.726	0.699	3.7	113	0.00
17	T	Methyl tert-butyl ether (MT	1.402	1.401	0.1	110	0.00
18	TP	1,1-Dichloroethane	1.166	1.109	4.9	112	-0.01
19	T	Diisopropyl ether (DIPE)	1.582	1.673	-5.8	114	0.00
20	T	cis-1,2-Dichloroethene	0.706	0.718	-1.7	112	0.00
21	T	2,2-Dichloropropane	0.601	0.615	-2.3	108	0.00
22	T	2-Butanone (MEK)	0.236	0.214	9.3	105	0.00
23	T	Bromochloromethane	0.333	0.321	3.6	112	0.00
25	C	Chloroform	1.205	1.125	6.6	111	0.00
26	T	1,1,1-Trichloroethane	0.958	0.969	-1.1	111	0.00
27	T	Carbon tetrachloride	0.870	0.906	-4.1	112	0.00
28	T	1,1-Dichloropropene	0.962	0.936	2.7	112	0.00
29	T	1,2-Dichloroethane (EDC)	0.789	0.713	9.6	107	0.00
30	S	1,2-Dichloroethane-d4	0.512	0.493	3.7	103	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	106	0.00
32	M	Benzene	1.672	1.623	2.9	112	0.00
33	M	Trichloroethene	0.456	0.443	2.9	111	0.00
34	C	1,2-Dichloropropane	0.383	0.362	5.5	112	0.00
35	T	Dibromomethane	0.222	0.216	2.7	110	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	111	0.00
37	T	Bromodichloromethane	0.465	0.503	-8.2	112	0.00
38	T	2-Chloroethyl vinyl ether	0.183	0.193	-5.5	112	0.00
39	T	cis-1,3-Dichloropropene	0.586	0.586	0.0	112	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.271	0.274	-1.1	108	0.00
41	S	Toluene-d8	1.139	1.162	-2.0	108	0.00
42	MC	Toluene	1.086	1.031	5.1	112	0.00
43	T	trans-1,3-Dichloropropene	0.438	0.500	-14.2	113	0.00
44	T	1,1,2-Trichloroethane	0.267	0.262	1.9	111	0.00
45	T	Tetrachloroethene	0.458	0.437	4.6	113	0.00
46	T	1,3-Dichloropropane	0.502	0.499	0.6	111	0.00

47	T	2-Hexanone	0.204	0.201	1.5	105	0.00
48	T	Dibromochloromethane	0.330	0.373	-13.0	113	0.00
49	T	1,2-Dibromoethane (EDB)	0.302	0.316	-4.6	112	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	109	0.00
51	TP	Chlorobenzene	1.366	1.277	6.5	113	0.00
52	T	1,1,1,2-Tetrachloroethane	0.441	0.454	-2.9	112	0.00
53	C	Ethylbenzene	2.229	2.190	1.7	113	0.00
54	T	m,p-Xylene	0.876	0.838	4.3	113	0.00
55	T	o-Xylene	0.763	0.808	-5.9	112	0.00
56	T	Styrene	1.290	1.337	-3.6	113	0.00
57	TP	Bromoform	0.248	0.249	-0.4	114	0.00
58	T	Isopropylbenzene	2.072	2.232	-7.7	112	0.00
59	S	Bromofluorobenzene	0.489	0.498	-1.8	112	0.00
60	TP	1,1,2,2-Tetrachloroethane	0.474	0.438	7.6	109	0.00
61	T	Bromobenzene	0.561	0.533	5.0	115	0.00
62	T	1,2,3-Trichloropropane	0.425	0.390	8.2	109	0.00
63	T	n-Propylbenzene	2.651	2.659	-0.3	114	0.00
64	T	2-Chlorotoluene	1.586	1.548	2.4	114	0.00
65	T	1,3,5-Trimethylbenzene	1.856	1.868	-0.6	112	0.00
66	T	4-Chlorotoluene	1.866	1.713	8.2	112	0.00
67	T	tert-Butylbenzene	1.690	1.693	-0.2	112	0.00
68	T	1,2,4-Trimethylbenzene	1.917	1.910	0.4	114	0.00
69	T	sec-Butylbenzene	2.460	2.542	-3.3	112	0.00
70	T	1,3-Dichlorobenzene	1.131	1.084	4.2	114	0.00
71	T	4-Isopropyltoluene	2.154	2.216	-2.9	113	0.00
72	T	1,4-Dichlorobenzene	1.147	1.077	6.1	115	0.00
73	T	n-Butylbenzene	1.016	1.037	-2.1	112	0.00
74	T	1,2-Dichlorobenzene	1.001	0.928	7.3	113	0.00
75	T	1,2-Dibromo-3-chloropropane	0.078	0.071	9.0	108	0.00
76	T	1,2,4-Trichlorobenzene	0.680	0.729	-7.2	112	0.00
77	T	Hexachlorobutadiene	0.466	0.430	7.7	113	0.00
78	T	Naphthalene	1.514	1.580	-4.4	111	0.00
79	T	1,2,3-Trichlorobenzene	0.639	0.674	-5.5	115	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.322	0.286	11.2	106	0.00
81	T	Methyl acetate	0.196	0.173	11.7	97	0.00
82	T	Cyclohexane	0.728	0.696	4.4	113	0.00
83	T	Methylcyclohexane	0.600	0.587	2.2	111	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

LS062615.M Wed Jul 01 13:26:18 2015 RPT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): G4733.D

Date Analyzed: 06/29/2015

Instrument ID: MSD_G

Time Analyzed: 11:33

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	562252	6.21	916715	7.03	836321	10.37
	UPPER LIMIT	1124504	6.71	1833430	7.53	1672642	10.87
	LOWER LIMIT	281126	5.71	458357.5	6.53	418160.5	9.87
	LAB SAMPLE ID						
01	ICC001	552320	6.21	906043	7.03	835676	10.37
02	ICC002	540366	6.21	897346	7.03	840115	10.37
03	ICC005	544074	6.21	886067	7.03	820944	10.37
04	ICC020	555749	6.21	897706	7.03	829625	10.37
05	ICC150	540136	6.21	889585	7.03	821734	10.37
06	ICC200	550599	6.20	897804	7.02	827096	10.37
07	ICV100	554983	6.20	906431	7.03	836171	10.37
08	BLKA150629a	597288	6.21	959740	7.03	871854	10.37
09	05262-4DL	448636	6.21	739823	7.03	691190	10.37
10	05262-6DL	547995	6.21	896973	7.03	836587	10.37
11	05262-7DL	538902	6.21	880396	7.03	810861	10.37
12	05341-1DL	580323	6.21	935548	7.02	851329	10.37
13	05466-001	584119	6.21	942725	7.03	857613	10.37
14	05466-002	582002	6.21	947413	7.03	873264	10.37
15	05199-010	585806	6.21	934785	7.03	849482	10.37
16	05199-011	568630	6.21	916477	7.03	838727	10.37
17	05199-012	543999	6.21	870062	7.03	798311	10.37
18	LCSA150629a	557618	6.20	905096	7.03	821079	10.37
19	5466-002MS	559093	6.21	901687	7.03	828492	10.37
20	5466-002MSD	570446	6.20	914831	7.03	839975	10.37
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): G4805.D

Date Analyzed: 06/30/2015

Instrument ID: MSD_G

Time Analyzed: 20:47

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	529387	6.21	858383	7.03	767023	10.37
	UPPER LIMIT	1058774	6.71	1716766	7.53	1534046	10.87
	LOWER LIMIT	264693.5	5.71	429191.5	6.53	383511.5	9.87
	LAB SAMPLE ID						
01	BLKA150630b	519168	6.21	839673	7.03	752127	10.37
02	05549-001	508879	6.21	830923	7.03	748137	10.37
03	05556-022	520009	6.21	843291	7.03	758661	10.37
04	05557-018	513048	6.21	834216	7.03	744870	10.37
05	05367-040	509962	6.21	821913	7.03	737001	10.37
06	05367-044	508741	6.21	820139	7.03	706405	10.37
07	05394-002	504805	6.21	817645	7.03	733000	10.37
08	05394-001	477480	6.21	784585	7.03	695190	10.37
09	05396-003	502332	6.21	818981	7.03	726540	10.37
10	05396-004	507301	6.21	817365	7.03	726840	10.37
11	05396-001	487578	6.21	785200	7.03	700815	10.37
12	05396-002	479714	6.21	778804	7.03	696845	10.37
13	05407-001	491839	6.21	787086	7.03	673339	10.37
14	05426-001	478521	6.21	791792	7.03	709697	10.37
15	05348-003	478939	6.21	778172	7.03	696176	10.37
16	05348-005	479286	6.21	784421	7.03	704739	10.37
17	05348-001	489728	6.21	793066	7.03	713166	10.37
18	05348-002	515583	6.21	836507	7.03	745576	10.37
19	05348-004	500761	6.21	825184	7.03	740197	10.37
20	LCSA150630b	533530	6.21	857923	7.03	767449	10.37
21	5549-01MS	524085	6.21	843414	7.03	765715	10.37
22	5549-001MSD	494747	6.21	802109	7.03	714009	10.37

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L8422.D

Date Analyzed: 06/26/2015

Instrument ID: MSD_L

Time Analyzed: 17:39

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	286208		6.13		459391		6.95		395708		10.29	
	UPPER LIMIT	572416		6.63		918782		7.45		791416		10.79	
	LOWER LIMIT	143104		5.63		229695.5		6.45		197854		9.79	
	LAB SAMPLE ID												
01	ICC2	276954		6.13		438429		6.95		375311		10.29	
02	ICC1	268022		6.13		428263		6.95		369558		10.29	
03	ICC5	275848		6.13		437289		6.95		372752		10.29	
04	ICC20	276402		6.13		435271		6.95		369096		10.29	
05	ICC200	299752		6.13		489223		6.95		423640		10.29	
06	ICC150	311913		6.13		507578		6.95		437717		10.29	
07	ICV100	287374		6.13		463631		6.95		403940		10.29	
08													
09													
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22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L8504.D

Date Analyzed: 07/01/2015

Instrument ID: MSD_L

Time Analyzed: 1:31

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	290686		6.13		463031		6.95		421751		10.29	
	UPPER LIMIT	581372		6.63		926062		7.45		843502		10.79	
	LOWER LIMIT	145343		5.63		231515.5		6.45		210875.5		9.79	
	LAB SAMPLE ID												
01	BLKS150630-02	260249		6.13		427931		6.95		372305		10.29	
02	LCSS150630-02	279090		6.13		443261		6.95		394256		10.29	
03	LCSDS150630-02	288199		6.13		450086		6.95		401641		10.29	
04	05367-031	263545		6.13		420945		6.95		357510		10.29	
05	05367-032	260133		6.13		419750		6.95		360033		10.29	
06	05367-033	251471		6.13		409833		6.95		354399		10.29	
07	05367-034	253334		6.13		415262		6.95		359716		10.29	
08	05367-035	248618		6.13		406735		6.95		345957		10.29	
09	05367-036	240841		6.13		394727		6.95		338448		10.29	
10	05367-037	244557		6.13		400731		6.95		339739		10.29	
11	05367-038	246128		6.13		407129		6.95		351978		10.29	
12	05367-039	246526		6.13		397743		6.95		336015		10.29	
13	05367-041	251187		6.13		415584		6.95		362707		10.29	
14	05367-042	245380		6.13		404547		6.95		346928		10.29	
15	05367-043	249300		6.13		406452		6.95		348934		10.29	
16	05367-010	232851		6.13		399109		6.95		339699		10.29	
17	05589-001	236288		6.13		407616		6.95		361053		10.29	
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): L8479.D

Date Analyzed: 06/30/2015

Instrument ID: MSD_L

Time Analyzed: 13:06

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	304977		6.13		486625		6.95		432850		10.29	
	UPPER LIMIT	609954		6.63		973250		7.45		865700		10.79	
	LOWER LIMIT	152488.5		5.63		243312.5		6.45		216425		9.79	
	LAB SAMPLE ID												
01	BLKS150630-01	296287		6.13		473778		6.95		408640		10.29	
02	LCSS150630-01	292496		6.13		463949		6.95		409569		10.29	
03	LCSDS150630-01	303347		6.13		478474		6.95		422854		10.29	
04	05166-030	271017		6.13		445648		6.95		392207		10.29	
05	05183-004DUP	0*		0.00	*	0*		0.00	*	0*		0.00	*
06	05367-001	273641		6.13		442263		6.95		380809		10.29	
07	05367-002	263698		6.13		421651		6.95		355745		10.29	
08	05367-003	253889		6.13		407577		6.95		342379		10.29	
09	05367-004	253852		6.13		415369		6.95		359229		10.29	
10	05367-007	256005		6.13		413450		6.95		350068		10.29	
11	05367-008	256540		6.13		422489		6.95		365458		10.29	
12	05367-009	253135		6.13		415023		6.95		354059		10.29	
13	05367-017	249934		6.13		406969		6.95		343481		10.29	
14	05367-018	246395		6.13		402713		6.95		343803		10.29	
15	05367-019	254443		6.13		413707		6.95		346435		10.29	
16	05367-020	245697		6.13		398482		6.95		332559		10.29	
17	05367-021	250805		6.13		406809		6.95		359304		10.29	
18	05367-022	248353		6.13		408626		6.95		351068		10.29	
19	05367-023	249999		6.13		410461		6.95		349916		10.29	
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8487.D
Acq On : 30 Jun 2015 17:04
Operator : XING
Sample : E-3_(3.0-3.5)/,05367-001,S,5.6g,8.20
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 01 13:43:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

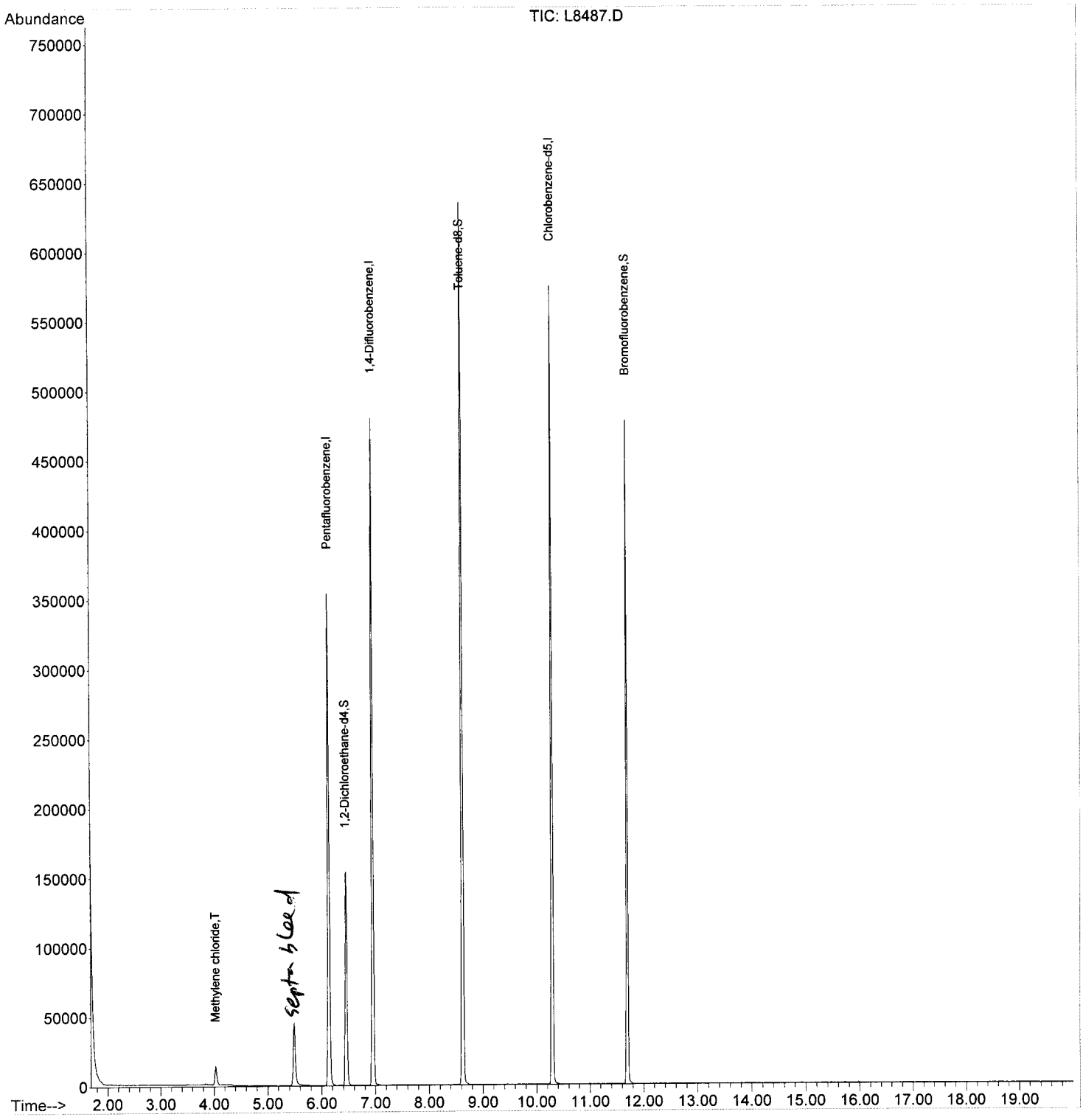
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	273641	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	442263	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	380809	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	133387	47.59	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.18%			
41) Toluene-d8	8.62	98	488019	48.45	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.90%			
59) Bromofluorobenzene	11.69	95	177457	47.62	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.24%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	9870	3.83	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8487.D
Acq On : 30 Jun 2015 17:04
Operator : XING
Sample : E-3_(3.0-3.5)/,05367-001,S,5.6g,8.20
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 01 13:43:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8487.D
Acq On : 30 Jun 2015 17:04
Operator : XING
Sample : E-3_(3.0-3.5)/,05367-001,S,5.6g,8.20
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	240	rVB	13237	34329	2.77%	0.647%
2	5.491	368	376	397	rBV	45019	121486	9.81%	2.289%
3	6.131	432	439	453	rVB	354113	747833	60.40%	14.093%
4	6.456	464	471	481	rBV	153449	349366	28.21%	6.584%
5	6.953	514	520	538	rVB	480097	939485	75.87%	17.705%
6	8.618	677	684	699	rVB	635373	1238231	100.00%	23.335%
7	10.293	842	849	866	rBV	574811	1060121	85.62%	19.978%
8	11.694	981	987	998	rBV	477820	815518	65.86%	15.369%

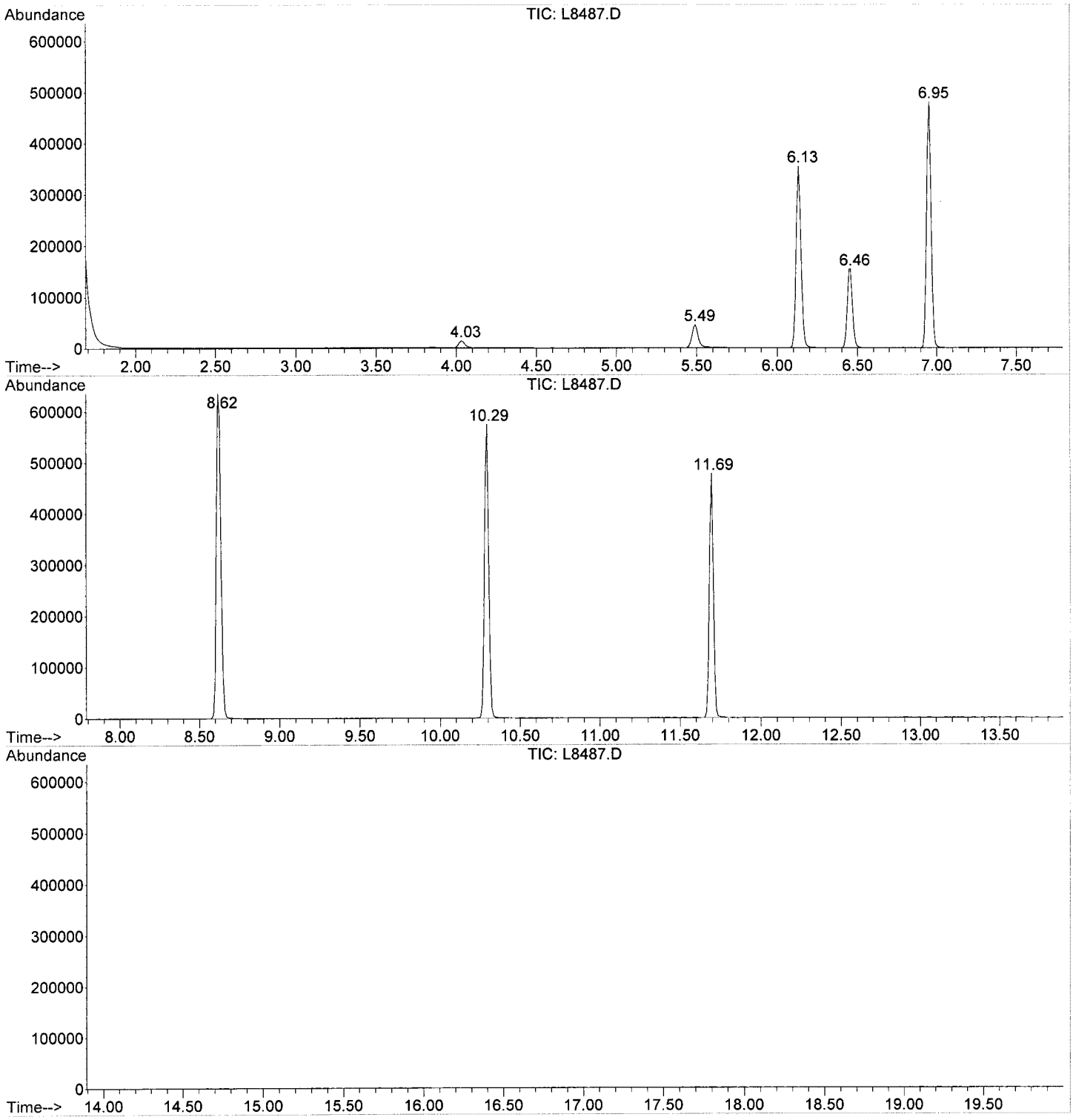
Sum of corrected areas: 5306369

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8487.D
Acq On : 30 Jun 2015 17:04
Operator : XING
Sample : E-3_(3.0-3.5)/,05367-001,S,5.6g,8.20
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8488.D
Acq On : 30 Jun 2015 17:34
Operator : XING
Sample : E-3_(0.5-1.0)/,05367-002,S,3.1g,22.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 01 13:41:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	263698	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	421651	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	355745	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	122184	45.24	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 90.48%			
41) Toluene-d8	8.62	98	468969	48.83	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.66%			
59) Bromofluorobenzene	11.69	95	159851	45.91	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.82%			

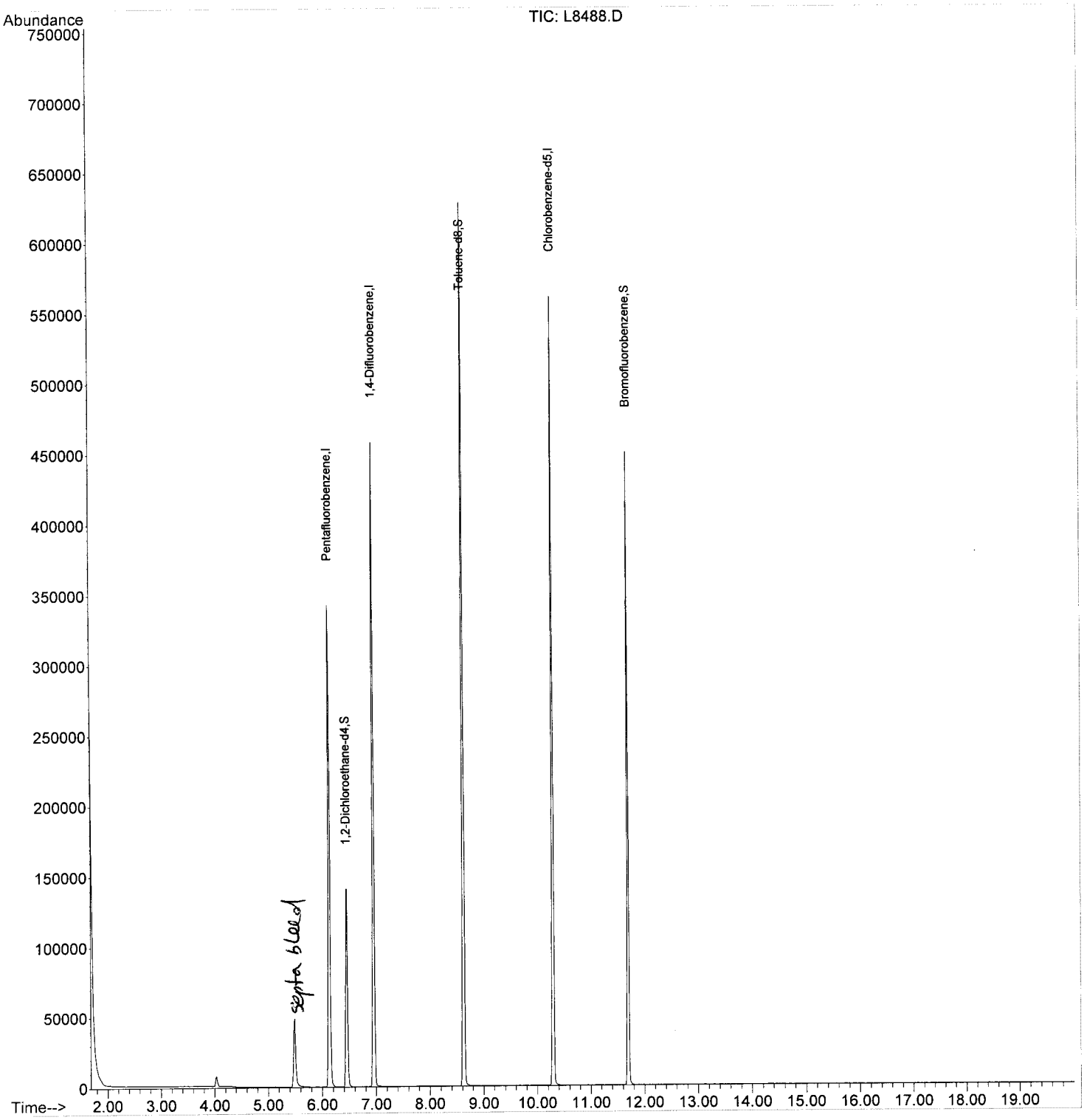
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8488.D
Acq On : 30 Jun 2015 17:34
Operator : XING
Sample : E-3_(0.5-1.0)/,05367-002,S,3.1g,22.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 01 13:41:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8488.D
Acq On : 30 Jun 2015 17:34
Operator : XING
Sample : E-3_(0.5-1.0)/,05367-002,S,3.1g,22.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	6864	16247	1.36%	0.325%
2	5.491	368	376	395	rBV	48288	131665	11.05%	2.631%
3	6.131	432	439	454	rVB	342417	719843	60.43%	14.387%
4	6.456	465	471	481	rBV	140655	319462	26.82%	6.385%
5	6.953	513	520	538	rVB	457870	894395	75.08%	17.875%
6	8.618	677	684	704	rVB	628065	1191211	100.00%	23.807%
7	10.293	842	849	864	rBV	560884	989767	83.09%	19.781%
8	11.694	980	987	998	rBV	450191	740954	62.20%	14.809%

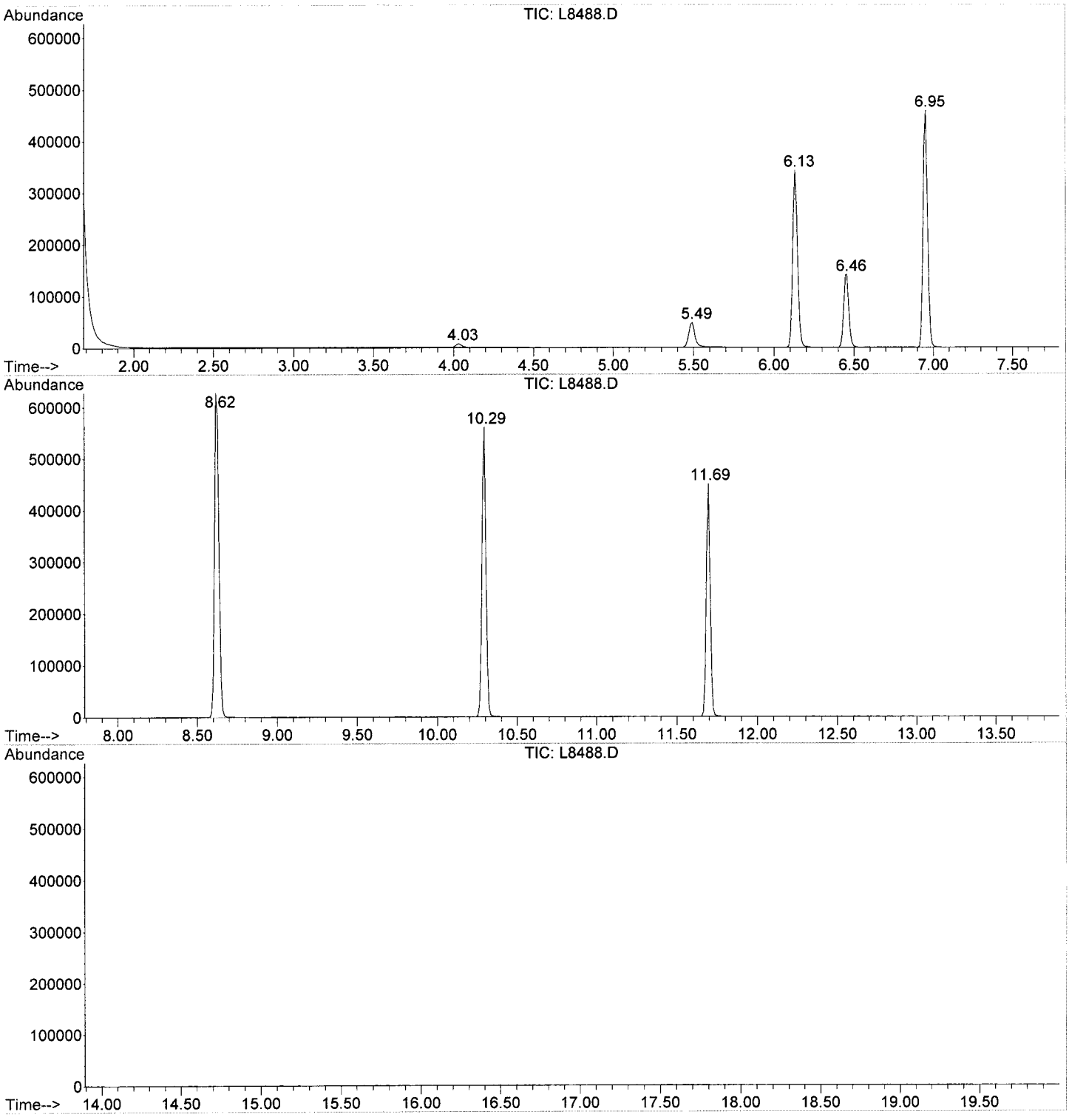
Sum of corrected areas: 5003544

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8488.D
Acq On : 30 Jun 2015 17:34
Operator : XING
Sample : E-3_(0.5-1.0)/,05367-002,S,3.1g,22.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8489.D
Acq On : 30 Jun 2015 18:03
Operator : XING
Sample : E-3_(2.0-2.5)/,05367-003,S,4.1g,12.7
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 01 13:43:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	253889	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	407577	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	342379	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	116246	44.70	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 89.40%			
41) Toluene-d8	8.62	98	455569	49.07	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.14%			
59) Bromofluorobenzene	11.69	95	154536	46.12	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.24%			

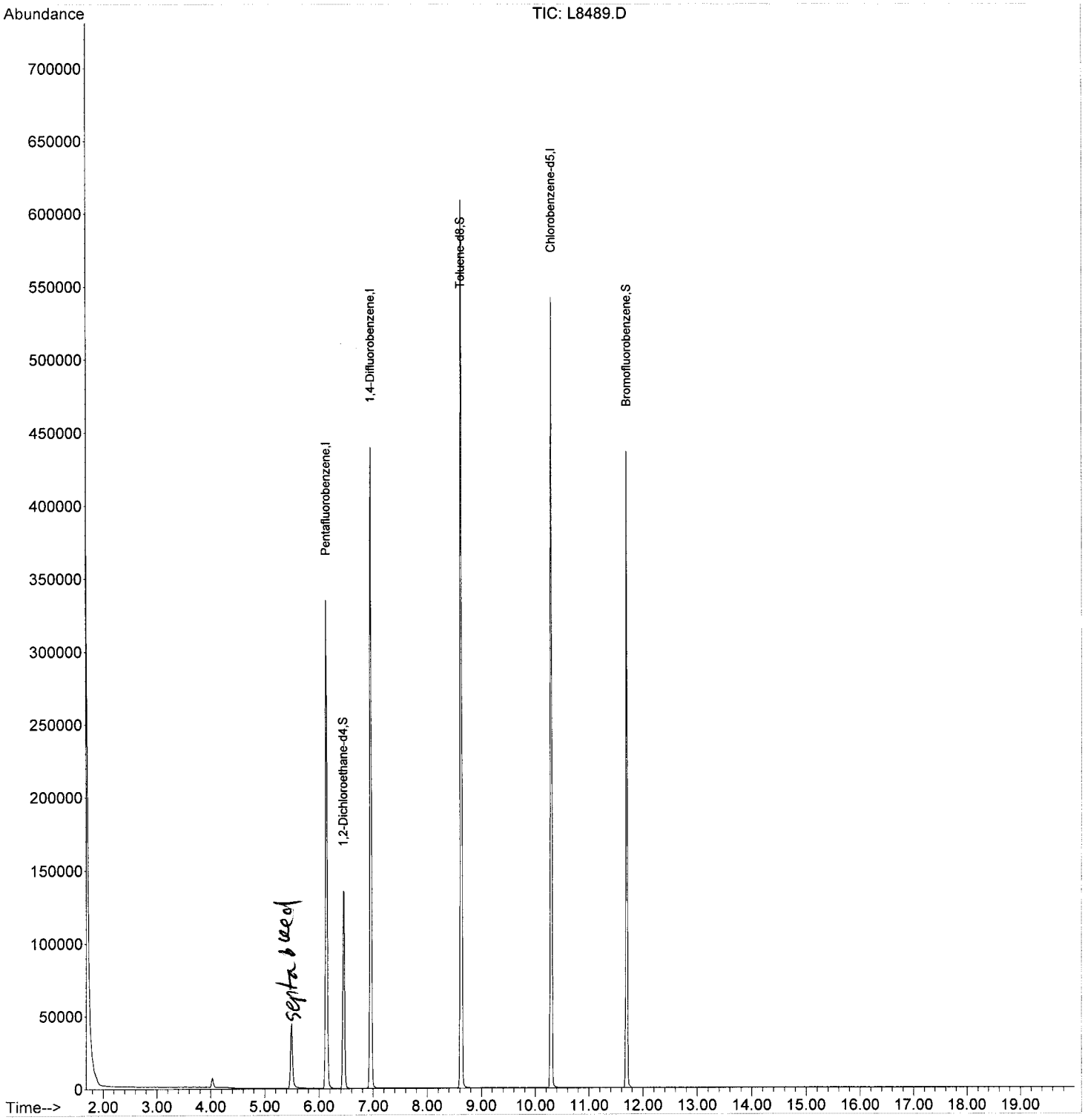
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8489.D
Acq On : 30 Jun 2015 18:03
Operator : XING
Sample : E-3_(2.0-2.5)/,05367-003,S,4.1g,12.7
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 01 13:43:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8489.D
Acq On : 30 Jun 2015 18:03
Operator : XING
Sample : E-3_(2.0-2.5)/,05367-003,S,4.1g,12.7
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	238	rVB	6339	14840	1.28%	0.308%
2	5.491	369	376	400	rVB	44275	119473	10.32%	2.477%
3	6.131	433	439	452	rBV	335078	695306	60.07%	14.414%
4	6.446	465	470	483	rVB	135220	303773	26.24%	6.297%
5	6.953	513	520	533	rVB	439541	866666	74.87%	17.966%
6	8.618	678	684	704	rBV	609237	1157492	100.00%	23.995%
7	10.293	843	849	861	rVB	542535	954969	82.50%	19.797%
8	11.694	980	987	998	rVB	436701	711339	61.46%	14.746%

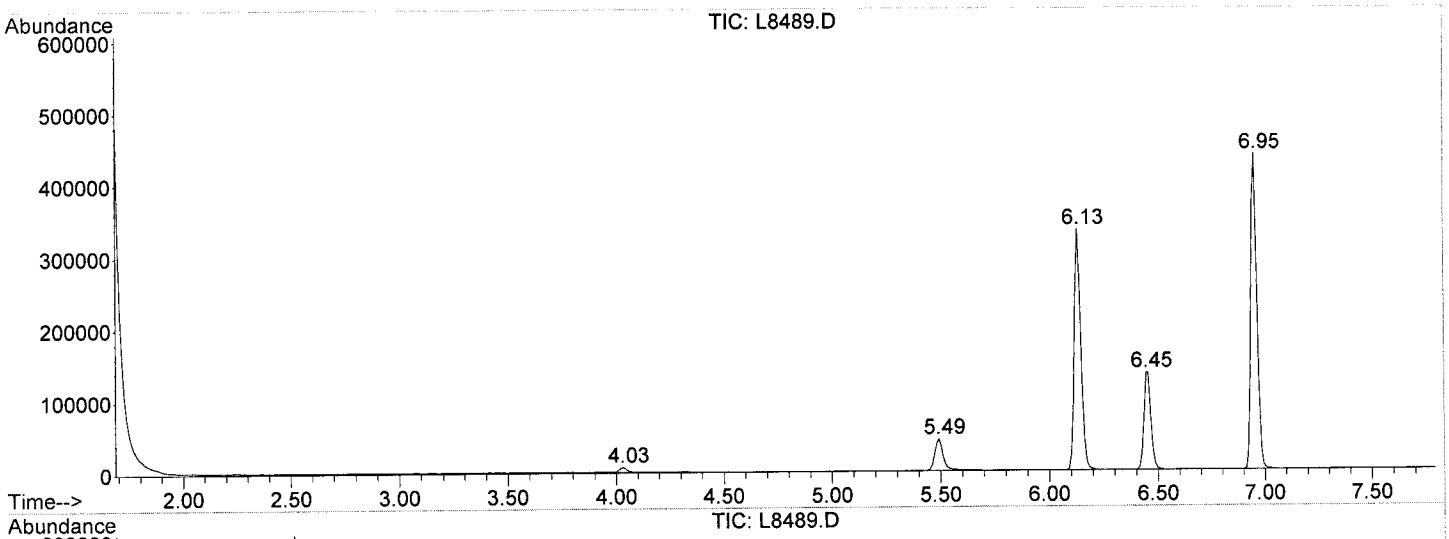
Sum of corrected areas: 4823858

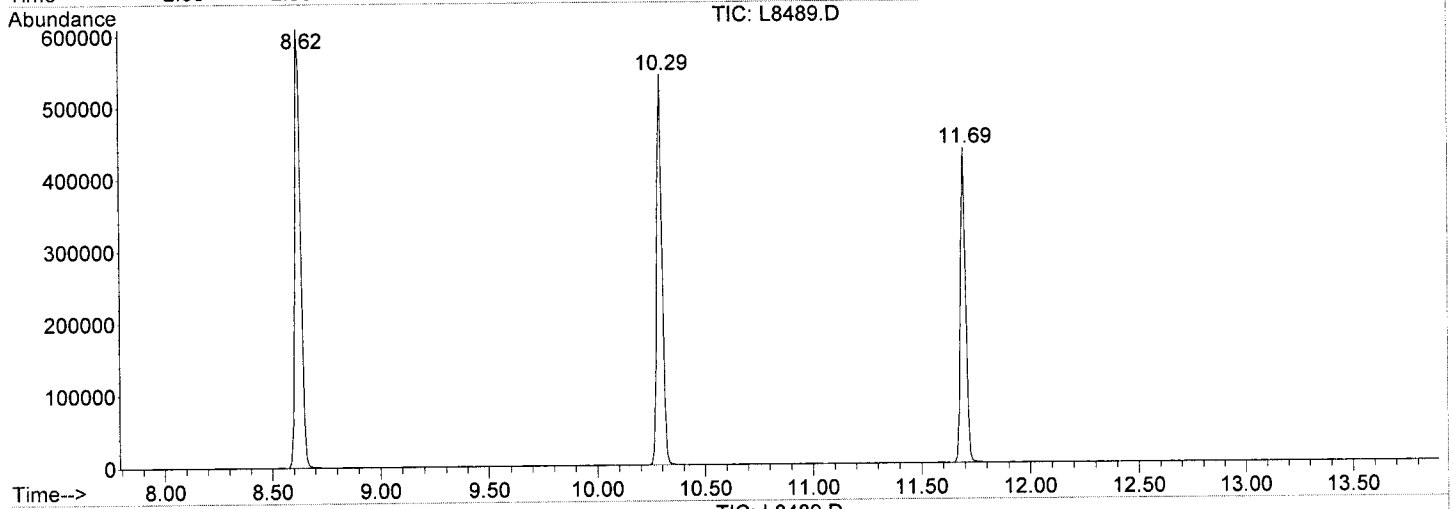
LSC Report - Integrated Chromatogram

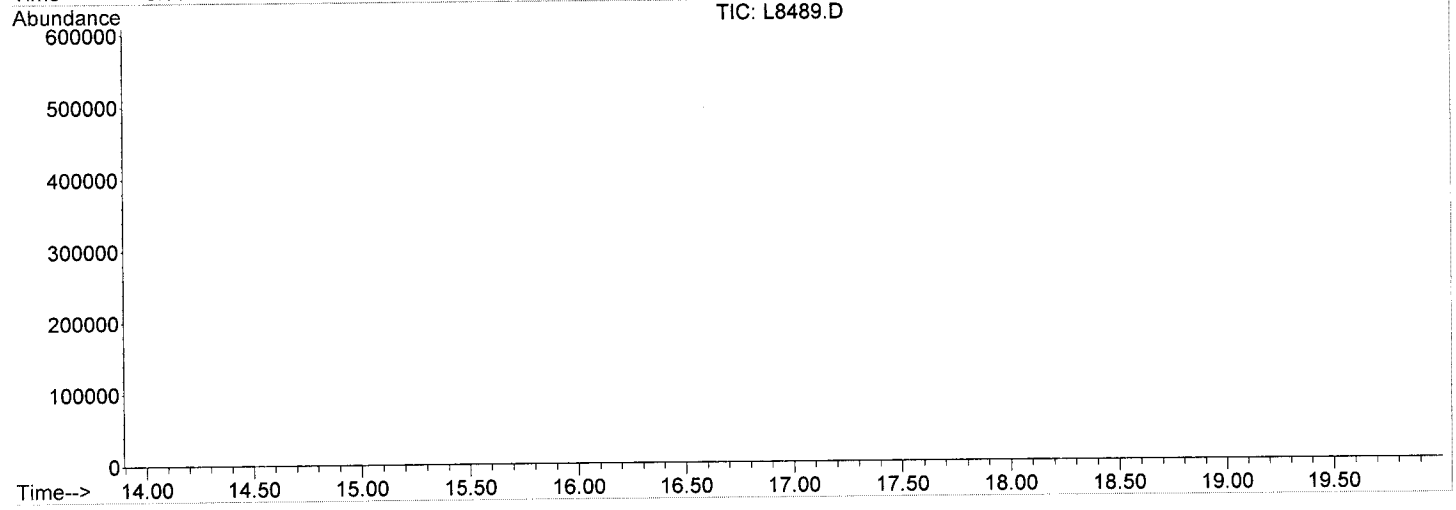
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8489.D
Acq On : 30 Jun 2015 18:03
Operator : XING
Sample : E-3_(2.0-2.5)/,05367-003,S,4.1g,12.7
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8490.D
Acq On : 30 Jun 2015 18:33
Operator : XING
Sample : E-3_(4.5-5.0)/,05367-004,S,5.7g,7.10
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 01 13:45:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	253852	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	415369	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	359229	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	119026	45.78	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 91.56%			
41) Toluene-d8	8.62	98	462815	48.92	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.84%			
59) Bromofluorobenzene	11.69	95	162226	46.14	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.28%			

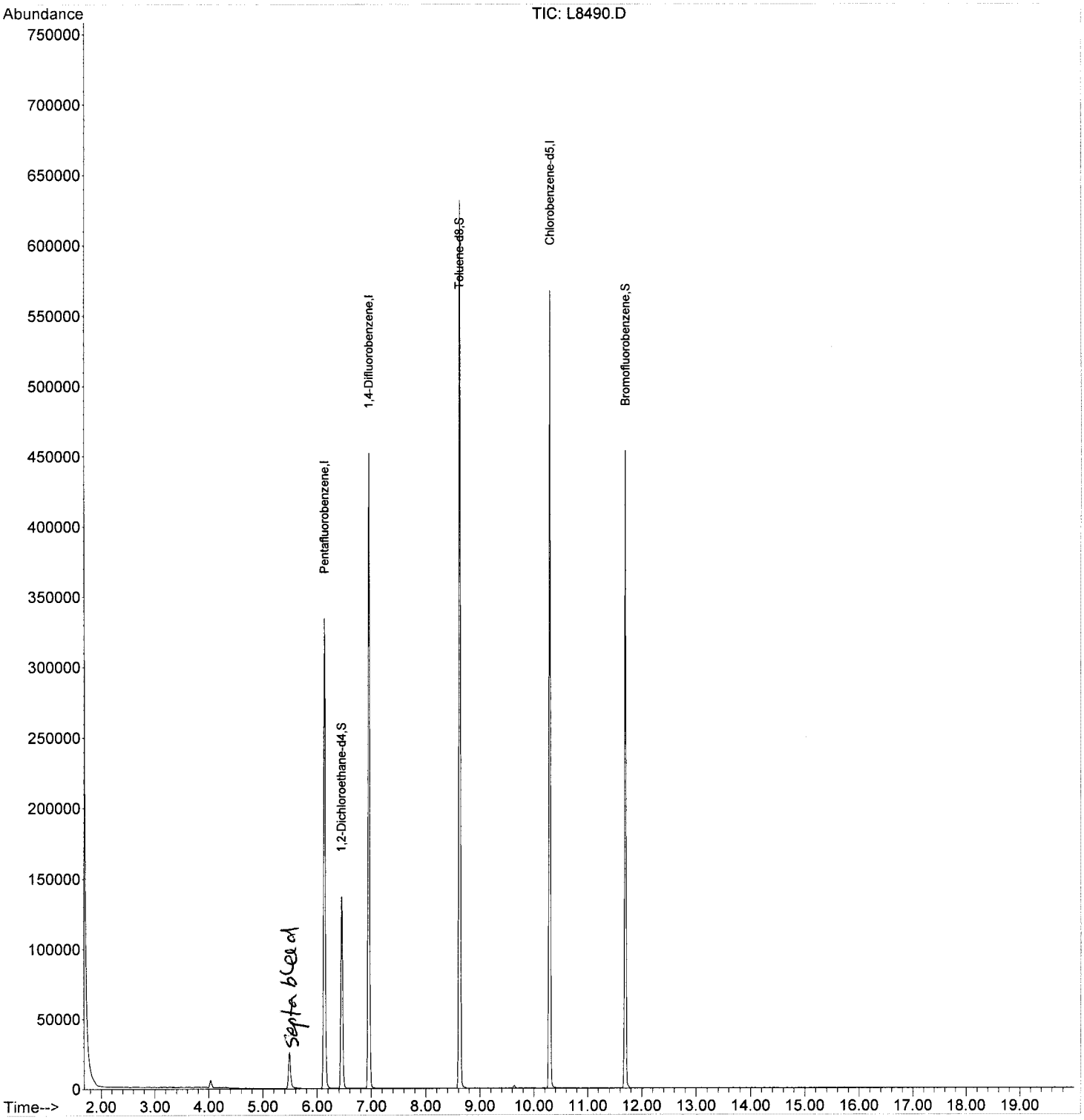
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8490.D
Acq On : 30 Jun 2015 18:33
Operator : XING
Sample : E-3_(4.5-5.0)/,05367-004,S,5.7g,7.10
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 01 13:45:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8490.D
Acq On : 30 Jun 2015 18:33
Operator : XING
Sample : E-3_(4.5-5.0)/,05367-004,S,5.7g,7.10
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	5162	12169	1.03%	0.248%
2	5.491	368	376	402	rVB	25728	72218	6.12%	1.472%
3	6.131	432	439	454	rVB	334483	696717	59.08%	14.202%
4	6.446	464	470	480	rVB	136814	310489	26.33%	6.329%
5	6.953	514	520	536	rVB	451990	884369	74.99%	18.028%
6	8.618	679	684	699	rVB	631831	1179308	100.00%	24.040%
7	10.293	842	849	861	rBV	567871	996043	84.46%	20.304%
8	11.694	981	987	1000	rBV	454096	754285	63.96%	15.376%

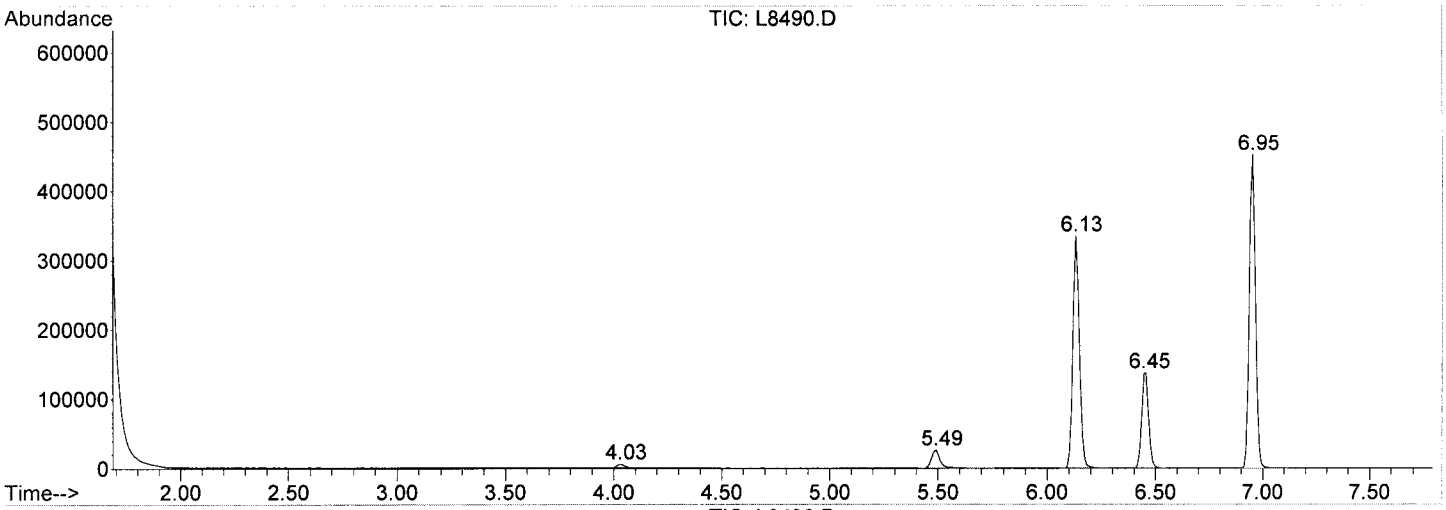
Sum of corrected areas: 4905598

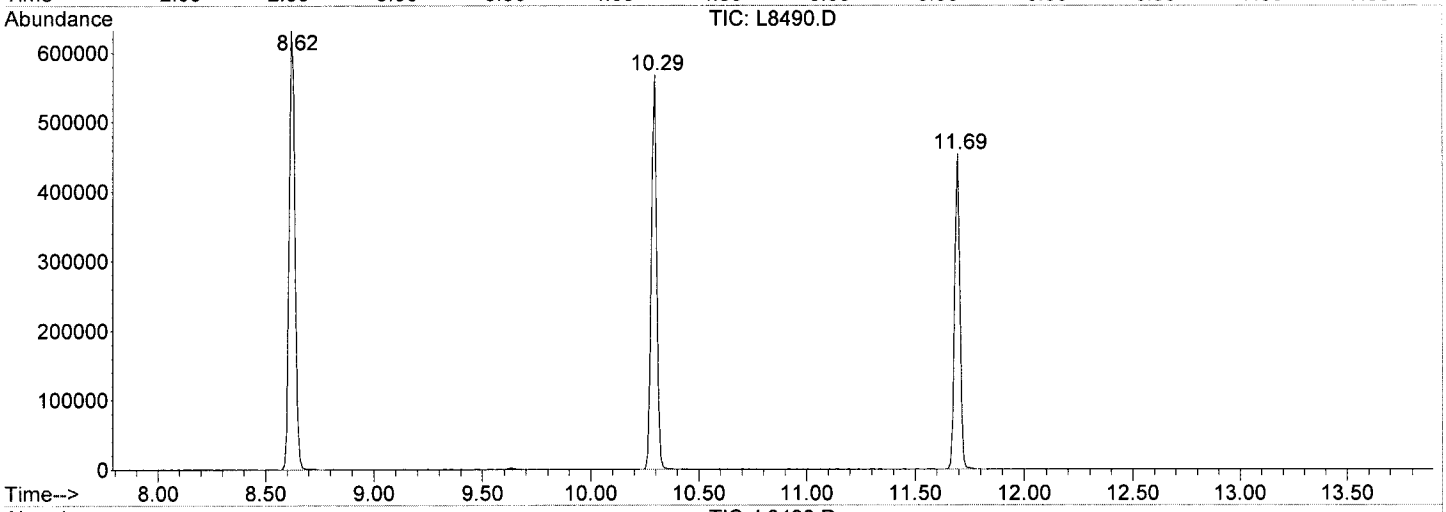
LSC Report - Integrated Chromatogram

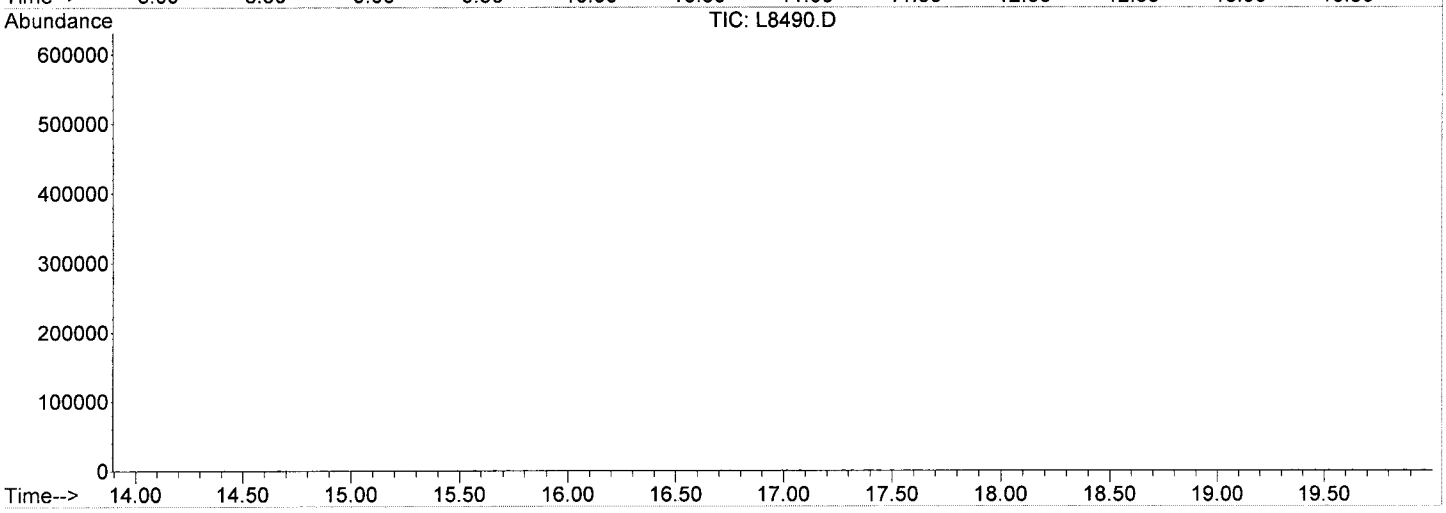
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8490.D
Acq On : 30 Jun 2015 18:33
Operator : XING
Sample : E-3_(4.5-5.0)/,05367-004,S,5.7g,7.10
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8491.D
Acq On : 30 Jun 2015 19:03
Operator : XING
Sample : E-4_(0.5-1.0)/,05367-007,S,4.3g,13.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 01 13:47:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	256005	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	413450	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	350068	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	121862	46.47	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.94%			
41) Toluene-d8	8.62	98	459188	48.76	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.52%			
59) Bromofluorobenzene	11.69	95	159023	46.42	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.84%			

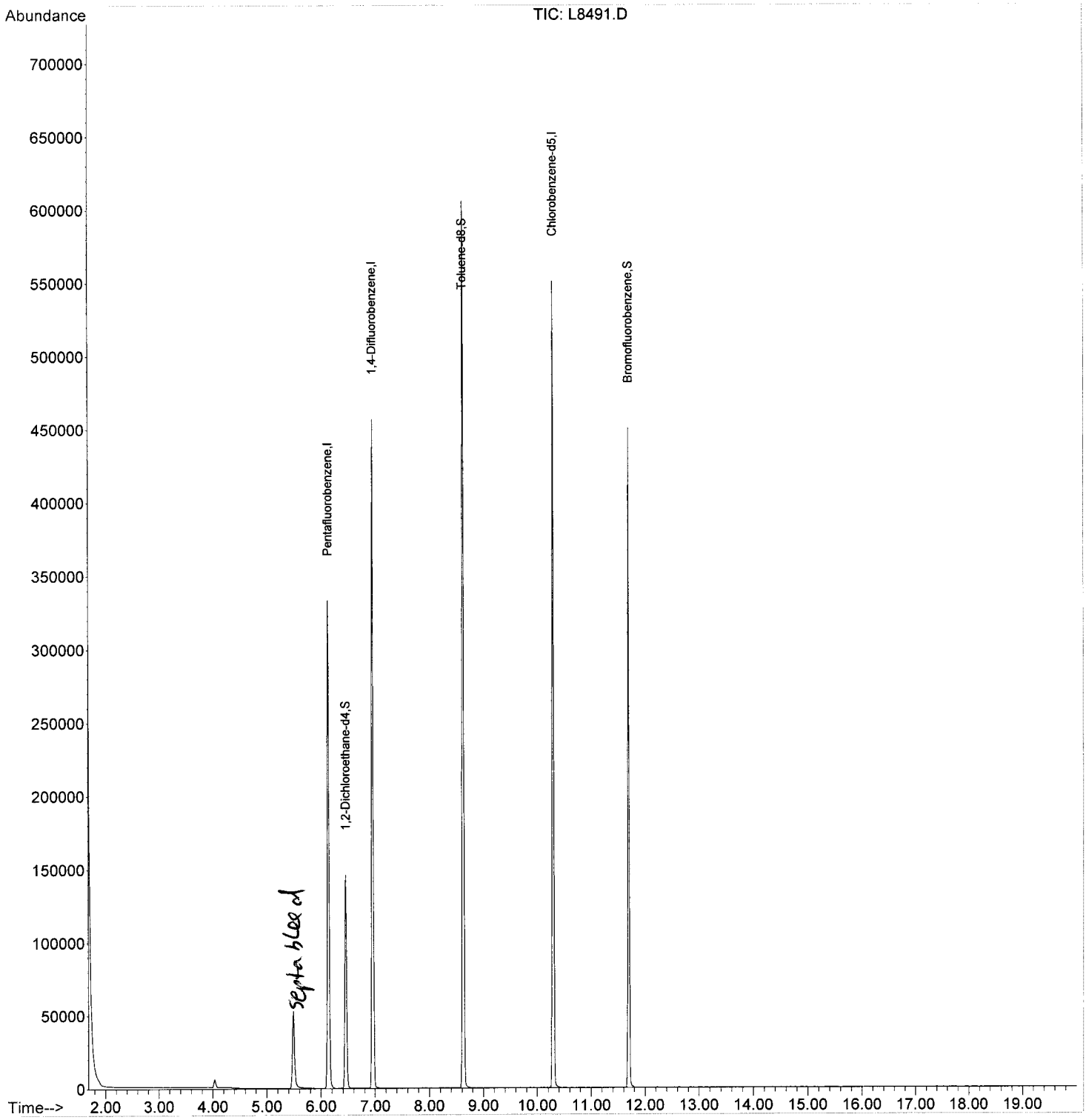
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8491.D
Acq On : 30 Jun 2015 19:03
Operator : XING
Sample : E-4_(0.5-1.0)/,05367-007,S,4.3g,13.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 01 13:47:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8491.D
Acq On : 30 Jun 2015 19:03
Operator : XING
Sample : E-4_(0.5-1.0)/,05367-007,S,4.3g,13.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	5361	13096	1.12%	0.265%
2	5.491	369	376	401	rBV	52502	143608	12.30%	2.909%
3	6.131	432	439	451	rVB	333066	704364	60.32%	14.269%
4	6.456	464	471	482	rBV	146021	316991	27.15%	6.421%
5	6.953	513	520	536	rVB	456758	878162	75.20%	17.789%
6	8.618	679	684	704	rVB	605747	1167708	100.00%	23.655%
7	10.293	843	849	866	rVB	551084	973599	83.38%	19.722%
8	11.694	982	987	998	rVB	450790	738961	63.28%	14.969%

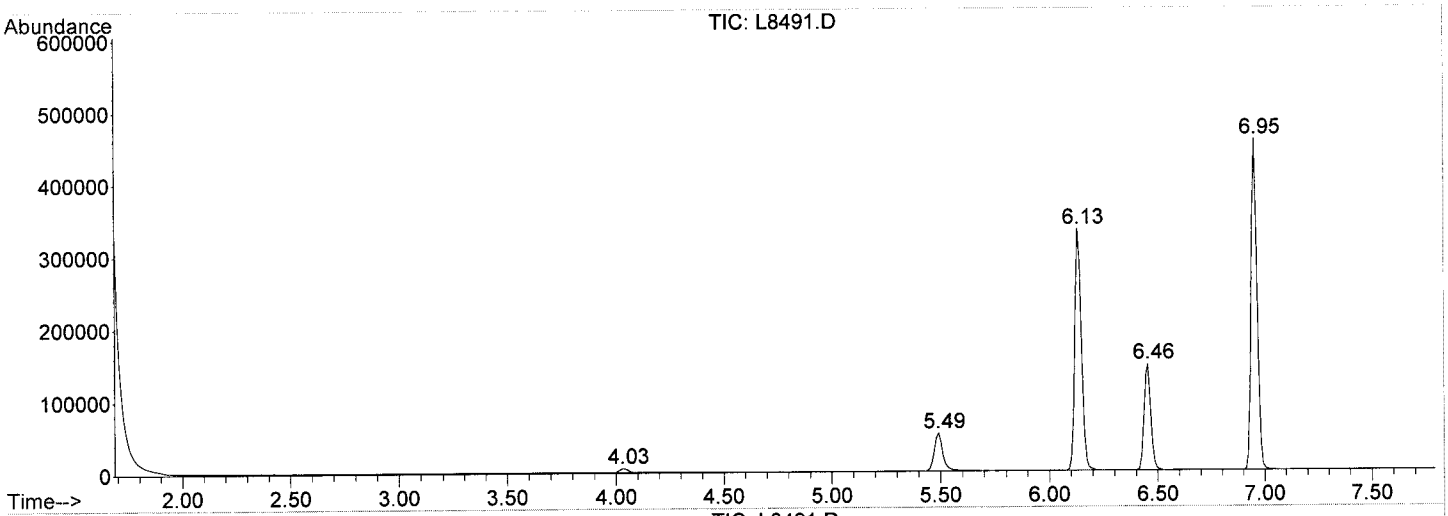
Sum of corrected areas: 4936489

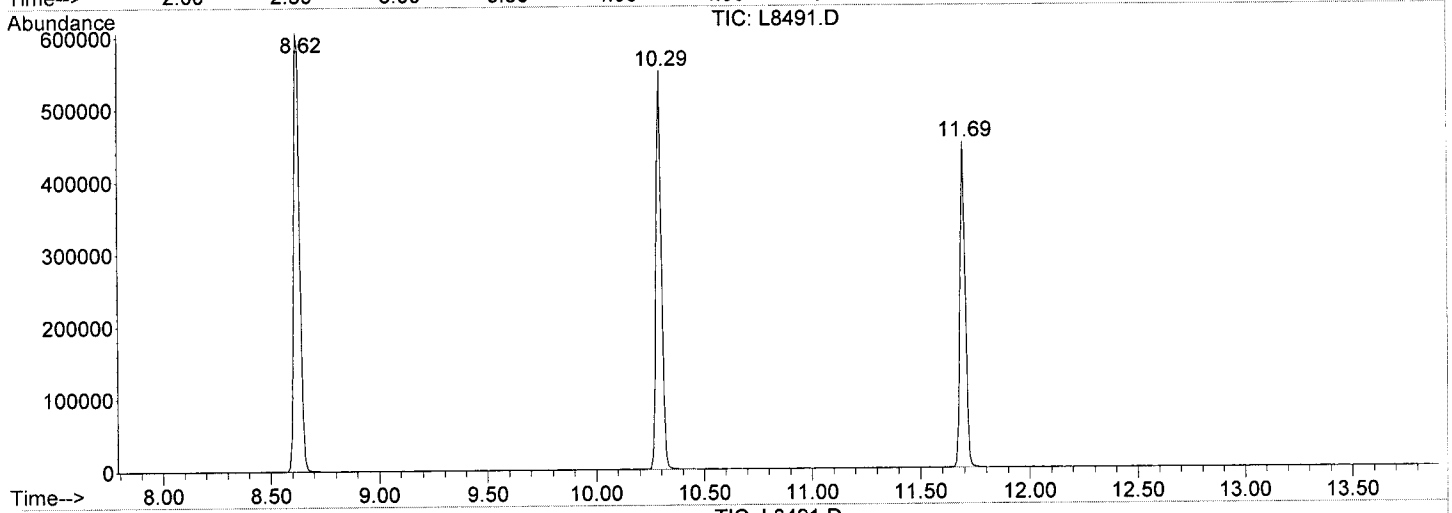
LSC Report - Integrated Chromatogram

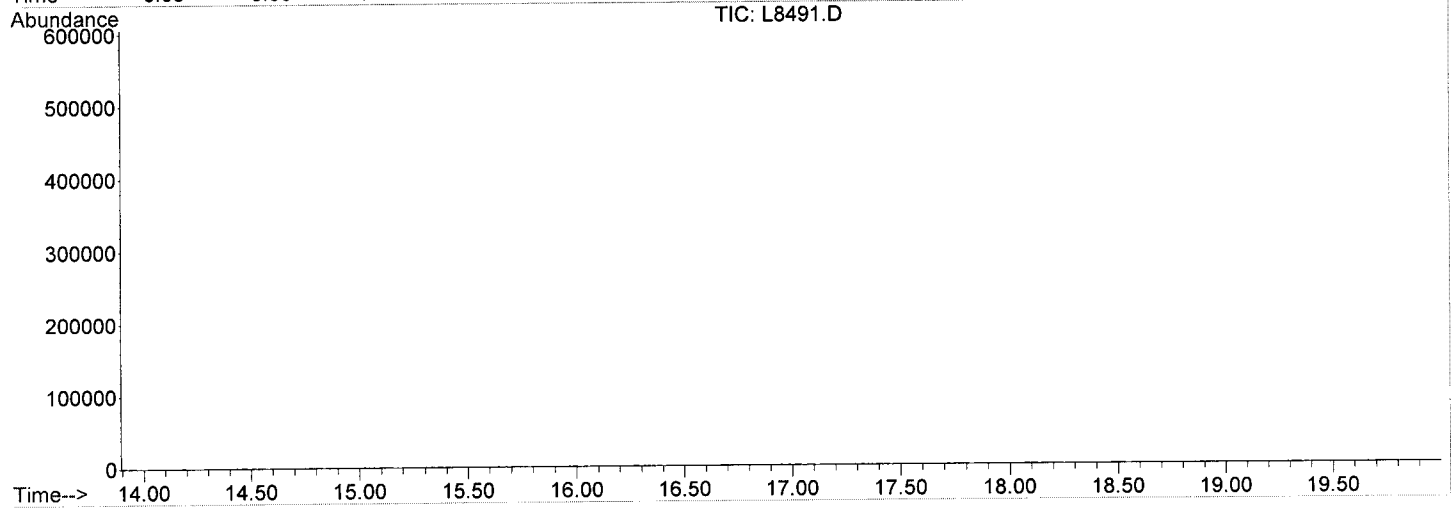
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8491.D
Acq On : 30 Jun 2015 19:03
Operator : XING
Sample : E-4_(0.5-1.0)/,05367-007,S,4.3g,13.1
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8492.D
Acq On : 30 Jun 2015 19:32
Operator : XING
Sample : E-4_(2.0-2.5)/,05367-008,S,5.3g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 01 13:48:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	256540	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	422489	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	365458	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.45	65	125586	47.79	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.58%			
41) Toluene-d8	8.62	98	472423	49.09	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.18%			
59) Bromofluorobenzene	11.69	95	166093	46.44	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.88%			

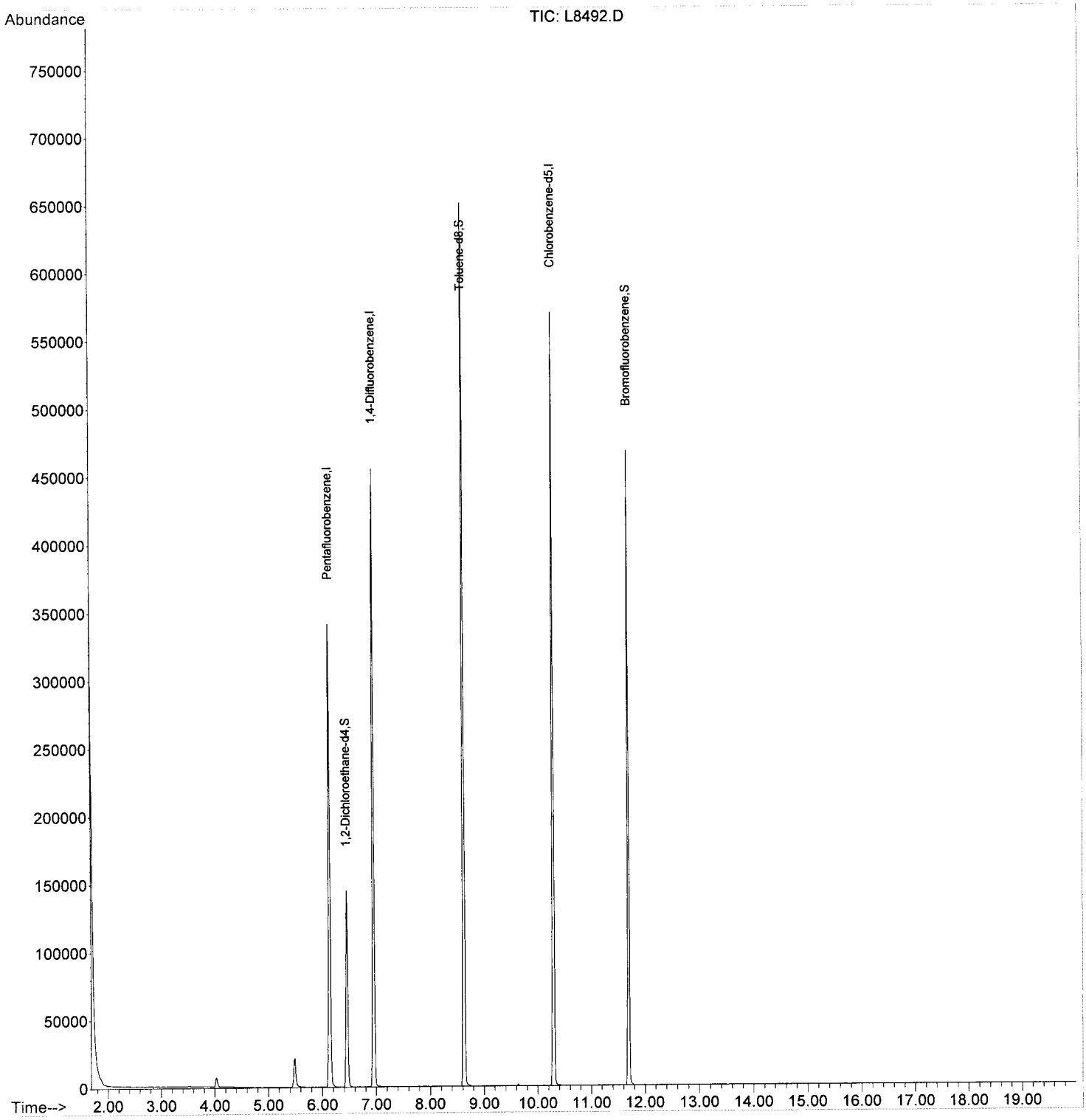
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8492.D
Acq On : 30 Jun 2015 19:32
Operator : XING
Sample : E-4_(2.0-2.5)/,05367-008,S,5.3g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 01 13:48:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8492.D
Acq On : 30 Jun 2015 19:32
Operator : XING
Sample : E-4_(2.0-2.5)/,05367-008,S,5.3g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	238	rVB	6713	16470	1.37%	0.330%
2	5.492	369	376	390	rBV	21156	58821	4.89%	1.177%
3	6.131	432	439	456	rVB	341114	704700	58.63%	14.100%
4	6.456	464	471	484	rBV	144536	328014	27.29%	6.563%
5	6.954	513	520	535	rBV	455578	897148	74.65%	17.950%
6	8.618	678	684	701	rVB	651432	1201874	100.00%	24.047%
7	10.293	840	849	861	rBB	570311	1019638	84.84%	20.401%
8	11.694	975	987	998	rBB	467642	771362	64.18%	15.433%

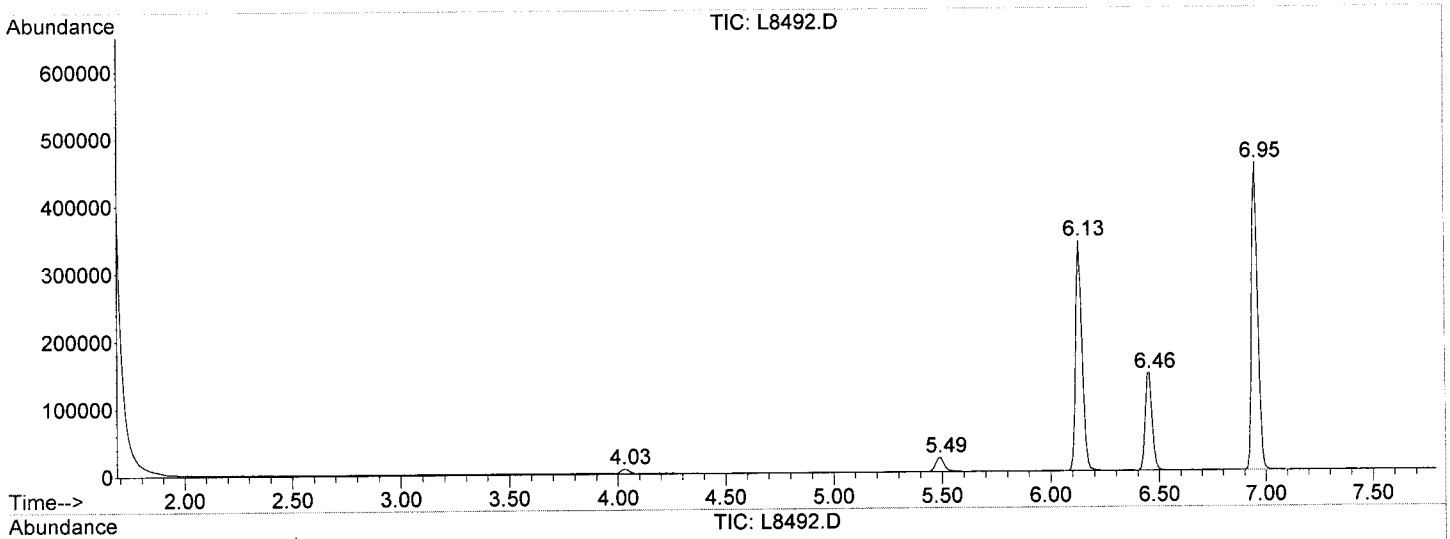
Sum of corrected areas: 4998027

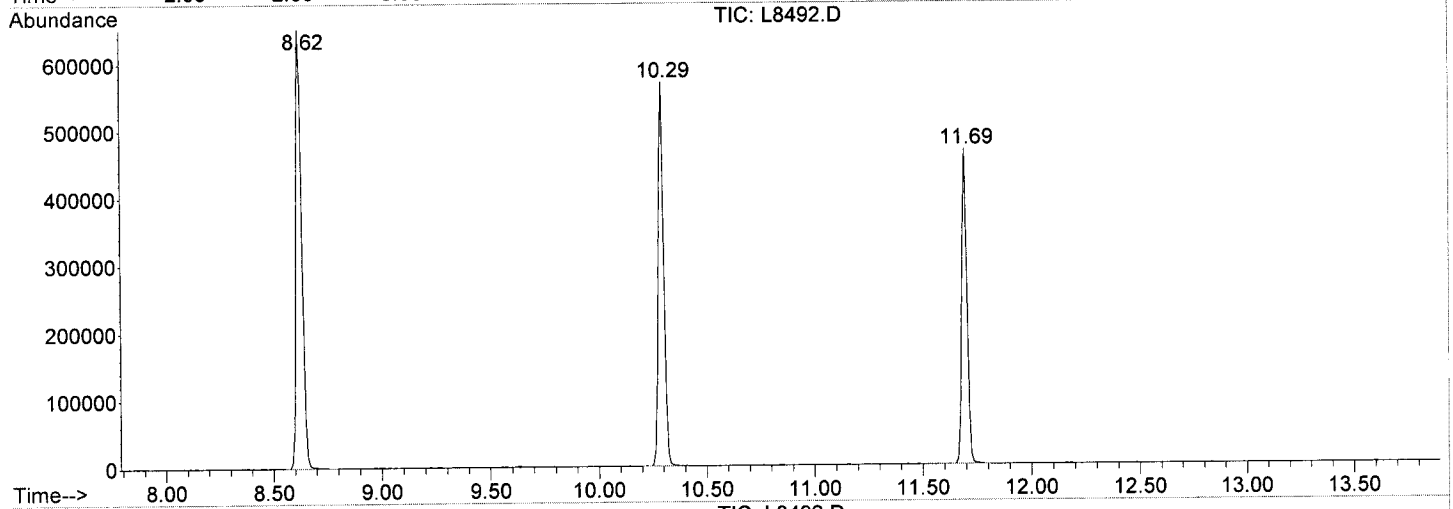
LSC Report - Integrated Chromatogram

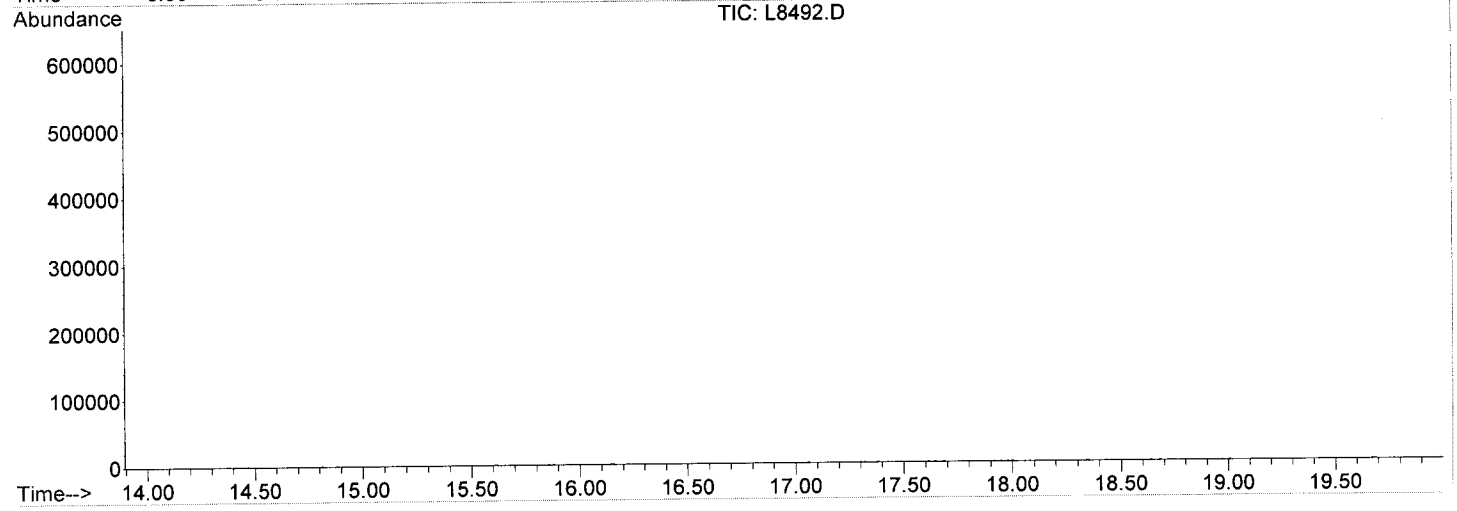
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8492.D
Acq On : 30 Jun 2015 19:32
Operator : XING
Sample : E-4_(2.0-2.5)/,05367-008,S,5.3g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8493.D
Acq On : 30 Jun 2015 20:02
Operator : XING
Sample : E-4_(3.0-3.5)/,05367-009,S,4.9g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 01 13:49:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	253135	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	415023	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	354059	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	123021	47.45	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.90%			
41) Toluene-d8	8.62	98	463093	48.99	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.98%			
59) Bromofluorobenzene	11.69	95	163194	47.10	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.20%			

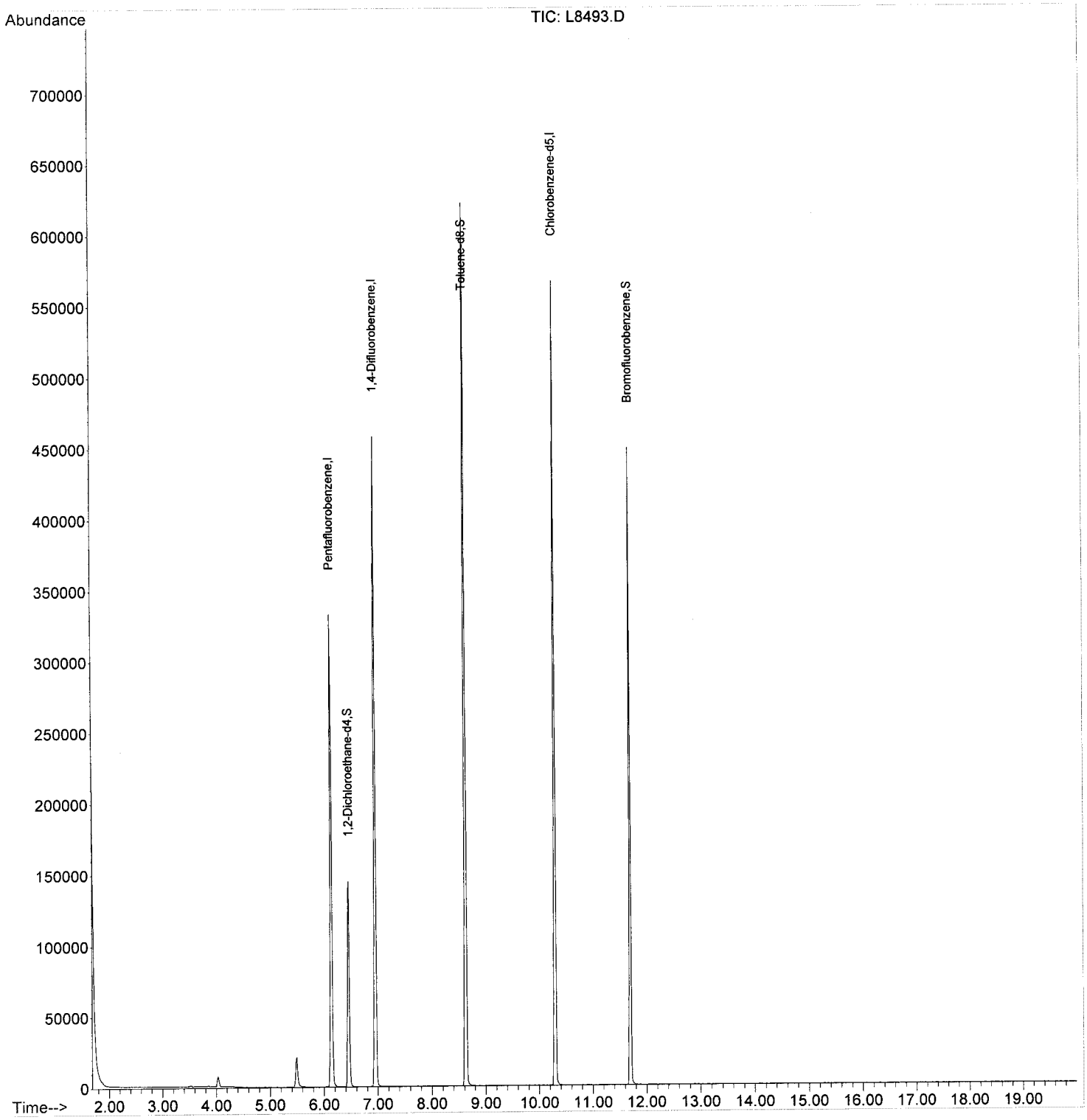
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8493.D
Acq On : 30 Jun 2015 20:02
Operator : XING
Sample : E-4_(3.0-3.5)/,05367-009,S,4.9g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 01 13:49:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8493.D
Acq On : 30 Jun 2015 20:02
Operator : XING
Sample : E-4_(3.0-3.5)/,05367-009,S,4.9g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	7026	17556	1.49%	0.358%
2	5.491	369	376	396	rVB	20764	57352	4.85%	1.171%
3	6.131	432	439	451	rVB	333015	696957	58.98%	14.230%
4	6.456	464	471	481	rBV	144680	322074	27.25%	6.576%
5	6.953	514	520	537	rVB	458092	883523	74.76%	18.039%
6	8.618	678	684	698	rVB	622796	1181768	100.00%	24.128%
7	10.293	842	849	859	rBV	567143	983998	83.26%	20.090%
8	11.694	980	987	1002	rBV	449479	754665	63.86%	15.408%

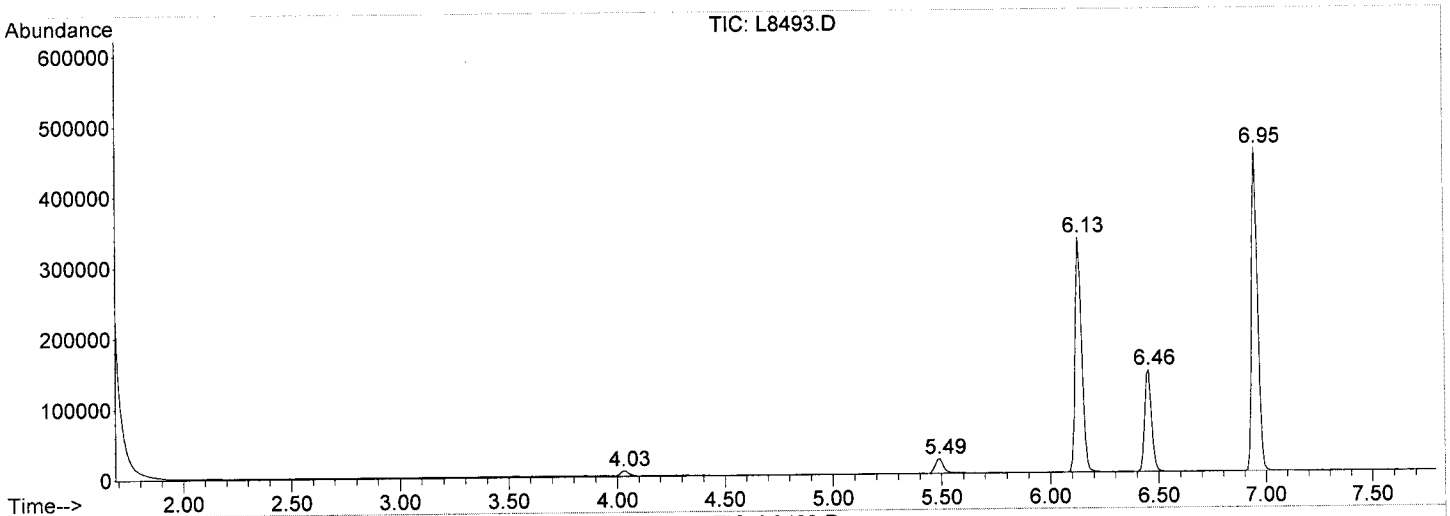
Sum of corrected areas: 4897893

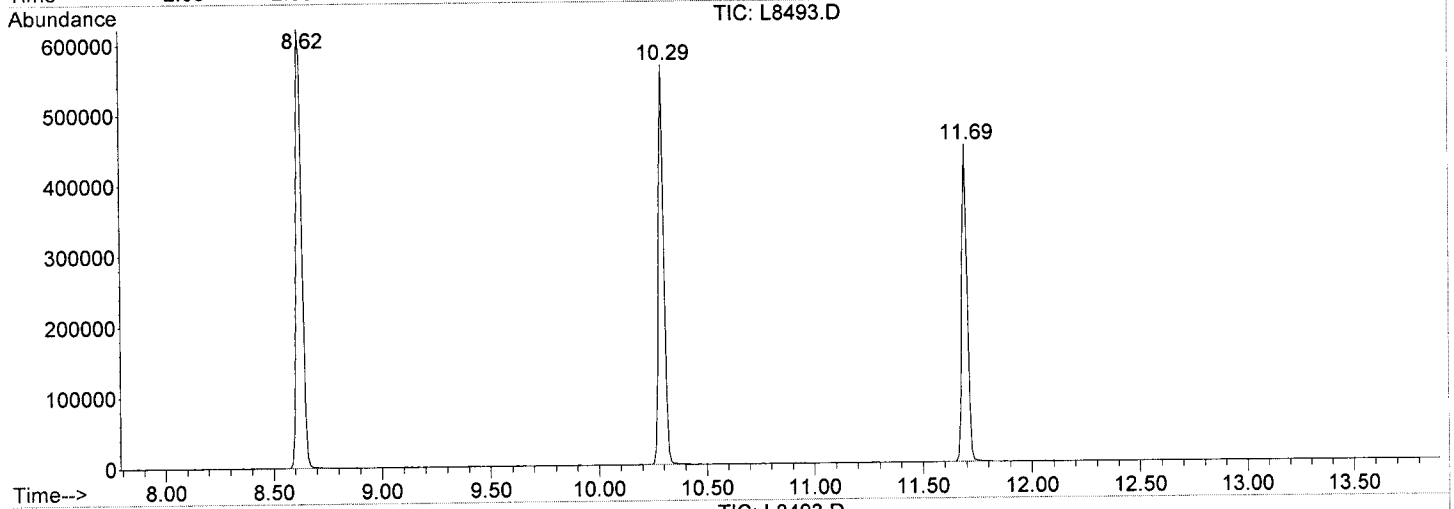
LSC Report - Integrated Chromatogram

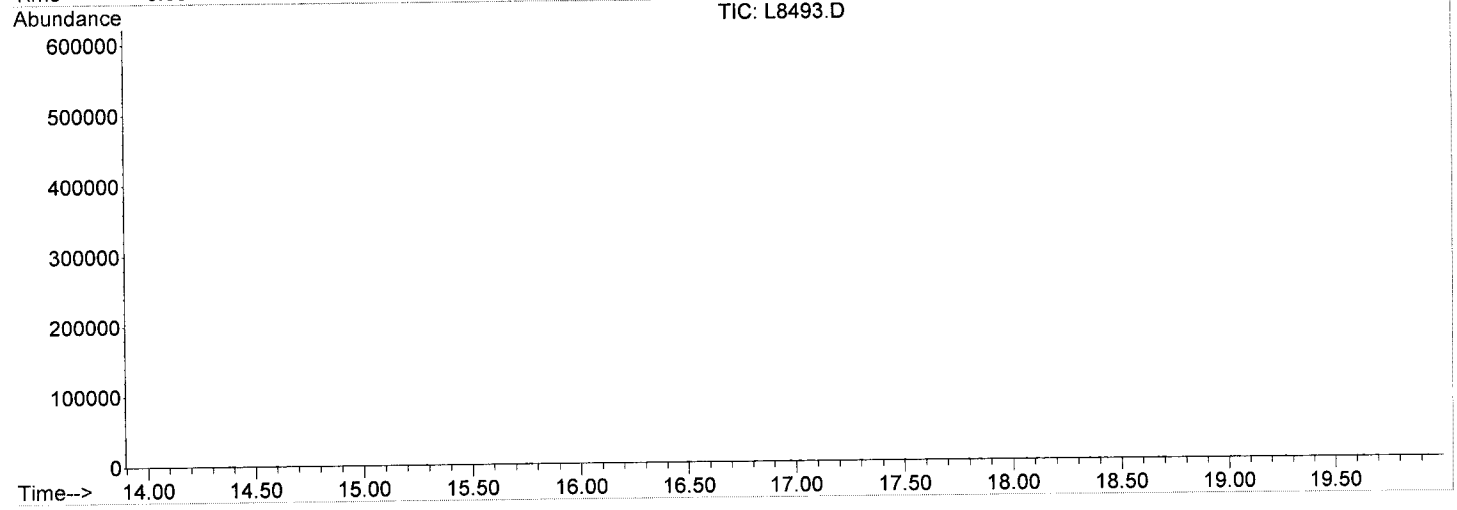
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8493.D
Acq On : 30 Jun 2015 20:02
Operator : XING
Sample : E-4_(3.0-3.5)/,05367-009,S,4.9g,8.00
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8522.D
Acq On : 1 Jul 2015 10:28
Operator : XING
Sample : E-4_(4.5-5.0)/,05367-010,S,4.7g,9.30
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jul 01 13:51:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	232851	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	399109	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	339699	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	124302	52.12	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 104.24%			
41) Toluene-d8	8.62	98	437663	48.14	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.28%			
59) Bromofluorobenzene	11.69	95	156605	47.11	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.22%			

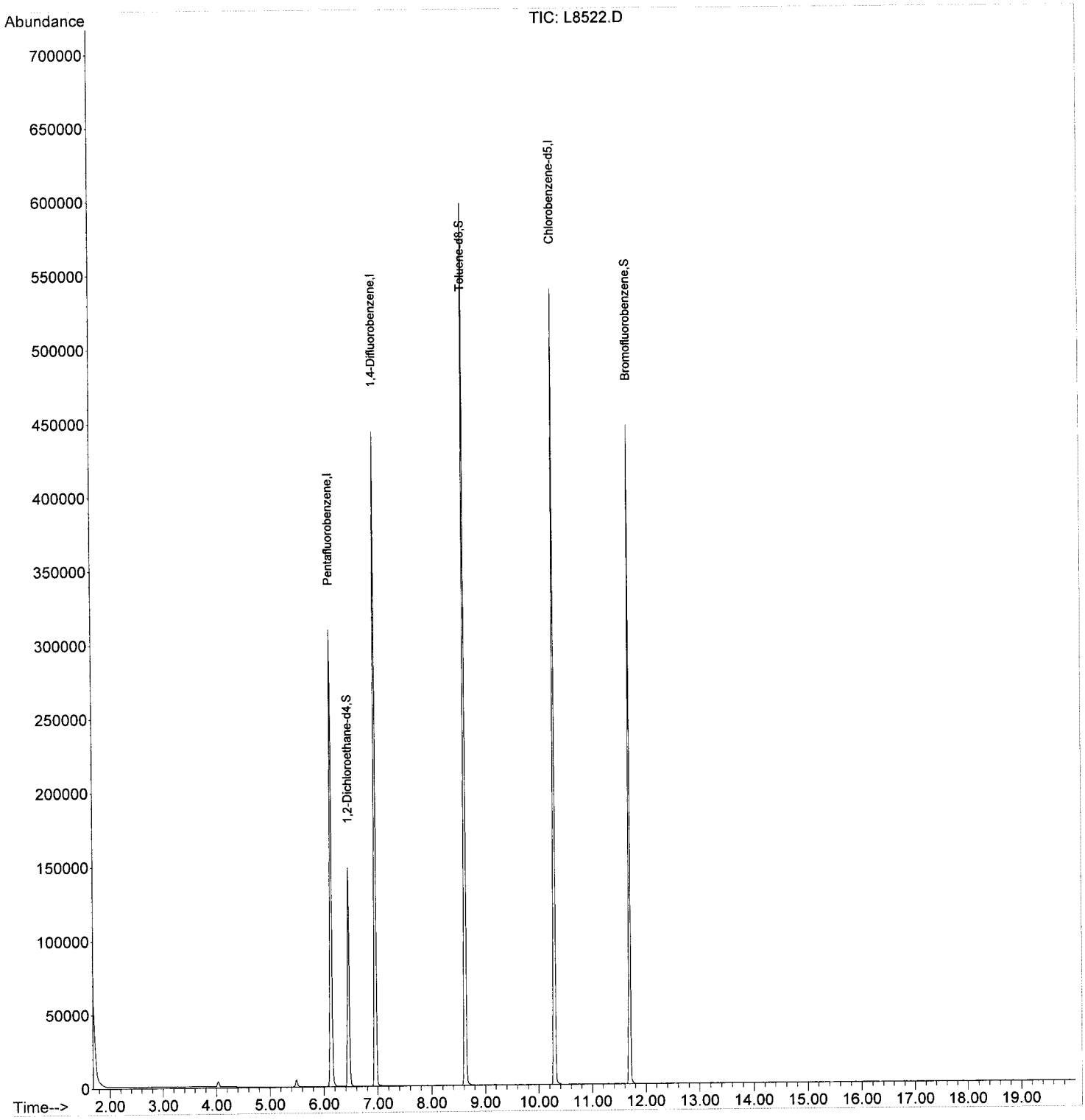
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8522.D
Acq On : 1 Jul 2015 10:28
Operator : XING
Sample : E-4_(4.5-5.0)/,05367-010,S,4.7g,9.30
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Jul 01 13:51:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8522.D
Acq On : 1 Jul 2015 10:28
Operator : XING
Sample : E-4_(4.5-5.0)/,05367-010,S,4.7g,9.30
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.491	370	376	384	rVB	4621	11565	1.04%	0.251%
2	6.131	433	439	452	rVB	309396	641077	57.61%	13.904%
3	6.456	465	471	486	rVB	148210	324797	29.19%	7.044%
4	6.953	513	520	536	rBV	443422	846719	76.09%	18.364%
5	8.618	679	684	704	rVB	597759	1112739	100.00%	24.133%
6	10.293	842	849	862	rVB	539463	945117	84.94%	20.498%
7	11.694	981	987	998	rBB	446758	728834	65.50%	15.807%

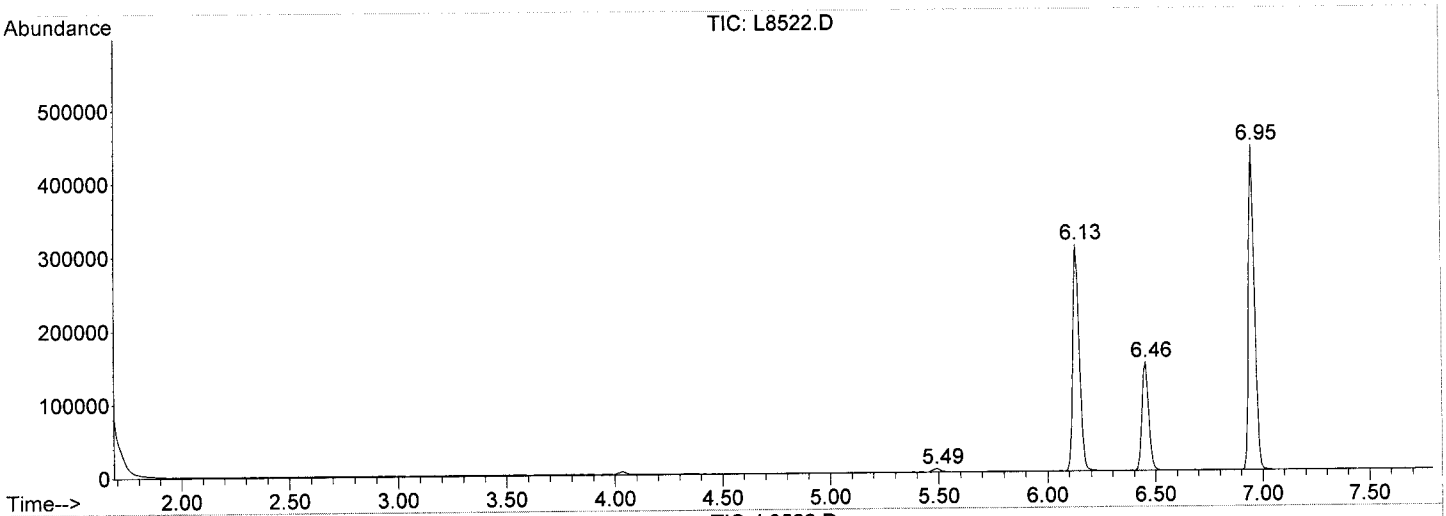
Sum of corrected areas: 4610848

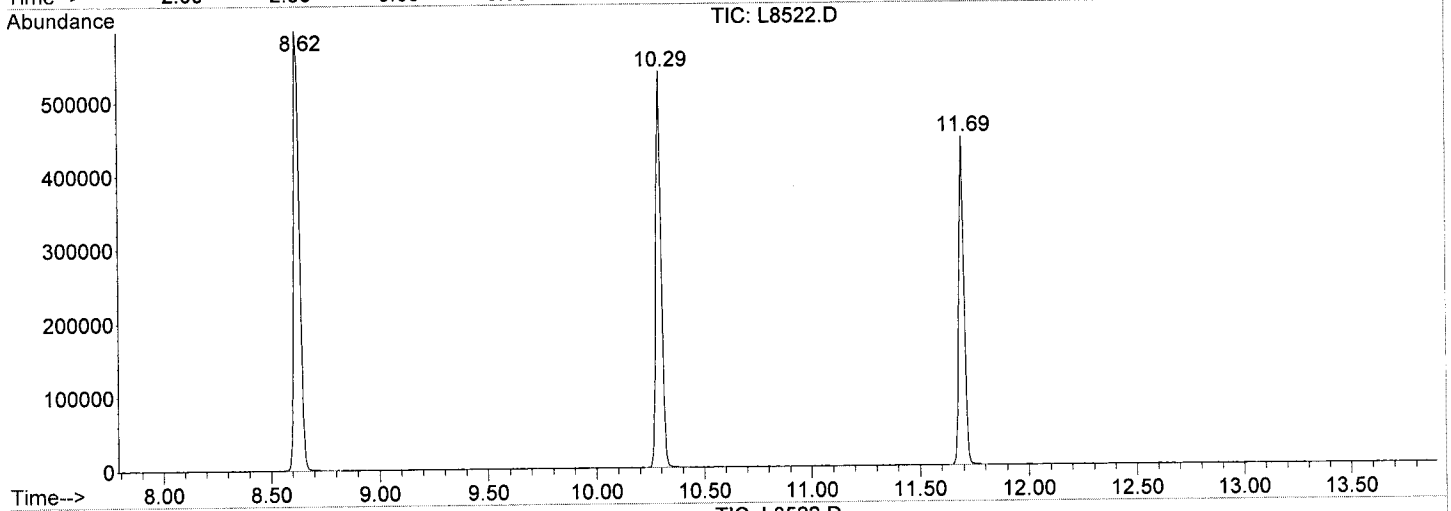
LSC Report - Integrated Chromatogram

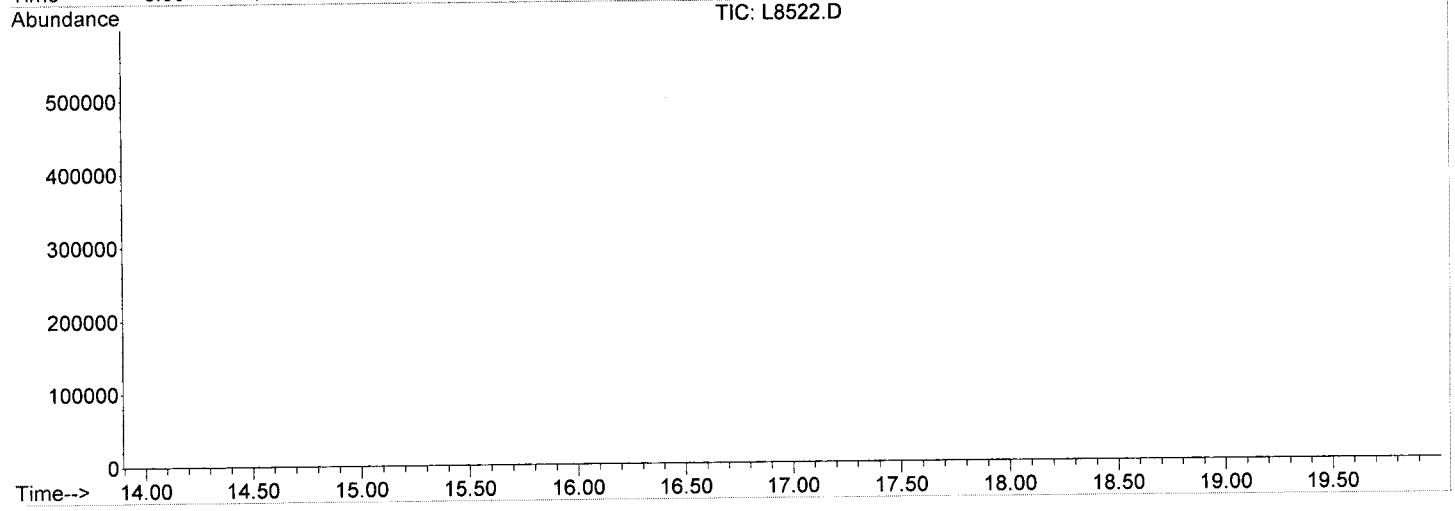
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8522.D
Acq On : 1 Jul 2015 10:28
Operator : XING
Sample : E-4_(4.5-5.0)/,05367-010,S,4.7g,9.30
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 45 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8495.D
Acq On : 30 Jun 2015 21:02
Operator : XING
Sample : E-16_(0.5-1.0),05367-017,S,4.8g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 01 13:52:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	249934	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	406969	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	343481	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	120612	47.11	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.22%			
41) Toluene-d8	8.62	98	447556	48.28	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.56%			
59) Bromofluorobenzene	11.69	95	156117	46.44	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.88%			

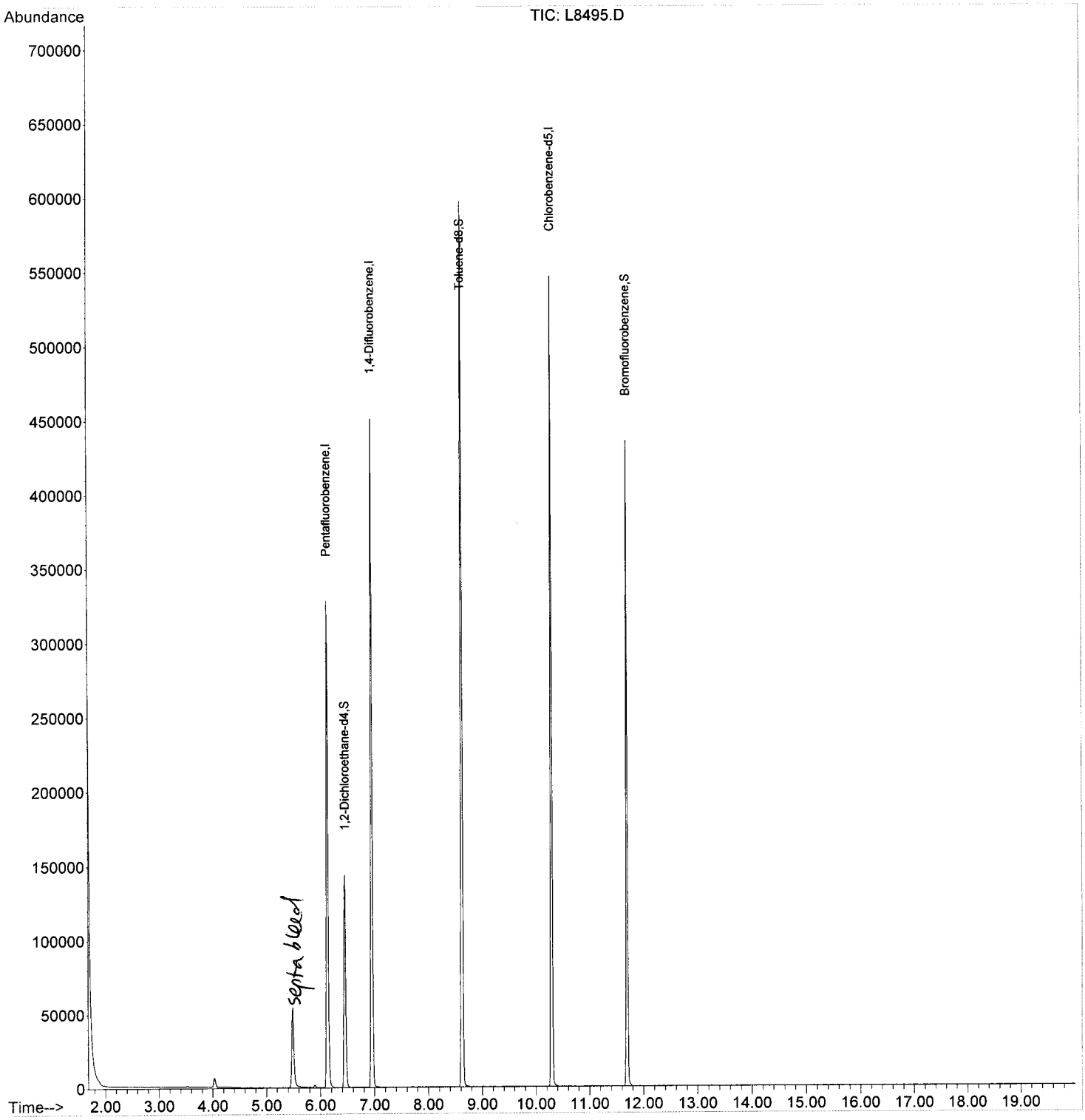
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8495.D
Acq On : 30 Jun 2015 21:02
Operator : XING
Sample : E-16_(0.5-1.0),05367-017,S,4.8g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jul 01 13:52:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8495.D
Acq On : 30 Jun 2015 21:02
Operator : XING
Sample : E-16_(0.5-1.0),05367-017,S,4.8g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	239	rVB	5981	14603	1.28%	0.301%
2	5.491	368	376	397	rBV	53963	148745	13.02%	3.064%
3	6.131	433	439	452	rVB	328083	688100	60.23%	14.173%
4	6.456	465	471	481	rVB	143645	315485	27.61%	6.498%
5	6.953	514	520	536	rVB	451161	864966	75.71%	17.816%
6	8.618	679	684	702	rBV	597396	1142546	100.00%	23.533%
7	10.293	843	849	865	rVB	547216	958377	83.88%	19.740%
8	11.694	977	987	997	rBB	435955	722239	63.21%	14.876%

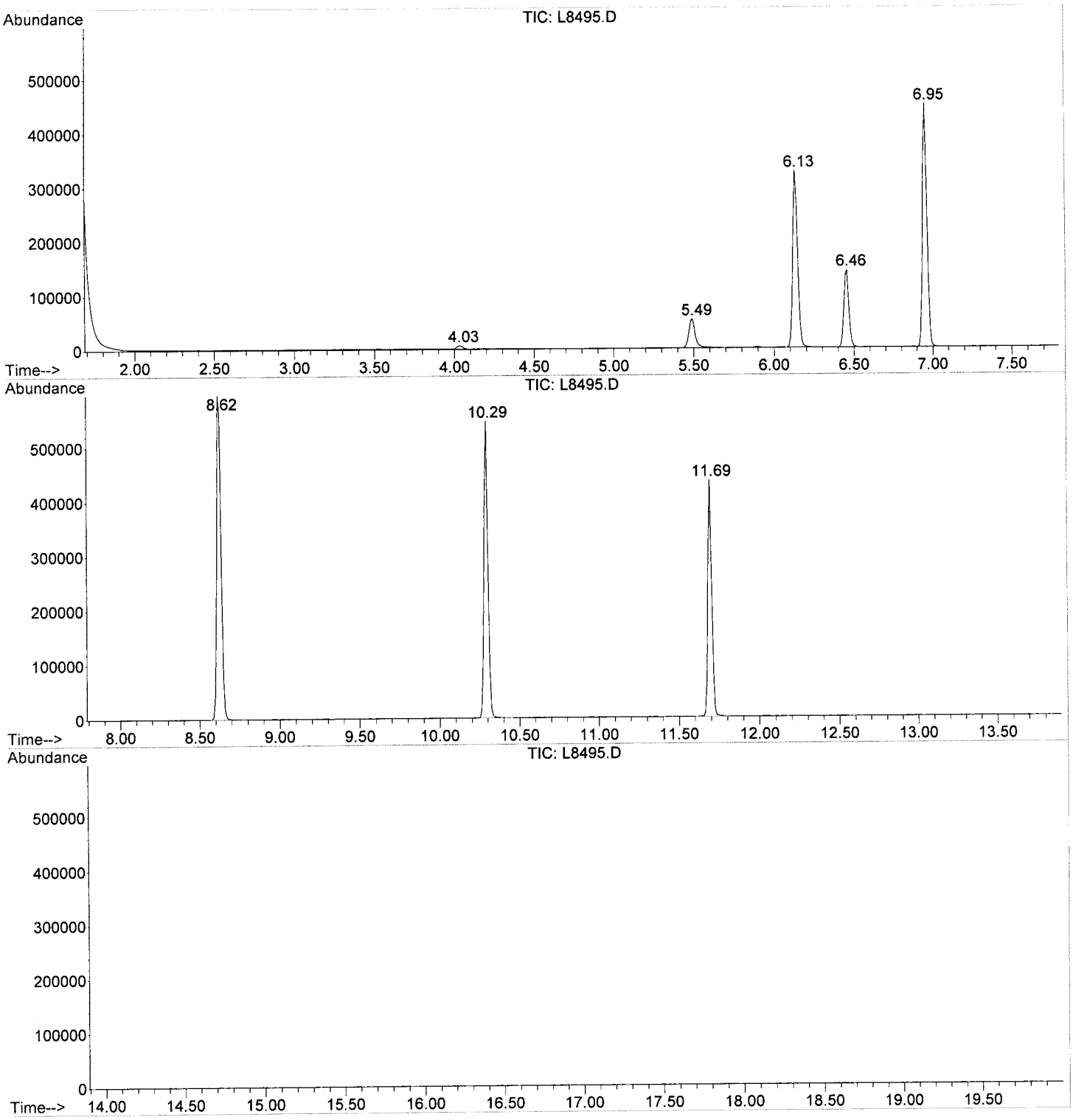
Sum of corrected areas: 4855061

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8495.D
Acq On : 30 Jun 2015 21:02
Operator : XING
Sample : E-16_(0.5-1.0),05367-017,S,4.8g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8496.D
Acq On : 30 Jun 2015 21:31
Operator : XING
Sample : E-16_(2.0-2.5),05367-018,S,5.3g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 01 13:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	246395	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	402713	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	343803	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	122050	48.36	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.72%			
41) Toluene-d8	8.62	98	453272	49.42	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.84%			
59) Bromofluorobenzene	11.69	95	155701	46.28	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.56%			

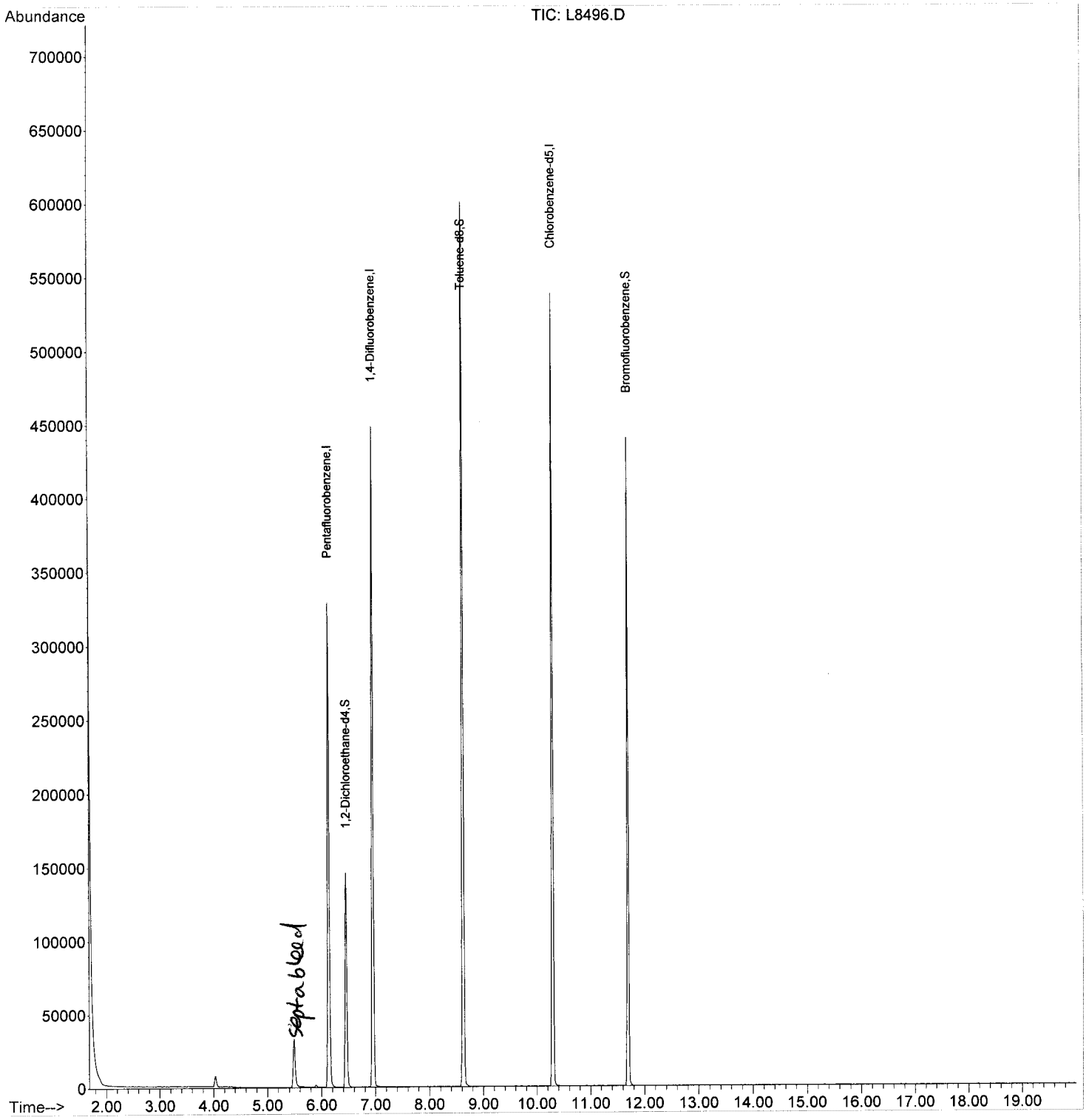
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8496.D
Acq On : 30 Jun 2015 21:31
Operator : XING
Sample : E-16_(2.0-2.5),05367-018,S,5.3g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Jul 01 13:53:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8496.D
Acq On : 30 Jun 2015 21:31
Operator : XING
Sample : E-16_(2.0-2.5),05367-018,S,5.3g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	7228	17908	1.55%	0.374%
2	5.491	370	376	396	rBV	32456	86446	7.50%	1.805%
3	6.131	433	439	456	rVB	328868	678964	58.91%	14.174%
4	6.456	464	471	483	rVB	145667	317058	27.51%	6.619%
5	6.953	513	520	536	rVB	448432	855290	74.22%	17.855%
6	8.618	679	684	700	rVB	601392	1152448	100.00%	24.058%
7	10.293	840	849	867	rBB	539196	960150	83.31%	20.044%
8	11.694	982	987	999	rBB	440639	722052	62.65%	15.073%

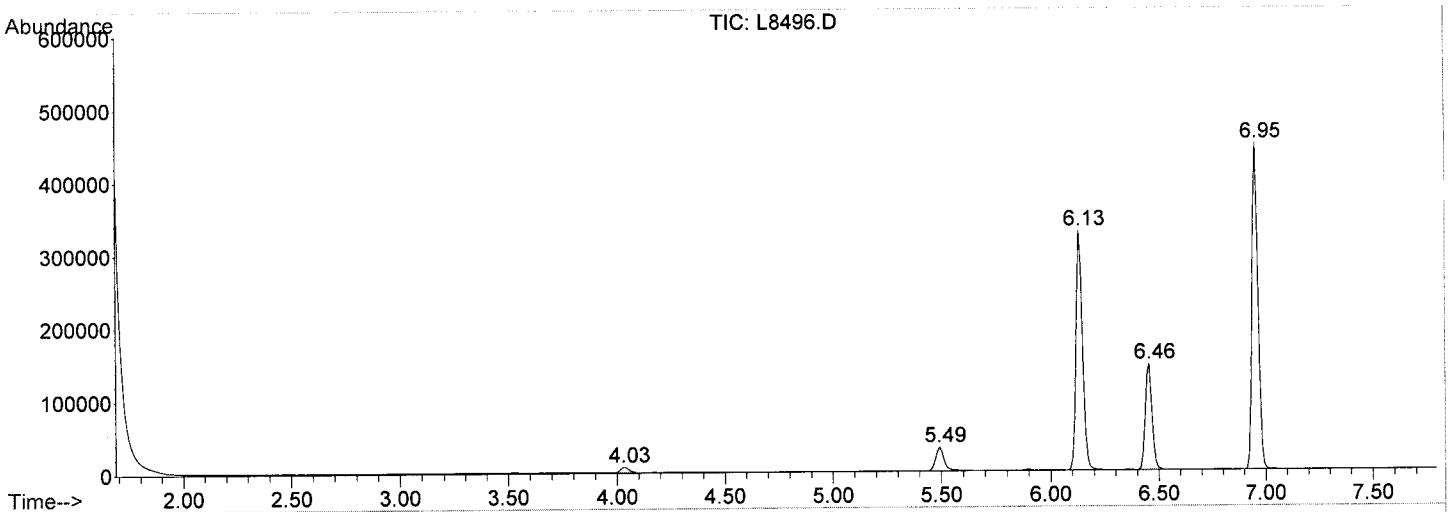
Sum of corrected areas: 4790316

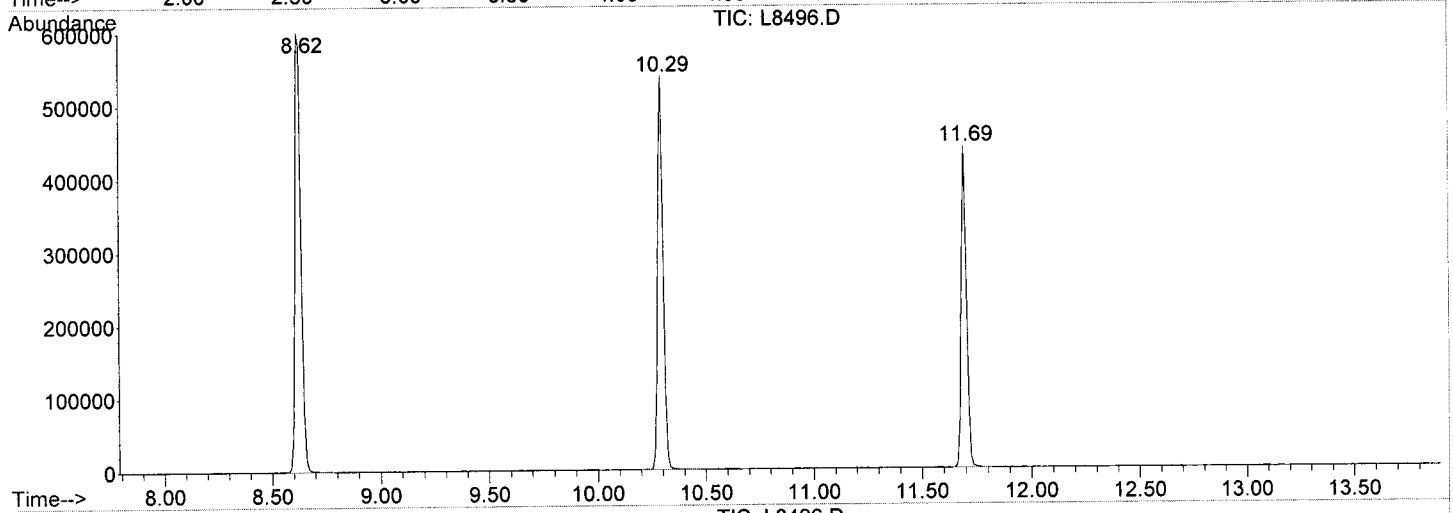
LSC Report - Integrated Chromatogram

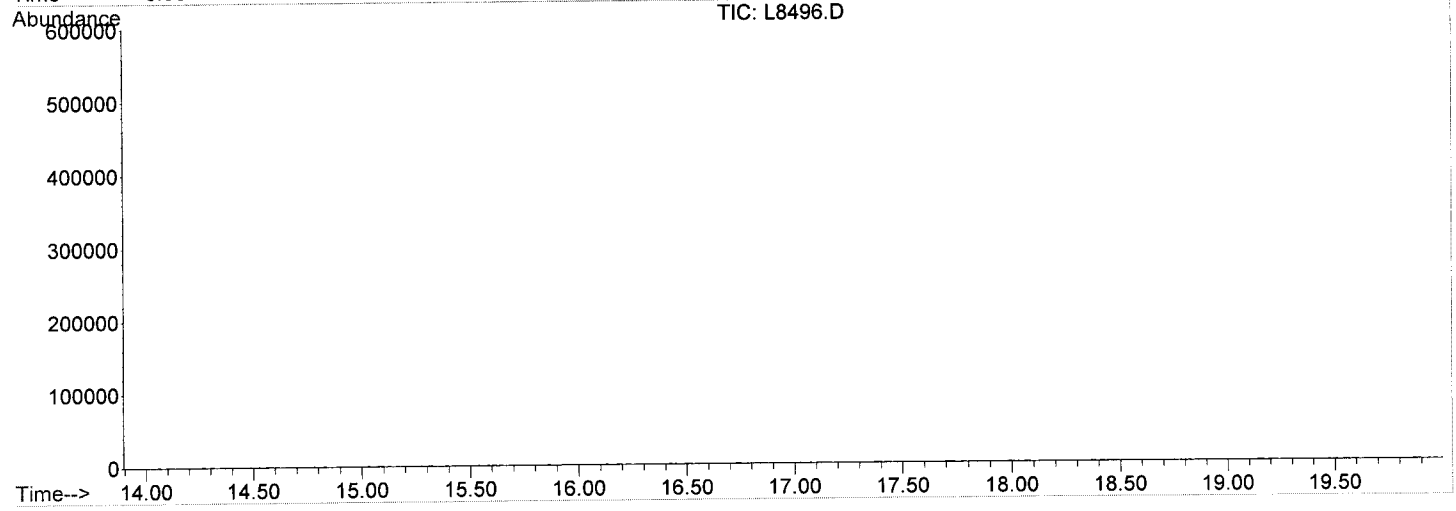
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8496.D
Acq On : 30 Jun 2015 21:31
Operator : XING
Sample : E-16_(2.0-2.5),05367-018,S,5.3g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8497.D
Acq On : 30 Jun 2015 22:01
Operator : XING
Sample : PZ-2_(0.5-1.0),05367-019,S,4g,20.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 01 13:55:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	254443	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	413707	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	346435	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	126688	48.61	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.22%			
41) Toluene-d8	8.62	98	456574	48.45	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.90%			
59) Bromofluorobenzene	11.69	95	154614	45.60	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.20%			

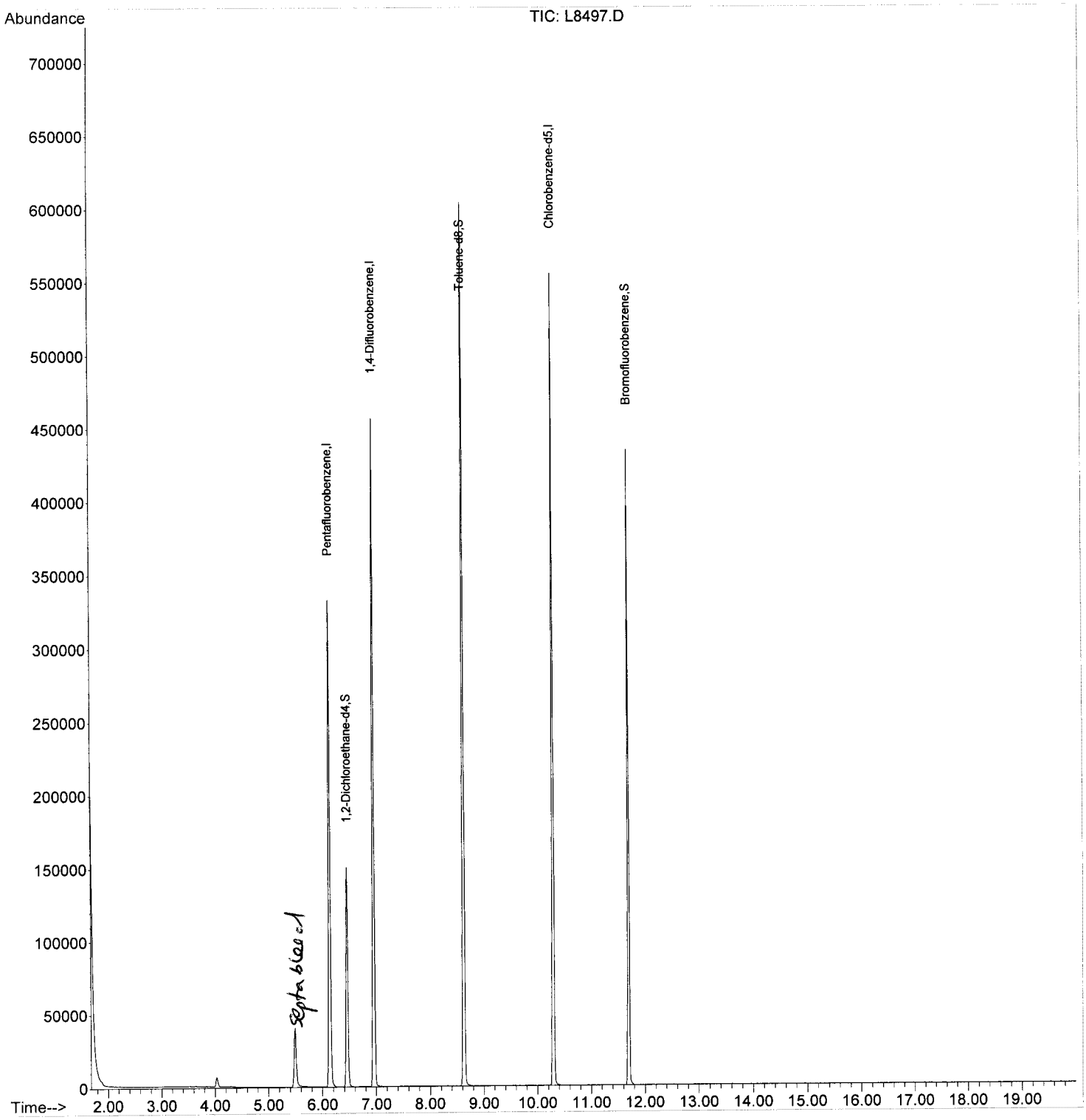
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8497.D
Acq On : 30 Jun 2015 22:01
Operator : XING
Sample : PZ-2_(0.5-1.0),05367-019,S,4g,20.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Jul 01 13:55:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8497.D
Acq On : 30 Jun 2015 22:01
Operator : XING
Sample : PZ-2_(0.5-1.0),05367-019,S,4g,20.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	6247	15074	1.30%	0.309%
2	5.492	370	376	399	rBV	40023	112274	9.65%	2.301%
3	6.131	433	439	454	rVB	332572	702284	60.39%	14.391%
4	6.456	465	471	486	rVB	150246	329886	28.37%	6.760%
5	6.953	513	520	533	rBV	456654	878428	75.53%	18.000%
6	8.618	673	684	702	rBB	604284	1162983	100.00%	23.831%
7	10.293	840	849	862	rBB	555694	963161	82.82%	19.736%
8	11.694	982	987	998	rBB	434492	716098	61.57%	14.674%

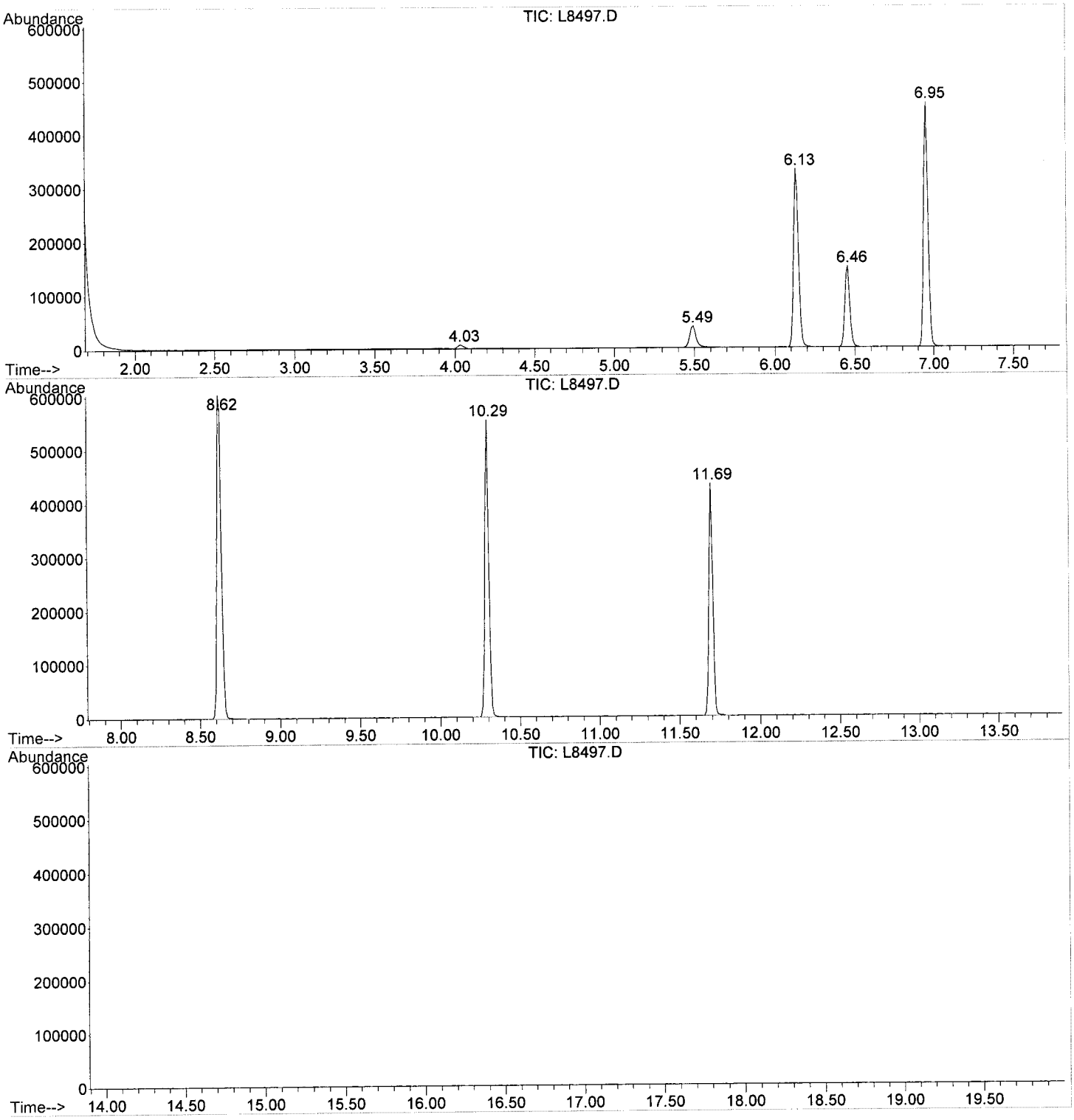
Sum of corrected areas: 4880188

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8497.D
Acq On : 30 Jun 2015 22:01
Operator : XING
Sample : PZ-2_(0.5-1.0),05367-019,S,4g,20.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8498.D
Acq On : 30 Jun 2015 22:31
Operator : XING
Sample : PZ-2_(2.0-2.5),05367-020,S,3.7g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 01 13:55:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

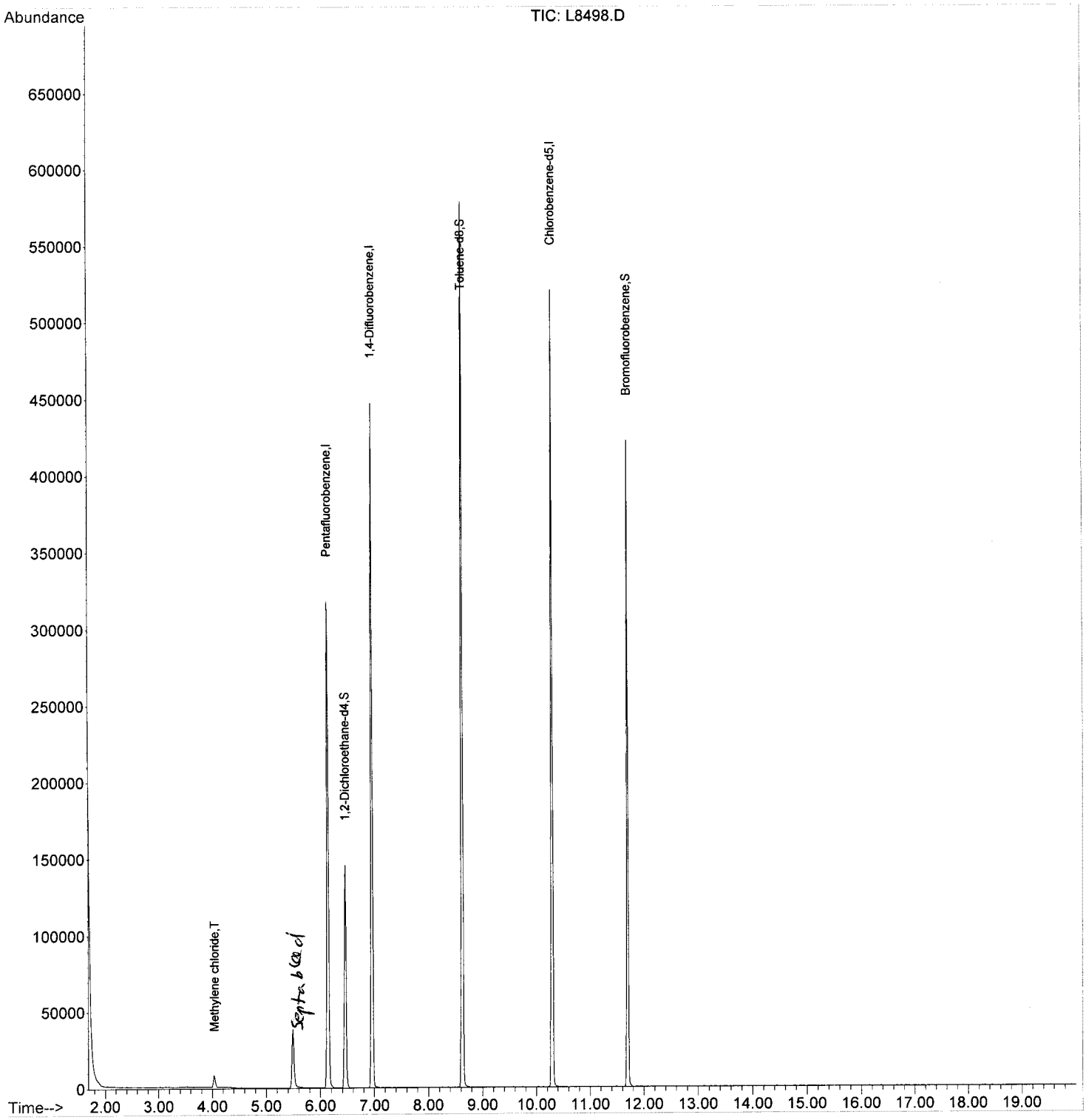
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	245697	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	398482	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	332559	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	118638	47.14	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.28%			
41) Toluene-d8	8.63	98	439045	48.37	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 96.74%			
59) Bromofluorobenzene	11.69	95	149096	45.81	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.62%			
Target Compounds						Qvalue
13) Methylene chloride	4.04	84	5816	2.52	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8498.D
Acq On : 30 Jun 2015 22:31
Operator : XING
Sample : PZ-2_(2.0-2.5),05367-020,S,3.7g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Jul 01 13:55:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8498.D
Acq On : 30 Jun 2015 22:31
Operator : XING
Sample : PZ-2_(2.0-2.5),05367-020,S,3.7g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	7626	19456	1.74%	0.415%
2	5.491	368	376	398	rBV	38181	103148	9.22%	2.198%
3	6.131	432	439	452	rBV	317812	676388	60.46%	14.412%
4	6.456	464	471	480	rBV	145279	309594	27.67%	6.597%
5	6.953	513	520	536	rBV	447167	849295	75.91%	18.097%
6	8.628	678	685	700	rVB	578758	1118806	100.00%	23.839%
7	10.293	842	849	864	rBB	521064	927064	82.86%	19.754%
8	11.694	980	987	999	rBB	422612	689354	61.62%	14.689%

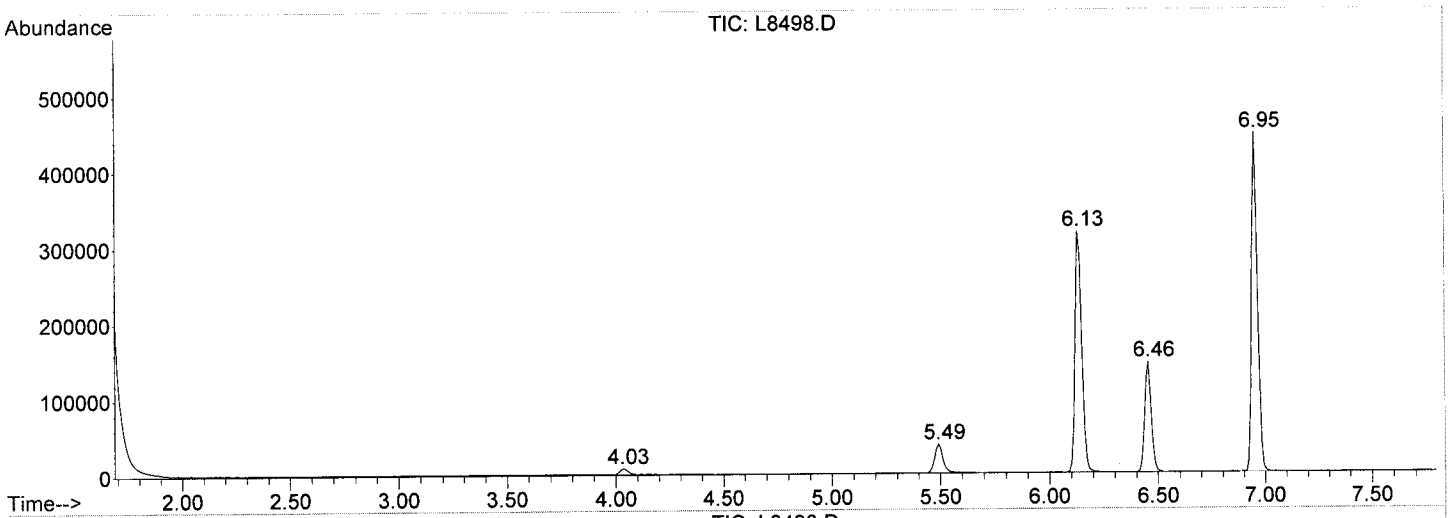
Sum of corrected areas: 4693105

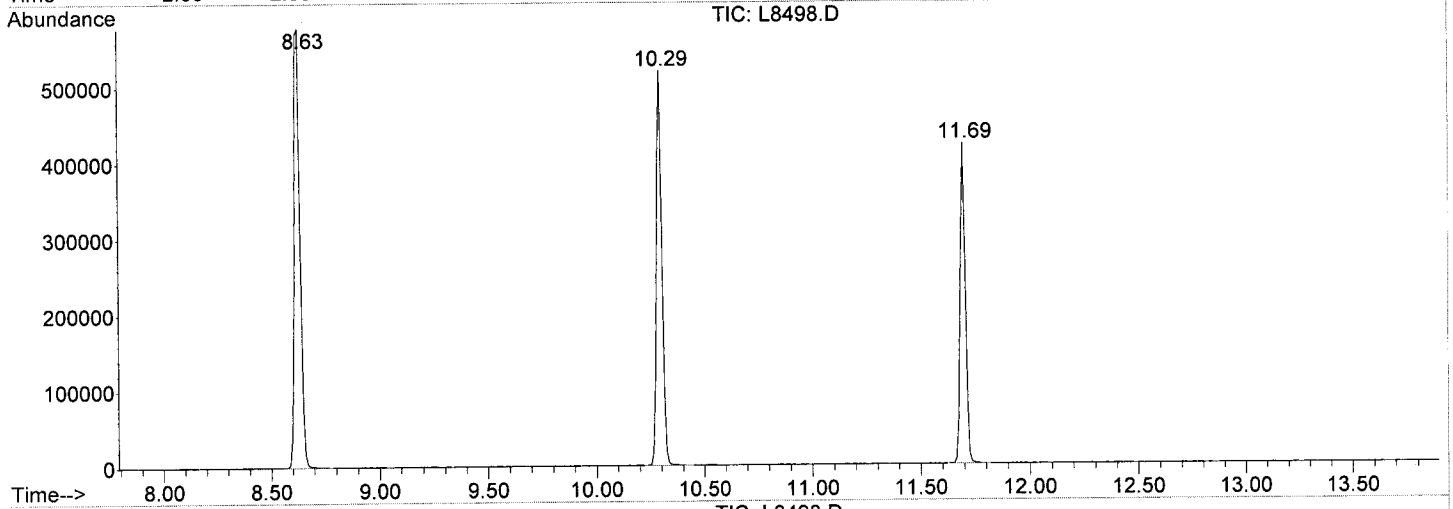
LSC Report - Integrated Chromatogram

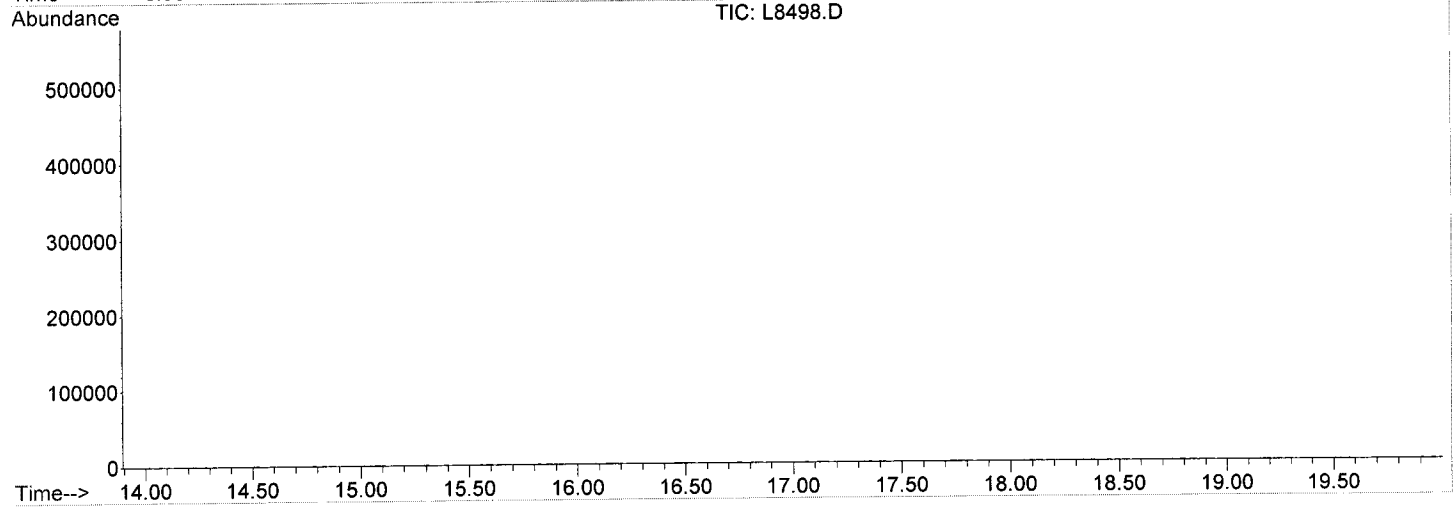
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8498.D
Acq On : 30 Jun 2015 22:31
Operator : XING
Sample : PZ-2_(2.0-2.5),05367-020,S,3.7g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8499.D
Acq On : 30 Jun 2015 23:01
Operator : XING
Sample : PZ-2_(4.0-4.5),05367-021,S,5.9g,7.70
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 01 13:57:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	250805	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	406809	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	359304	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	122668	47.75	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.50%			
41) Toluene-d8	8.62	98	461242	49.78	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 99.56%			
59) Bromofluorobenzene	11.69	95	162427	46.19	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.38%			

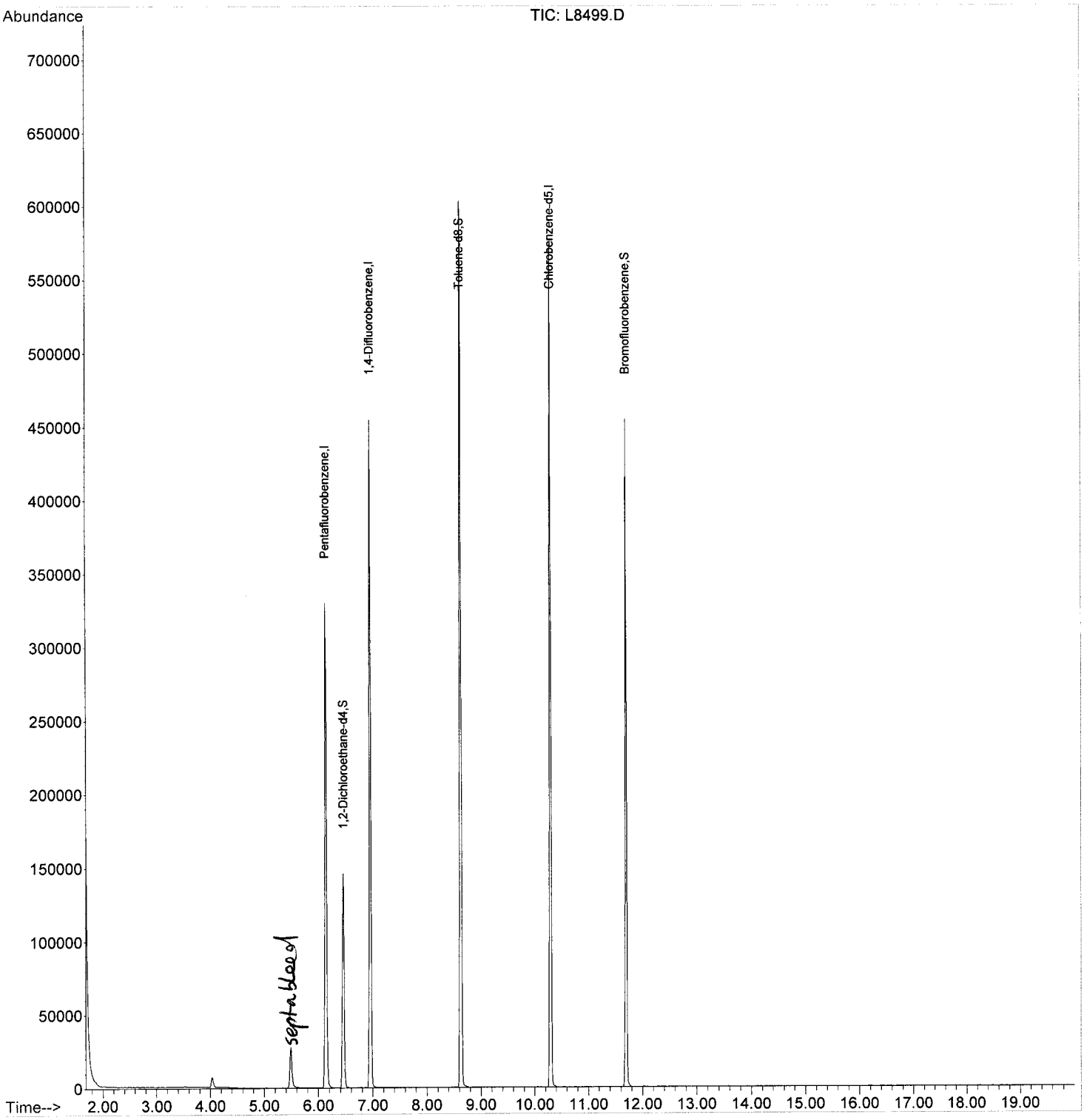
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8499.D
Acq On : 30 Jun 2015 23:01
Operator : XING
Sample : PZ-2_(4.0-4.5),05367-021,S,5.9g,7.70
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Jul 01 13:57:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8499.D
Acq On : 30 Jun 2015 23:01
Operator : XING
Sample : PZ-2_(4.0-4.5),05367-021,S,5.9g,7.70
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	6783	17525	1.49%	0.358%
2	5.491	368	376	393	rBV	27551	74726	6.36%	1.526%
3	6.131	433	439	452	rVB	330012	690424	58.80%	14.096%
4	6.456	465	471	484	rVB	145798	319736	27.23%	6.528%
5	6.953	514	520	541	rVB	454756	862550	73.46%	17.610%
6	8.618	678	684	699	rBB	603453	1174178	100.00%	23.972%
7	10.293	842	849	860	rVB	574231	1002596	85.39%	20.469%
8	11.694	979	987	1000	rBB	454901	756410	64.42%	15.443%

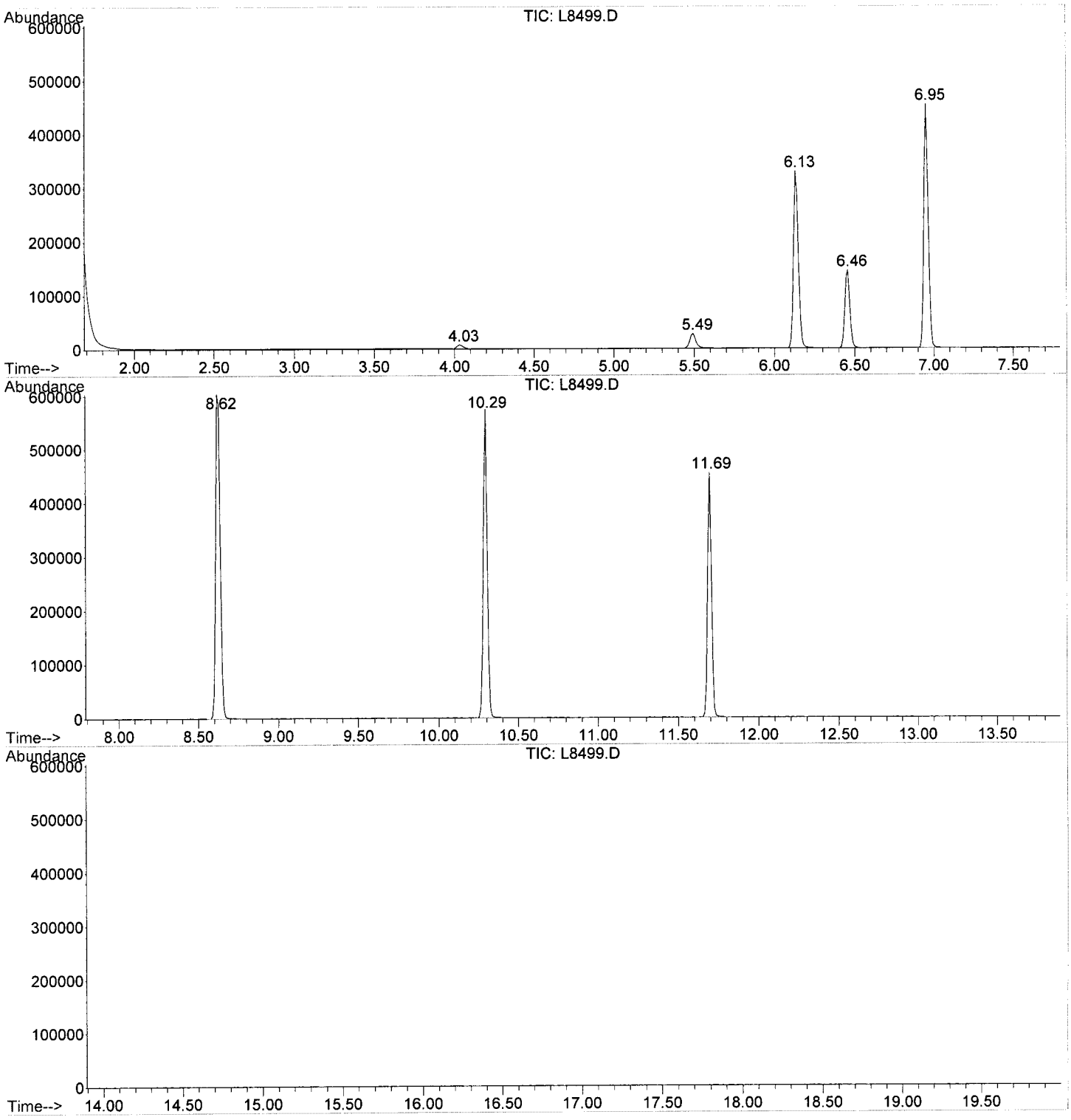
Sum of corrected areas: 4898145

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8499.D
Acq On : 30 Jun 2015 23:01
Operator : XING
Sample : PZ-2_(4.0-4.5),05367-021,S,5.9g,7.70
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8500.D
Acq On : 30 Jun 2015 23:31
Operator : XING
Sample : PZ-2_(6.0-6.5),05367-022,S,6.2g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 01 16:11:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

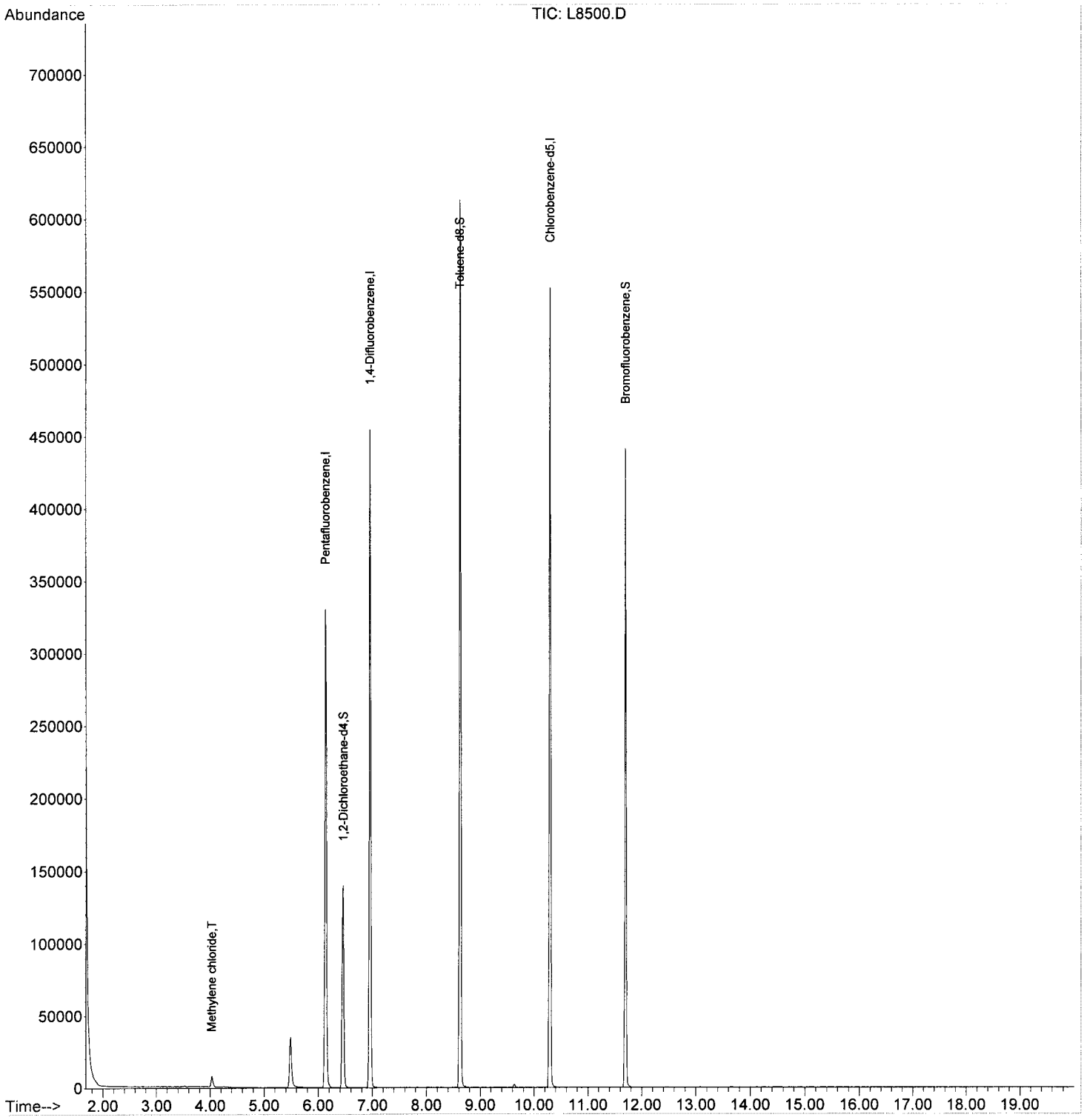
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	248353	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	408626	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	351068	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	118342	46.52	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.04%			
41) Toluene-d8	8.62	98	452373	48.60	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.20%			
59) Bromofluorobenzene	11.69	95	155892	45.37	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.74%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	5461m	2.34	UG	

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8500.D
Acq On : 30 Jun 2015 23:31
Operator : XING
Sample : PZ-2_(6.0-6.5),05367-022,S,6.2g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Jul 01 16:11:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8500.D
Acq On : 30 Jun 2015 23:31
Operator : XING
Sample : PZ-2_(6.0-6.5),05367-022,S,6.2g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	238	rVB	7434	18004	1.56%	0.373%
2	5.491	369	376	400	rVB	34740	96574	8.39%	1.999%
3	6.131	432	439	453	rVB	330513	686260	59.60%	14.207%
4	6.456	465	471	484	rVB	139680	308599	26.80%	6.388%
5	6.953	514	520	534	rVB	454650	867079	75.30%	17.950%
6	8.618	678	684	698	rBV	612916	1151535	100.00%	23.838%
7	10.293	840	849	864	rBV	552878	974785	84.65%	20.179%
8	11.694	980	987	999	rBB	441627	727747	63.20%	15.065%

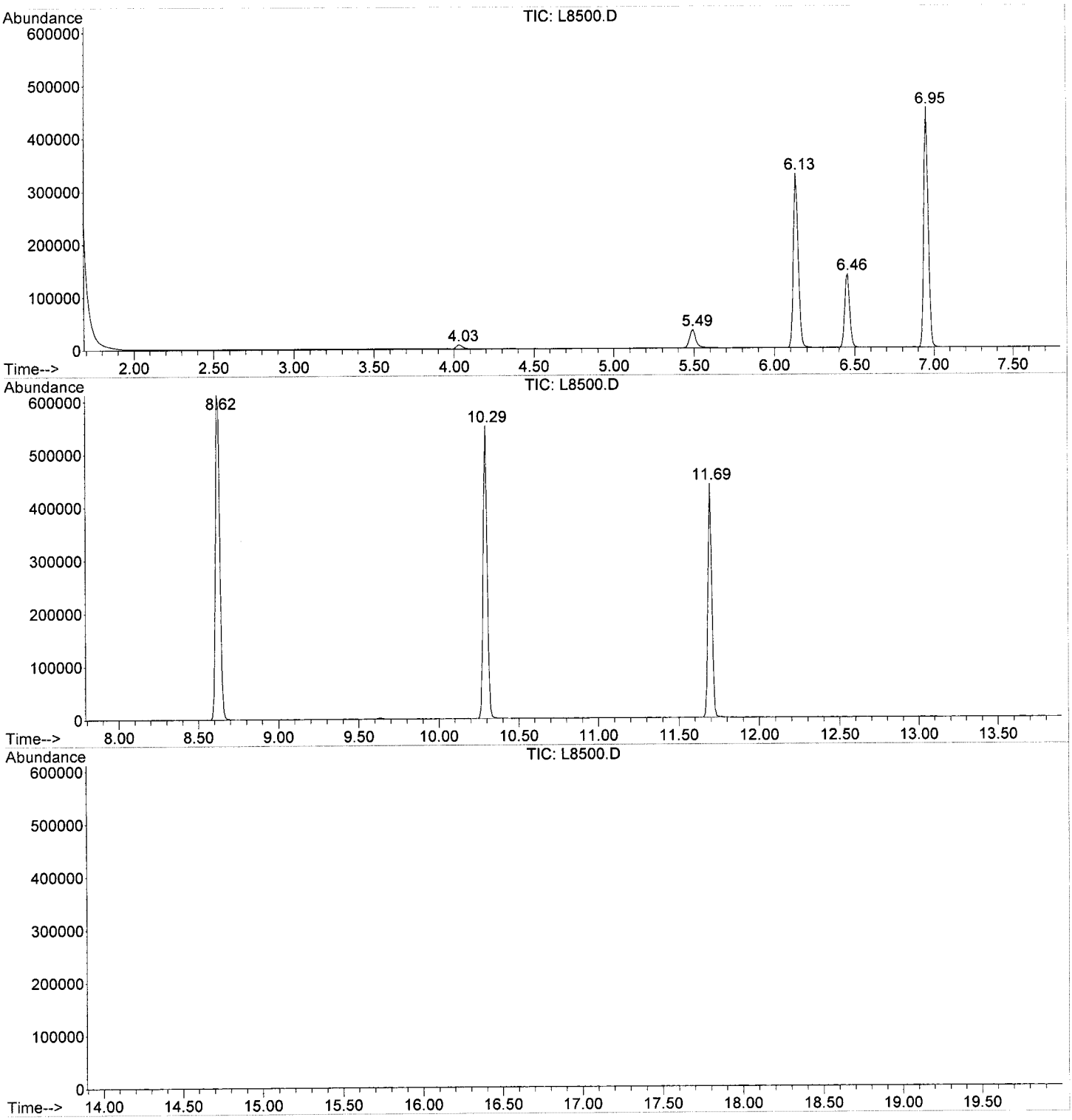
Sum of corrected areas: 4830583

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8500.D
Acq On : 30 Jun 2015 23:31
Operator : XING
Sample : PZ-2_(6.0-6.5),05367-022,S,6.2g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8501.D
Acq On : 1 Jul 2015 00:01
Operator : XING
Sample : X-1_(4.5-5.0)/,05367-023,S,5.4g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jul 01 13:59:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

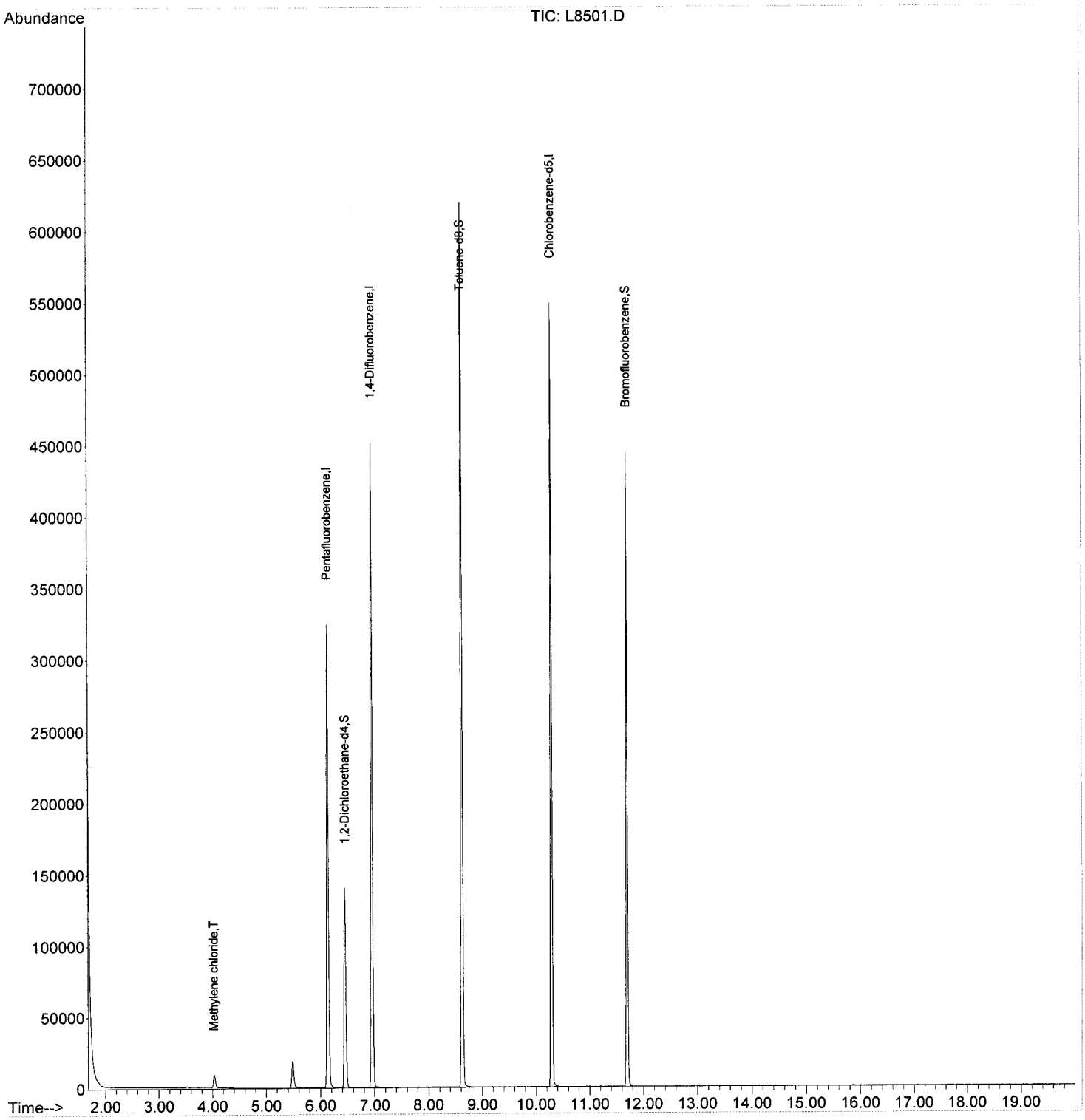
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	249999	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	410461	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	349916	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	119968	46.85	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.70%			
41) Toluene-d8	8.62	98	455339	48.70	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.40%			
59) Bromofluorobenzene	11.69	95	158829	46.38	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.76%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	6584	2.80	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8501.D
Acq On : 1 Jul 2015 00:01
Operator : XING
Sample : X-1_(4.5-5.0)/,05367-023,S,5.4g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Jul 01 13:59:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8501.D
Acq On : 1 Jul 2015 00:01
Operator : XING
Sample : X-1_(4.5-5.0)/,05367-023,S,5.4g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	8745	22493	1.94%	0.468%
2	5.481	369	375	390	rVB	18511	51231	4.43%	1.065%
3	6.131	433	439	454	rVB	324410	689117	59.56%	14.325%
4	6.456	464	471	484	rVB	140078	313532	27.10%	6.517%
5	6.953	513	520	536	rVB	451378	870974	75.27%	18.105%
6	8.618	678	684	698	rVB	619660	1157068	100.00%	24.052%
7	10.293	843	849	862	rVB	549445	971267	83.94%	20.190%
8	11.694	980	987	1003	rBB	444778	734937	63.52%	15.277%

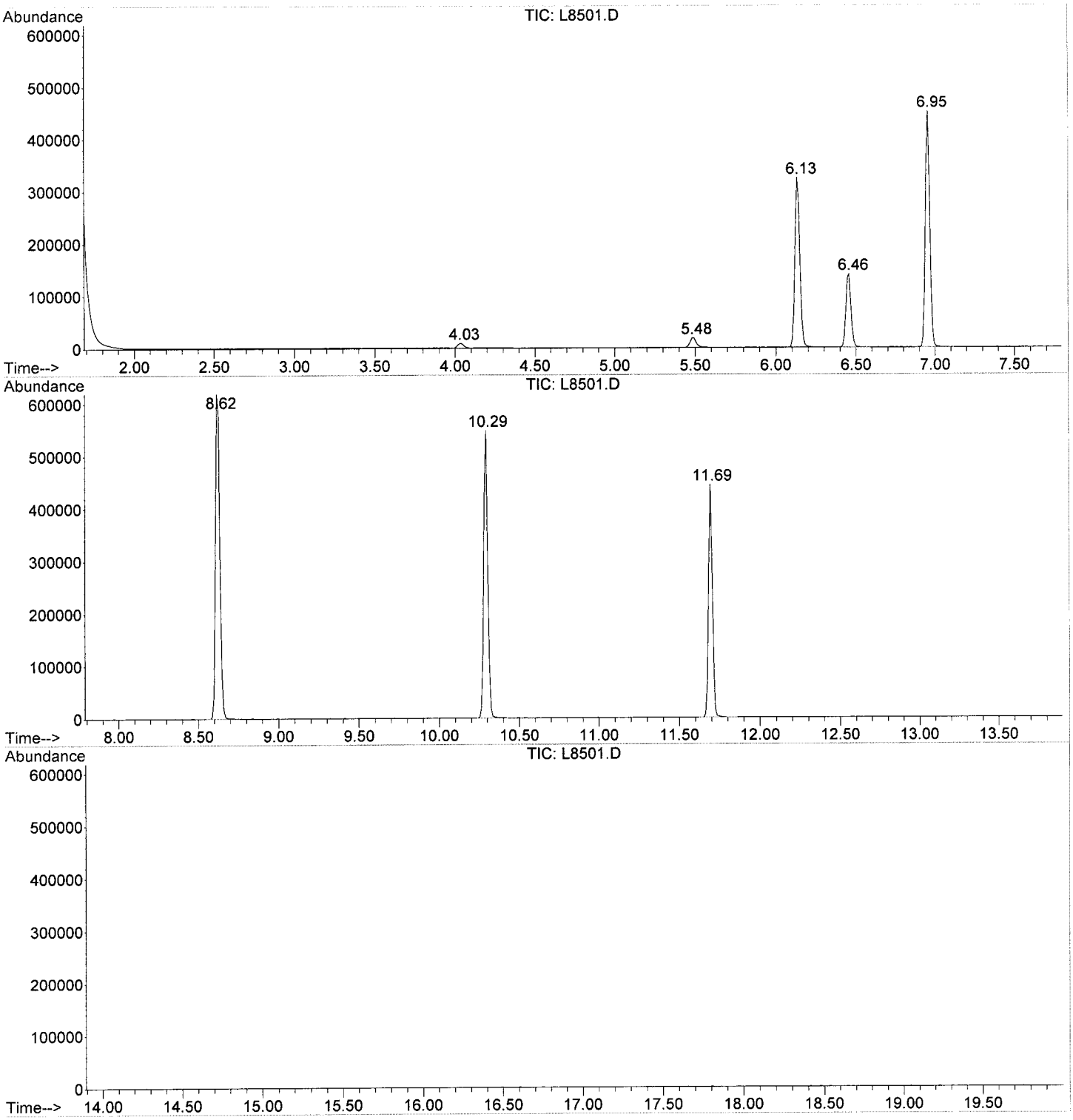
Sum of corrected areas: 4810619

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8501.D
Acq On : 1 Jul 2015 00:01
Operator : XING
Sample : X-1_(4.5-5.0)/,05367-023,S,5.4g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8510.D
Acq On : 1 Jul 2015 4:31
Operator : XING
Sample : PZ-1_(0.5-1.0),05367-031,S,4.5g,30.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 01 15:03:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	263545	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	420945	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	357510	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	124005	45.94	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 91.88%			
41) Toluene-d8	8.62	98	469686	48.99	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.98%			
59) Bromofluorobenzene	11.69	95	161034	46.03	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.06%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	6870	2.77	UG	100

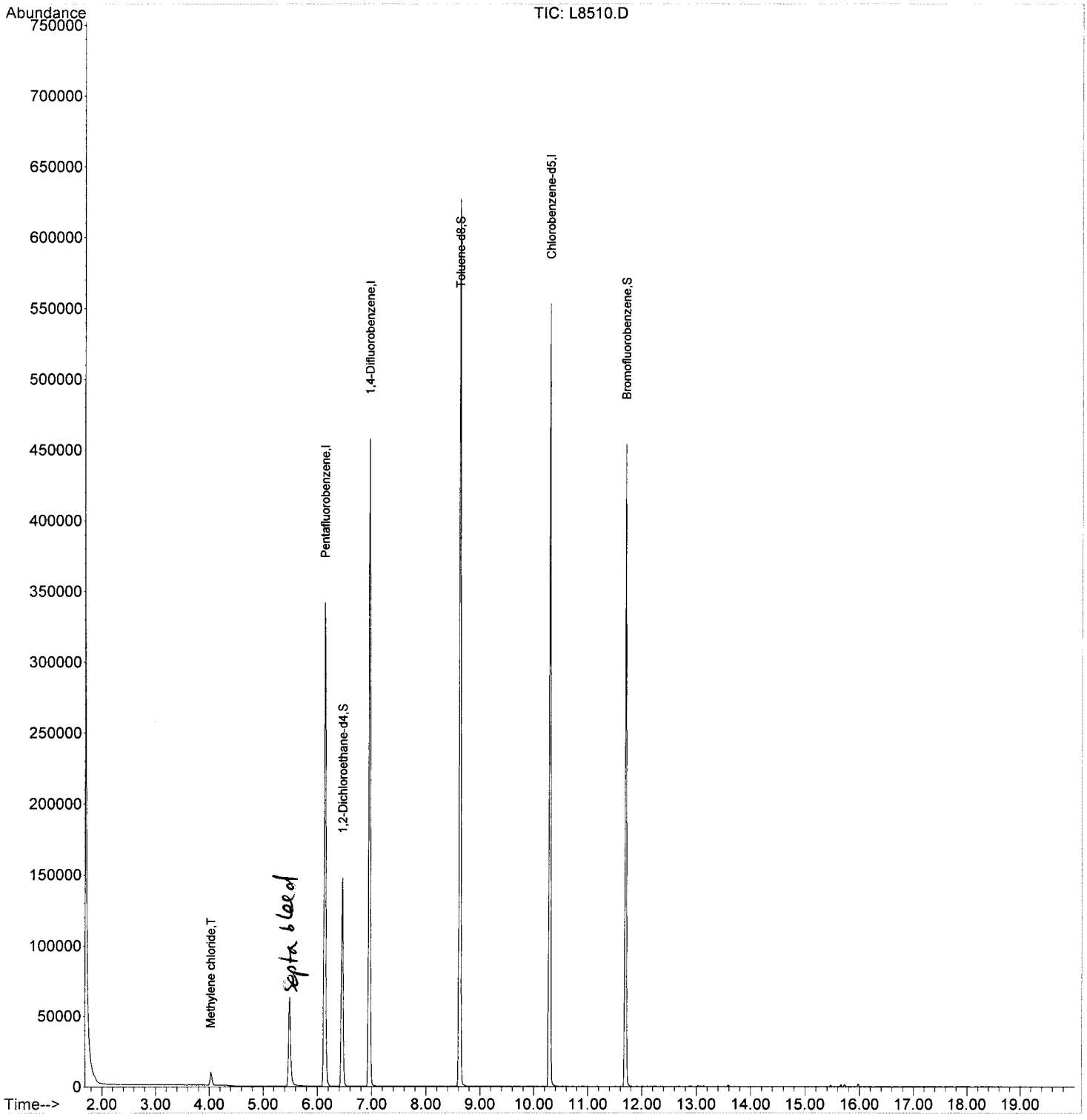
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E15-05367_0302

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8510.D
Acq On : 1 Jul 2015 4:31
Operator : XING
Sample : PZ-1_(0.5-1.0),05367-031,S,4.5g,30.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Jul 01 15:03:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8510.D
Acq On : 1 Jul 2015 4:31
Operator : XING
Sample : PZ-1_(0.5-1.0),05367-031,S,4.5g,30.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	239	rBV	8958	22354	1.87%	0.441%
2	5.492	368	376	397	rBV	63244	170234	14.27%	3.361%
3	6.131	432	439	452	rBV	341913	722228	60.54%	14.260%
4	6.456	464	471	487	rVB	147563	324975	27.24%	6.416%
5	6.953	514	520	536	rBV	457580	891398	74.72%	17.600%
6	8.618	678	684	699	rBV	626780	1192957	100.00%	23.554%
7	10.293	842	849	869	rVB	553289	993938	83.32%	19.624%
8	11.694	981	987	998	rVB	454113	746718	62.59%	14.743%

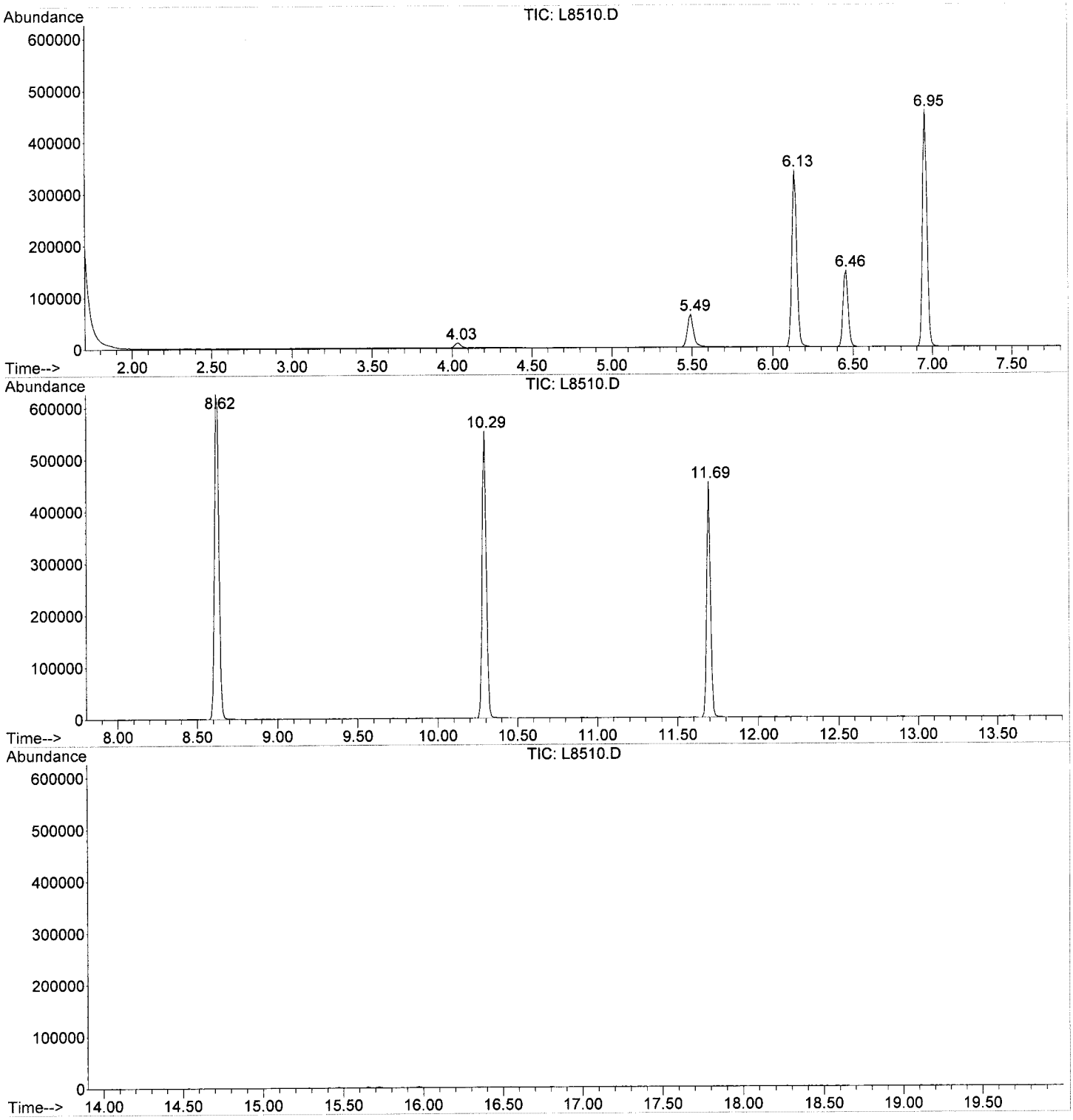
Sum of corrected areas: 5064802

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8510.D
Acq On : 1 Jul 2015 4:31
Operator : XING
Sample : PZ-1_(0.5-1.0),05367-031,S,4.5g,30.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8511.D
Acq On : 1 Jul 2015 5:01
Operator : XING
Sample : PZ-1_(2.0-2.5),05367-032,S,4.2g,15.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 01 15:04:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

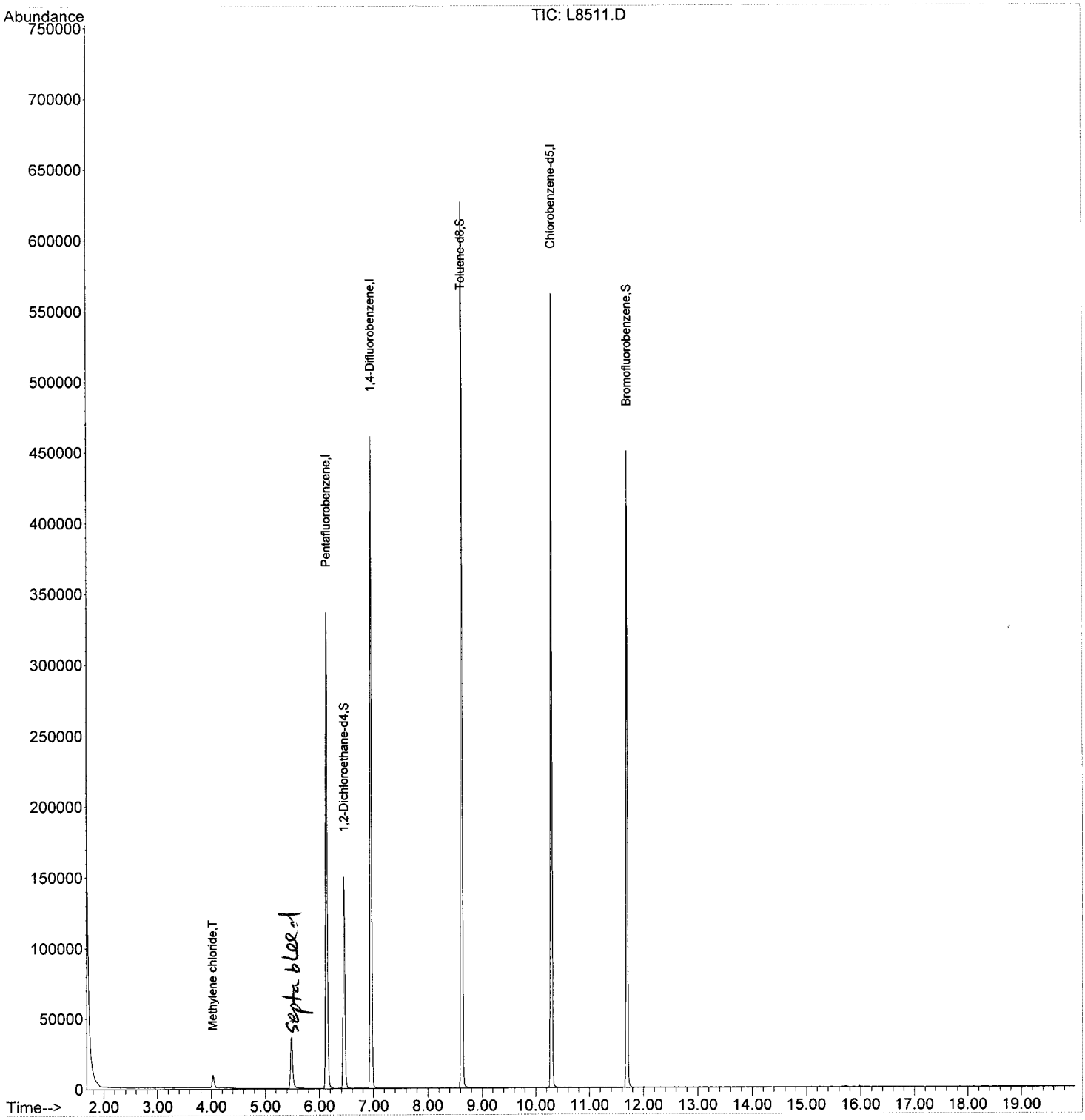
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	260133	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	419750	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	360033	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	126384	47.43	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 94.86%			
41) Toluene-d8	8.62	98	466731	48.82	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.64%			
59) Bromofluorobenzene	11.69	95	163100	46.29	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.58%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	6637	2.71	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8511.D
Acq On : 1 Jul 2015 5:01
Operator : XING
Sample : PZ-1_(2.0-2.5),05367-032,S,4.2g,15.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 01 15:04:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8511.D
Acq On : 1 Jul 2015 5:01
Operator : XING
Sample : PZ-1_(2.0-2.5),05367-032,S,4.2g,15.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	8975	22413	1.89%	0.448%
2	5.491	369	376	392	rBV	36051	101829	8.59%	2.037%
3	6.131	432	439	452	rBV	336869	711917	60.06%	14.239%
4	6.456	464	471	481	rBV	149937	330699	27.90%	6.614%
5	6.953	513	520	535	rBV	460687	891643	75.23%	17.834%
6	8.618	679	684	701	rBB	626589	1185294	100.00%	23.707%
7	10.293	841	849	859	rBV	561902	998634	84.25%	19.974%
8	11.694	981	987	1001	rVB	450207	757346	63.90%	15.148%

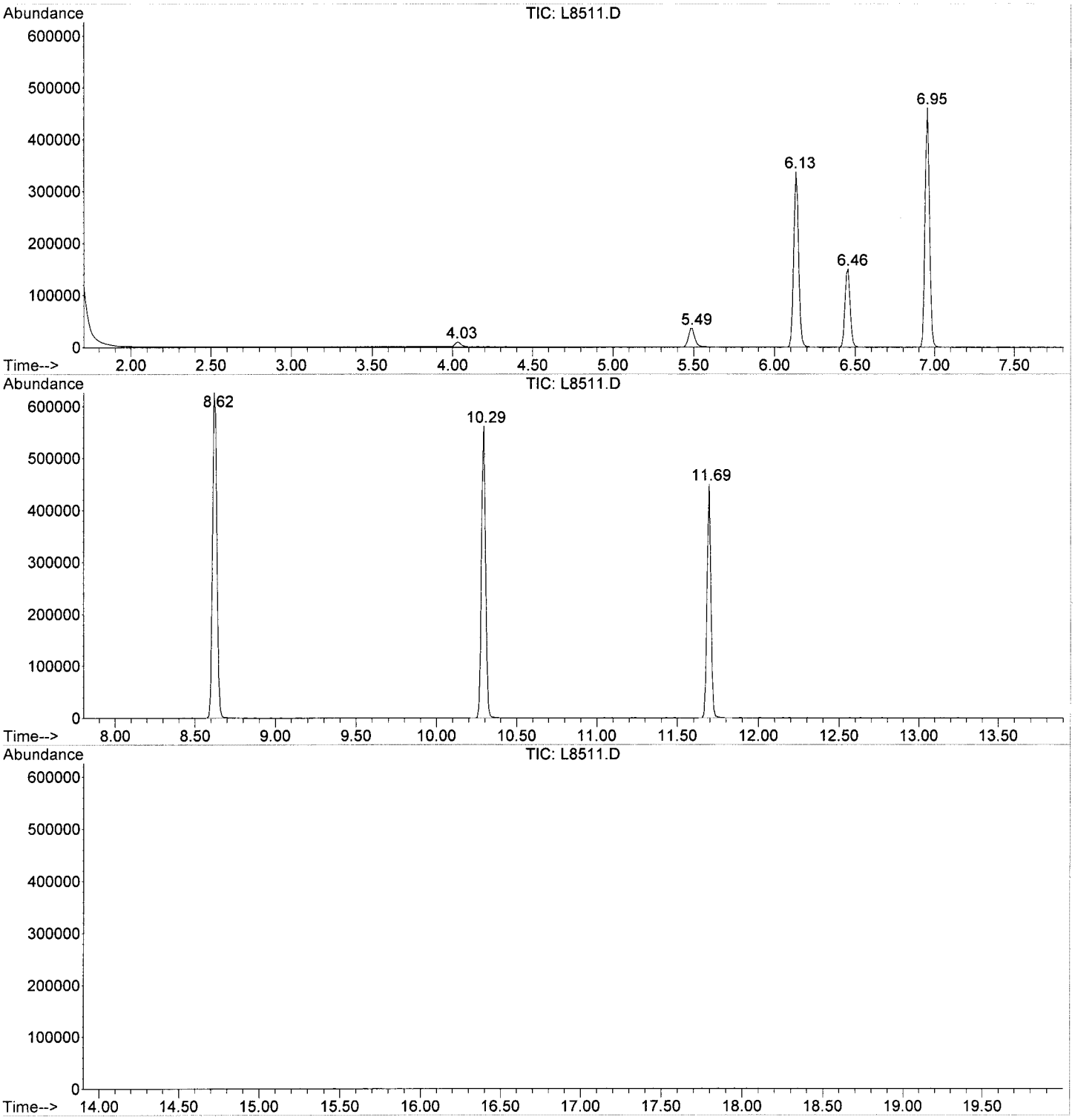
Sum of corrected areas: 4999775

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8511.D
Acq On : 1 Jul 2015 5:01
Operator : XING
Sample : PZ-1_(2.0-2.5),05367-032,S,4.2g,15.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8512.D
Acq On : 1 Jul 2015 5:31
Operator : XING
Sample : PZ-1_(2.5-3.0),05367-033,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 01 15:05:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

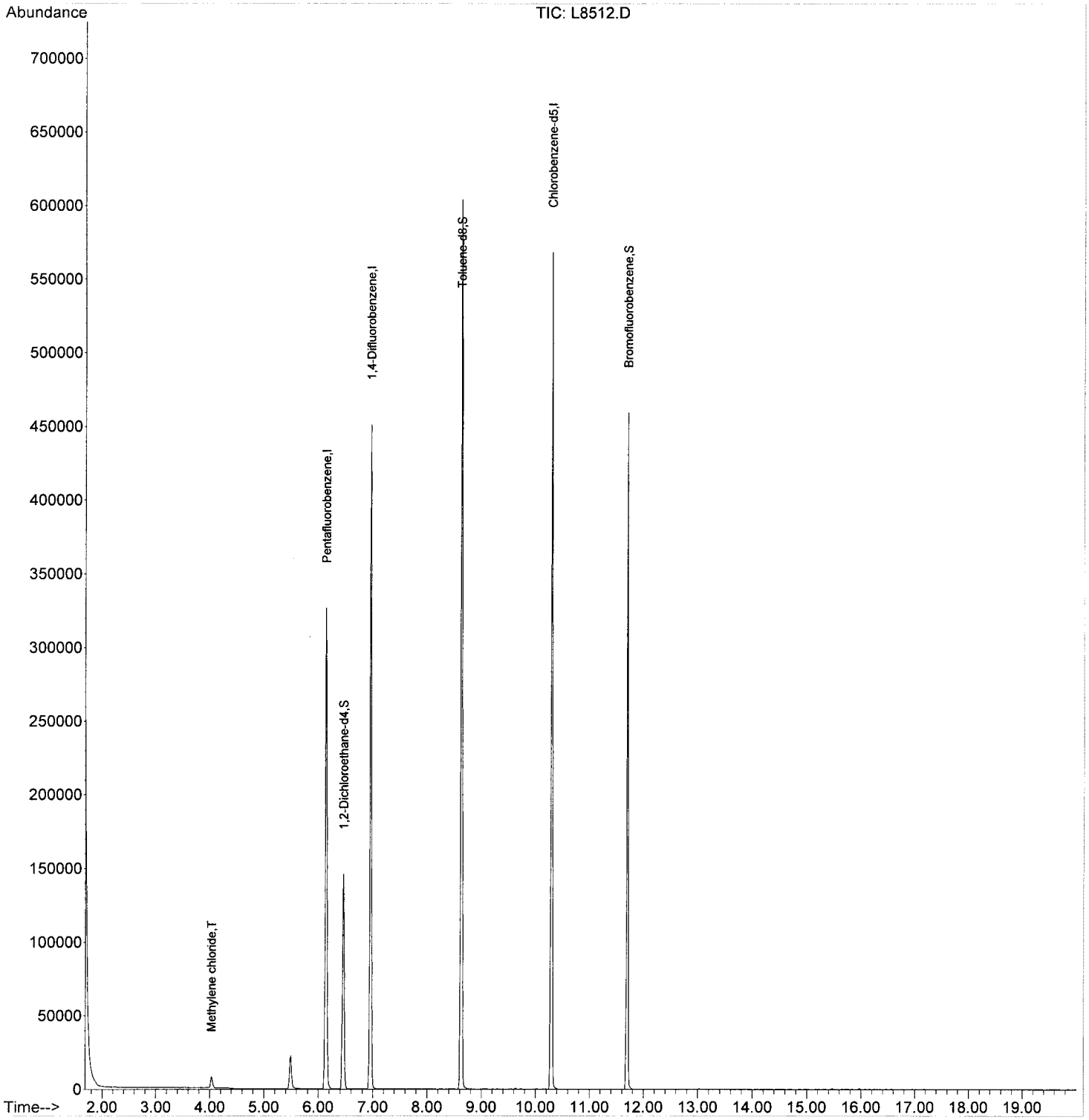
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	251471	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	409833	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	354399	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	120638	46.84	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.68%			
41) Toluene-d8	8.62	98	458150	49.08	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.16%			
59) Bromofluorobenzene	11.69	95	159081	45.87	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 91.74%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	5838	2.47	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8512.D
Acq On : 1 Jul 2015 5:31
Operator : XING
Sample : PZ-1_(2.5-3.0),05367-033,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 01 15:05:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8512.D
Acq On : 1 Jul 2015 5:31
Operator : XING
Sample : PZ-1_(2.5-3.0),05367-033,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	7625	18986	1.63%	0.391%
2	5.492	370	376	391	rVB	22493	61365	5.26%	1.265%
3	6.131	432	439	452	rBV	326763	691685	59.25%	14.262%
4	6.456	464	471	485	rVB	145862	316011	27.07%	6.516%
5	6.953	512	520	532	rBV	450919	868871	74.43%	17.916%
6	8.618	679	684	698	rVB	604098	1167347	100.00%	24.070%
7	10.293	842	849	862	rBB	568370	983302	84.23%	20.275%
8	11.694	981	987	999	rBB	459528	742167	63.58%	15.303%

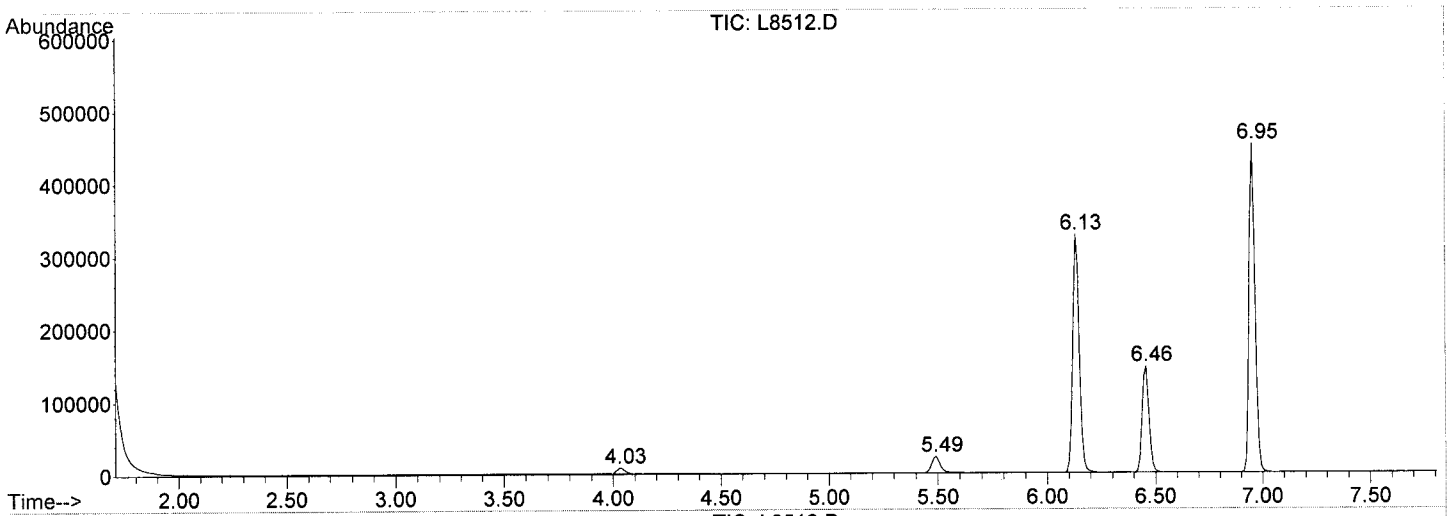
Sum of corrected areas: 4849734

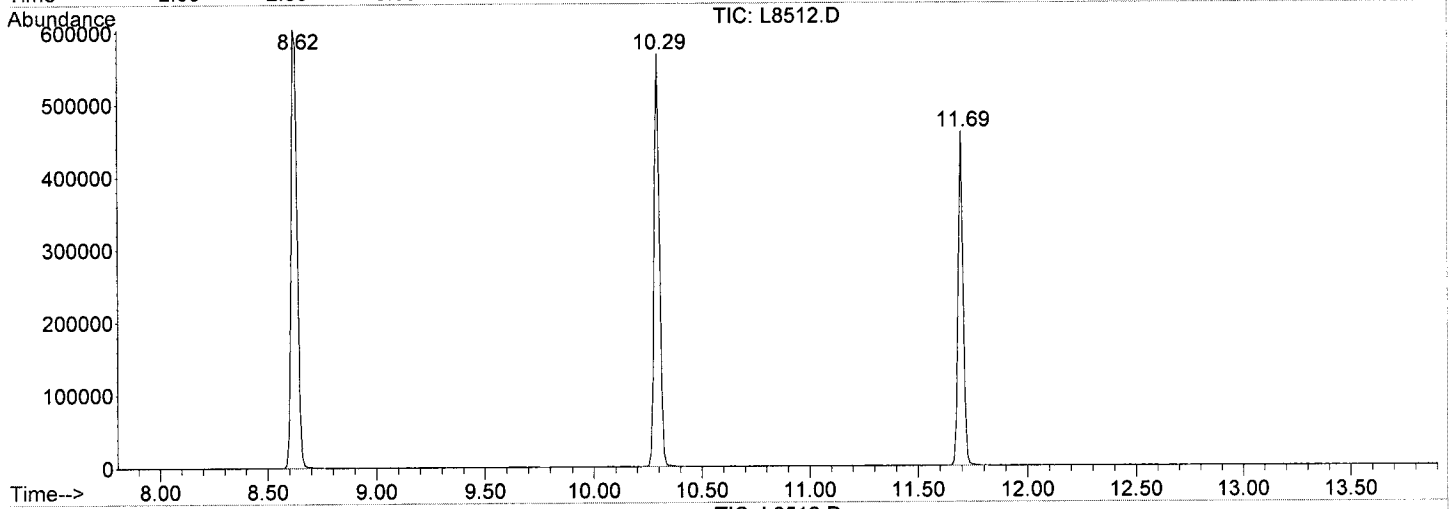
LSC Report - Integrated Chromatogram

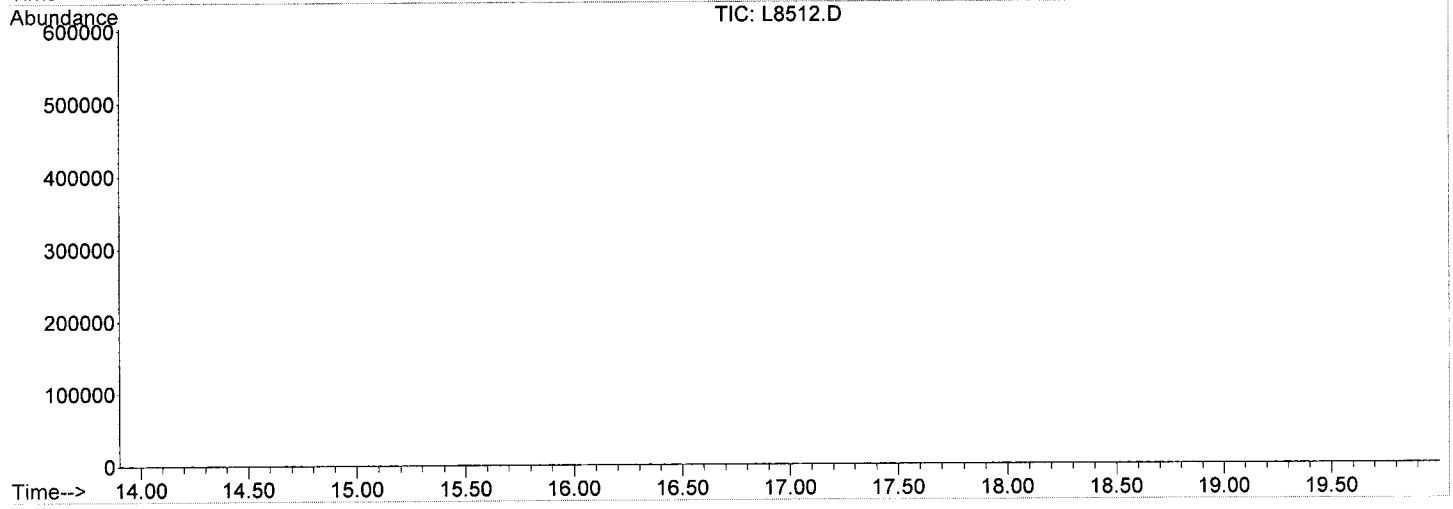
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8512.D
Acq On : 1 Jul 2015 5:31
Operator : XING
Sample : PZ-1_(2.5-3.0),05367-033,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8513.D
Acq On : 1 Jul 2015 6:00
Operator : XING
Sample : PZ-1_(4.5-5.0),05367-034,S,6.1g,12.0
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 01 15:06:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	253334	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	415262	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	359716	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	124070	47.81	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.62%			
41) Toluene-d8	8.62	98	462663	48.91	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.82%			
59) Bromofluorobenzene	11.69	95	164408	46.70	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 93.40%			

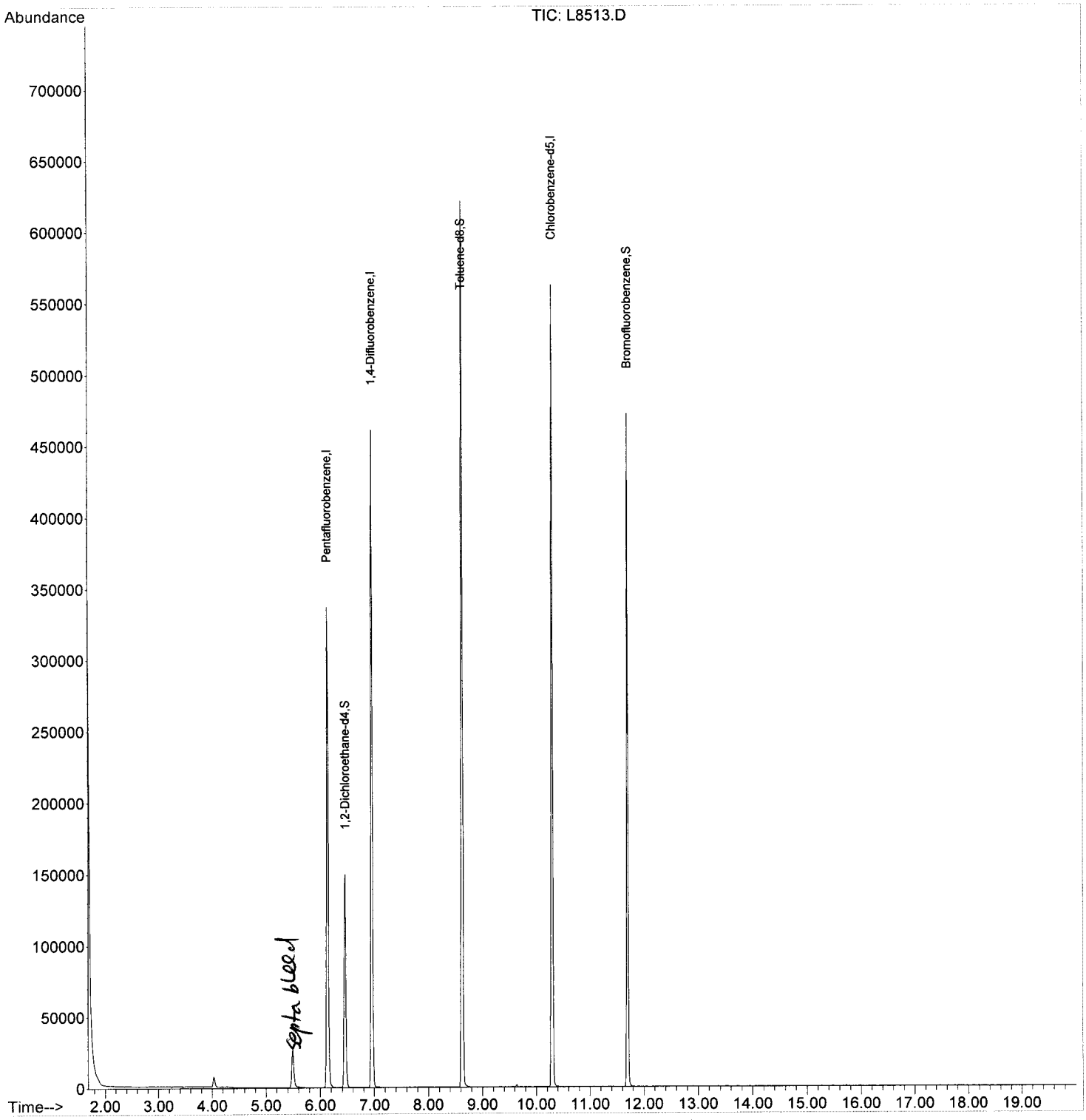
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8513.D
Acq On : 1 Jul 2015 6:00
Operator : XING
Sample : PZ-1_(4.5-5.0),05367-034,S,6.1g,12.0
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 01 15:06:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8513.D
Acq On : 1 Jul 2015 6:00
Operator : XING
Sample : PZ-1_(4.5-5.0),05367-034,S,6.1g,12.0
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	239	rVB	7099	17193	1.46%	0.348%
2	5.492	370	376	395	rVB	26603	72418	6.14%	1.467%
3	6.131	430	439	455	rBV	336991	698586	59.23%	14.148%
4	6.456	464	471	488	rVB	149630	325268	27.58%	6.587%
5	6.953	513	520	535	rVB	461233	880778	74.68%	17.838%
6	8.618	678	684	700	rBV	621258	1179477	100.00%	23.887%
7	10.293	843	849	863	rVB	562757	1001418	84.90%	20.281%
8	11.694	976	987	998	rBB	472515	762600	64.66%	15.444%

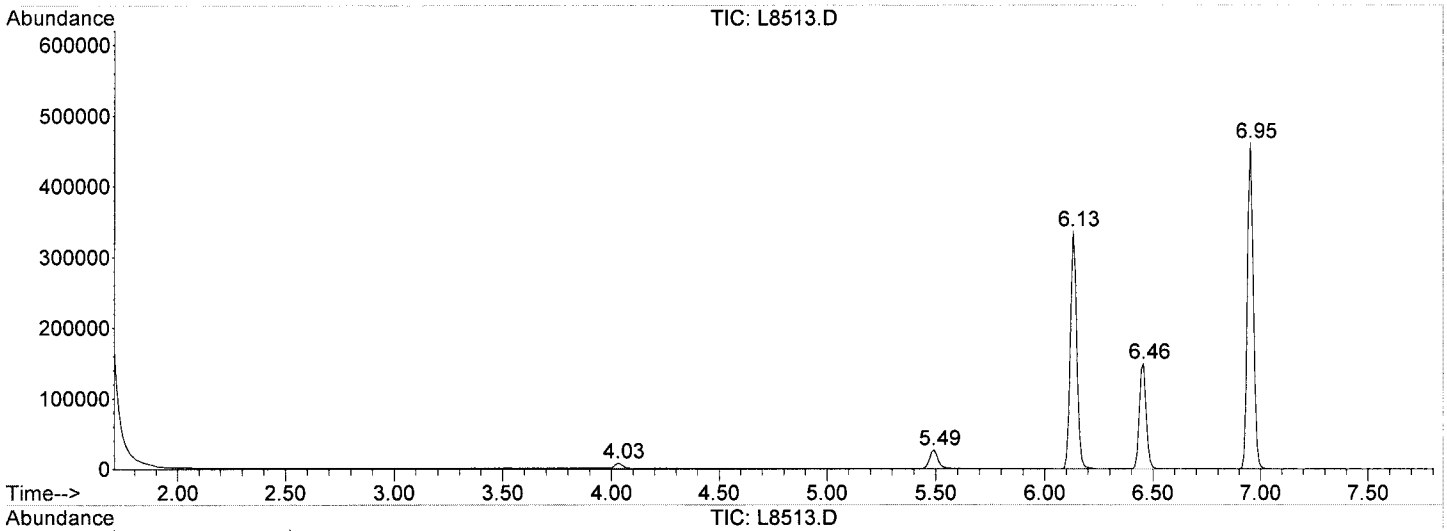
Sum of corrected areas: 4937738

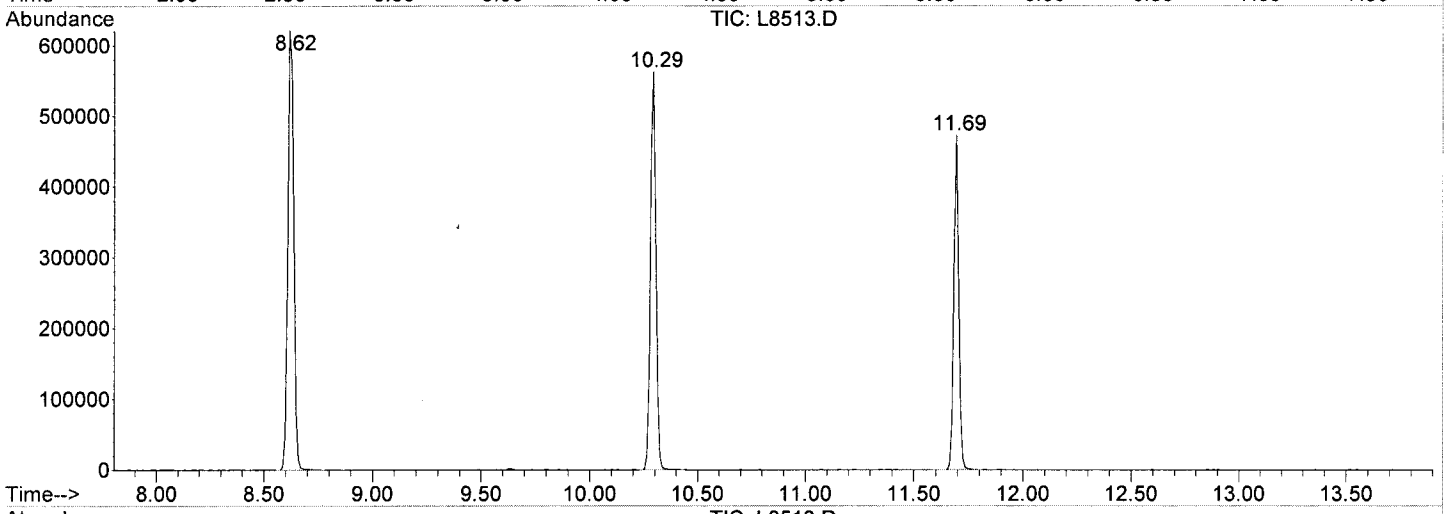
LSC Report - Integrated Chromatogram

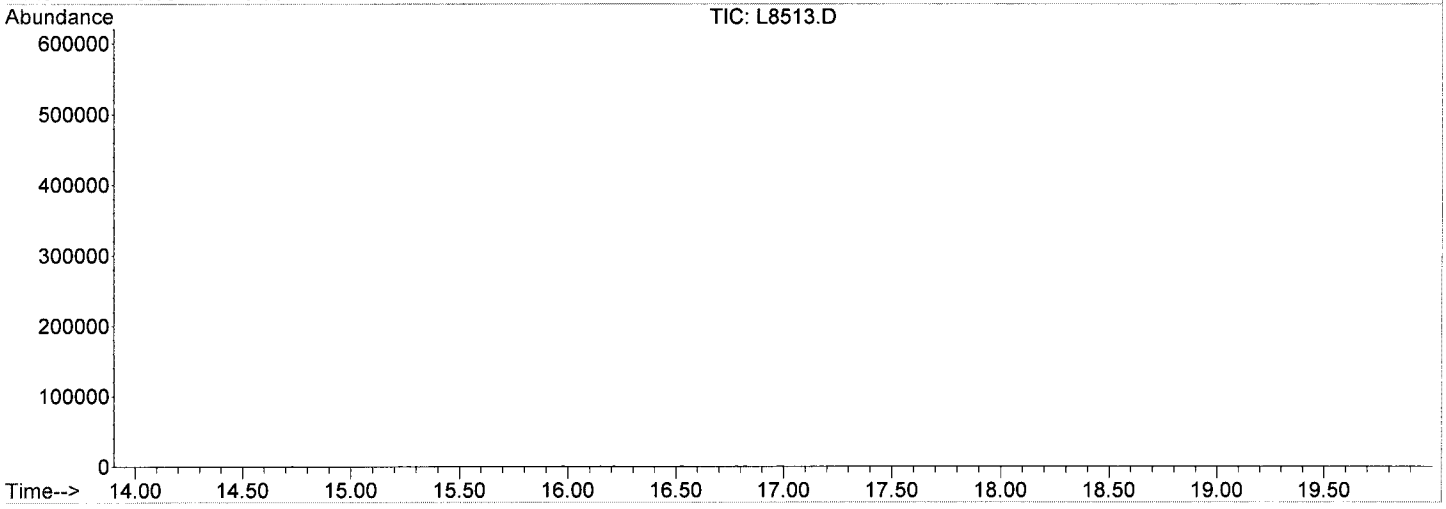
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8513.D
Acq On : 1 Jul 2015 6:00
Operator : XING
Sample : PZ-1_(4.5-5.0),05367-034,S,6.1g,12.0
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8514.D
Acq On : 1 Jul 2015 6:30
Operator : XING
Sample : E-5_(0.5-1.0)/,05367-035,S,5.6g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 01 15:07:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	248618	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	406735	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	345957	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	123275	48.41	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.82%			
41) Toluene-d8	8.62	98	449622	48.53	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.06%			
59) Bromofluorobenzene	11.69	95	156239	46.15	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.30%			

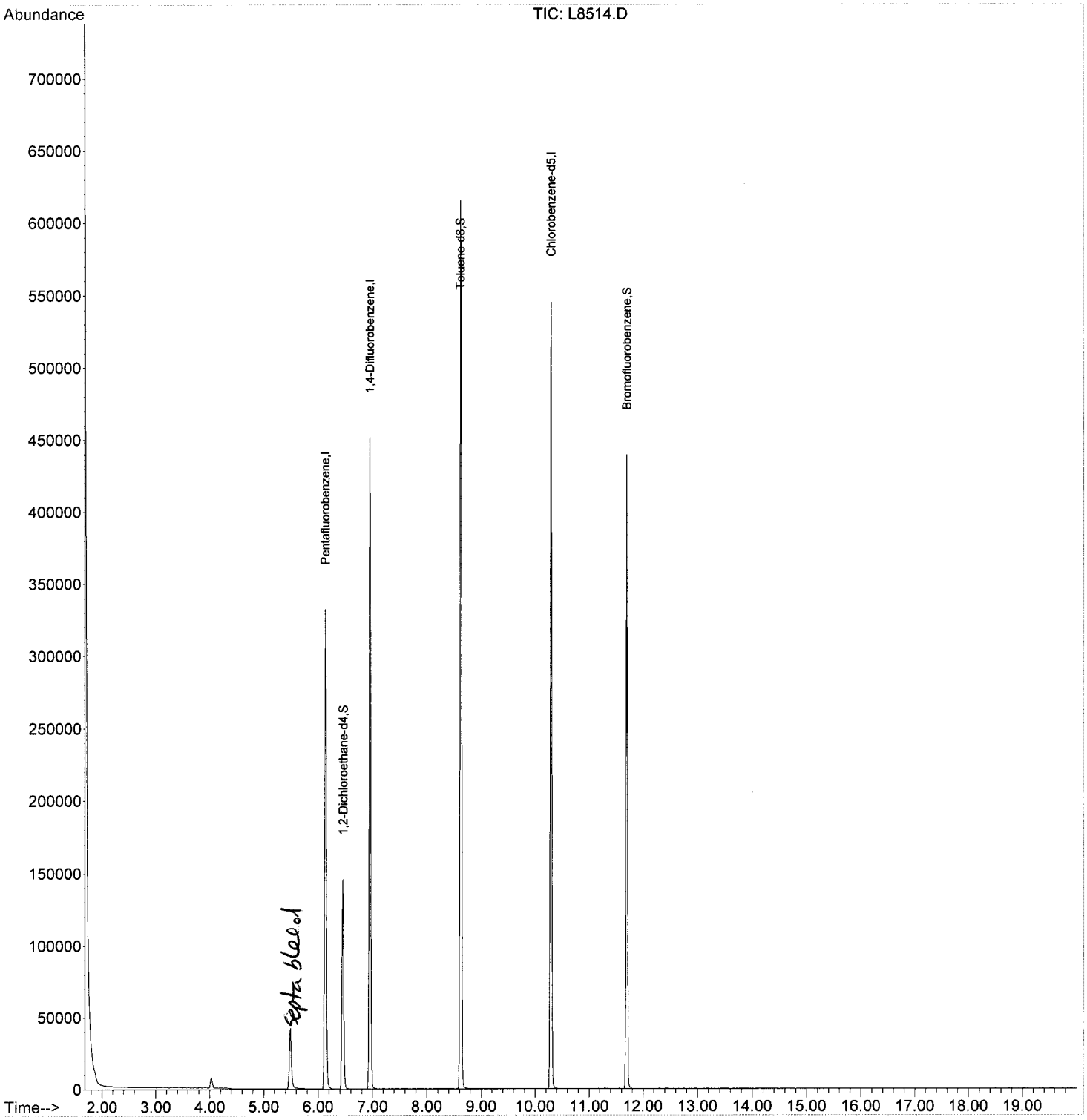
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8514.D
Acq On : 1 Jul 2015 6:30
Operator : XING
Sample : E-5_(0.5-1.0)/,05367-035,S,5.6g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 01 15:07:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8514.D
Acq On : 1 Jul 2015 6:30
Operator : XING
Sample : E-5_(0.5-1.0)/,05367-035,S,5.6g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	238	rVB	7173	17129	1.49%	0.354%
2	5.492	369	376	396	rBV	42093	114250	9.96%	2.361%
3	6.131	432	439	453	rVB	332260	686041	59.81%	14.180%
4	6.456	464	471	482	rBV	145344	321185	28.00%	6.638%
5	6.953	513	520	535	rBV	451353	863509	75.28%	17.848%
6	8.618	674	684	701	rBV	615588	1147073	100.00%	23.709%
7	10.293	842	849	857	rBV	545726	962232	83.89%	19.888%
8	11.694	982	987	1001	rBB	439686	726810	63.36%	15.022%

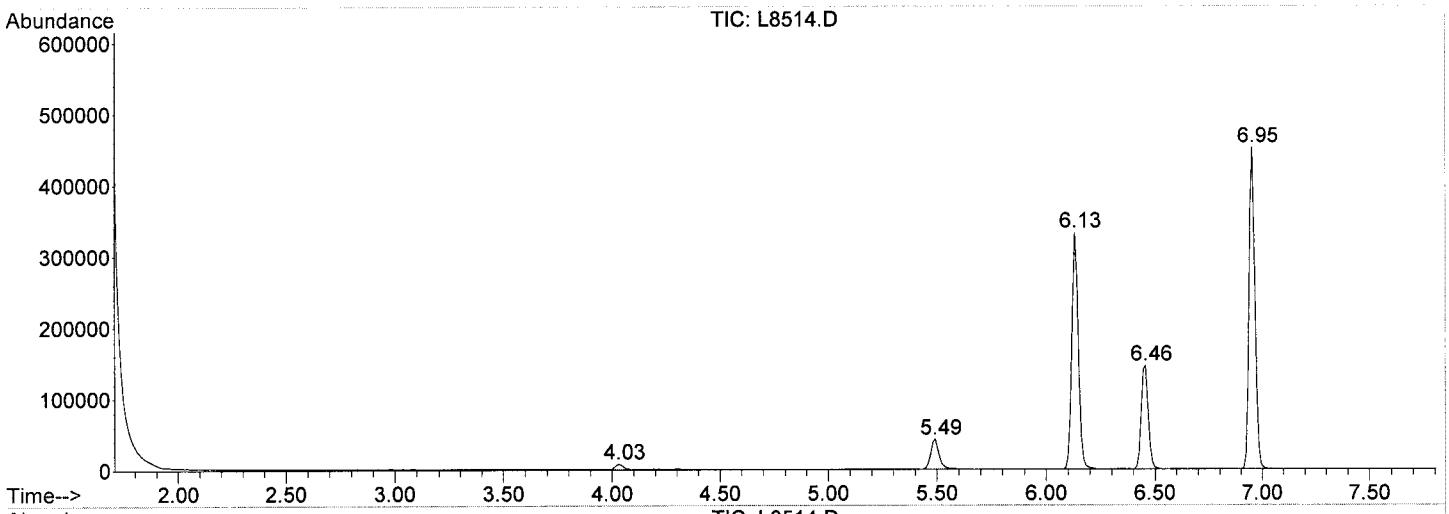
Sum of corrected areas: 4838229

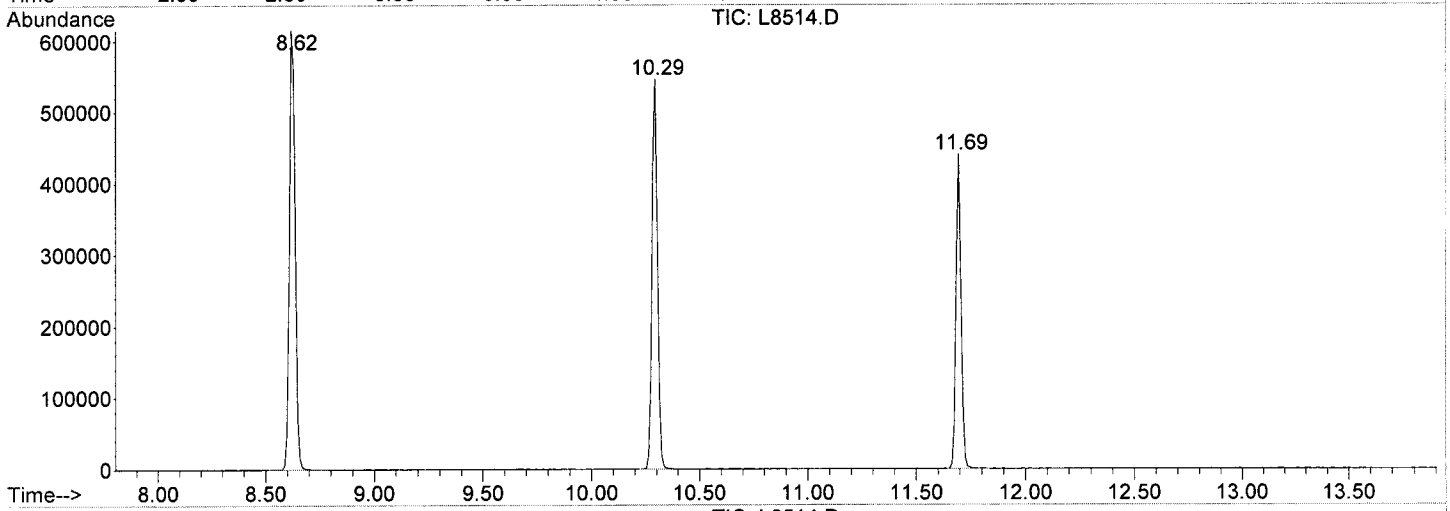
LSC Report - Integrated Chromatogram

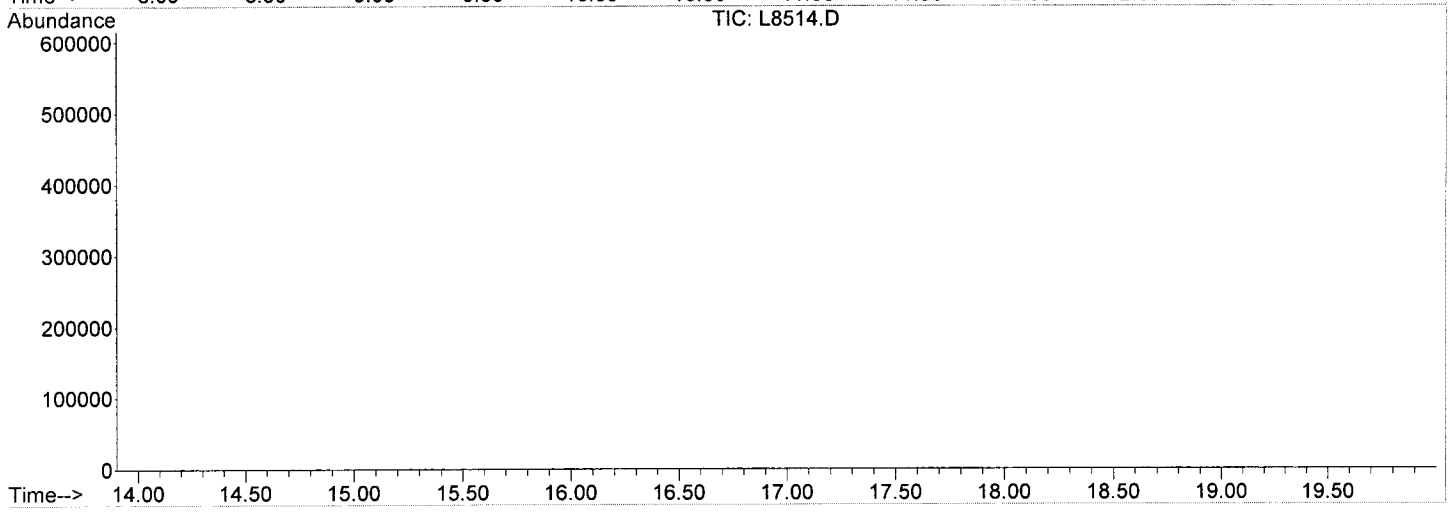
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8514.D
Acq On : 1 Jul 2015 6:30
Operator : XING
Sample : E-5_(0.5-1.0)/,05367-035,S,5.6g,19.6
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8515.D
Acq On : 1 Jul 2015 6:59
Operator : XING
Sample : E-5_(3.0-3.5)/,05367-036,S,3.7g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 01 15:08:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

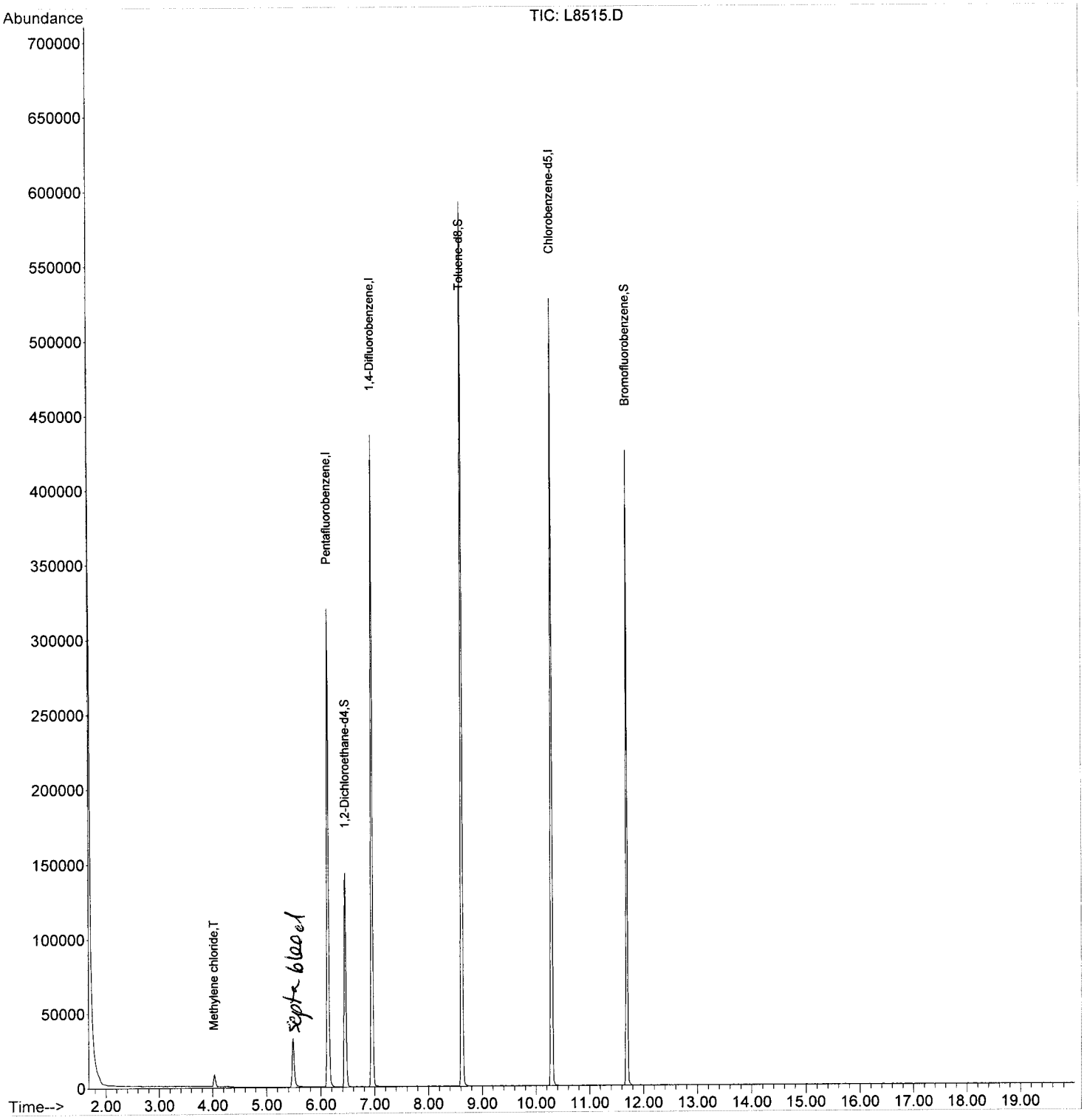
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	240841	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	394727	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	338448	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	121578	49.28	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.56%			
41) Toluene-d8	8.62	98	441144	49.07	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.14%			
59) Bromofluorobenzene	11.69	95	149554	45.15	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.30%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	5761	2.54	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8515.D
Acq On : 1 Jul 2015 6:59
Operator : XING
Sample : E-5_(3.0-3.5)/,05367-036,S,3.7g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 01 15:08:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8515.D
Acq On : 1 Jul 2015 6:59
Operator : XING
Sample : E-5_(3.0-3.5)/,05367-036,S,3.7g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	239	rVB	8058	19681	1.76%	0.420%
2	5.491	370	376	401	rBV	32733	89097	7.95%	1.900%
3	6.131	433	439	452	rVB	320110	665340	59.34%	14.185%
4	6.456	465	471	483	rVB	143527	318425	28.40%	6.789%
5	6.953	513	520	537	rVB	436396	838122	74.74%	17.869%
6	8.618	678	684	699	rVB	592591	1121311	100.00%	23.906%
7	10.293	841	849	863	rBV	527802	939926	83.82%	20.039%
8	11.694	979	987	997	rBV	425756	698530	62.30%	14.893%

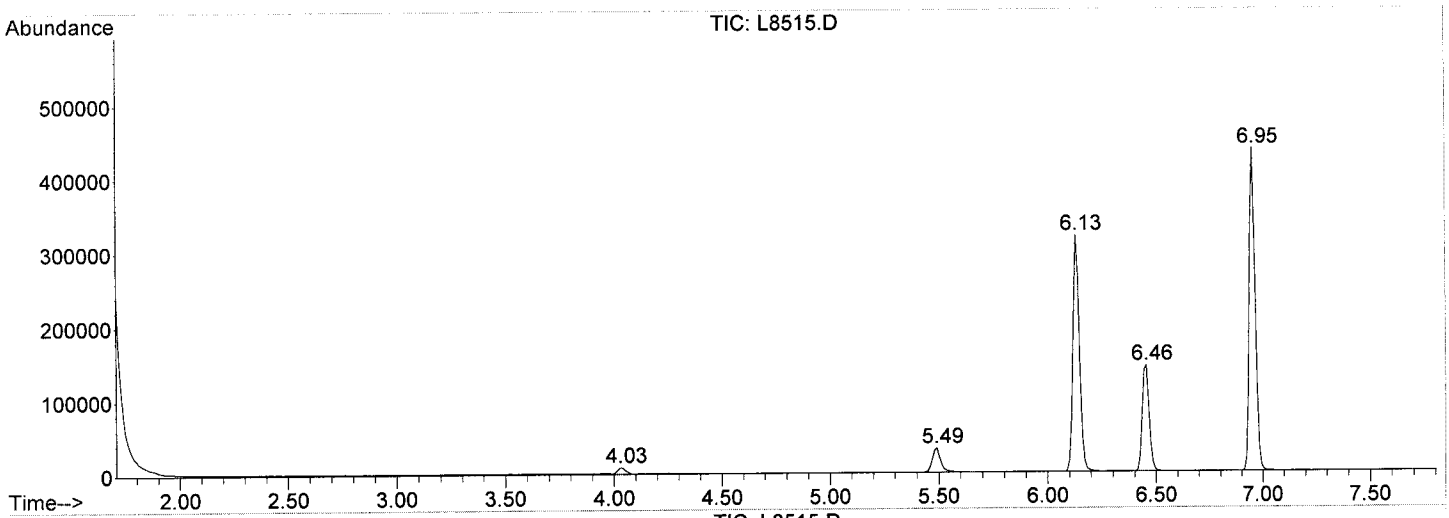
Sum of corrected areas: 4690432

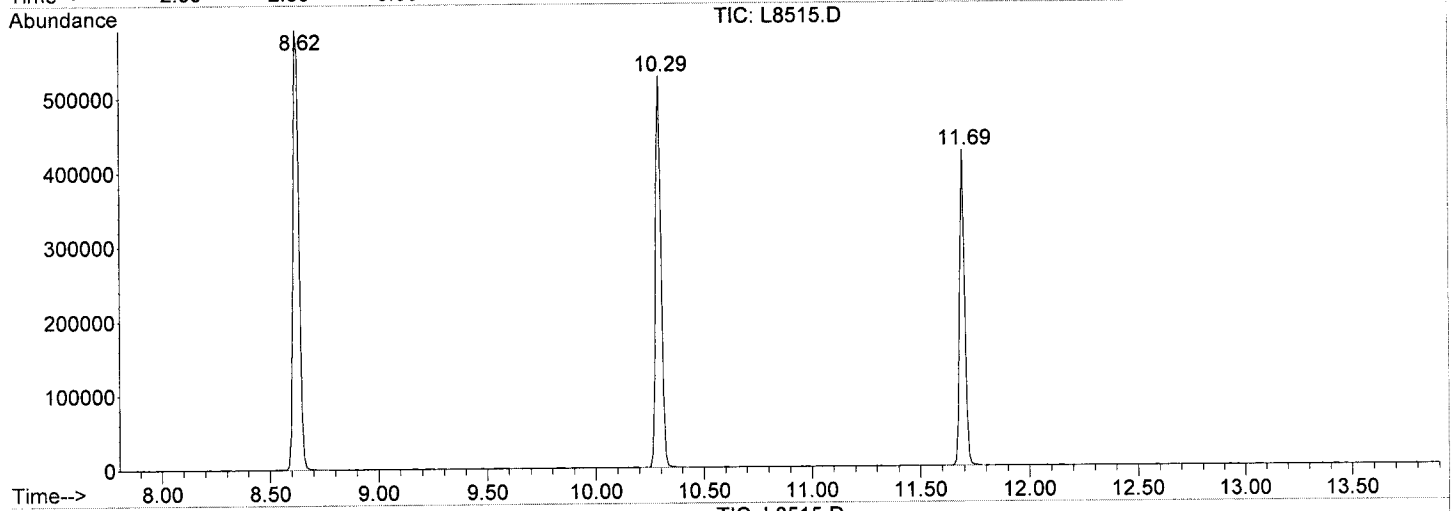
LSC Report - Integrated Chromatogram

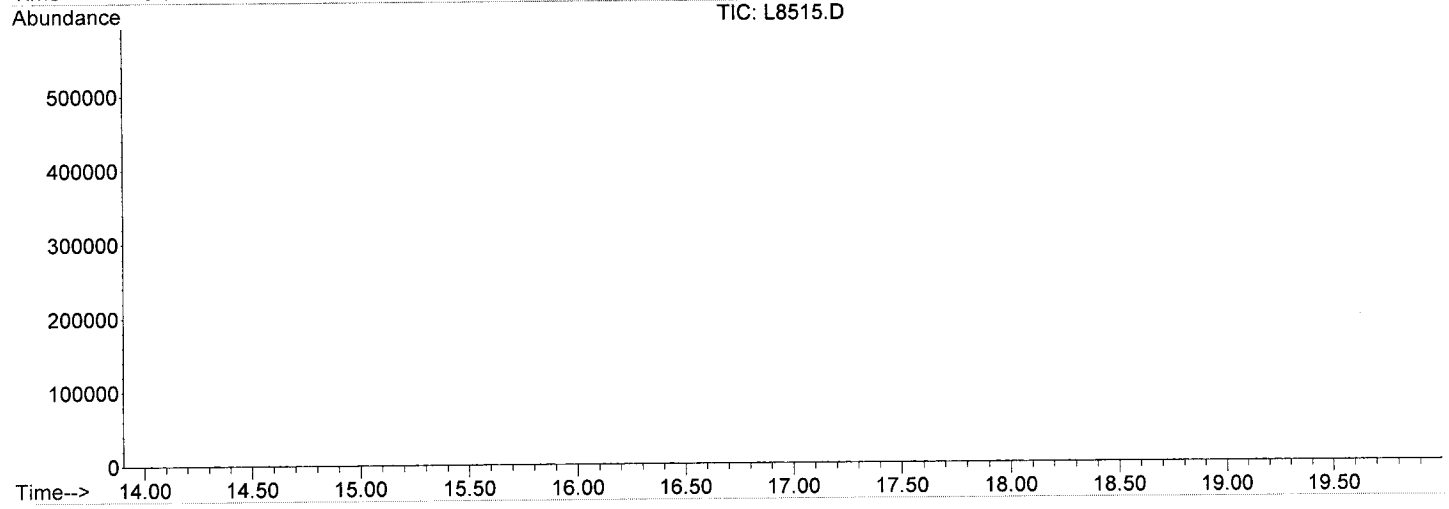
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8515.D
Acq On : 1 Jul 2015 6:59
Operator : XING
Sample : E-5_(3.0-3.5)/,05367-036,S,3.7g,18.4
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8516.D
Acq On : 1 Jul 2015 7:29
Operator : XING
Sample : E-5_(2.0-2.5)/,05367-037,S,5.7g,16.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 01 15:10:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

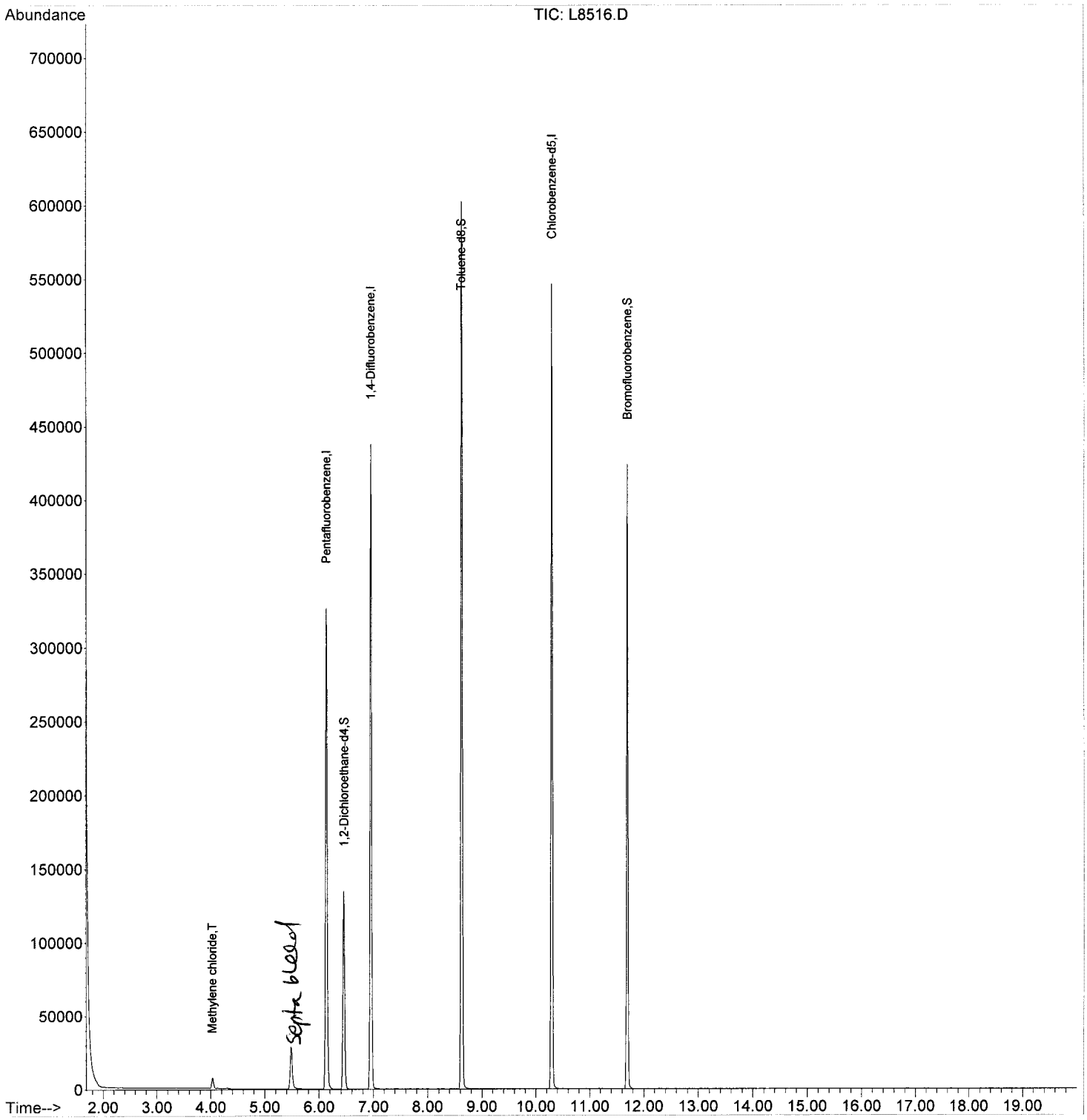
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	244557	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	400731	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	339739	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	114427	45.68	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 91.36%			
41) Toluene-d8	8.62	98	444396	48.69	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.38%			
59) Bromofluorobenzene	11.69	95	149846	45.07	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.14%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	5347	2.32	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8516.D
Acq On : 1 Jul 2015 7:29
Operator : XING
Sample : E-5_(2.0-2.5)/,05367-037,S,5.7g,16.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 01 15:10:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8516.D
Acq On : 1 Jul 2015 7:29
Operator : XING
Sample : E-5_(2.0-2.5)/,05367-037,S,5.7g,16.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	238	rVB	7234	17529	1.55%	0.374%
2	5.481	369	375	401	rVB	28700	80924	7.15%	1.724%
3	6.131	433	439	452	rBV	326411	673742	59.50%	14.357%
4	6.456	464	471	480	rVB	134656	298455	26.36%	6.360%
5	6.953	513	520	539	rVB	437855	851056	75.16%	18.136%
6	8.618	678	684	699	rBV	602905	1132370	100.00%	24.131%
7	10.293	841	849	865	rBB	546999	942893	83.27%	20.093%
8	11.694	982	987	997	rBB	424229	695683	61.44%	14.825%

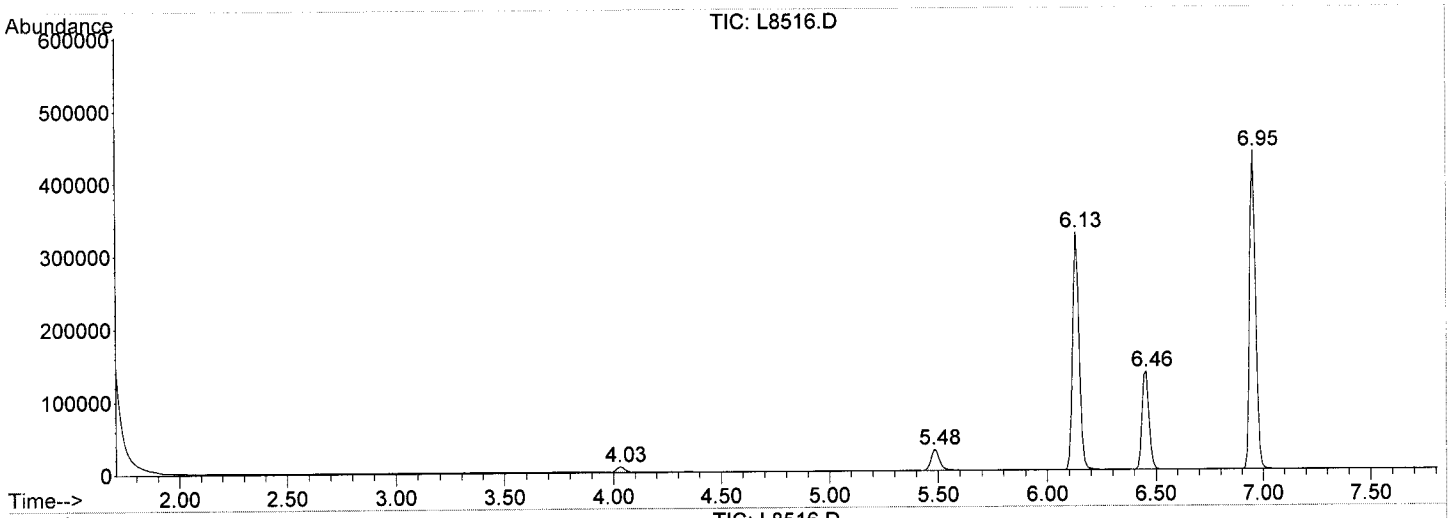
Sum of corrected areas: 4692652

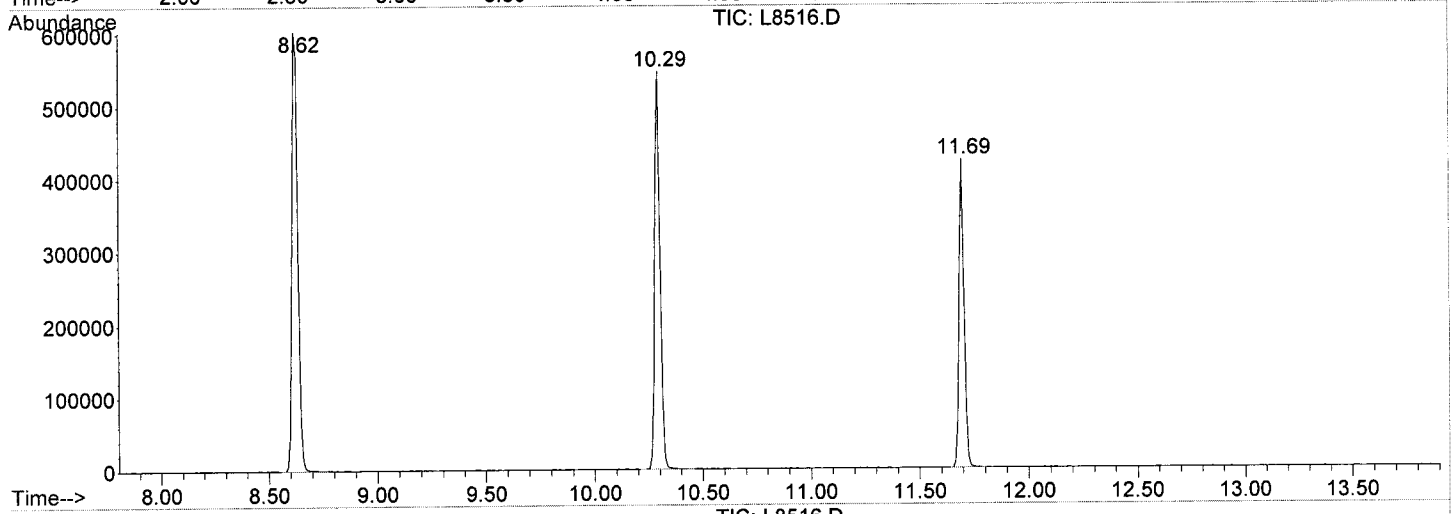
LSC Report - Integrated Chromatogram

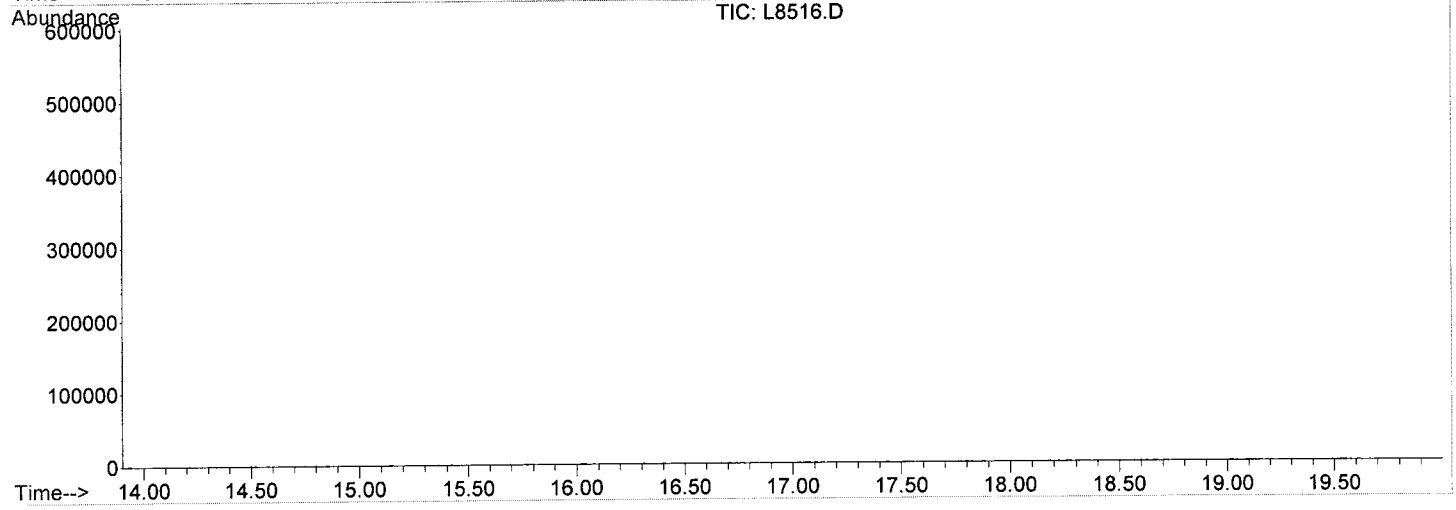
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8516.D
Acq On : 1 Jul 2015 7:29
Operator : XING
Sample : E-5_(2.0-2.5)/,05367-037,S,5.7g,16.2
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8517.D
Acq On : 1 Jul 2015 7:58
Operator : XING
Sample : E-5_(4.5-5.0)/,05367-038,S,6.2g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 01 15:12:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

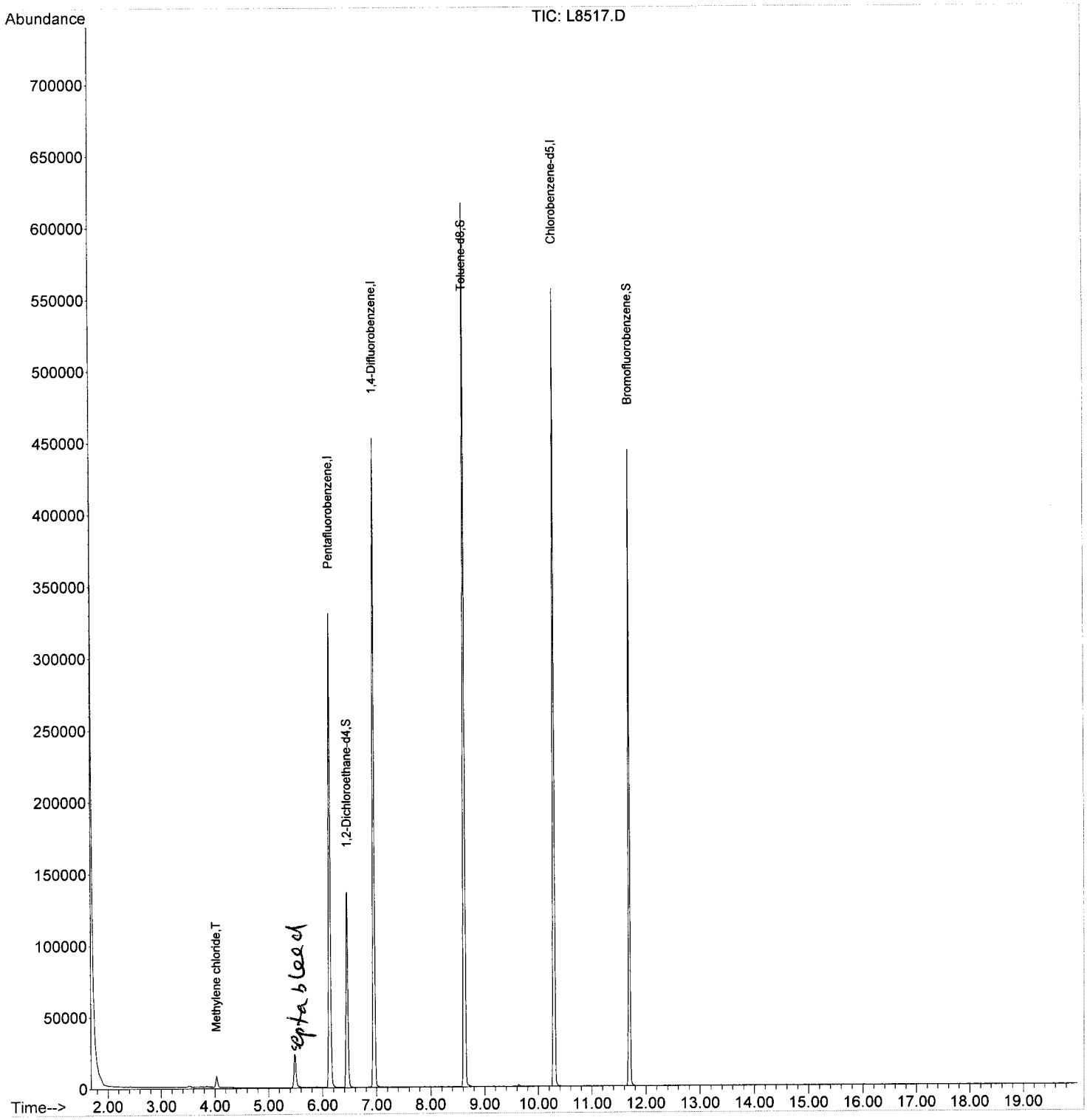
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	246128	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	407129	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	351978	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	117092	46.45	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 92.90%			
41) Toluene-d8	8.62	98	455144	49.08	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.16%			
59) Bromofluorobenzene	11.69	95	156051	45.30	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.60%			
Target Compounds						Qvalue
13) Methylene chloride	4.03	84	5523	2.38	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8517.D
Acq On : 1 Jul 2015 7:58
Operator : XING
Sample : E-5_(4.5-5.0)/,05367-038,S,6.2g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 01 15:12:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8517.D
Acq On : 1 Jul 2015 7:58
Operator : XING
Sample : E-5_(4.5-5.0)/,05367-038,S,6.2g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 40 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	240	rVB	7728	18496	1.60%	0.386%
2	5.481	369	375	393	rBV	23024	64548	5.58%	1.347%
3	6.131	432	439	451	rBV	330813	677450	58.52%	14.142%
4	6.456	465	471	485	rBV	136422	306312	26.46%	6.394%
5	6.953	514	520	535	rVB	452484	862042	74.46%	17.996%
6	8.618	679	684	699	rBV	616858	1157674	100.00%	24.167%
7	10.293	841	849	863	rBB	556671	976848	84.38%	20.392%
8	11.694	982	987	1000	rBB	444093	726900	62.79%	15.175%

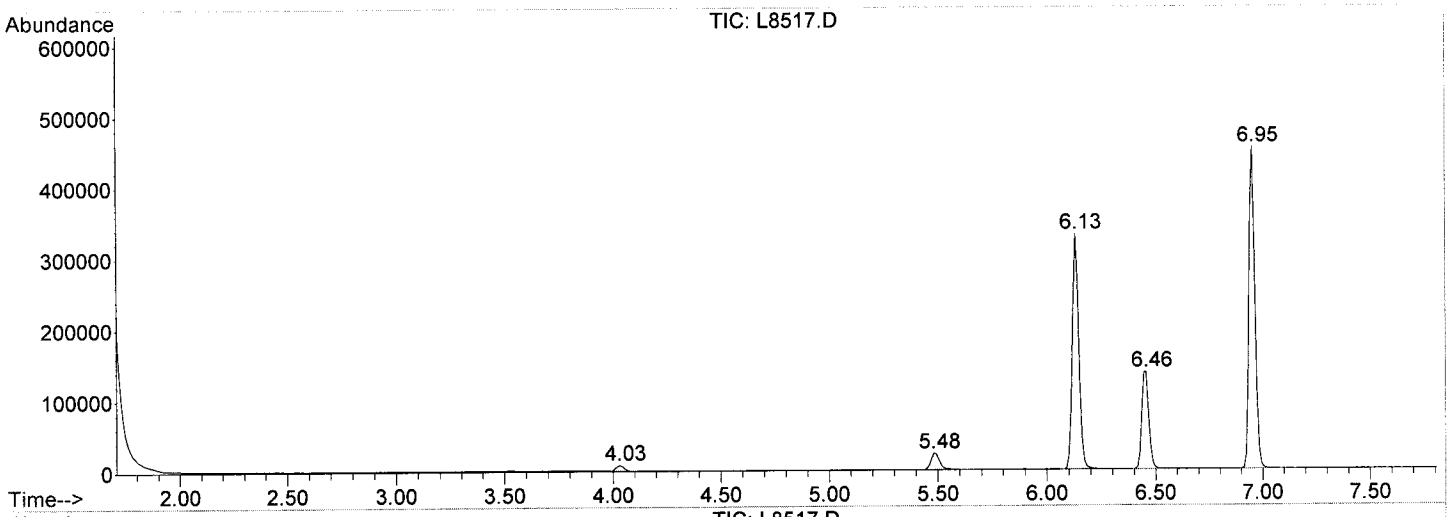
Sum of corrected areas: 4790270

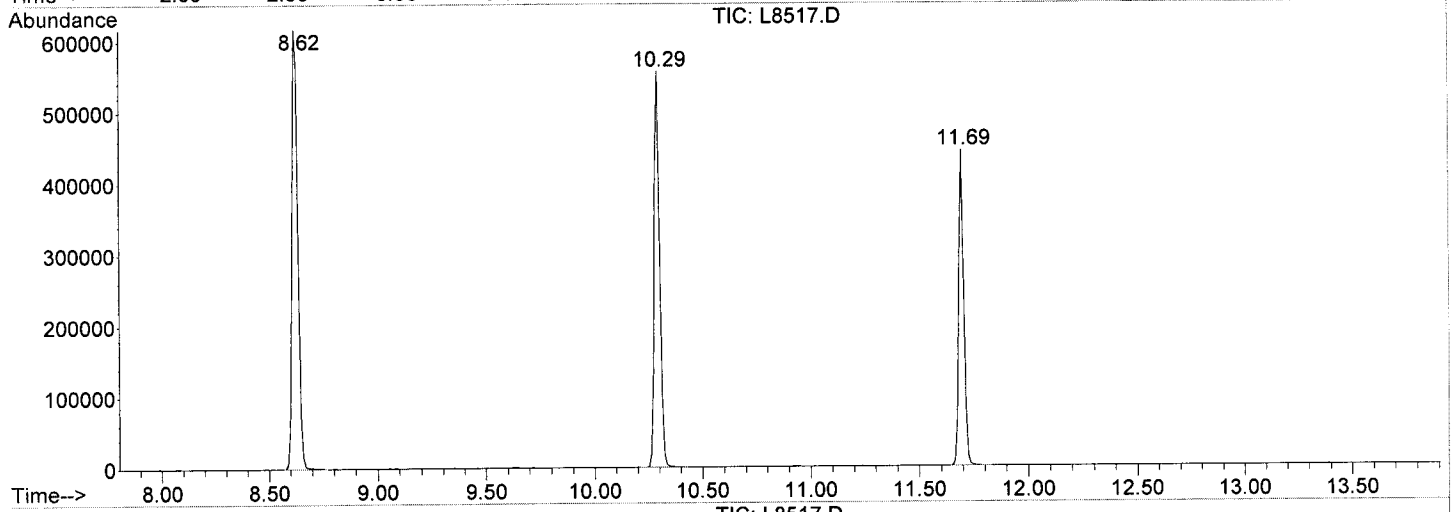
LSC Report - Integrated Chromatogram

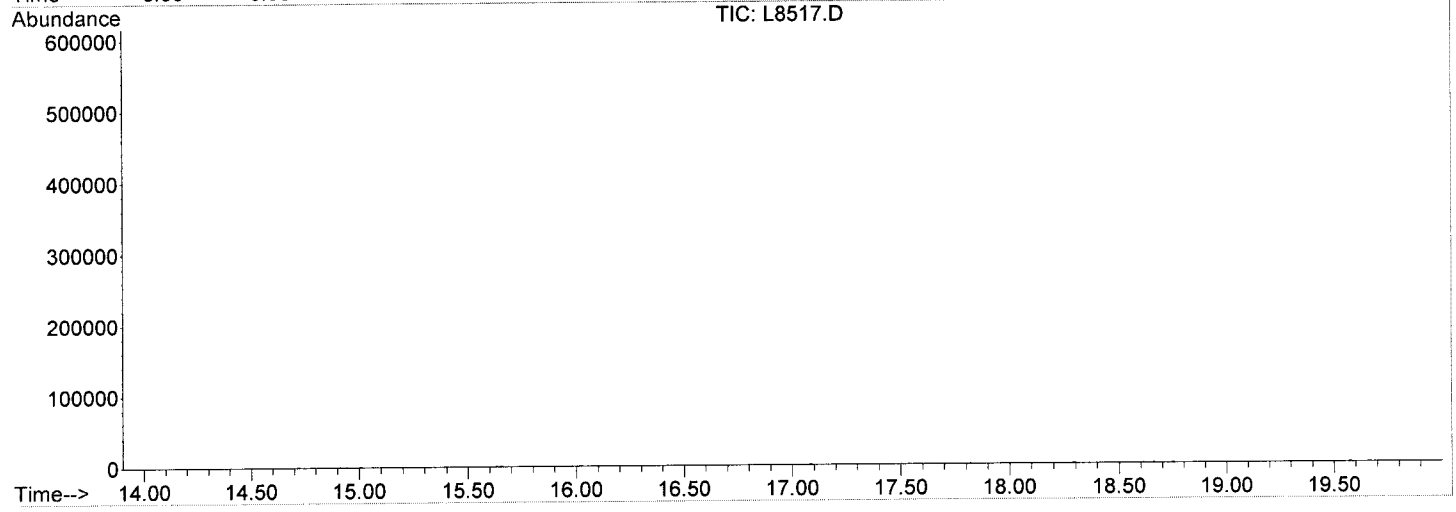
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8517.D
Acq On : 1 Jul 2015 7:58
Operator : XING
Sample : E-5_(4.5-5.0)/,05367-038,S,6.2g,18.8
Misc : AMEC-SMRST/AMTRAK_,06/22/15,06/23/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8518.D
Acq On : 1 Jul 2015 8:28
Operator : XING
Sample : E-6_(0.5-1.0)/,05367-039,S,3.5g,20.5
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jul 01 15:12:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

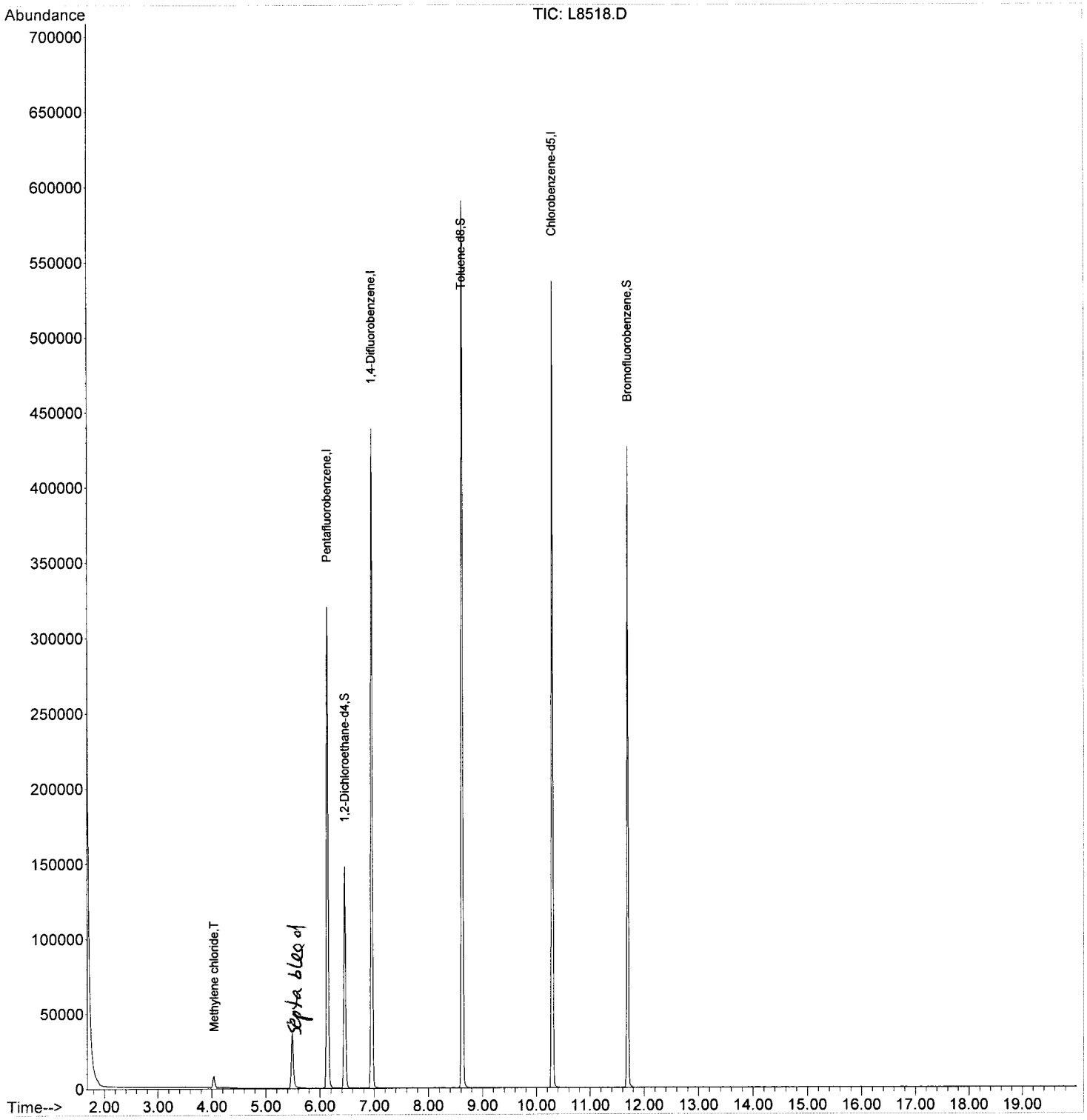
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	246526	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	397743	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	336015	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	121344	48.05	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 96.10%			
41) Toluene-d8	8.62	98	441769	48.76	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.52%			
59) Bromofluorobenzene	11.69	95	148383	45.12	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 90.24%			
Target Compounds						Qvalue
13) Methylene chloride	4.04	84	5483	2.36	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8518.D
Acq On : 1 Jul 2015 8:28
Operator : XING
Sample : E-6_(0.5-1.0)/,05367-039,S,3.5g,20.5
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Jul 01 15:12:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8518.D
Acq On : 1 Jul 2015 8:28
Operator : XING
Sample : E-6_(0.5-1.0)/,05367-039,S,3.5g,20.5
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 41 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.040	227	233	239	rVB	7450	18467	1.65%	0.393%
2	5.492	369	376	401	rVB	36584	99349	8.86%	2.113%
3	6.131	433	439	454	rVB	320320	678257	60.49%	14.424%
4	6.456	465	471	481	rVB	147537	316811	28.26%	6.737%
5	6.953	514	520	534	rVB	438799	847942	75.62%	18.032%
6	8.618	674	684	701	rBB	590648	1121246	100.00%	23.844%
7	10.293	840	849	860	rBV	537310	926832	82.66%	19.710%
8	11.694	981	987	1001	rBB	426885	693435	61.85%	14.747%

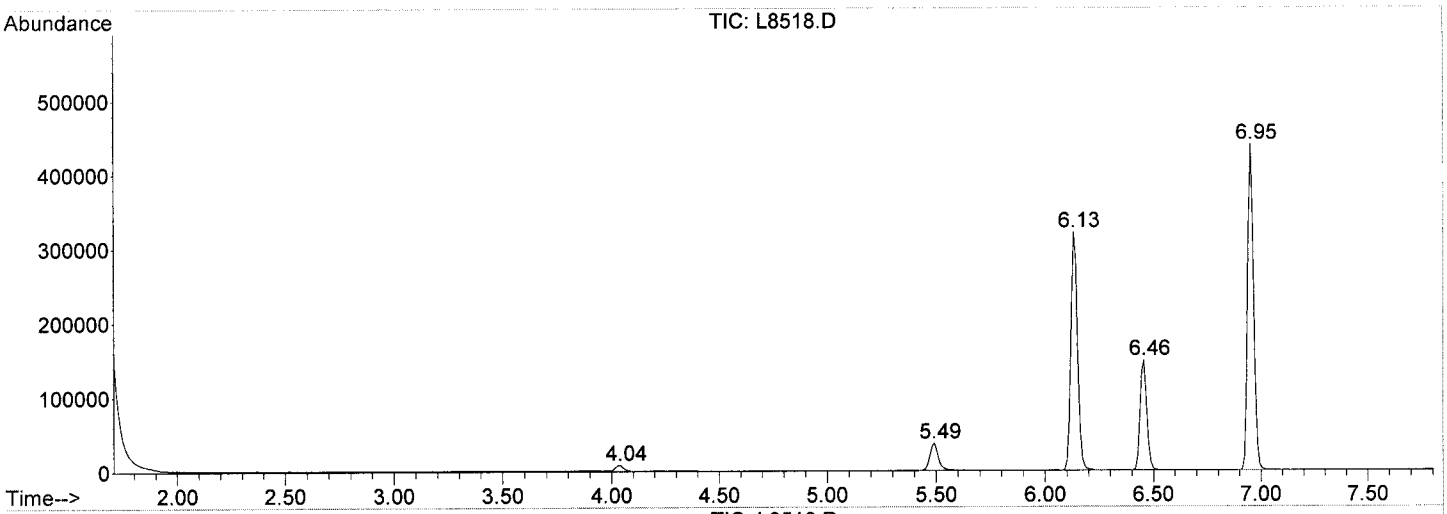
Sum of corrected areas: 4702339

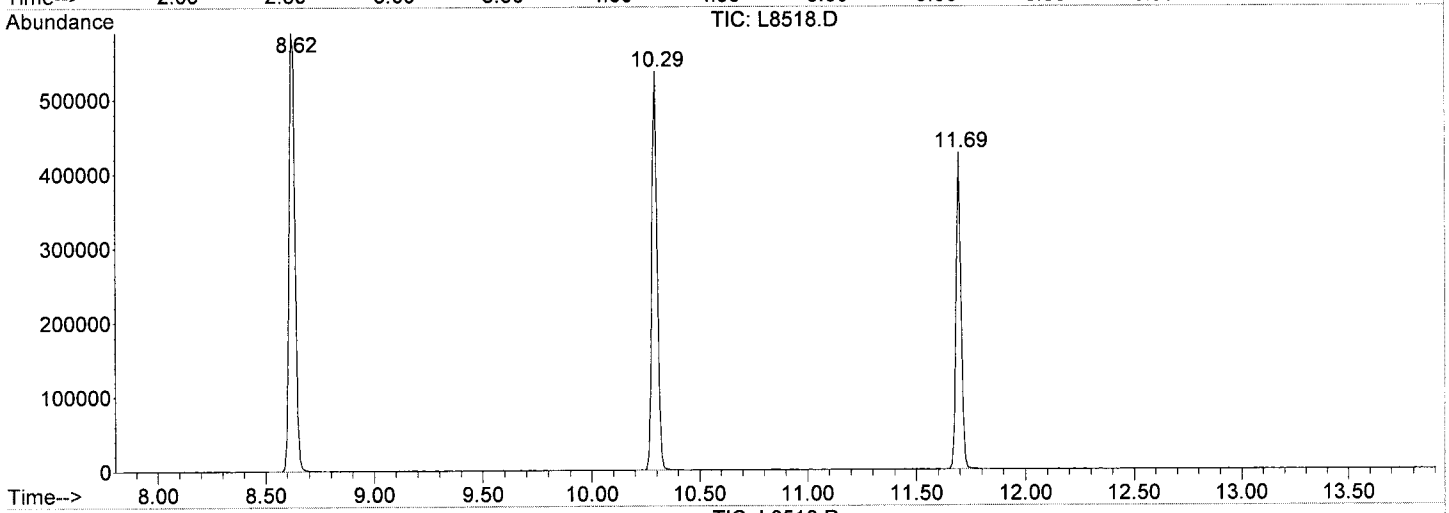
LSC Report - Integrated Chromatogram

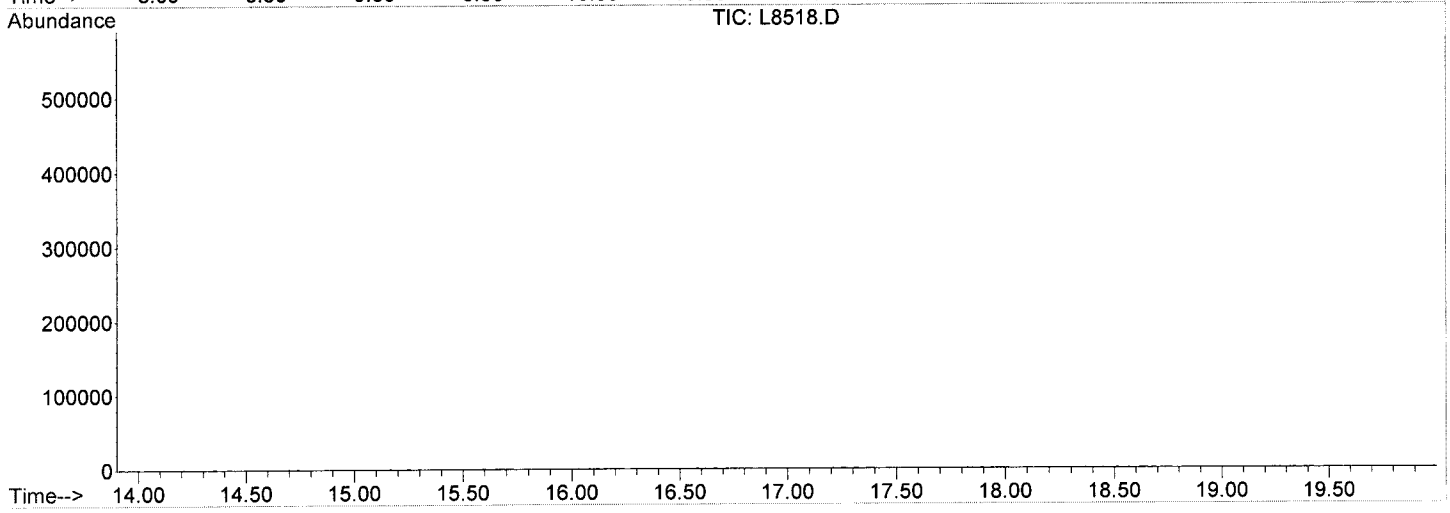
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8518.D
Acq On : 1 Jul 2015 8:28
Operator : XING
Sample : E-6_(0.5-1.0)/,05367-039,S,3.5g,20.5
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 41 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4811.D
Acq On : 30 Jun 2015 23:36
Operator : Sylvia
Sample : FB-062215,05367-040,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 08:48:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.21	168	509962	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.03	114	821913	50.00	UG	0.00
50) Chlorobenzene-d5	10.37	117	737001	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.52	65	331476	50.68	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 101.36%			
41) Toluene-d8	8.70	98	978066	49.34	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.68%			
59) Bromofluorobenzene	11.77	95	389121	48.41	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 96.82%			

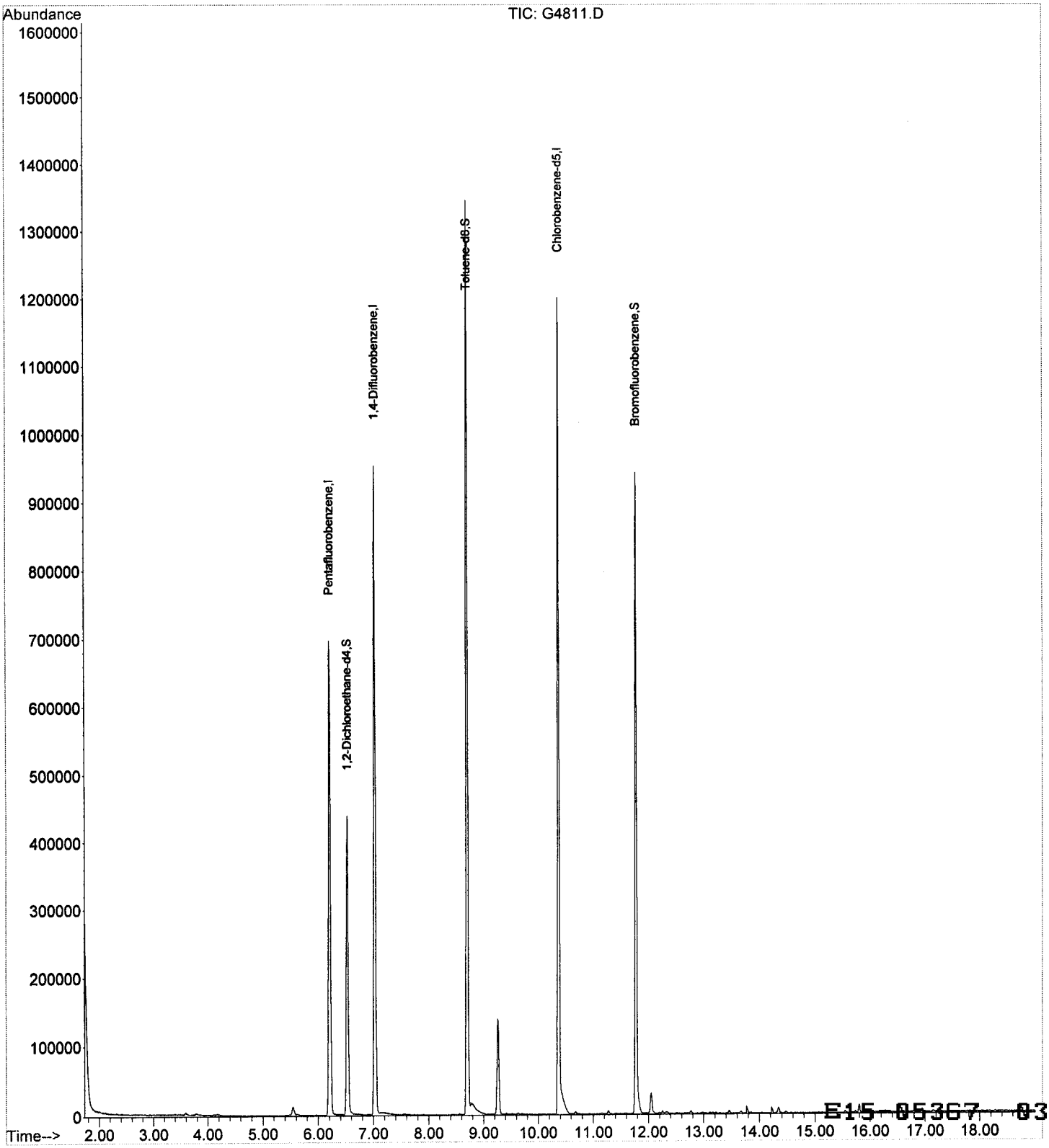
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4811.D
Acq On : 30 Jun 2015 23:36
Operator : Sylvia
Sample : FB-062215,05367-040,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 08:48:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration



E15-05367-0339

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4811.D
Acq On : 30 Jun 2015 23:36
Operator : Sylvia
Sample : FB-062215,05367-040,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 1

Method : C:\MSDCHEM\1\METHODS\G8062915.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	5.543	720	729	742	rBV	11201	29682	1.14%	0.251%
2	6.207	842	856	882	rBV	696125	1547991	59.51%	13.068%
3	6.526	903	917	947	rBV	437571	981201	37.72%	8.283%
4	7.028	1002	1013	1030	rBV	952421	1998232	76.81%	16.869%
5	8.702	1318	1333	1344	rBV	1345539	2601414	100.00%	21.960%
6	8.780	1344	1348	1400	rVB5	16588	113970	4.38%	0.962%
7	9.261	1428	1440	1456	rBV	136914	324522	12.47%	2.740%
8	10.370	1640	1652	1690	rBV	1199738	2390200	91.88%	20.177%
9	11.772	1907	1920	1946	rBV	941529	1785148	68.62%	15.070%
10	12.049	1962	1973	1988	rVB5	29677	73558	2.83%	0.621%

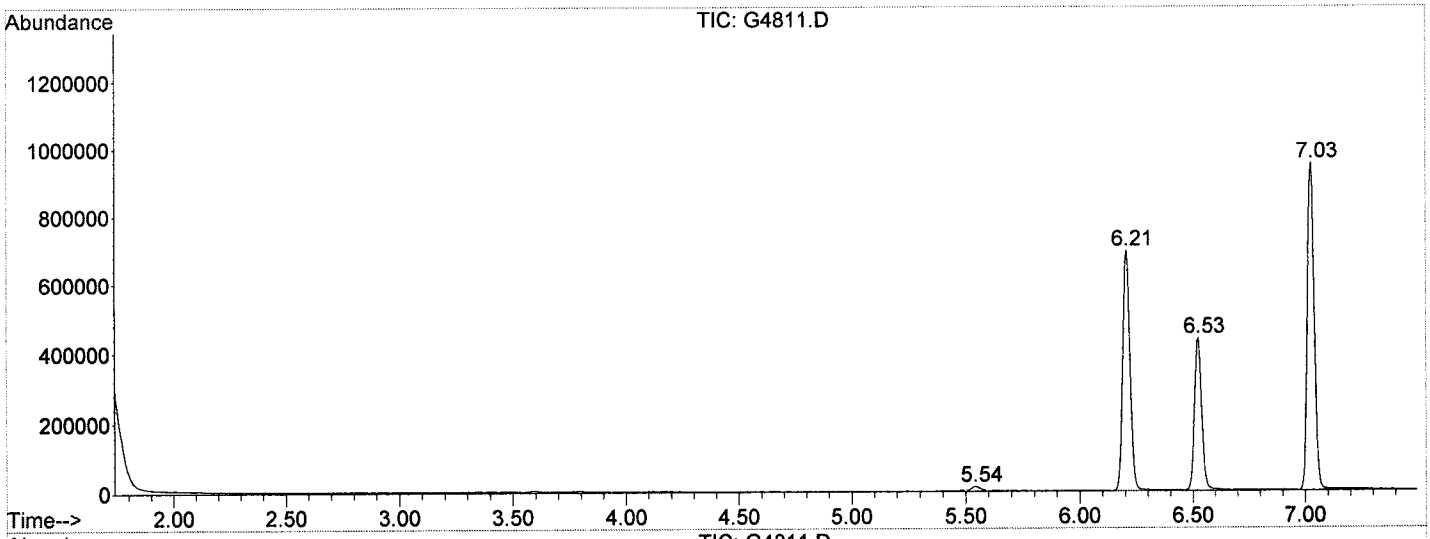
Sum of corrected areas: 11845918

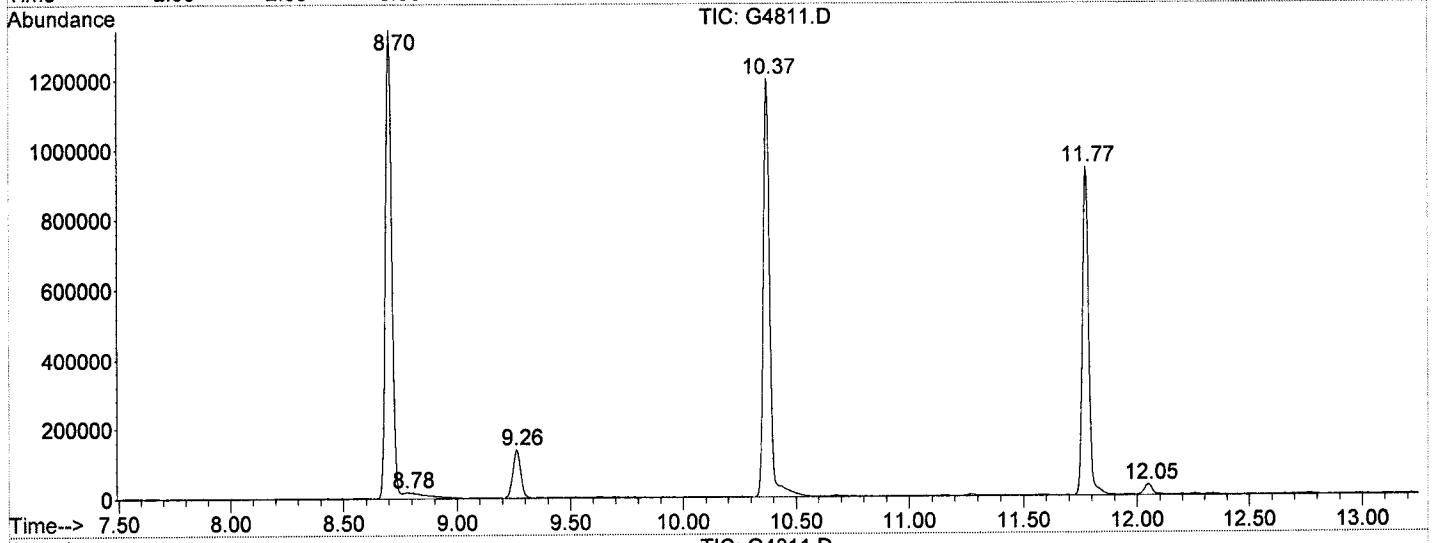
LSC Report - Integrated Chromatogram

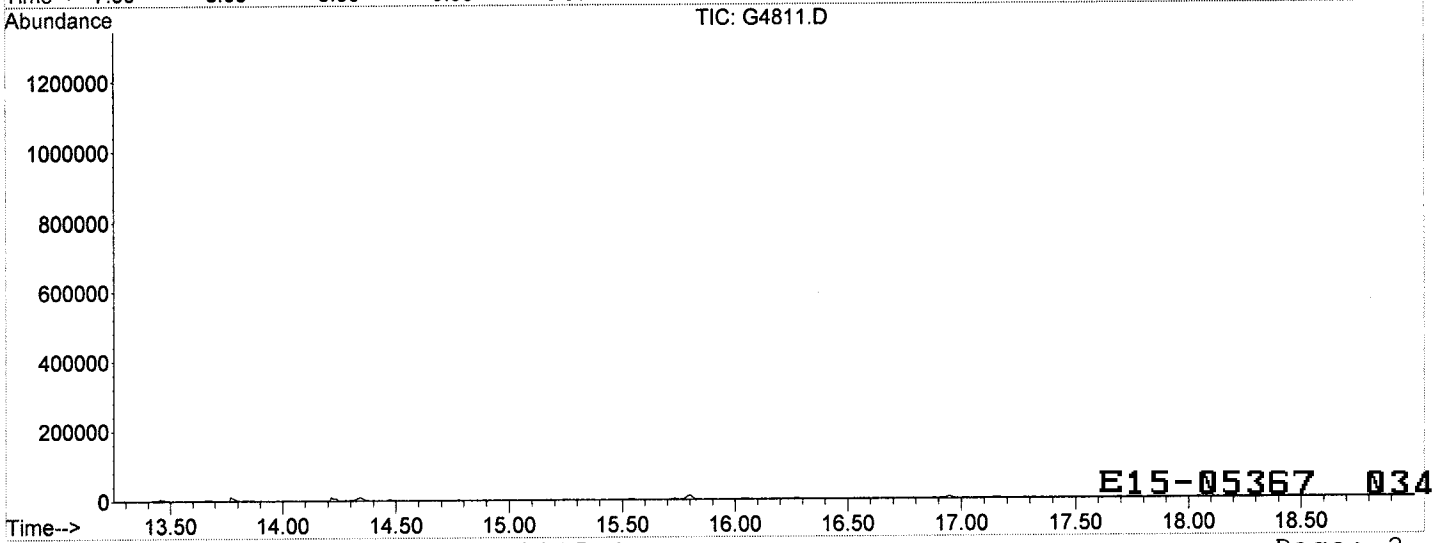
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4811.D
Acq On : 30 Jun 2015 23:36
Operator : Sylvia
Sample : FB-062215,05367-040,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







E15-05367 0341

Library Search Compound Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4811.D
Acq On : 30 Jun 2015 23:36
Operator : Sylvia
Sample : FB-062215,05367-040,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

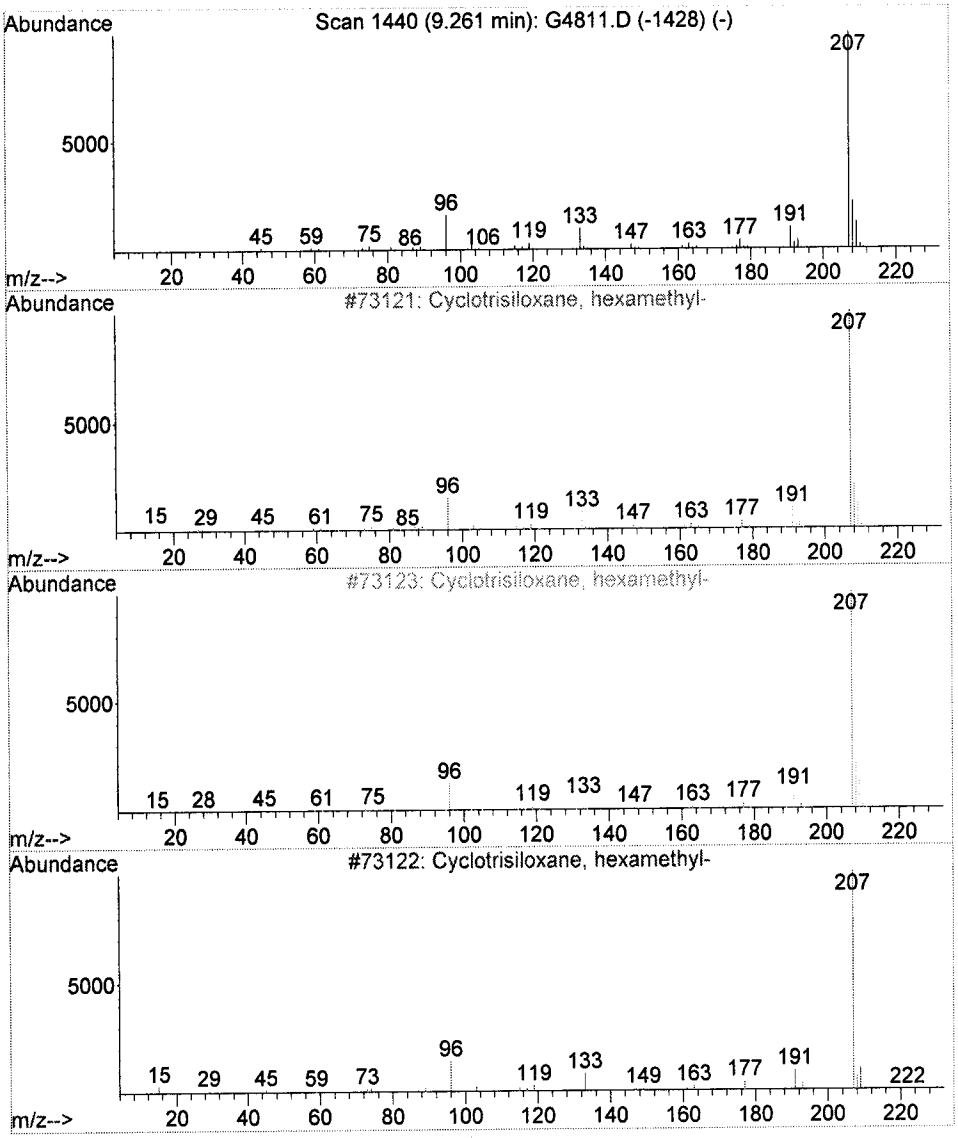
TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P

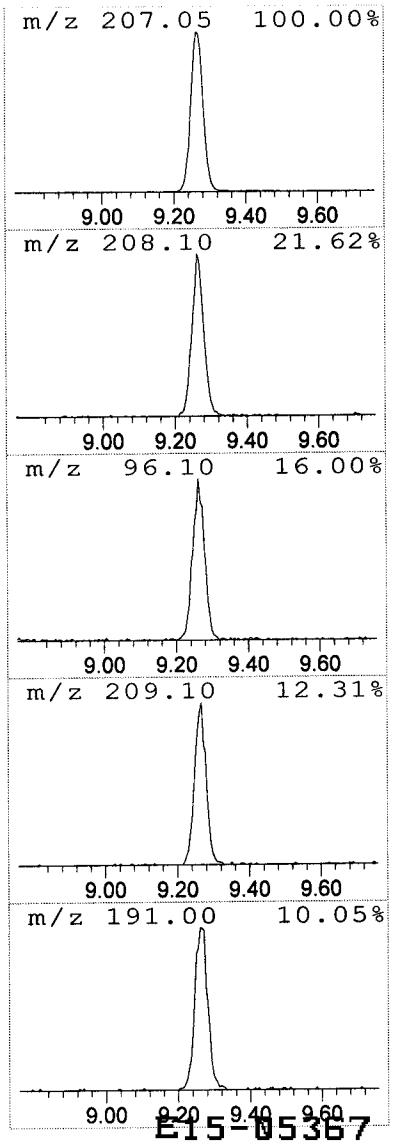
****

Peak Number 1 Column/Septa bleed Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.26	6.79 UG	324522	Chlorobenzene-d5	10.37

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
2	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	91
3	Cyclotrisiloxane, hexamethyl-	222	C6H18O3Si3	000541-05-9	80
4	Benzo[h]quinoline, 2,4-dimethyl-	207	C15H13N	000605-67-4	38
5	5-Methyl-2-phenylindolizine	207	C15H13N	036944-99-7	38





E15-05367 0342

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8519.D
Acq On : 1 Jul 2015 8:58
Operator : XING
Sample : E-6_(2.0-2.5)/,05367-041,S,5.1g,6.90
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jul 01 15:14:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	251187	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	415584	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	362707	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	126540	49.18	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 98.36%			
41) Toluene-d8	8.62	98	465631	49.19	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.38%			
59) Bromofluorobenzene	11.69	95	166009	46.77	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 93.54%			

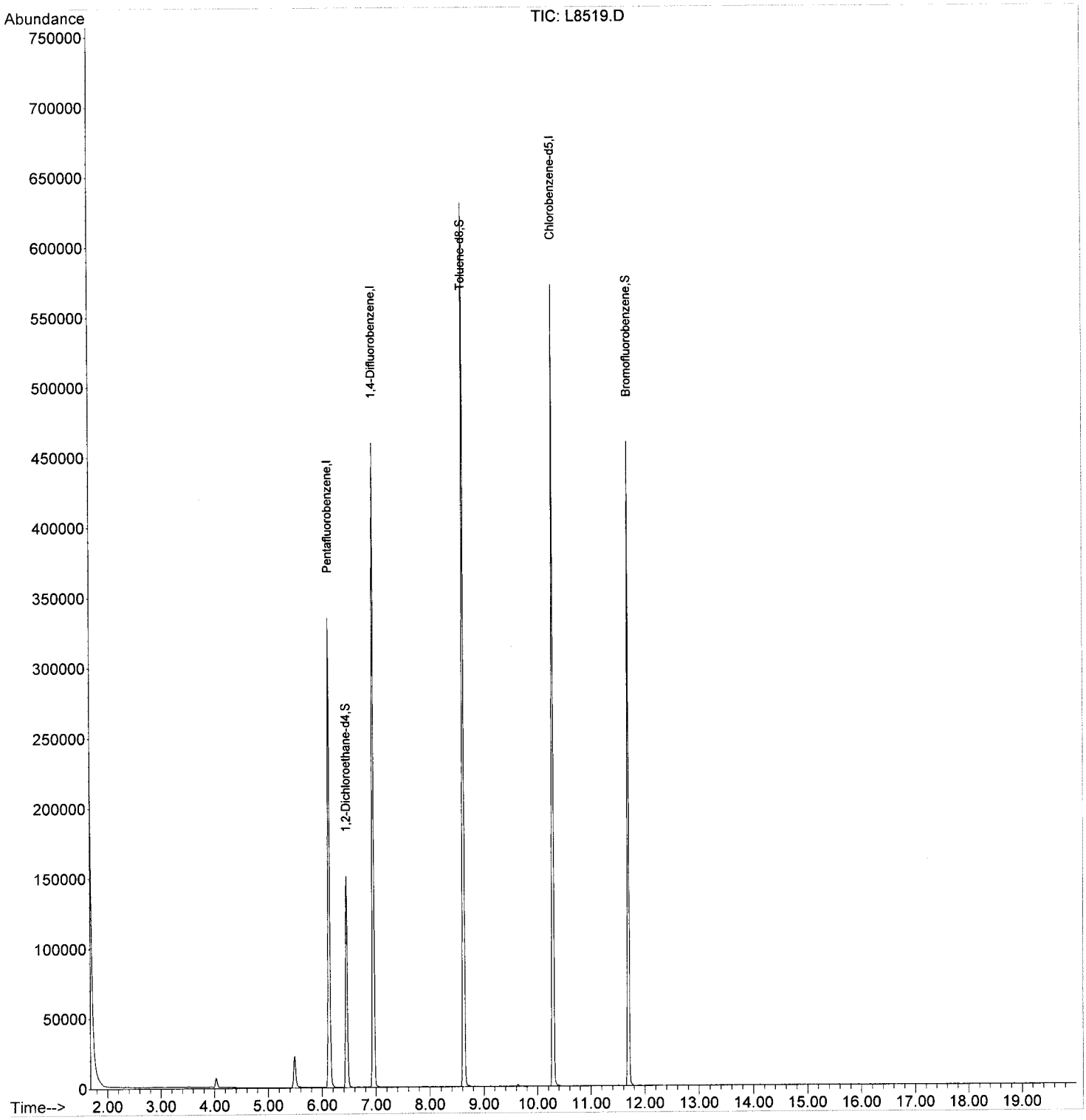
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8519.D
Acq On : 1 Jul 2015 8:58
Operator : XING
Sample : E-6_(2.0-2.5)/,05367-041,S,5.1g,6.90
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jul 01 15:14:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8519.D
Acq On : 1 Jul 2015 8:58
Operator : XING
Sample : E-6_(2.0-2.5)/,05367-041,S,5.1g,6.90
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	227	232	240	rVB	6530	16371	1.38%	0.331%
2	5.491	368	376	389	rBV	22152	61725	5.20%	1.247%
3	6.131	432	439	454	rVB	335254	692630	58.30%	13.990%
4	6.456	465	471	481	rVB	150631	331091	27.87%	6.688%
5	6.953	513	520	535	rVB	459669	885618	74.55%	17.889%
6	8.618	677	684	699	rBV	631199	1187965	100.00%	23.996%
7	10.293	842	849	865	rBB	572460	1009752	85.00%	20.396%
8	11.694	978	987	997	rBB	459930	765567	64.44%	15.464%

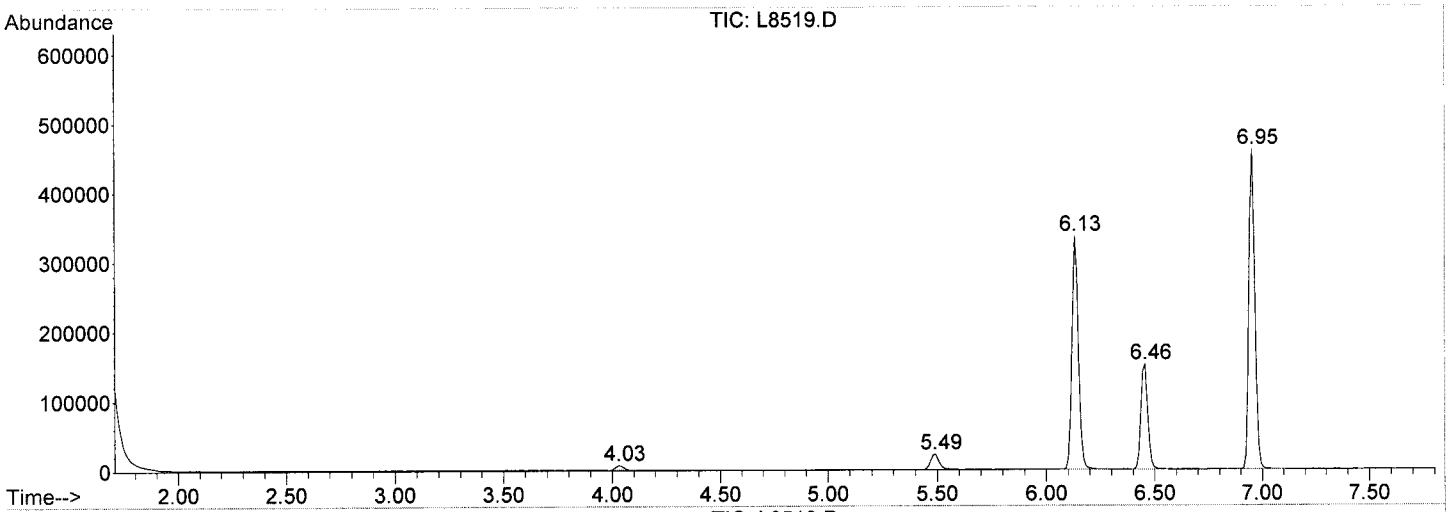
Sum of corrected areas: 4950719

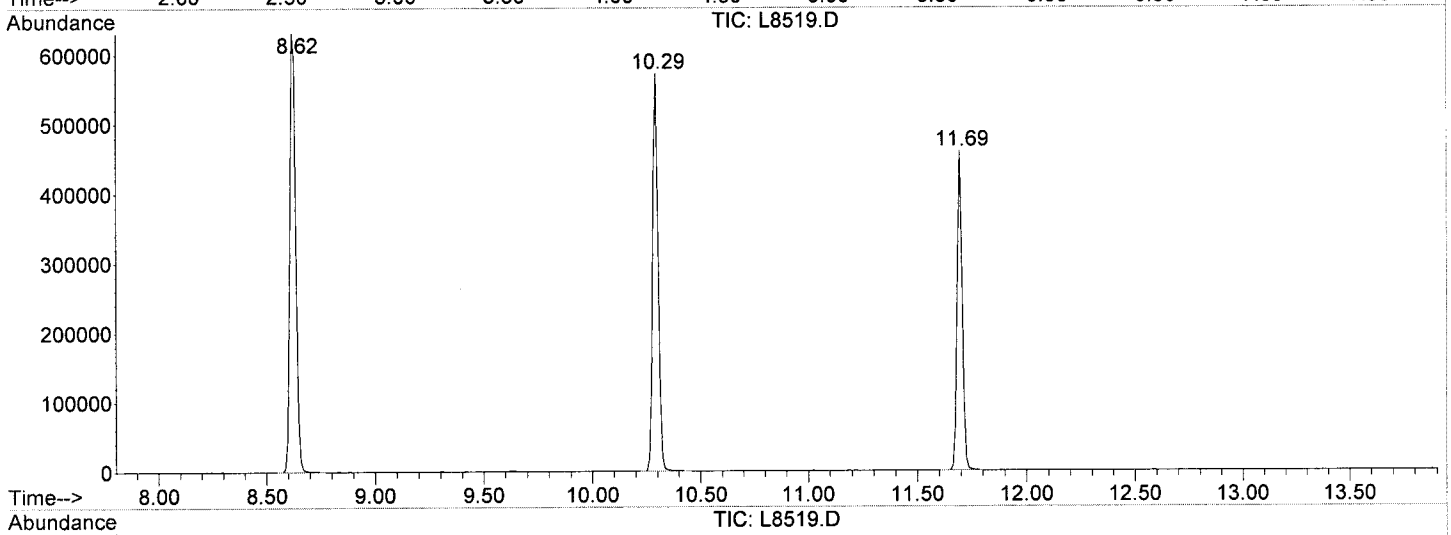
LSC Report - Integrated Chromatogram

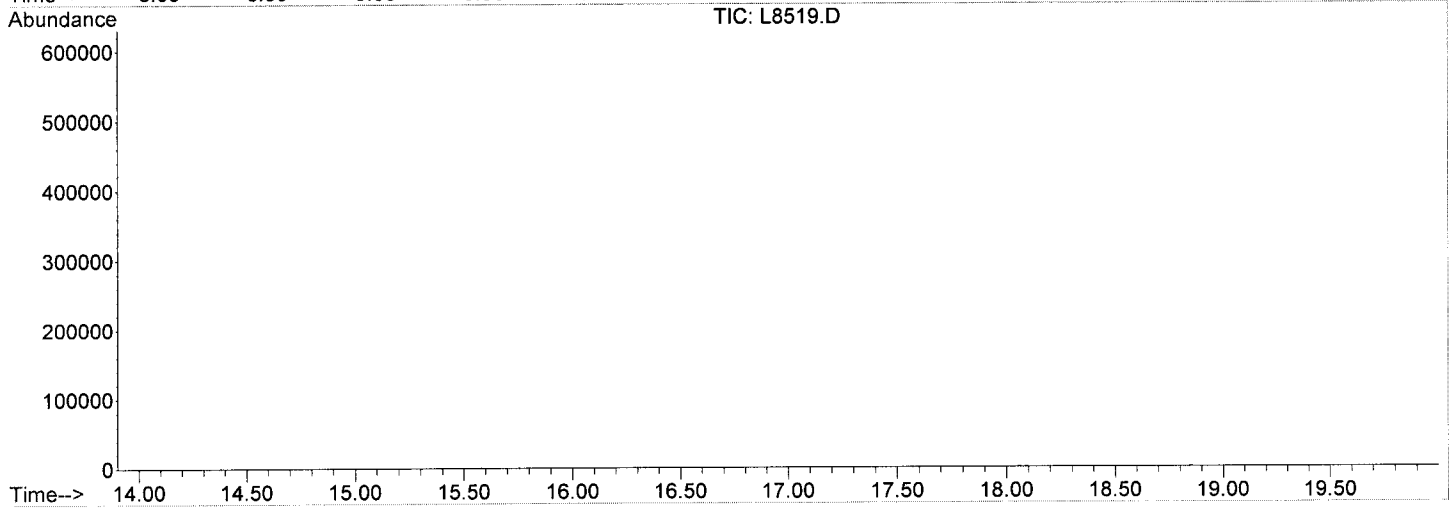
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8519.D
Acq On : 1 Jul 2015 8:58
Operator : XING
Sample : E-6_(2.0-2.5)/,05367-041,S,5.1g,6.90
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8520.D
Acq On : 1 Jul 2015 9:28
Operator : XING
Sample : E-6_(3.0-3.5)/,05367-042,S,5g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jul 01 15:16:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

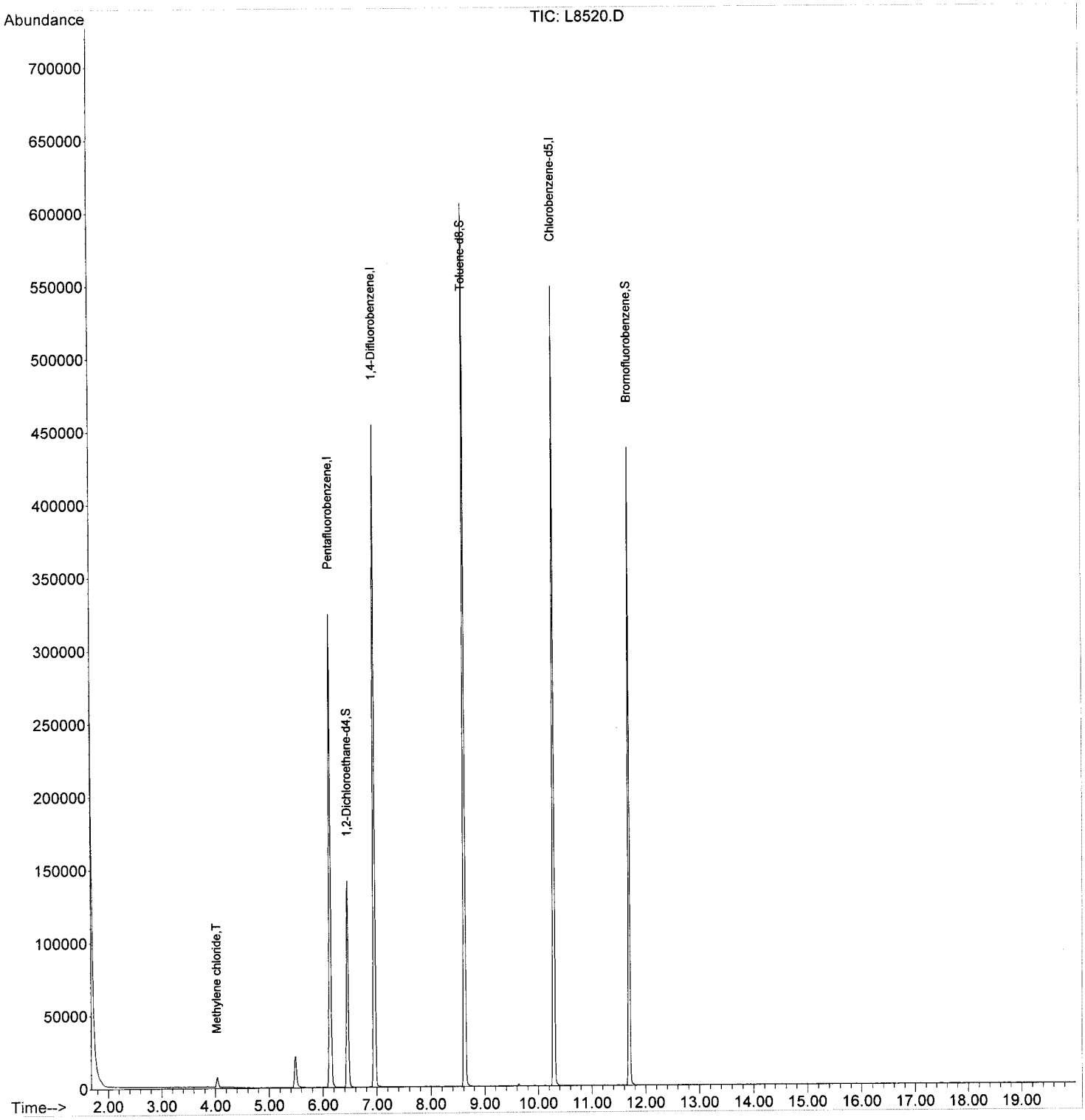
Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene		6.13	168	245380	50.00	UG	0.00
31) 1,4-Difluorobenzene		6.95	114	404547	50.00	UG	0.00
50) Chlorobenzene-d5		10.29	117	346928	50.00	UG	0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4		6.46	65	119046	47.36	UG	0.01
Spiked Amount	50.000	Range 43 - 133		Recovery =	94.72%		
41) Toluene-d8		8.62	98	449320	48.76	UG	0.00
Spiked Amount	50.000	Range 39 - 137		Recovery =	97.52%		
59) Bromofluorobenzene		11.69	95	156162	45.99	UG	0.00
Spiked Amount	50.000	Range 23 - 145		Recovery =	91.98%		
Target Compounds							Qvalue
13) Methylene chloride		4.03	84	5108	2.21	UG	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8520.D
Acq On : 1 Jul 2015 9:28
Operator : XING
Sample : E-6_(3.0-3.5)/,05367-042,S,5g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jul 01 15:16:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8520.D
Acq On : 1 Jul 2015 9:28
Operator : XING
Sample : E-6_(3.0-3.5)/,05367-042,S,5g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.040	227	233	241	rVB	6817	17192	1.50%	0.361%
2	5.492	369	376	394	rVB	21053	59768	5.22%	1.256%
3	6.131	433	439	451	rBV	324669	675700	59.03%	14.194%
4	6.456	465	471	482	rVB	141367	310444	27.12%	6.521%
5	6.953	514	520	534	rVB	454051	858221	74.98%	18.029%
6	8.618	679	684	695	rBV	606079	1144582	100.00%	24.044%
7	10.293	841	849	863	rBB	548595	965273	84.33%	20.277%
8	11.694	980	987	1001	rBB	437581	729173	63.71%	15.318%

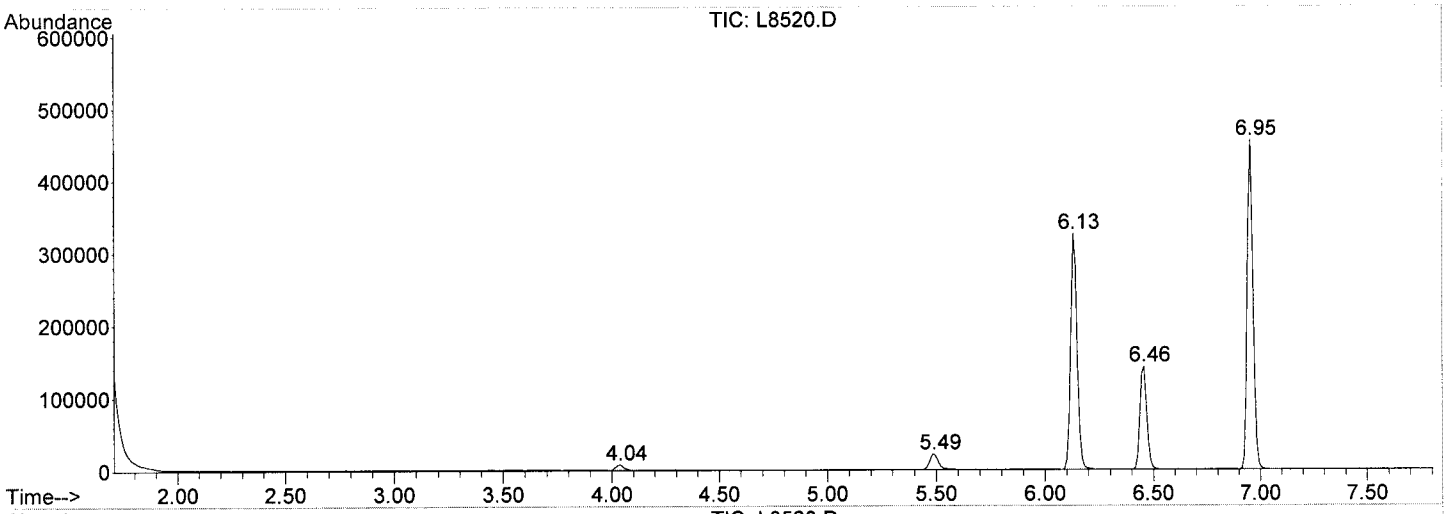
Sum of corrected areas: 4760353

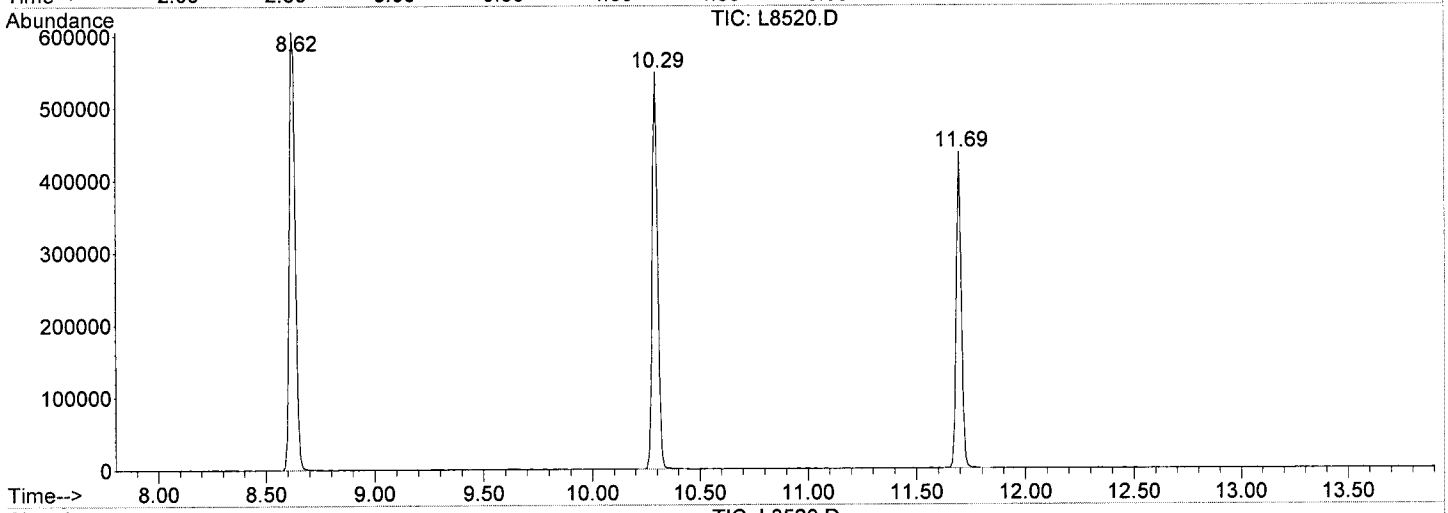
LSC Report - Integrated Chromatogram

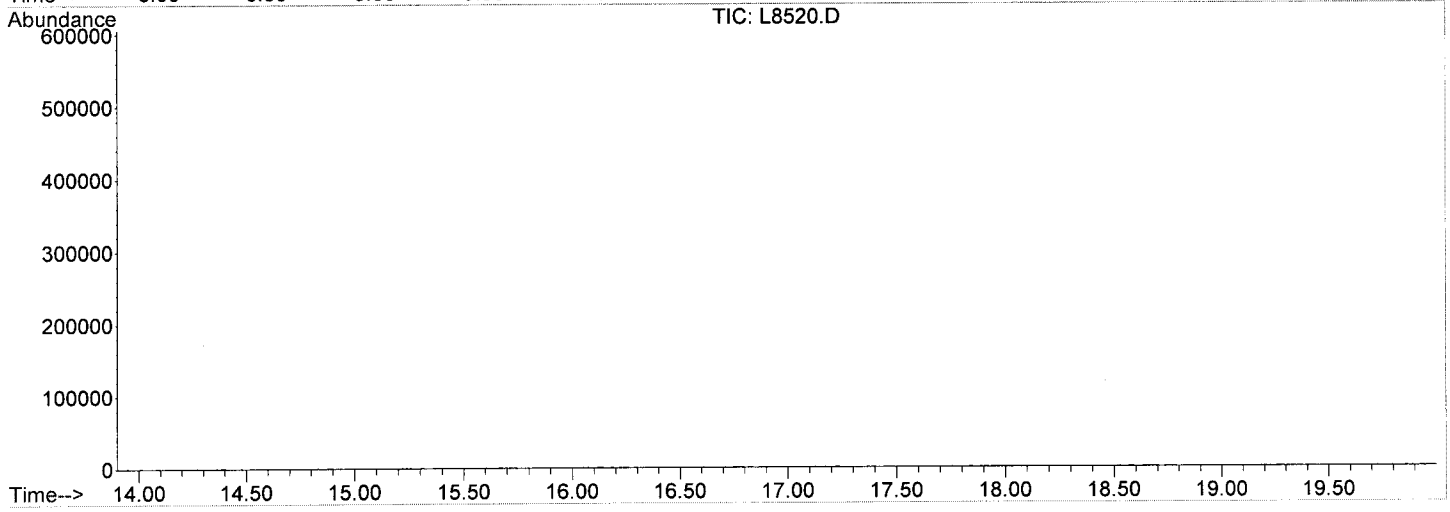
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8520.D
Acq On : 1 Jul 2015 9:28
Operator : XING
Sample : E-6_(3.0-3.5)/,05367-042,S,5g,6.50
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8521.D
Acq On : 1 Jul 2015 9:58
Operator : XING
Sample : E-6_(4.0-4.5)/,05367-043,S,5.6g,10.0
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jul 01 15:16:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	249300	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	406452	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	348934	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	119595	46.83	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 93.66%			
41) Toluene-d8	8.62	98	452206	48.85	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.70%			
59) Bromofluorobenzene	11.69	95	157981	46.26	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 92.52%			

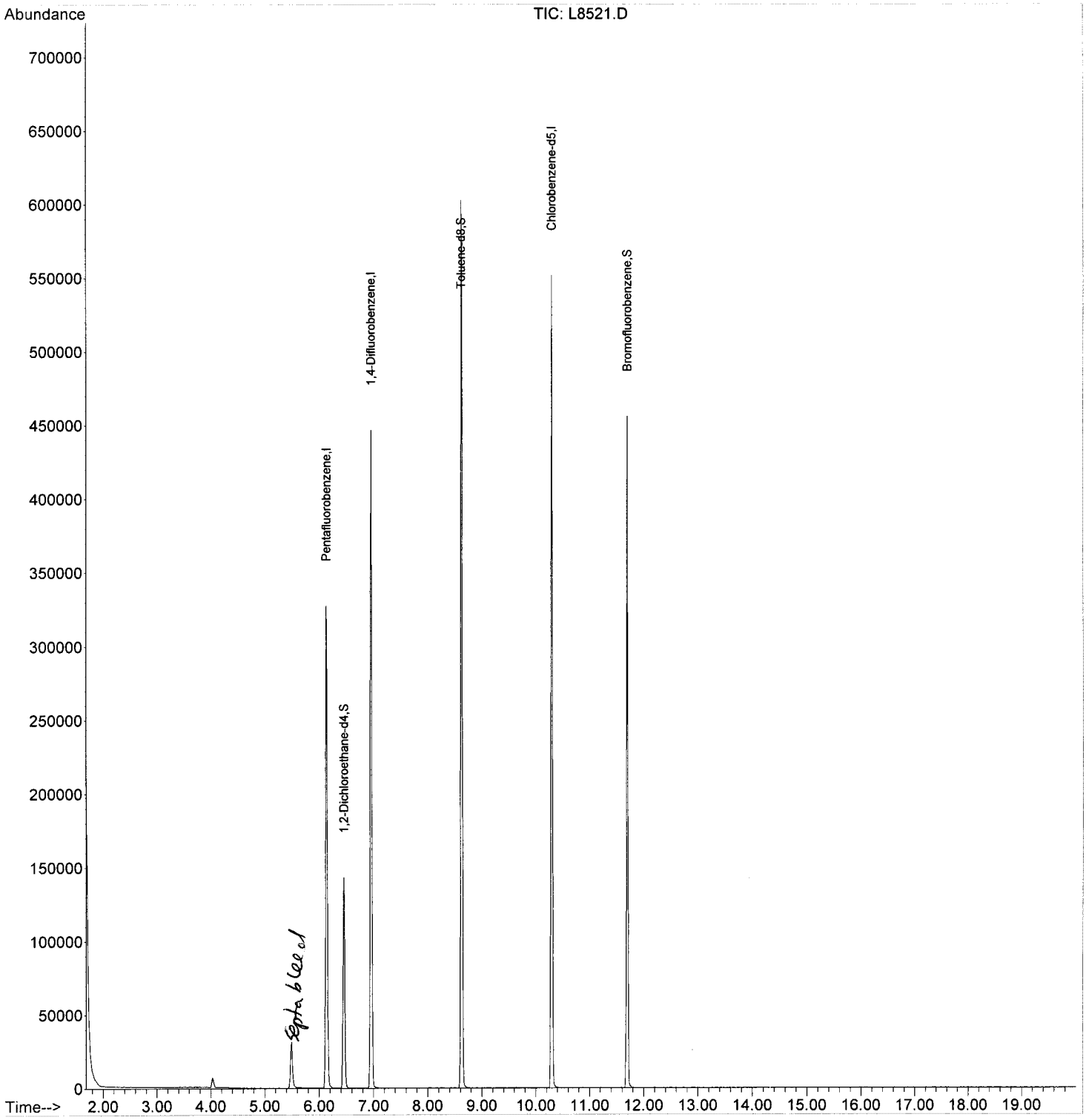
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8521.D
Acq On : 1 Jul 2015 9:58
Operator : XING
Sample : E-6_(4.0-4.5)/,05367-043,S,5.6g,10.0
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jul 01 15:16:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8521.D
Acq On : 1 Jul 2015 9:58
Operator : XING
Sample : E-6_(4.0-4.5)/,05367-043,S,5.6g,10.0
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.030	228	232	238	rBV	6561	16613	1.45%	0.346%
2	5.492	370	376	395	rBV	31234	83458	7.27%	1.736%
3	6.131	432	439	452	rBV	327521	682053	59.40%	14.189%
4	6.456	465	471	483	rVB	143085	311666	27.15%	6.484%
5	6.953	514	520	535	rVB	446599	862385	75.11%	17.940%
6	8.618	678	684	700	rBV	602694	1148152	100.00%	23.885%
7	10.293	842	849	867	rBB	551877	967431	84.26%	20.126%
8	11.694	981	987	997	rBB	456099	735168	64.03%	15.294%

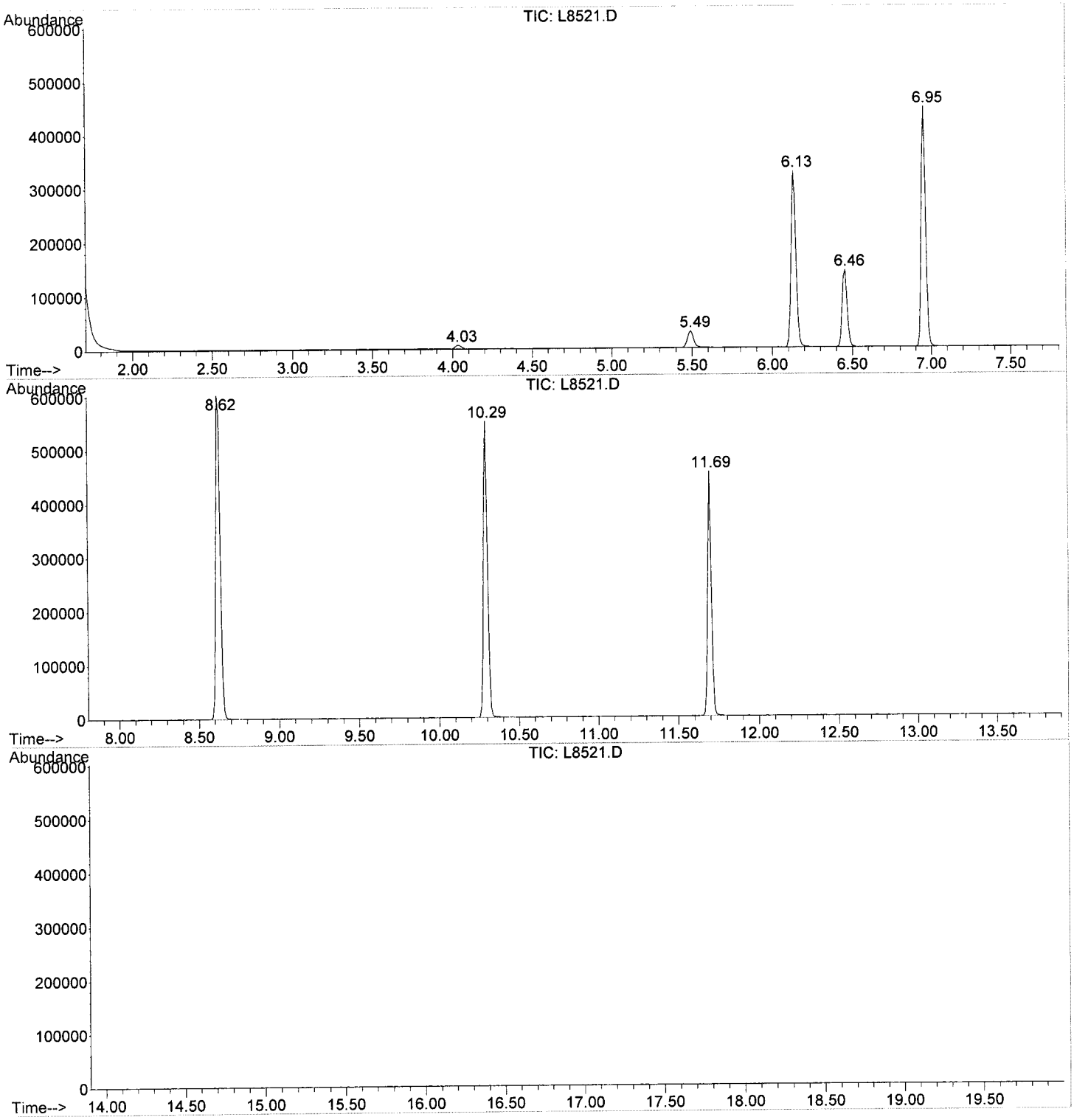
Sum of corrected areas: 4806926

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8521.D
Acq On : 1 Jul 2015 9:58
Operator : XING
Sample : E-6_(4.0-4.5)/,05367-043,S,5.6g,10.0
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4812.D
Acq On : 1 Jul 2015 00:04
Operator : Sylvia
Sample : TB-062315,05367-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 01 08:49:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.21	168	508741	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.03	114	820139	50.00	UG	0.00
50) Chlorobenzene-d5	10.37	117	706405	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.52	65	328163	50.29	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 100.58%			
41) Toluene-d8	8.70	98	951516	48.11	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.22%			
59) Bromofluorobenzene	11.77	95	375728	48.77	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 97.54%			

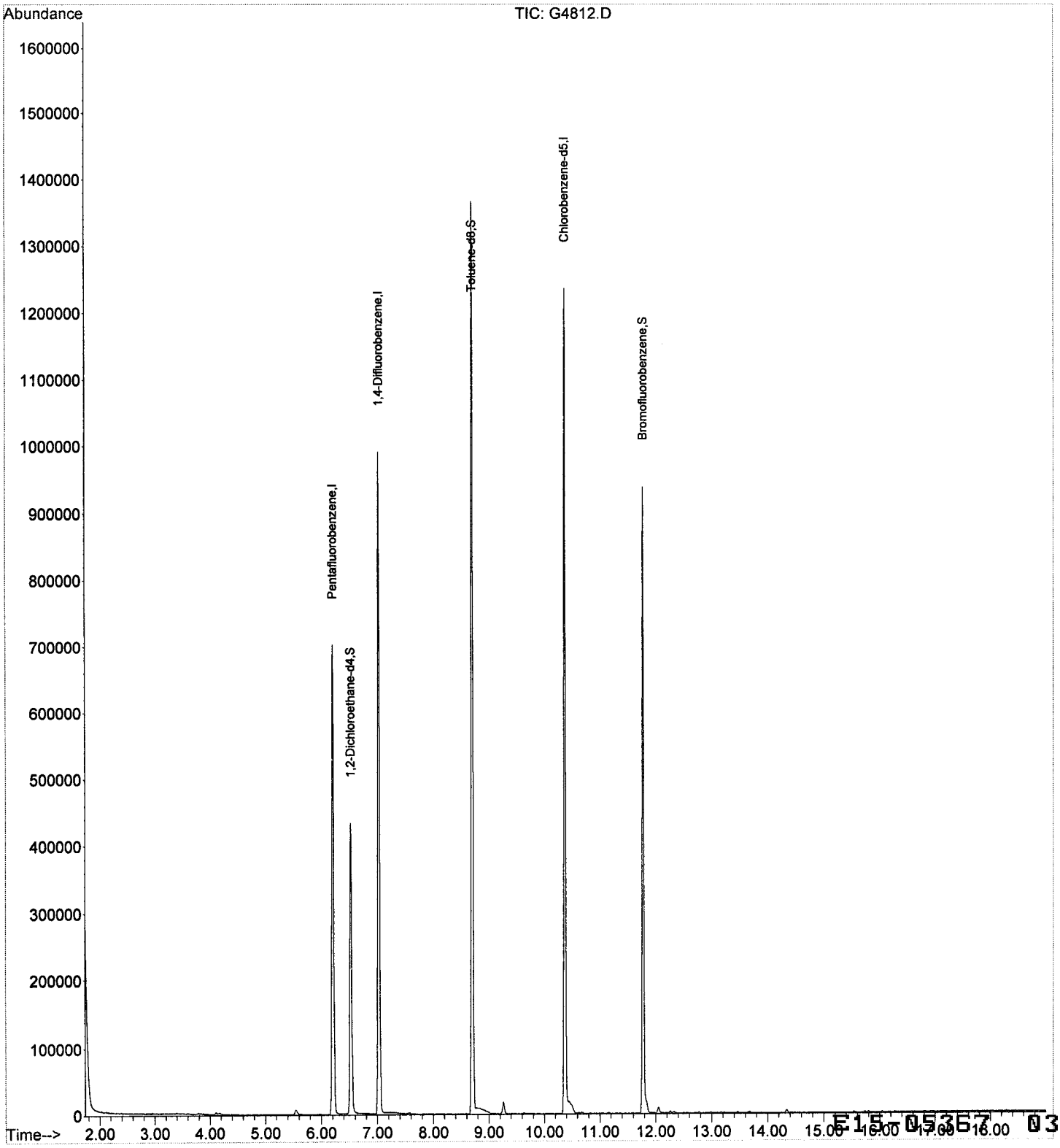
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4812.D
Acq On : 1 Jul 2015 00:04
Operator : Sylvia
Sample : TB-062315,05367-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 01 08:49:10 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration



E15-05367 0356

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4812.D
Acq On : 1 Jul 2015 00:04
Operator : Sylvia
Sample : TB-062315,05367-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 1

Method : C:\MSDCHEM\1\METHODS\G8062915.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.207	844	856	881	rBV	702496	1540651	56.52%	13.506%
2	6.521	903	916	939	rBV	432353	976661	35.83%	8.562%
3	7.028	998	1013	1036	rBV	989412	2002794	73.48%	17.557%
4	8.702	1322	1333	1399	rBV	1366218	2725796	100.00%	23.895%
5	9.261	1427	1440	1451	rBV3	17919	41862	1.54%	0.367%
6	10.370	1641	1652	1695	rBV	1235374	2381539	87.37%	20.877%
7	11.772	1909	1920	1943	rBV	937586	1738240	63.77%	15.238%

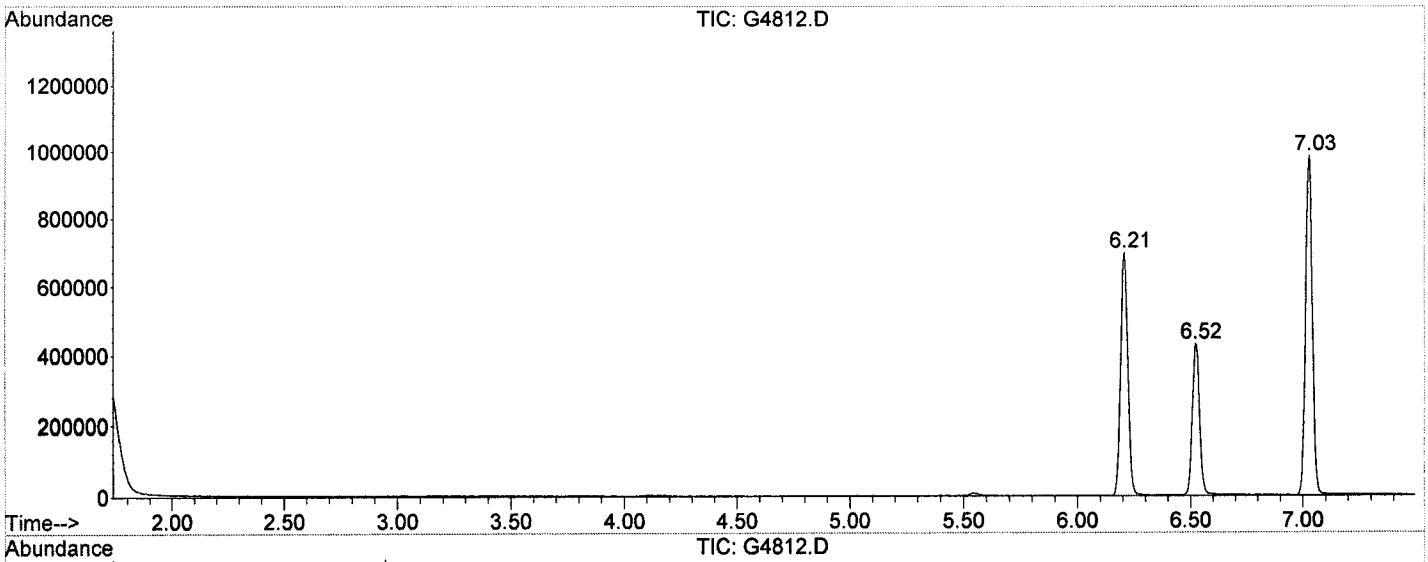
Sum of corrected areas: 11407543

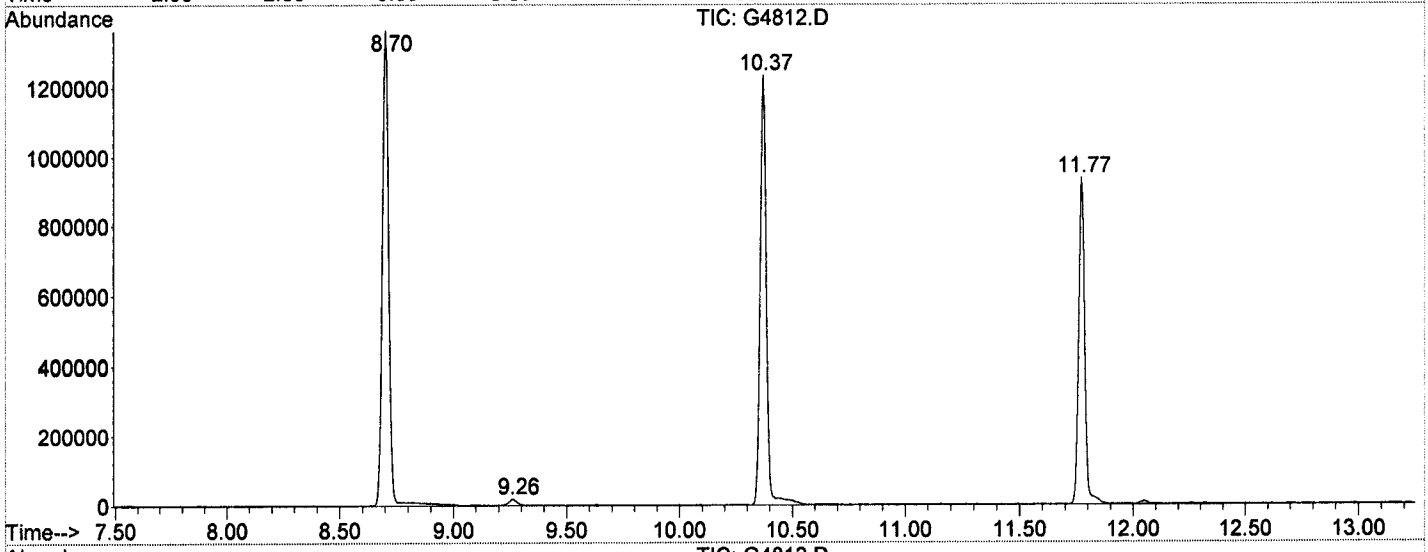
LSC Report - Integrated Chromatogram

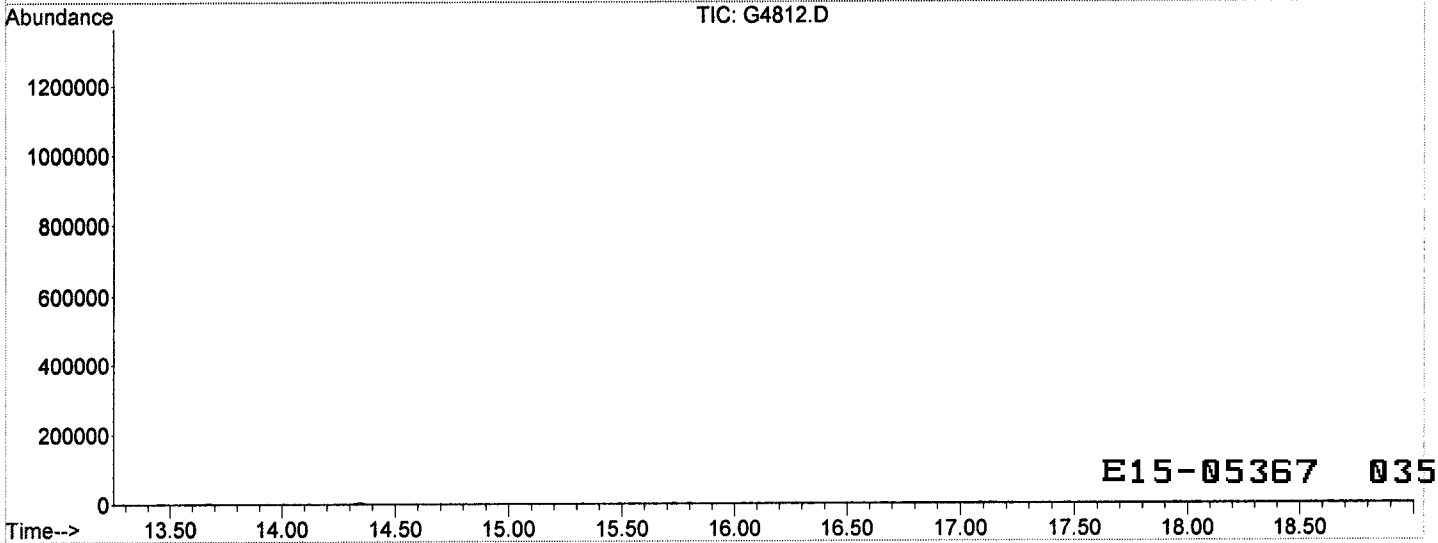
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4812.D
Acq On : 1 Jul 2015 00:04
Operator : Sylvia
Sample : TB-062315,05367-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







E15-05367 0358

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150630b
Client ID: BLKA150630b
Date Received: NA
Date Analyzed: 06/30/2015
Data file: G4807.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.685
Chloromethane	ND		1.00	0.493
Vinyl chloride	ND		1.00	0.463
Bromomethane	ND		1.00	0.684
Chloroethane	ND		1.00	0.829
Trichlorofluoromethane	ND		1.00	0.813
1,1-Dichloroethene	ND		1.00	0.491
Acetone	ND		5.00	1.43
Carbon disulfide	ND		1.00	0.505
Methylene chloride	ND		2.00	1.99
trans-1,2-Dichloroethene	ND		1.00	0.544
Methyl tert-butyl ether (MTBE)	ND		1.00	0.491
1,1-Dichloroethane	ND		1.00	0.358
cis-1,2-Dichloroethene	ND		1.00	0.479
2-Butanone (MEK)	ND		1.00	0.872
Bromochloromethane	ND		1.00	0.636
Chloroform	ND		1.00	0.511
1,1,1-Trichloroethane	ND		1.00	0.485
Carbon tetrachloride	ND		1.00	0.668
1,2-Dichloroethane (EDC)	ND		1.00	0.573
Benzene	ND		1.00	0.388
Trichloroethene	ND		1.00	0.357
1,2-Dichloropropane	ND		1.00	0.556
1,4-Dioxane	ND		200	82.7
Bromodichloromethane	ND		1.00	0.526
cis-1,3-Dichloropropene	ND		1.00	0.441
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150630b
Client ID: BLKA150630b
Date Received: NA
Date Analyzed: 06/30/2015
Data file: G4807.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.370
trans-1,3-Dichloropropene	ND		1.00	0.416
1,1,2-Trichloroethane	ND		1.00	0.633
Tetrachloroethene	ND		1.00	0.495
2-Hexanone	ND		1.00	0.693
Dibromochloromethane	ND		1.00	0.516
1,2-Dibromoethane (EDB)	ND		1.00	0.677
Chlorobenzene	ND		1.00	0.395
Ethylbenzene	ND		1.00	0.420
Total Xylenes	ND		2.00	1.04
Styrene	ND		1.00	0.370
Bromoform	ND		1.00	0.663
Isopropylbenzene	ND		1.00	0.581
1,1,2,2-Tetrachloroethane	ND		1.00	0.691
1,3-Dichlorobenzene	ND		1.00	0.416
1,4-Dichlorobenzene	ND		1.00	0.409
1,2-Dichlorobenzene	ND		1.00	0.401
1,2-Dibromo-3-chloropropane	ND		1.00	0.930
1,2,4-Trichlorobenzene	ND		1.00	0.483
1,2,3-Trichlorobenzene	ND		1.00	0.449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.972
Methyl acetate	ND		1.00	0.897
Cyclohexane	ND		2.00	0.818
Methylcyclohexane	ND		1.00	0.773
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA150630b
Client ID: BLKA150630b
Date Received: NA
Date Analyzed: 06/30/2015
Date File: G4807.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4807.D
Acq On : 30 Jun 2015 21:43
Operator : Sylvia
Sample : BLKA150630b,BLKA150630b,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 01 08:45:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.21	168	519168	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.03	114	839673	50.00	UG	0.00
50) Chlorobenzene-d5	10.37	117	752127	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.52	65	331973	49.85	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 99.70%			
41) Toluene-d8	8.70	98	990265	48.90	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.80%			
59) Bromofluorobenzene	11.77	95	393947	48.02	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 96.04%			

Target Compounds	Qvalue

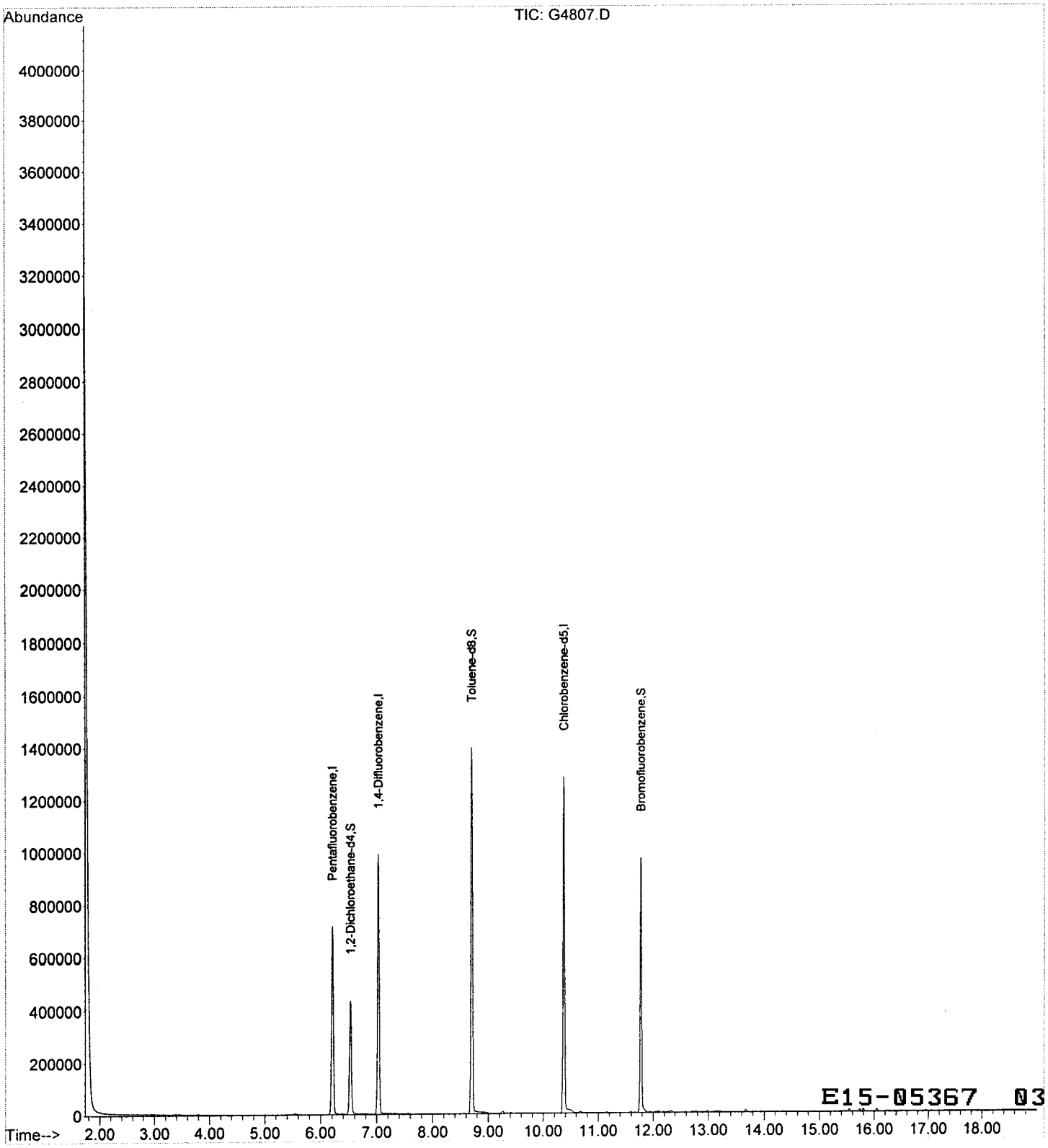
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E15-05367 0362

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4807.D
Acq On : 30 Jun 2015 21:43
Operator : Sylvia
Sample : BLKA150630b,BLKA150630b,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Jul 01 08:45:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 14:20:51 2015
Response via : Initial Calibration



E15-05367 0363

LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4807.D
Acq On : 30 Jun 2015 21:43
Operator : Sylvia
Sample : BLKA150630b,BLKA150630b,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.1 Max Peaks: 100
Stop Thrs : 0.1 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 1

Method : C:\MSDCHEM\1\METHODS\G8062915.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.207	842	856	883	rBV	715918	1575118	56.47%	13.539%
2	6.526	903	917	947	rBV	432590	982648	35.23%	8.447%
3	7.028	1001	1013	1035	rBV	989209	2038107	73.07%	17.519%
4	8.702	1319	1333	1400	rBV	1394854	2789253	100.00%	23.976%
5	10.370	1640	1652	1693	rBV	1282023	2441149	87.52%	20.984%
6	11.772	1910	1920	1948	rBV	971124	1807250	64.79%	15.535%

Sum of corrected areas: 11633525

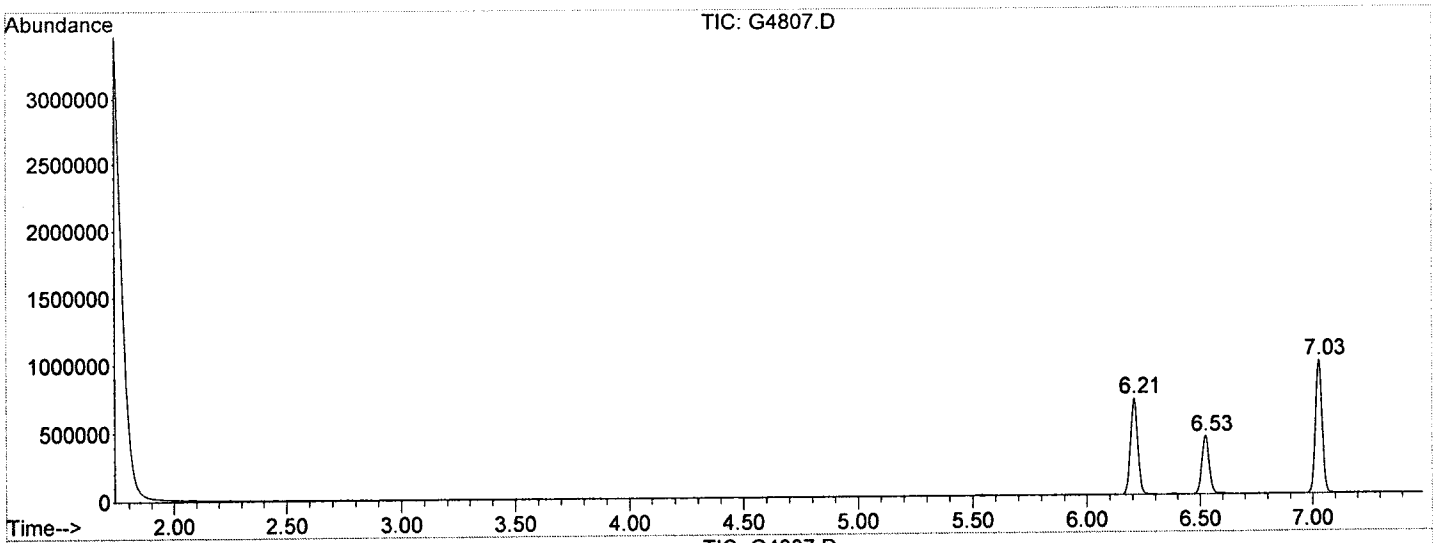
E15-05367 0364

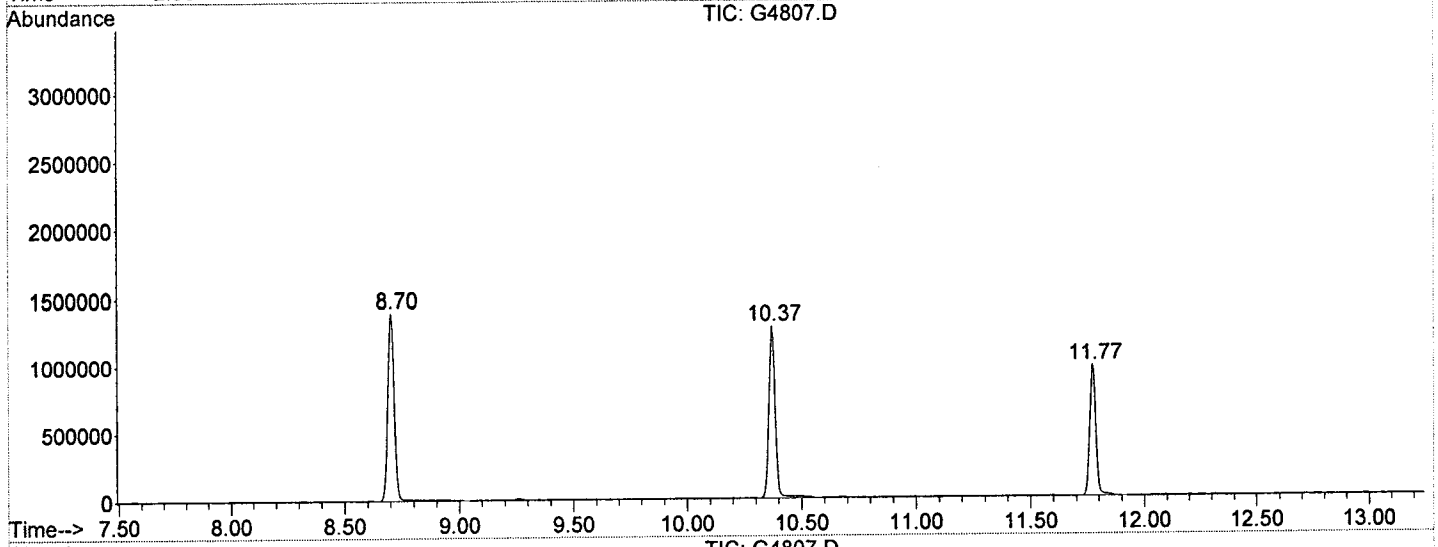
LSC Report - Integrated Chromatogram

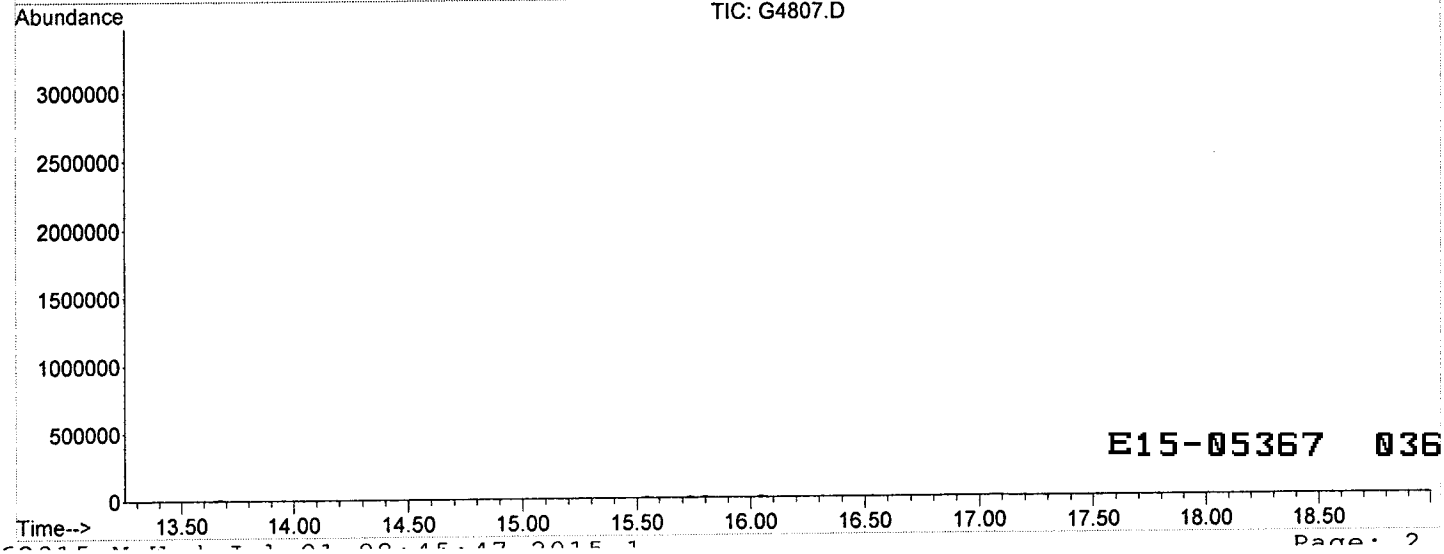
Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : G4807.D
Acq On : 30 Jun 2015 21:43
Operator : Sylvia
Sample : BLKA150630b,BLKA150630b,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\G8062915.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







E15-05367 0365

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
Data file: L8506.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.00044
Chloromethane	ND		0.001	0.000449
Vinyl chloride	ND		0.001	0.000426
Bromomethane	ND		0.002	0.00064
Chloroethane	ND		0.001	0.000507
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000488
Acetone	ND		0.005	0.000697
Carbon disulfide	ND		0.001	0.000572
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.001	0.000374
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000373
1,1-Dichloroethane	ND		0.001	0.000269
cis-1,2-Dichloroethene	ND		0.001	0.000319
2-Butanone (MEK)	ND		0.001	0.000748
Bromochloromethane	ND		0.001	0.000422
Chloroform	ND		0.001	0.00042
1,1,1-Trichloroethane	ND		0.001	0.000437
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000348
Benzene	ND		0.001	0.000272
Trichloroethene	ND		0.001	0.000322
1,2-Dichloropropane	ND		0.001	0.000354
1,4-Dioxane	ND		0.200	0.020
Bromodichloromethane	ND		0.001	0.000418
cis-1,3-Dichloropropene	ND		0.001	0.0004
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000501

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
Data file: L8506.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.000291
trans-1,3-Dichloropropene	ND		0.001	0.000305
1,1,2-Trichloroethane	ND		0.001	0.000235
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000578
Dibromochloromethane	ND		0.001	0.000295
1,2-Dibromoethane (EDB)	ND		0.001	0.000353
Chlorobenzene	ND		0.001	0.000336
Ethylbenzene	ND		0.001	0.000342
Total Xylenes	ND		0.002	0.000803
Styrene	ND		0.001	0.000358
Bromoform	ND		0.001	0.000461
Isopropylbenzene	ND		0.001	0.000438
1,1,2,2-Tetrachloroethane	ND		0.001	0.000392
1,3-Dichlorobenzene	ND		0.001	0.000471
1,4-Dichlorobenzene	ND		0.001	0.00053
1,2-Dichlorobenzene	ND		0.001	0.000482
1,2-Dibromo-3-chloropropane	ND		0.001	0.000639
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000573
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000691
Methyl acetate	ND		0.005	0.000539
Cyclohexane	ND		0.001	0.000519
Methylcyclohexane	ND		0.001	0.000558
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.0004

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0367

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150630-02
Client ID: BLKS15063002
Date Received:
Date Analyzed: 07/01/2015
Date File: L8506.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8506.D
Acq On : 1 Jul 2015 2:31
Operator : XING
Sample : BLKS15063002,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 14:59:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	260249	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	427931	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	372305	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	126616	47.50	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 95.00%			
41) Toluene-d8	8.63	98	477632	49.00	UG	0.01
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.00%			
59) Bromofluorobenzene	11.69	95	170631	46.83	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 93.66%			

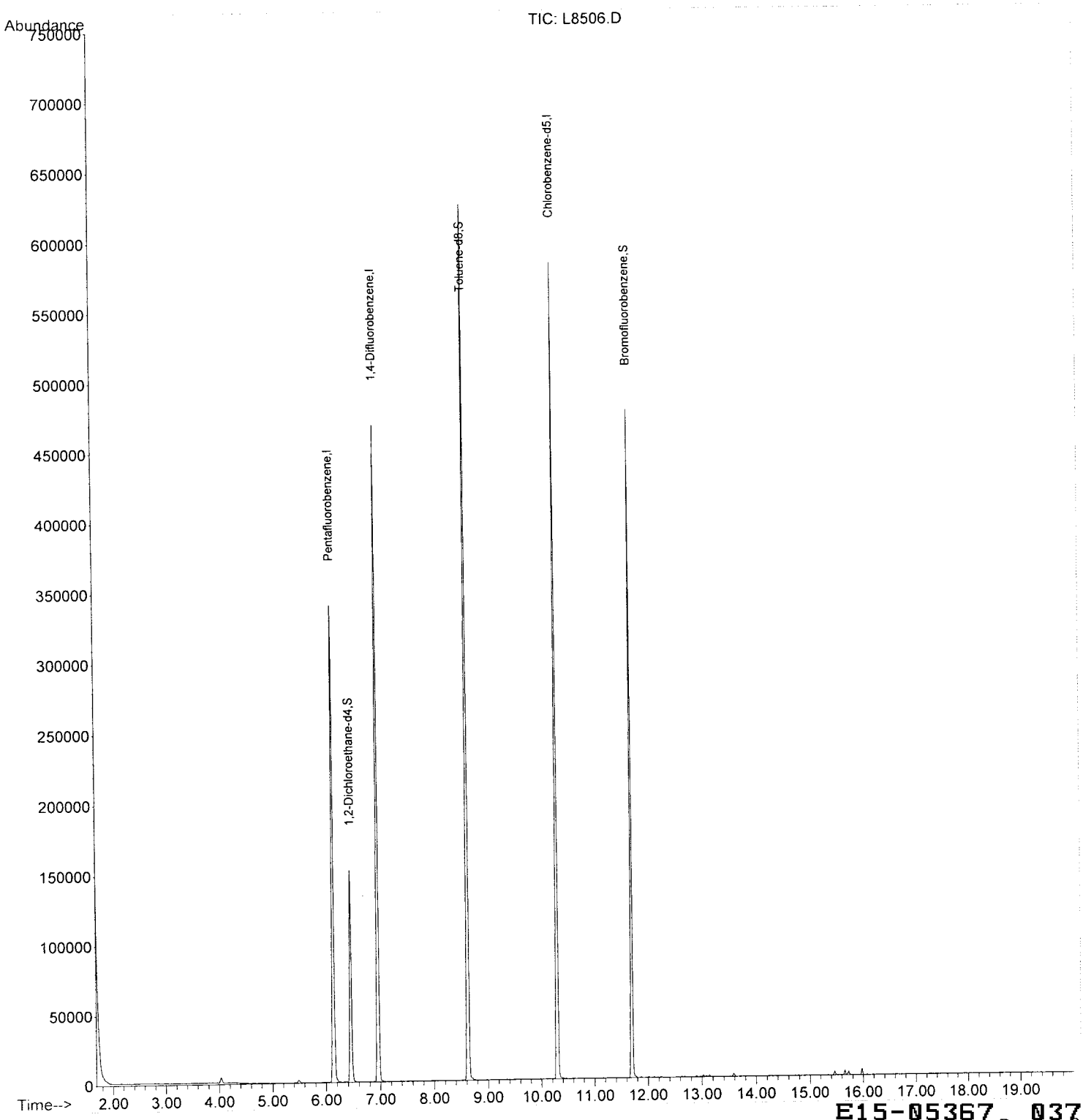
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8506.D
Acq On : 1 Jul 2015 2:31
Operator : XING
Sample : BLKS15063002,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 14:59:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8506.D
Acq On : 1 Jul 2015 2:31
Operator : XING
Sample : BLKS15063002,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	432	439	451	rVB	340154	716037	58.91%	14.345%
2	6.456	465	471	482	rBV	151809	332422	27.35%	6.660%
3	6.953	514	520	536	rVB	468860	909725	74.84%	18.225%
4	8.618	678	684	700	rBV	625113	1215562	100.00%	24.352%
5	10.293	842	849	864	rBV	583229	1031312	84.84%	20.661%
6	11.694	981	987	998	rBV	477170	786496	64.70%	15.757%

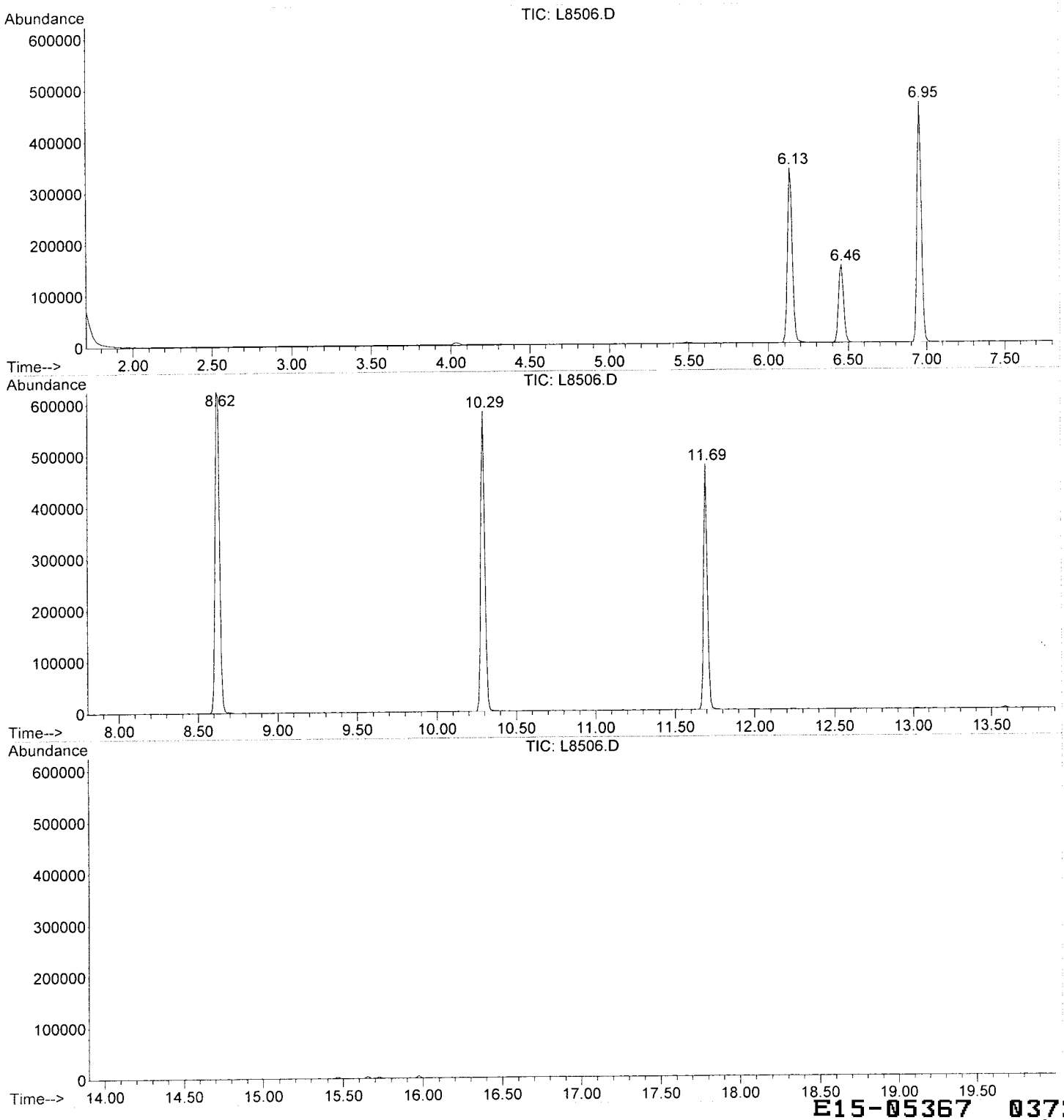
Sum of corrected areas: 4991554

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8506.D
Acq On : 1 Jul 2015 2:31
Operator : XING
Sample : BLKS15063002,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
Data file: L8481.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.00044
Chloromethane	ND		0.001	0.000449
Vinyl chloride	ND		0.001	0.000426
Bromomethane	ND		0.002	0.00064
Chloroethane	ND		0.001	0.000507
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000488
Acetone	ND		0.005	0.000697
Carbon disulfide	ND		0.001	0.000572
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.001	0.000374
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000373
1,1-Dichloroethane	ND		0.001	0.000269
cis-1,2-Dichloroethene	ND		0.001	0.000319
2-Butanone (MEK)	ND		0.001	0.000748
Bromochloromethane	ND		0.001	0.000422
Chloroform	ND		0.001	0.00042
1,1,1-Trichloroethane	ND		0.001	0.000437
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000348
Benzene	ND		0.001	0.000272
Trichloroethene	ND		0.001	0.000322
1,2-Dichloropropane	ND		0.001	0.000354
1,4-Dioxane	ND		0.200	0.020
Bromodichloromethane	ND		0.001	0.000418
cis-1,3-Dichloropropene	ND		0.001	0.0004
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000501

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
Data file: L8481.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.000291
trans-1,3-Dichloropropene	ND		0.001	0.000305
1,1,2-Trichloroethane	ND		0.001	0.000235
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000578
Dibromochloromethane	ND		0.001	0.000295
1,2-Dibromoethane (EDB)	ND		0.001	0.000353
Chlorobenzene	ND		0.001	0.000336
Ethylbenzene	ND		0.001	0.000342
Total Xylenes	ND		0.002	0.000803
Styrene	ND		0.001	0.000358
Bromoform	ND		0.001	0.000461
Isopropylbenzene	ND		0.001	0.000438
1,1,2,2-Tetrachloroethane	ND		0.001	0.000392
1,3-Dichlorobenzene	ND		0.001	0.000471
1,4-Dichlorobenzene	ND		0.001	0.00053
1,2-Dichlorobenzene	ND		0.001	0.000482
1,2-Dibromo-3-chloropropane	ND		0.001	0.000639
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000573
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000691
Methyl acetate	ND		0.005	0.000539
Cyclohexane	ND		0.001	0.000519
Methylcyclohexane	ND		0.001	0.000558
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.0004

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0374

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150630-01
Client ID: BLKS150630-01
Date Received:
Date Analyzed: 06/30/2015
Date File: L8481.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8481.D
Acq On : 30 Jun 2015 14:05
Operator : XING
Sample : BLKS150630-01,BLKS150630-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 01 13:32:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.13	168	296287	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.95	114	473778	50.00	UG	0.00
50) Chlorobenzene-d5	10.29	117	408640	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.46	65	148023	48.77	UG	0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 97.54%			
41) Toluene-d8	8.62	98	524432	48.60	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.20%			
59) Bromofluorobenzene	11.69	95	189576	47.40	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.80%			

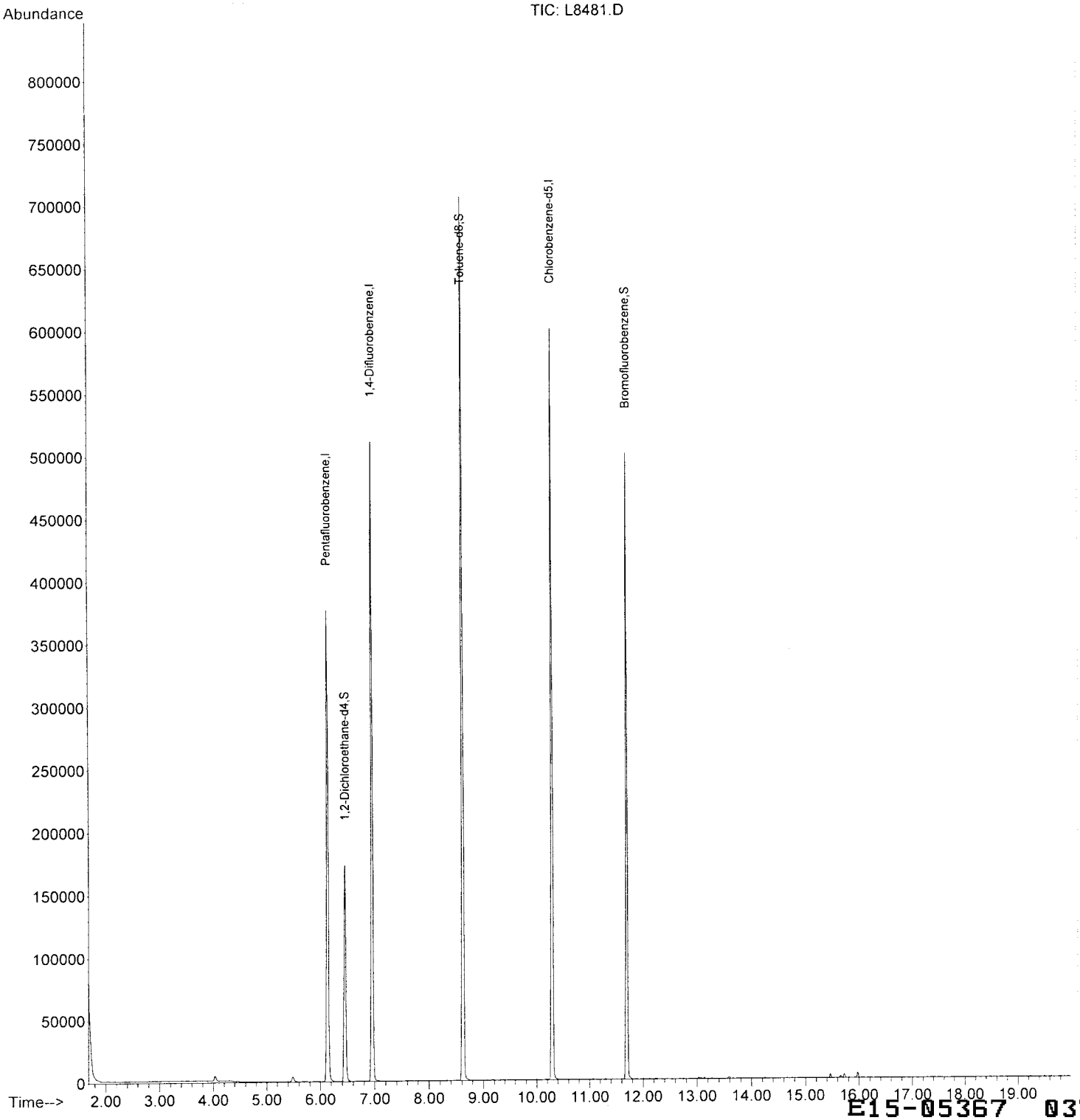
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8481.D
Acq On : 30 Jun 2015 14:05
Operator : XING
Sample : BLKS150630-01,BLKS150630-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 01 13:32:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 29 12:35:01 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8481.D
Acq On : 30 Jun 2015 14:05
Operator : XING
Sample : BLKS150630-01,BLKS150630-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\LS062615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.131	432	439	460	rVB	376595	801682	60.36%	14.504%
2	6.456	465	471	481	rVB	172896	390219	29.38%	7.060%
3	6.953	514	520	537	rVB	510866	1001563	75.41%	18.120%
4	8.618	678	684	699	rBV	706105	1328106	100.00%	24.027%
5	10.293	843	849	863	rVB	600754	1132458	85.27%	20.488%
6	11.694	980	987	1002	rBV	500444	873422	65.76%	15.802%

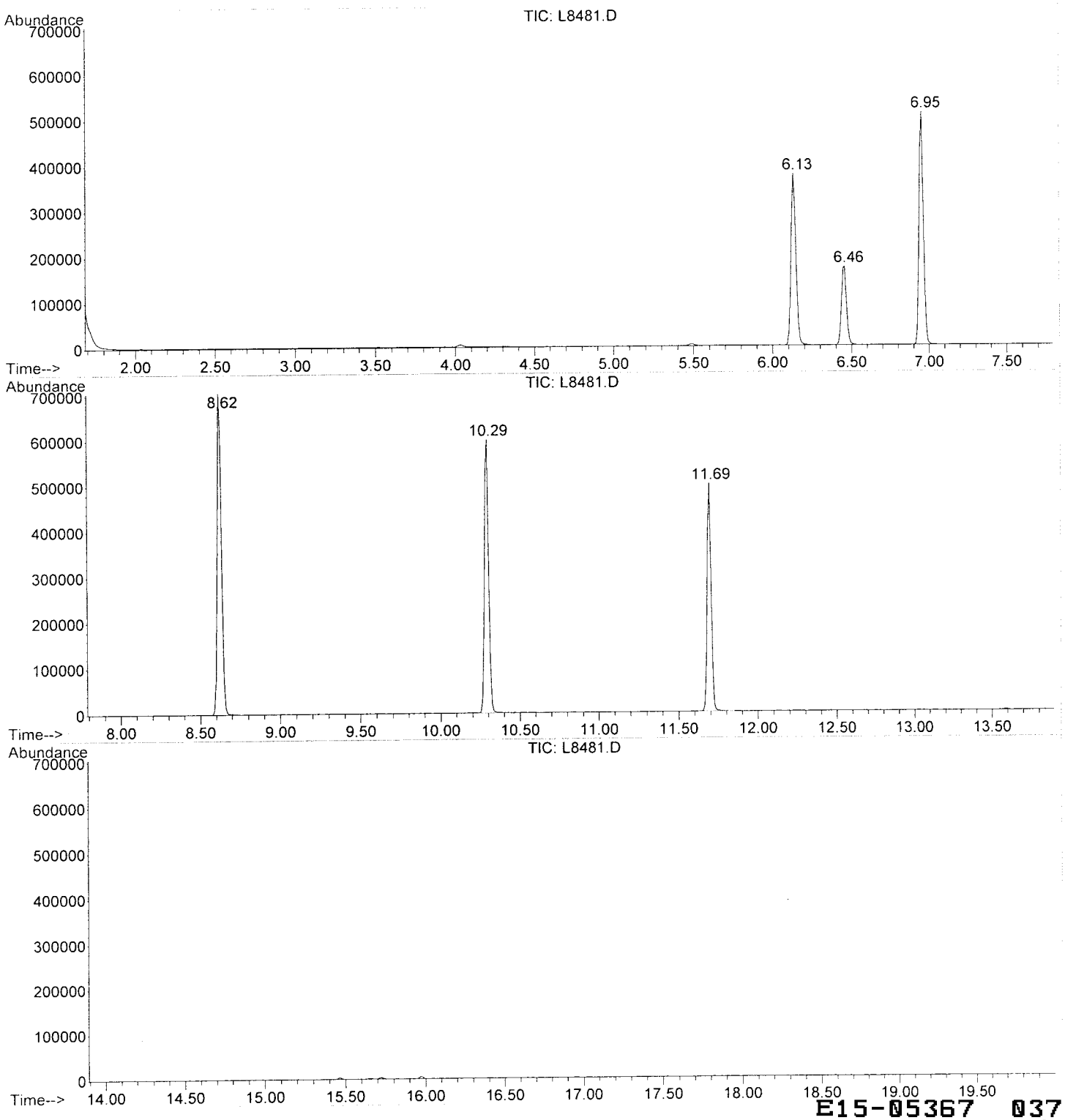
Sum of corrected areas: 5527450

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\06-30-15\
Data File : L8481.D
Acq On : 30 Jun 2015 14:05
Operator : XING
Sample : BLKS150630-01,BLKS150630-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\LS062615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA150629-16	AQUEOUS	79		61		75		48	
PCB	LCSA150629-16	AQUEOUS	84		68		81		63	
PCB	LCSDA150629-16	AQUEOUS	85		69		82		63	
FB	E15-05346-027	AQUEOUS	88		74		85		61	
FB	E15-05430-103	AQUEOUS	86		77		84		64	
FB-1	E15-05338-007	AQUEOUS	84		73		81		65	
FB-06221	E15-05367-040	AQUEOUS	86		83		83		73	
FB-06231	E15-05428-030	AQUEOUS	92		85		89		77	
FB-06241	E15-05428-032	AQUEOUS	88		80		86		77	
FB-06251	E15-05467-012	AQUEOUS	87		81		85		78	
FIELD_BL	E15-05470-016	AQUEOUS	87		81		85		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-08	SOIL	103		78		94		78	
PCB	LCSS150701-08	SOIL	103		78		93		78	
PCB	05367-005MS	SOIL	80		79		88		79	
PCB	05367-005MSD	SOIL	81		78		89		89	
E-18_(0.	E15-05367-005	SOIL	81		76		90		87	
E-18_(2.	E15-05367-006	SOIL	97		69		92		111	
E-11_(0.	E15-05367-011	SOIL	78		83		89		86	
E-11_(2.	E15-05367-012	SOIL	91		73		91		118	
E-12_(0.	E15-05367-013	SOIL	76		89		90		91	
E-12_(2.	E15-05367-014	SOIL	88		72		89		127	
E-14_(0.	E15-05367-015	SOIL	77		83		86		83	
E-14_(2.	E15-05367-016	SOIL	88		72		90		91	
X-2_(2.0	E15-05367-024	SOIL	98		72		93		88	
E-8_(0.5	E15-05367-025	SOIL	84		74		89		74	
E-8_(2.0	E15-05367-026	SOIL	90		75		90		96	
E-17_(2.	E15-05367-028	SOIL	86		96		98		135	
E-9_(0.5	E15-05367-029	SOIL	80		86		89		94	
E-9_(2.0	E15-05367-030	SOIL	93		74		89		88	
E-19_(0.	E15-05428-007	SOIL	85		77		88		80	
E-19_(2.	E15-05428-008	SOIL	92		70		90		81	
E-27_(0.	E15-05428-009	SOIL	71		90		87		88	
E-27_(2.	E15-05428-010	SOIL	88		77		91		95	
E-25_(0.	E15-05428-012	SOIL	78		77		86		79	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-08	SOIL	103		78		94		78	
PCB	LCSS150701-08	SOIL	103		78		93		78	
E-18_(0.	E15-05367-005DL	SOIL	107		72		100		83	
E-11_(0.	E15-05367-011DL	SOIL	100		72		96		89	
E-12_(0.	E15-05367-013DL	SOIL	120		90		140		110	
E-14_(0.	E15-05367-015DL	SOIL	102		80		98		104	
E-17_(0.	E15-05367-027	SOIL	80		60		100		80	
E-9_(0.5	E15-05367-029	SOIL	87		68		92		72	
E-19_(0.	E15-05428-007DL	SOIL	100		78		94		86	
E-27_(0.	E15-05428-009DL	SOIL	97		86		101		104	
E-25_(0.	E15-05428-012DL	SOIL	101		80		96		99	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-07	SOIL	92		81		87		85	
PCB	LCSS150701-07	SOIL	105		123		99		124	
PCB	05367-003MS	SOIL	70		75		72		86	
PCB	05367-003MSD	SOIL	68		84		69		84	
E-3_(4.5	E15-05367-004	SOIL	92		100		89		111	
E-4_(2.0	E15-05367-008	SOIL	62		95		64		100	
E-4_(3.0	E15-05367-009	SOIL	76		85		76		93	
E-4_(4.5	E15-05367-010	SOIL	79		80		79		86	
X-1_(4.5	E15-05367-023	SOIL	67		84		67		90	
E-6_(0.5	E15-05367-039	SOIL	43		52		51		64	
E-6_(2.0	E15-05367-041	SOIL	75		85		69		90	
E-6_(3.0	E15-05367-042	SOIL	71		82		66		86	
E-6_(4.0	E15-05367-043	SOIL	66		81		60		91	
E-1_(0.5	E15-05428-014	SOIL	40		47		51		55	
E-1_(2.0	E15-05428-015	SOIL	75		72		71		81	
E-1_(3.0	E15-05428-016	SOIL	73		67		69		71	
E-1_(4.5	E15-05428-017	SOIL	74		73		70		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-07	SOIL	92		81		87		85	
PCB	LCSS150701-07	SOIL	105		123		99		124	
E-3_(2.0	E15-05367-003	SOIL	100		100		100		100	
E-4_(0.5	E15-05367-007	SOIL	100		150		100		150	
E-4_(2.0	E15-05367-008DL	SOIL	86		98		79		102	
E-4_(3.0	E15-05367-009DL	SOIL	106		91		98		98	
E-4_(4.5	E15-05367-010DL	SOIL	108		122		102		134	
X-1_(4.5	E15-05367-023DL	SOIL	96		92		90		106	
E-6_(0.5	E15-05367-039DL	SOIL	66		104		66		110	
X-3_(0.5	E15-05428-011	SOIL	100		150		100		150	
E-1_(0.5	E15-05428-014DL	SOIL	62		106		64		114	
E-2_(0.5	E15-05428-020	SOIL	80		140		100		120	
E-2_(2.0	E15-05428-021	SOIL	100		150		140		140	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150630-12	SOIL	84		90		79		93	
PCB	LCSS150630-12	SOIL	77		84		70		83	
PCB	05559-023MS	SOIL	99		114		89		129	
PCB	05559-023MSD	SOIL	95		117		85		123	
DRAINAGE	E15-05559-023	SOIL	80		88		72		85	
GYM-1/0.	E15-05559-024	SOIL	91		104		82		99	
GYM-2/0.	E15-05559-025	SOIL	86		101		77		101	
DSB-W/0.	E15-05559-029	SOIL	88		104		79		103	
E-16_(0.	E15-05367-017	SOIL	67		65		61		72	
E-16_(2.	E15-05367-018	SOIL	87		111		83		115	
PZ-2_(0.	E15-05367-019	SOIL	50		65		38		88	
PZ-2_(2.	E15-05367-020	SOIL	57		75		44		76	
PZ-2_(4.	E15-05367-021	SOIL	88		98		74		125	
PZ-2_(6.	E15-05367-022	SOIL	103		113		88		108	
PZ-1_(0.	E15-05367-031	SOIL	79		117		74		111	
PZ-1_(2.	E15-05367-032	SOIL	69		117		64		149	
PZ-1_(2.	E15-05367-033	SOIL	83		120		78		115	
PZ-1_(4.	E15-05367-034	SOIL	85		100		79		112	
E-5_(0.5	E15-05367-035	SOIL	78		79		75		126	
E-5_(3.0	E15-05367-036	SOIL	50		56		41		55	
E-5_(2.0	E15-05367-037	SOIL	75		74		71		88	
E-5_(4.5	E15-05367-038	SOIL	85		103		79		111	
E-3_(3.0	E15-05367-001	SOIL	94		111		82		111	
E-16_(0.	E15-05367-017DL	SOIL	82		84		74		1058	M
E-5_(0.5	E15-05367-035DL	SOIL	90		110		120		70	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150630-12	SOIL	84		90		79		93	
PCB	LCSS150630-12	SOIL	77		84		70		83	
E-3_(0.5	E15-05367-002	SOIL	0	D	0	D	0	D	0	D

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB LCS/LCSD ACCURACY RECOVERY

Matrix spike Lab sample ID: BLKA150629-16
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	LCS CONC. (ug/L)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	399.5	80	40 - 140
Aroclor-1260	500	0.0	291.1	58	40 - 140

Compound	SAMPLE CONC. (ug/L)	LCSD CONC. (ug/L)	LCSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	405.0	81	1	50/20	40 - 140
Aroclor-1260	0.0	303.8	61	4	50/20	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-08
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	520.0	104	40 - 140
Aroclor-1260	500	0.0	462.3	92	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-07
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	425.8	85	40 - 140
Aroclor-1260	500	0.0	454.4	91	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150630-12
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	449.6	90	40 - 140
Aroclor-1260	500	0.0	447.3	89	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05367-005
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.11g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	537.9	108	40 - 140
Aroclor-1260	500	2537.0	3731.6	239 *$	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	471.8	94	13	50/30	40 - 140
Aroclor-1260	2537.0	2793.1	51	29	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05367-003
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30.40g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	446.7	89	40 - 140
Aroclor-1260	500	267.7	27732.6	5493 *$	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	406.0	81	10	50/30	40 - 140
Aroclor-1260	267.7	30071.8	*$ 5961	8	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05559-023
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30.24g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	510.3	102	40 - 140
Aroclor-1260	500	0.0	551.6	110	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	498.9	100	2	50/30	40 - 140
Aroclor-1260	0.0	543.1	109	2	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

PCB METHOD BLANK SUMMARY

Lab File ID: R5413.D

Instrument ID: GC-R

Date Extracted: 06/29/2015

Matrix: AQUEOUS

Date Analyzed: 06/30/2015

Time Analyzed: 18:42

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA150629-16	06/30/2015	18:59
PCB	LCSDA150629-16	06/30/2015	19:17
FB	E15-05346-027	06/30/2015	19:34
FB	E15-05430-103	06/30/2015	19:51
FB-1	E15-05338-007	06/30/2015	20:09
FB-06221	E15-05367-040	06/30/2015	20:26
FB-06231	E15-05428-030	06/30/2015	20:44
FB-06241	E15-05428-032	06/30/2015	21:01
FB-06251	E15-05467-012	06/30/2015	21:19
FIELD_BL	E15-05470-016	06/30/2015	21:36

PCB METHOD BLANK SUMMARY

Lab File ID: Y2994.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-08	07/02/2015	11:38
PCB	05367-005MS	07/02/2015	11:56
PCB	05367-005MSD	07/02/2015	12:13
E-18_(0.	E15-05367-005	07/02/2015	12:31
E-18_(2.	E15-05367-006	07/02/2015	12:48
E-11_(0.	E15-05367-011	07/02/2015	13:05
E-11_(2.	E15-05367-012	07/02/2015	13:23
E-12_(0.	E15-05367-013	07/02/2015	14:15
E-12_(2.	E15-05367-014	07/02/2015	14:32
E-14_(0.	E15-05367-015	07/02/2015	14:49
E-14_(2.	E15-05367-016	07/02/2015	15:07
X-2_(2.0	E15-05367-024	07/02/2015	15:24
E-8_(0.5	E15-05367-025	07/02/2015	15:41
E-8_(2.0	E15-05367-026	07/02/2015	15:59
E-17_(2.	E15-05367-028	07/02/2015	16:32
E-9_(0.5	E15-05367-029	07/02/2015	16:50
E-9_(2.0	E15-05367-030	07/02/2015	17:07
E-19_(0.	E15-05428-007	07/02/2015	17:59
E-19_(2.	E15-05428-008	07/02/2015	18:16
E-27_(0.	E15-05428-009	07/02/2015	18:34
E-27_(2.	E15-05428-010	07/02/2015	18:51
E-25_(0.	E15-05428-012	07/02/2015	19:08

PCB METHOD BLANK SUMMARY

Lab File ID: Y2994.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-08	07/02/2015	11:38
E-18_(0.	E15-05367-005DL	07/03/2015	07:00
E-11_(0.	E15-05367-011DL	07/03/2015	07:17
E-12_(0.	E15-05367-013DL	07/03/2015	07:34
E-14_(0.	E15-05367-015DL	07/03/2015	07:52
E-17_(0.	E15-05367-027	07/06/2015	10:25
E-9_(0.5	E15-05367-029	07/06/2015	10:53
E-19_(0.	E15-05428-007DL	07/06/2015	11:11
E-27_(0.	E15-05428-009DL	07/06/2015	11:28
E-25_(0.	E15-05428-012DL	07/06/2015	11:45

PCB METHOD BLANK SUMMARY

Lab File ID: Y3074.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 17:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-07	07/06/2015	17:50
PCB	05367-003MS	07/06/2015	18:07
PCB	05367-003MSD	07/06/2015	18:25
E-3_(4.5	E15-05367-004	07/06/2015	18:59
E-4_(2.0	E15-05367-008	07/06/2015	19:34
E-4_(3.0	E15-05367-009	07/06/2015	19:51
E-4_(4.5	E15-05367-010	07/06/2015	20:09
X-1_(4.5	E15-05367-023	07/06/2015	20:26
E-6_(0.5	E15-05367-039	07/06/2015	20:44
E-6_(2.0	E15-05367-041	07/06/2015	21:01
E-6_(3.0	E15-05367-042	07/06/2015	21:19
E-6_(4.0	E15-05367-043	07/06/2015	21:36
E-1_(0.5	E15-05428-014	07/06/2015	23:55
E-1_(2.0	E15-05428-015	07/07/2015	00:12
E-1_(3.0	E15-05428-016	07/07/2015	00:29
E-1_(4.5	E15-05428-017	07/07/2015	00:47

PCB METHOD BLANK SUMMARY

Lab File ID: Y3074.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 17:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-07	07/06/2015	17:50
E-3_(2.0	E15-05367-003	07/07/2015	14:00
E-4_(0.5	E15-05367-007	07/07/2015	14:17
E-4_(2.0	E15-05367-008DL	07/07/2015	14:34
E-4_(3.0	E15-05367-009DL	07/07/2015	14:52
E-4_(4.5	E15-05367-010DL	07/07/2015	15:09
X-1_(4.5	E15-05367-023DL	07/07/2015	15:26
E-6_(0.5	E15-05367-039DL	07/07/2015	15:44
X-3_(0.5	E15-05428-011	07/07/2015	16:01
E-1_(0.5	E15-05428-014DL	07/07/2015	16:18
E-2_(0.5	E15-05428-020	07/07/2015	16:36
E-2_(2.0	E15-05428-021	07/07/2015	16:53

PCB METHOD BLANK SUMMARY

Lab File ID: R5520.D

Instrument ID: GC-R

Date Extracted: 06/30/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 10:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150630-12	07/06/2015	11:16
PCB	05559-023MS	07/06/2015	11:33
PCB	05559-023MSD	07/06/2015	11:51
DRAINAGE	E15-05559-023	07/06/2015	12:13
GYM-1/0.	E15-05559-024	07/06/2015	12:30
GYM-2/0.	E15-05559-025	07/06/2015	12:48
DSB-W/0.	E15-05559-029	07/06/2015	13:05
E-16_(0.	E15-05367-017	07/06/2015	13:45
E-16_(2.	E15-05367-018	07/06/2015	14:03
PZ-2_(0.	E15-05367-019	07/06/2015	14:20
PZ-2_(2.	E15-05367-020	07/06/2015	14:38
PZ-2_(4.	E15-05367-021	07/06/2015	14:55
PZ-2_(6.	E15-05367-022	07/06/2015	15:13
PZ-1_(0.	E15-05367-031	07/06/2015	15:30
PZ-1_(2.	E15-05367-032	07/06/2015	15:48
PZ-1_(2.	E15-05367-033	07/06/2015	16:05
PZ-1_(4.	E15-05367-034	07/06/2015	16:41
E-5_(0.5	E15-05367-035	07/06/2015	16:58
E-5_(3.0	E15-05367-036	07/06/2015	17:23
E-5_(2.0	E15-05367-037	07/06/2015	17:40
E-5_(4.5	E15-05367-038	07/06/2015	17:58
E-3_(3.0	E15-05367-001	07/06/2015	18:15
E-16_(0.	E15-05367-017DL	07/06/2015	18:50
E-5_(0.5	E15-05367-035DL	07/06/2015	19:08

PCB METHOD BLANK SUMMARY

Lab File ID: R5520.D

Instrument ID: GC-R

Date Extracted: 06/30/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 10:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150630-12	07/06/2015	11:16
E-3_(0.5	E15-05367-002	07/07/2015	09:16

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.24	3.24	3.24	3.24	3.24	3.24	3.17	3.31
Aroclor-1016 {2}	4.07	4.07	4.07	4.07	4.07	4.07	4.00	4.14
Aroclor-1016 {3}	4.62	4.63	4.62	4.62	4.62	4.62	4.55	4.69
Aroclor-1016 {4}	5.13	5.13	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1016 {5}	5.53	5.53	5.53	5.53	5.53	5.53	5.46	5.60
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.03				2.96	3.10
Aroclor-1221 {3}			3.16				3.09	3.23
Aroclor-1221 {4}			3.24				3.17	3.31
Aroclor-1221 {5}			3.83				3.76	3.90
Aroclor-1232			3.24				3.17	3.31
Aroclor-1232 {2}			4.07				4.00	4.14
Aroclor-1232 {3}			4.74				4.67	4.81
Aroclor-1232 {4}			5.33				5.26	5.40
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.07				4.00	4.14
Aroclor-1242 {2}			5.01				4.94	5.08
Aroclor-1242 {3}			5.33				5.26	5.40
Aroclor-1242 {4}			6.03				5.96	6.10
Aroclor-1242 {5}			6.31				6.24	6.38
Aroclor-1248			4.47				4.39	4.55
Aroclor-1248 {2}			5.01				4.93	5.09
Aroclor-1248 {3}			5.33				5.25	5.41
Aroclor-1248 {4}			6.04				5.96	6.12
Aroclor-1248 {5}			6.32				6.24	6.40
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.87				6.79	6.95
Aroclor-1254 {3}			7.04				6.95	7.13
Aroclor-1254 {4}			7.47				7.38	7.56
Aroclor-1254 {5}			8.33				8.24	8.42
Aroclor-1260	8.32	8.33	8.33	8.32	8.32	8.32	7.42	9.22
Aroclor-1260 {2}	9.00	9.00	9.00	9.00	9.00	9.00	8.10	9.90
Aroclor-1260 {3}	9.48	9.48	9.48	9.48	9.47	9.48	8.58	10.38
Aroclor-1260 {4}	9.97	9.97	9.96	9.96	9.96	9.96	9.06	10.86
Aroclor-1260 {5}	11.03	11.02	11.02	11.02	11.02	11.02	10.12	11.92

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1035220	1134677	1200626	1141101	1179553	1138235	5.60
Aroclor-1016 {2}	1465857	1417900	1561807	1517080	1549717	1502472	4.00
Aroclor-1016 {3}	1971167	1971569	2134979	2053626	2147950	2055858	4.14
Aroclor-1016 {4}	1161680	1093048	1154206	1080175	1119575	1121737	3.22
Aroclor-1016 {5}	1714728	1531336	1696349	1641444	1758369	1668445	5.24
Aroclor-1221			449690				
Aroclor-1221 {2}			797648				
Aroclor-1221 {3}			494086				
Aroclor-1221 {4}			1826249				
Aroclor-1221 {5}			349620				
Aroclor-1232			1283730				
Aroclor-1232 {2}			679188				
Aroclor-1232 {3}			600221				
Aroclor-1232 {4}			546220				
Aroclor-1232 {5}			888909				
Aroclor-1242			1327257				
Aroclor-1242 {2}			826000				
Aroclor-1242 {3}			1025010				
Aroclor-1242 {4}			2509146				
Aroclor-1242 {5}			1614150				
Aroclor-1248			2660626				
Aroclor-1248 {2}			1486008				
Aroclor-1248 {3}			1797318				
Aroclor-1248 {4}			3729181				
Aroclor-1248 {5}			2536819				
Aroclor-1254			4149122				
Aroclor-1254 {2}			3098341				
Aroclor-1254 {3}			4553666				
Aroclor-1254 {4}			4265173				
Aroclor-1254 {5}			4303752				
Aroclor-1260	4131374	3602975	4306509	4242607	4423326	4141358	7.70
Aroclor-1260 {2}	2439674	2054713	2406192	2420883	2455212	2355335	7.18
Aroclor-1260 {3}	5614242	5258674	6353528	6215095	6341158	5956539	8.30
Aroclor-1260 {4}	2638606	2324791	2795276	2788768	2865653	2682619	8.07
Aroclor-1260 {5}	1517585	1427974	1525858	1491030	1509914	1494472	2.63
					Average %RSD		5.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.79	3.79	3.79	3.79	3.79	3.79	3.72	3.86
Aroclor-1016 {2}	4.39	4.39	4.39	4.39	4.39	4.39	4.32	4.46
Aroclor-1016 {3}	5.15	5.15	5.15	5.15	5.15	5.15	5.08	5.22
Aroclor-1016 {4}	5.36	5.36	5.36	5.36	5.36	5.36	5.29	5.43
Aroclor-1016 {5}	5.54	5.54	5.54	5.54	5.54	5.54	5.47	5.61
Aroclor-1221			2.45				2.38	2.52
Aroclor-1221 {2}			3.46				3.39	3.53
Aroclor-1221 {3}			3.70				3.63	3.77
Aroclor-1221 {4}			3.79				3.72	3.86
Aroclor-1221 {5}			5.15				5.08	5.22
Aroclor-1232			3.70				3.63	3.77
Aroclor-1232 {2}			4.71				4.64	4.78
Aroclor-1232 {3}			5.15				5.08	5.22
Aroclor-1232 {4}			5.36				5.29	5.43
Aroclor-1232 {5}			6.14				6.07	6.21
Aroclor-1242			4.78				4.71	4.85
Aroclor-1242 {2}			5.54				5.47	5.61
Aroclor-1242 {3}			6.14				6.07	6.21
Aroclor-1242 {4}			6.30				6.23	6.37
Aroclor-1242 {5}			6.85				6.78	6.92
Aroclor-1248			5.15				5.07	5.23
Aroclor-1248 {2}			5.74				5.66	5.82
Aroclor-1248 {3}			6.14				6.06	6.22
Aroclor-1248 {4}			6.29				6.21	6.37
Aroclor-1248 {5}			6.65				6.57	6.73
Aroclor-1254			7.14				7.06	7.22
Aroclor-1254 {2}			7.73				7.65	7.81
Aroclor-1254 {3}			8.36				8.27	8.45
Aroclor-1254 {4}			8.58				8.49	8.67
Aroclor-1254 {5}			9.17				9.08	9.26
Aroclor-1260	7.92	7.91	7.92	7.92	7.92	7.92	7.02	8.82
Aroclor-1260 {2}	8.17	8.17	8.17	8.17	8.17	8.17	7.27	9.07
Aroclor-1260 {3}	9.77	9.77	9.77	9.77	9.77	9.77	8.87	10.67
Aroclor-1260 {4}	10.28	10.28	10.28	10.28	10.28	10.28	9.38	11.18
Aroclor-1260 {5}	10.87	10.87	10.87	10.87	10.87	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	727179	649681	599818	572679	596428	629157	9.78
Aroclor-1016 {2}	1451309	1253159	1169195	1102953	1162450	1227813	11.07
Aroclor-1016 {3}	2849344	2530697	2600004	2514006	2692095	2637229	5.22
Aroclor-1016 {4}	1324756	1271114	1143157	1071810	1116437	1185455	9.07
Aroclor-1016 {5}	1029139	916078	878209	835898	880789	908023	8.09
Aroclor-1221			248315				
Aroclor-1221 {2}			395120				
Aroclor-1221 {3}			243765				
Aroclor-1221 {4}			924924				
Aroclor-1221 {5}			157727				
Aroclor-1232			155379				
Aroclor-1232 {2}			170266				
Aroclor-1232 {3}			1103692				
Aroclor-1232 {4}			515970				
Aroclor-1232 {5}			518462				
Aroclor-1242			453993				
Aroclor-1242 {2}			757756				
Aroclor-1242 {3}			959648				
Aroclor-1242 {4}			979390				
Aroclor-1242 {5}			1546010				
Aroclor-1248			1344062				
Aroclor-1248 {2}			2099649				
Aroclor-1248 {3}			1468554				
Aroclor-1248 {4}			1371497				
Aroclor-1248 {5}			722538				
Aroclor-1254			1762464				
Aroclor-1254 {2}			1459628				
Aroclor-1254 {3}			1313798				
Aroclor-1254 {4}			1001882				
Aroclor-1254 {5}			2271862				
Aroclor-1260	1114518	1071341	1054896	1020713	940767	1040447	6.26
Aroclor-1260 {2}	1736190	1550859	1474231	1399297	1445588	1521233	8.69
Aroclor-1260 {3}	1591443	1402133	1426458	1400913	1455999	1455389	5.45
Aroclor-1260 {4}	3835300	3153994	3293958	3277088	3383463	3388761	7.75
Aroclor-1260 {5}	2687365	2299414	2360009	2336144	2380674	2412721	6.49
					Average %RSD		7.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.61				8.49	8.73
Aroclor-1262 {2}			9.48				9.36	9.60
Aroclor-1262 {3}			10.11				9.99	10.23
Aroclor-1262 {4}			10.19				10.07	10.31
Aroclor-1262 {5}			11.02				10.90	11.14
Aroclor-1268			10.11				9.99	10.23
Aroclor-1268 {2}			10.19				10.07	10.31
Aroclor-1268 {3}			10.66				10.54	10.78
Aroclor-1268 {4}			11.02				10.90	11.14
Aroclor-1268 {5}			11.62				11.50	11.74

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.77				9.65	9.89
Aroclor-1262 {2}			10.28				10.16	10.40
Aroclor-1262 {3}			10.77				10.65	10.89
Aroclor-1262 {4}			10.86				10.74	10.98
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.77				10.65	10.89
Aroclor-1268 {2}			10.86				10.74	10.98
Aroclor-1268 {3}			11.11				10.99	11.23
Aroclor-1268 {4}			11.91				11.79	12.03
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3942099				
Aroclor-1262 {2}			7631823				
Aroclor-1262 {3}			2755124				
Aroclor-1262 {4}			3476908				
Aroclor-1262 {5}			2531033				
Aroclor-1268			7248111				
Aroclor-1268 {2}			9271222				
Aroclor-1268 {3}			6927535				
Aroclor-1268 {4}			2776800				
Aroclor-1268 {5}			21046728				

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1738813				
Aroclor-1262 {2}			4008201				
Aroclor-1262 {3}			1271006				
Aroclor-1262 {4}			2847748				
Aroclor-1262 {5}			513693				
Aroclor-1268			4026781				
Aroclor-1268 {2}			4415953				
Aroclor-1268 {3}			3441265				
Aroclor-1268 {4}			1482145				
Aroclor-1268 {5}			10901949				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y2993.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1308746	14.98
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1666537	10.92
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2341594	13.90
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1213602	8.19
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856792	11.29
Aroclor-1260	8.33	7.42	9.22	4141358	4705900	13.63
Aroclor-1260 {2}	9.00	8.10	9.90	2355335	2553976	8.43
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6614887	11.05
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2907575	8.39
Aroclor-1260 {5}	11.02	10.12	11.92	1494472	1525140	2.05

Data File: Y2993.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	631836	0.43
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210631	1.40
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2753198	4.40
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1186588	0.10
Aroclor-1016 {5}	5.54	5.47	5.61	908023	920091	1.33
Aroclor-1260	7.92	7.02	8.82	1040447	1096803	5.42
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1502289	1.25
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1464879	0.65
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3313207	2.23
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2378242	1.43

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3003.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1241919	9.11
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1518132	1.04
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2152661	4.71
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1128175	0.57
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1652684	0.94
Aroclor-1260	8.33	7.42	9.22	4141358	3836215	7.37
Aroclor-1260 {2}	9.00	8.10	9.90	2355335	2006617	14.81
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5236037	12.10
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2286981	14.75
Aroclor-1260 {5}	11.02	10.12	11.92	1494472	1369559	8.36

Data File: Y3003.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	611174	2.86
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1166135	5.02
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2575414	2.34
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1112834	6.13
Aroclor-1016 {5}	5.54	5.47	5.61	908023	852982	6.06
Aroclor-1260	7.92	7.02	8.82	1040447	964886	7.26
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1312055	13.75
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1218755	16.26
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2748919	18.88
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	1935431	19.78

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3021.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1248450	9.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1459422	2.87
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2153358	4.74
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1160017	3.41
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1673764	0.32
Aroclor-1260	8.33	7.42	9.22	4141358	3841492	7.24
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1962626	16.67
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5254919	11.78
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2154907	19.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1283214	14.14

Data File: Y3021.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	612648	2.62
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1164984	5.12
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2558796	2.97
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1109967	6.37
Aroclor-1016 {5}	5.54	5.47	5.61	908023	848730	6.53
Aroclor-1260	7.92	7.02	8.82	1040447	954903	8.22
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1295787	14.82
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1210913	16.80
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2768561	18.30
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	1946172	19.34

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3032.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1274065	11.93
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1668575	11.06
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2271346	10.48
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1215949	8.40
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1765462	5.81
Aroclor-1260	8.33	7.42	9.22	4141358	4503660	8.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2520198	7.00
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6485409	8.88
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2664680	0.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1481540	0.87

Data File: Y3032.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	635559	1.02
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210344	1.42
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2716194	2.99
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1185605	0.01
Aroclor-1016 {5}	5.54	5.47	5.61	908023	907360	0.07
Aroclor-1260	7.92	7.02	8.82	1040447	1070893	2.93
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1467749	3.52
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438854	1.14
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3365800	0.68
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2430287	0.73

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3055.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1249590	9.78
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1425194	5.14
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2121582	3.20
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1205332	7.45
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1695215	1.60
Aroclor-1260	8.33	7.42	9.22	4141358	3851645	7.00
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1938282	17.71
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5252544	11.82
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2213141	17.50
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1282827	14.16

Data File: Y3055.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	640788	1.85
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1212509	1.25
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2683131	1.74
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1182590	0.24
Aroclor-1016 {5}	5.54	5.47	5.61	908023	903170	0.53
Aroclor-1260	7.92	7.02	8.82	1040447	997470	4.13
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1381031	9.22
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1279710	12.07
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2913217	14.03
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	2072422	14.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3056.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1339496	17.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1593650	6.07
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2307503	12.24
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1217027	8.49
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1787366	7.13
Aroclor-1260	8.33	7.42	9.22	4141358	4095878	1.10
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2120942	9.95
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5563039	6.61
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2375486	11.45
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1258259	15.81

Data File: Y3056.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	693129	10.17
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1292323	5.25
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2867215	8.72
Aroclor-1016 {4}	5.37	5.29	5.43	1185455	1235456	4.22
Aroclor-1016 {5}	5.54	5.47	5.61	908023	952956	4.95
Aroclor-1260	7.92	7.02	8.82	1040447	1050696	0.99
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1433485	5.77
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1373278	5.64
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3149693	7.05
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2241538	7.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3066.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1300400	14.25
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1630197	8.50
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2389934	16.25
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1304204	16.27
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856225	11.25
Aroclor-1260	8.33	7.42	9.22	4141358	4308258	4.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2253041	4.34
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5995207	0.65
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2541612	5.26
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1309646	12.37

Data File: Y3066.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	697702	10.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1324110	7.84
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2915672	10.56
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1270603	7.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	971414	6.98
Aroclor-1260	7.92	7.02	8.82	1040447	1075474	3.37
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1486540	2.28
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1388714	4.58
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3197845	5.63
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2278661	5.56

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3073.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1251064	9.91
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1483320	1.27
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2179319	6.01
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1195525	6.58
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1736367	4.07
Aroclor-1260	8.34	7.42	9.22	4141358	4545170	9.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2482016	5.38
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6771801	13.69
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2950430	9.98
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1605036	7.40

Data File: Y3073.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	607974	3.37
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1151370	6.23
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2591146	1.75
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1135876	4.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	873267	3.83
Aroclor-1260	7.92	7.02	8.82	1040447	1035352	0.49
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1444744	5.03
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1459740	0.30
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3458587	2.06
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2514634	4.22

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3090.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1311908	15.26
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1662073	10.62
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2310298	12.38
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1234615	10.06
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1770376	6.11
Aroclor-1260	8.34	7.42	9.22	4141358	4374408	5.63
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2421012	2.79
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6237028	4.71
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2361454	11.97
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1339823	10.35

Data File: Y3090.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	648563	3.08
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1217920	0.81
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2692822	2.11
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1186821	0.12
Aroclor-1016 {5}	5.54	5.47	5.61	908023	908927	0.10
Aroclor-1260	7.92	7.02	8.82	1040447	1028109	1.19
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1424452	6.36
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1404577	3.49
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3272856	3.42
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2371368	1.71

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3110.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1305225	14.67
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1709652	13.79
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2357395	14.67
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1258049	12.15
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1785870	7.04
Aroclor-1260	8.33	7.42	9.22	4141358	4071807	1.68
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2202647	6.48
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5572554	6.45
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2440673	9.02
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1225661	17.99

Data File: Y3110.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	662683	5.33
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1238971	0.91
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2729322	3.49
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1207735	1.88
Aroclor-1016 {5}	5.54	5.47	5.61	908023	919052	1.21
Aroclor-1260	7.92	7.02	8.82	1040447	1016191	2.33
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1394774	8.31
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1308307	10.11
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2970447	12.34
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2114771	12.35

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3131.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1263162	10.98
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1350794	10.10
Aroclor-1016 {3}	4.64	4.55	4.69	2055858	2097805	2.04
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1187656	5.88
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1681596	0.79
Aroclor-1260	8.34	7.42	9.22	4141358	4184054	1.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2087478	11.37
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	5912878	0.73
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2579996	3.83
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1355936	9.27

Data File: Y3131.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.80	3.72	3.86	629157	638337	1.46
Aroclor-1016 {2}	4.41	4.32	4.46	1227813	1165121	5.11
Aroclor-1016 {3}	5.17	5.08	5.22	2637229	2603759	1.27
Aroclor-1016 {4}	5.38	5.29	5.43	1185455	1142168	3.65
Aroclor-1016 {5}	5.55	5.47	5.61	908023	876885	3.43
Aroclor-1260	7.93	7.02	8.82	1040447	1016249	2.33
Aroclor-1260 {2}	8.18	7.27	9.07	1521233	1408698	7.40
Aroclor-1260 {3}	9.78	8.87	10.67	1455389	1410706	3.07
Aroclor-1260 {4}	10.29	9.38	11.18	3388761	3271501	3.46
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2358325	2.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3147.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1343984	18.08
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1368564	8.91
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2246321	9.26
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1277619	13.90
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1801884	8.00
Aroclor-1260	8.34	7.42	9.22	4141358	4494095	8.52
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2203079	6.46
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6686130	12.25
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2811582	4.81
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1508246	0.92

Data File: Y3147.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	659894	4.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1228583	0.06
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2720790	3.17
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1206309	1.76
Aroclor-1016 {5}	5.54	5.47	5.61	908023	923284	1.68
Aroclor-1260	7.92	7.02	8.82	1040447	1053045	1.21
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1445534	4.98
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438592	1.15
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3376317	0.37
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2436062	0.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.18	3.18	3.18	3.17	3.17	3.17	3.10	3.24
Aroclor-1016 {2}	4.01	4.01	4.01	4.00	4.00	4.00	3.93	4.07
Aroclor-1016 {3}	4.56	4.56	4.56	4.55	4.55	4.56	4.49	4.63
Aroclor-1016 {4}	5.06	5.06	5.06	5.06	5.06	5.06	4.99	5.13
Aroclor-1016 {5}	5.47	5.46	5.46	5.46	5.45	5.46	5.39	5.53
Aroclor-1221			2.09				2.02	2.16
Aroclor-1221 {2}			2.98				2.91	3.05
Aroclor-1221 {3}			3.10				3.03	3.17
Aroclor-1221 {4}			3.18				3.11	3.25
Aroclor-1221 {5}			3.77				3.70	3.84
Aroclor-1232			3.18				3.11	3.25
Aroclor-1232 {2}			4.01				3.94	4.08
Aroclor-1232 {3}			4.68				4.61	4.75
Aroclor-1232 {4}			5.27				5.20	5.34
Aroclor-1232 {5}			5.47				5.40	5.54
Aroclor-1242			4.01				3.94	4.08
Aroclor-1242 {2}			4.95				4.88	5.02
Aroclor-1242 {3}			5.27				5.20	5.34
Aroclor-1242 {4}			5.97				5.90	6.04
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.41				4.33	4.49
Aroclor-1248 {2}			4.95				4.87	5.03
Aroclor-1248 {3}			5.27				5.19	5.35
Aroclor-1248 {4}			5.98				5.90	6.06
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.37				6.29	6.45
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.41				7.32	7.50
Aroclor-1254 {5}			8.28				8.19	8.37
Aroclor-1260	8.28	8.28	8.27	8.26	8.25	8.27	7.37	9.17
Aroclor-1260 {2}	8.94	8.94	8.94	8.93	8.93	8.94	8.04	9.84
Aroclor-1260 {3}	9.43	9.43	9.42	9.41	9.41	9.42	8.52	10.32
Aroclor-1260 {4}	9.93	9.92	9.91	9.90	9.89	9.91	9.01	10.81
Aroclor-1260 {5}	10.98	10.98	10.97	10.96	10.96	10.97	10.07	11.87

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	383548	375292	385763	375421	359640	375933	2.73
Aroclor-1016 {2}	503591	530508	497528	500692	481758	502815	3.51
Aroclor-1016 {3}	681685	668513	662817	670162	650188	666673	1.72
Aroclor-1016 {4}	390492	369352	384791	347143	330681	364492	6.94
Aroclor-1016 {5}	529731	514847	535436	529296	521001	526062	1.54
Aroclor-1221			147211				
Aroclor-1221 {2}			254307				
Aroclor-1221 {3}			149368				
Aroclor-1221 {4}			547853				
Aroclor-1221 {5}			133657				
Aroclor-1232			386422				
Aroclor-1232 {2}			220885				
Aroclor-1232 {3}			174797				
Aroclor-1232 {4}			319751				
Aroclor-1232 {5}			258228				
Aroclor-1242			420497				
Aroclor-1242 {2}			242599				
Aroclor-1242 {3}			588549				
Aroclor-1242 {4}			1187200				
Aroclor-1242 {5}			429341				
Aroclor-1248			765975				
Aroclor-1248 {2}			430311				
Aroclor-1248 {3}			864904				
Aroclor-1248 {4}			2086442				
Aroclor-1248 {5}			526706				
Aroclor-1254			1217349				
Aroclor-1254 {2}			892550				
Aroclor-1254 {3}			1304938				
Aroclor-1254 {4}			1526940				
Aroclor-1254 {5}			1478160				
Aroclor-1260	1356939	1186664	1302633	1371900	1363279	1316283	5.88
Aroclor-1260 {2}	742135	683611	759465	782547	765810	746714	5.11
Aroclor-1260 {3}	1766316	1688283	2029923	2166907	2129858	1956257	11.08
Aroclor-1260 {4}	898826	750678	850957	950128	954853	881089	9.57
Aroclor-1260 {5}	541345	502458	563054	601497	596253	560921	7.30
					Average %RSD		5.54

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.75	3.75	3.75	3.75	3.75	3.75	3.68	3.82
Aroclor-1016 {2}	4.36	4.36	4.36	4.35	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.12	5.12	5.12	5.11	5.11	5.12	5.05	5.19
Aroclor-1016 {4}	5.33	5.33	5.33	5.32	5.32	5.33	5.26	5.40
Aroclor-1016 {5}	5.51	5.50	5.50	5.50	5.49	5.50	5.43	5.57
Aroclor-1221			2.42				2.35	2.49
Aroclor-1221 {2}			3.43				3.36	3.50
Aroclor-1221 {3}			3.66				3.59	3.73
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.12				5.05	5.19
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.33				5.26	5.40
Aroclor-1232 {4}			5.51				5.44	5.58
Aroclor-1232 {5}			6.11				6.04	6.18
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.50				5.43	5.57
Aroclor-1242 {3}			6.11				6.04	6.18
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.82				6.75	6.89
Aroclor-1248			5.12				5.04	5.20
Aroclor-1248 {2}			5.71				5.63	5.79
Aroclor-1248 {3}			6.11				6.03	6.19
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.63				6.55	6.71
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.15				8.06	8.24
Aroclor-1254 {4}			8.34				8.25	8.43
Aroclor-1254 {5}			9.15				9.06	9.24
Aroclor-1260	7.89	7.89	7.89	7.88	7.88	7.89	6.99	8.79
Aroclor-1260 {2}	8.14	8.14	8.14	8.14	8.13	8.14	7.24	9.04
Aroclor-1260 {3}	9.75	9.75	9.75	9.74	9.74	9.74	8.84	10.64
Aroclor-1260 {4}	10.26	10.26	10.26	10.25	10.25	10.26	9.36	11.16
Aroclor-1260 {5}	10.85	10.85	10.85	10.84	10.84	10.85	9.95	11.75

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	2116191	2184167	2069500	1963430	1828497	2032357	6.86
Aroclor-1016 {2}	4032217	4376841	3930273	3803138	3565832	3941660	7.59
Aroclor-1016 {3}	7791958	8929233	8616852	8889690	8671818	8579910	5.37
Aroclor-1016 {4}	4274487	4074906	4139189	3771123	3566867	3965314	7.29
Aroclor-1016 {5}	3241005	3252905	3167215	2917390	2809404	3077584	6.56
Aroclor-1221			1101307				
Aroclor-1221 {2}			1591569				
Aroclor-1221 {3}			931575				
Aroclor-1221 {4}			3241230				
Aroclor-1221 {5}			767749				
Aroclor-1232			2398551				
Aroclor-1232 {2}			1010687				
Aroclor-1232 {3}			1902389				
Aroclor-1232 {4}			1470120				
Aroclor-1232 {5}			1969846				
Aroclor-1242			1767216				
Aroclor-1242 {2}			2671204				
Aroclor-1242 {3}			3427878				
Aroclor-1242 {4}			3387777				
Aroclor-1242 {5}			5330277				
Aroclor-1248			4728954				
Aroclor-1248 {2}			7333442				
Aroclor-1248 {3}			5066691				
Aroclor-1248 {4}			4686159				
Aroclor-1248 {5}			2534546				
Aroclor-1254			6166460				
Aroclor-1254 {2}			5082450				
Aroclor-1254 {3}			4179985				
Aroclor-1254 {4}			5985162				
Aroclor-1254 {5}			7752886				
Aroclor-1260	3440198	3725384	3815643	3646592	3118275	3549219	7.83
Aroclor-1260 {2}	5653519	5439844	5082333	4794742	4639360	5121959	8.31
Aroclor-1260 {3}	4528784	4795138	4543939	4444612	4428232	4548141	3.23
Aroclor-1260 {4}	10838904	10757351	10551106	10180290	10126019	10490734	3.11
Aroclor-1260 {5}	6703349	7156159	7298639	6951763	6817890	6985560	3.48
					Average %RSD		5.96

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.56				8.44	8.68
Aroclor-1262 {2}			9.43				9.31	9.55
Aroclor-1262 {3}			10.06				9.94	10.18
Aroclor-1262 {4}			10.14				10.02	10.26
Aroclor-1262 {5}			10.98				10.86	11.10
Aroclor-1268			10.06				9.94	10.18
Aroclor-1268 {2}			10.14				10.02	10.26
Aroclor-1268 {3}			10.61				10.49	10.73
Aroclor-1268 {4}			10.74				10.62	10.86
Aroclor-1268 {5}			11.58				11.46	11.70

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.75				9.63	9.87
Aroclor-1262 {2}			10.26				10.14	10.38
Aroclor-1262 {3}			10.76				10.64	10.88
Aroclor-1262 {4}			10.85				10.73	10.97
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.76				10.64	10.88
Aroclor-1268 {2}			10.84				10.72	10.96
Aroclor-1268 {3}			11.10				10.98	11.22
Aroclor-1268 {4}			11.24				11.12	11.36
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1168212				
Aroclor-1262 {2}			2239849				
Aroclor-1262 {3}			879258				
Aroclor-1262 {4}			1126181				
Aroclor-1262 {5}			839831				
Aroclor-1268			2311054				
Aroclor-1268 {2}			3012042				
Aroclor-1268 {3}			2314168				
Aroclor-1268 {4}			631651				
Aroclor-1268 {5}			7380276				

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5360706				
Aroclor-1262 {2}			12638729				
Aroclor-1262 {3}			4064561				
Aroclor-1262 {4}			8668956				
Aroclor-1262 {5}			2098932				
Aroclor-1268			11967904				
Aroclor-1268 {2}			12782905				
Aroclor-1268 {3}			10108282				
Aroclor-1268 {4}			2858263				
Aroclor-1268 {5}			29150062				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5401.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	389866	3.71
Aroclor-1016 {2}	4.01	3.93	4.07	502815	515488	2.52
Aroclor-1016 {3}	4.56	4.49	4.63	666673	683552	2.53
Aroclor-1016 {4}	5.07	4.99	5.13	364492	351877	3.46
Aroclor-1016 {5}	5.47	5.39	5.53	526062	525343	0.14
Aroclor-1260	8.27	7.37	9.17	1316283	1299868	1.25
Aroclor-1260 {2}	8.94	8.04	9.84	746714	728779	2.40
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	1955817	0.02
Aroclor-1260 {4}	9.91	9.01	10.81	881089	876409	0.53
Aroclor-1260 {5}	10.97	10.07	11.87	560921	510817	8.93

Data File: R5401.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2139076	5.25
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4220504	7.07
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9368061	9.19
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	4118329	3.86
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3205909	4.17
Aroclor-1260	7.90	6.99	8.79	3549219	3228705	9.03
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4622896	9.74
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4147919	8.80
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	8976984	14.43
Aroclor-1260 {5}	10.86	9.95	11.75	6985560	5988006	14.28

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5424.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	415039	10.40
Aroclor-1016 {2}	4.01	3.93	4.07	502815	535457	6.49
Aroclor-1016 {3}	4.56	4.49	4.63	666673	718890	7.83
Aroclor-1016 {4}	5.07	4.99	5.13	364492	390403	7.11
Aroclor-1016 {5}	5.47	5.39	5.53	526062	565847	7.56
Aroclor-1260	8.27	7.37	9.17	1316283	1334254	1.37
Aroclor-1260 {2}	8.94	8.04	9.84	746714	746865	0.02
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	2038526	4.21
Aroclor-1260 {4}	9.91	9.01	10.81	881089	881737	0.07
Aroclor-1260 {5}	10.98	10.07	11.87	560921	535984	4.45

Data File: R5424.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	2032357	2312450	13.78
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4568460	15.90
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	10119055	17.94
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4576445	15.41
Aroclor-1016 {5}	5.50	5.43	5.57	3077584	3587966	16.58
Aroclor-1260	7.89	6.99	8.79	3549219	3894443	9.73
Aroclor-1260 {2}	8.14	7.24	9.04	5121959	5008381	2.22
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4223262	7.14
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9217606	12.14
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6233678	10.76

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-R

Data File: R5519.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	391344	4.10
Aroclor-1016 {2}	4.01	3.93	4.07	502815	522445	3.90
Aroclor-1016 {3}	4.57	4.49	4.63	666673	696118	4.42
Aroclor-1016 {4}	5.07	4.99	5.13	364492	370382	1.62
Aroclor-1016 {5}	5.47	5.39	5.53	526062	541991	3.03
Aroclor-1260	8.27	7.37	9.17	1316283	1346183	2.27
Aroclor-1260 {2}	8.94	8.04	9.84	746714	785029	5.13
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2079646	6.31
Aroclor-1260 {4}	9.91	9.01	10.81	881089	885647	0.52
Aroclor-1260 {5}	10.97	10.07	11.87	560921	537919	4.10

Data File: R5519.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	2032357	2163345	6.45
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4097498	3.95
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9086220	5.90
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4060015	2.39
Aroclor-1016 {5}	5.50	5.43	5.57	3077584	3136086	1.90
Aroclor-1260	7.89	6.99	8.79	3549219	4017727	13.20
Aroclor-1260 {2}	8.14	7.24	9.04	5121959	5243406	2.37
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4985231	9.61
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	11072832	5.55
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	7593959	8.71

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 Instrument ID: GC-R

Data File: R5528.D GC Column (1st): DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	400317	6.49
Aroclor-1016 {2}	4.01	3.93	4.07	502815	534169	6.24
Aroclor-1016 {3}	4.57	4.49	4.63	666673	718169	7.72
Aroclor-1016 {4}	5.07	4.99	5.13	364492	391022	7.28
Aroclor-1016 {5}	5.47	5.39	5.53	526062	561925	6.82
Aroclor-1260	8.28	7.37	9.17	1316283	1385141	5.23
Aroclor-1260 {2}	8.95	8.04	9.84	746714	787599	5.48
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2120807	8.41
Aroclor-1260 {4}	9.91	9.01	10.81	881089	920002	4.42
Aroclor-1260 {5}	10.98	10.07	11.87	560921	544115	3.00

Data File: R5528.C GC Column (2nd): DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2293614	12.85
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4266233	8.23
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9383021	9.36
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4191283	5.70
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3244706	5.43
Aroclor-1260	7.89	6.99	8.79	3549219	3971842	11.91
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5137356	0.30
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4912686	8.02
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	10777099	2.73
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	7329340	4.92

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-R

Data File: R5549.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	407334	8.35
Aroclor-1016 {2}	4.01	3.93	4.07	502815	531743	5.75
Aroclor-1016 {3}	4.57	4.49	4.63	666673	720810	8.12
Aroclor-1016 {4}	5.07	4.99	5.13	364492	377724	3.63
Aroclor-1016 {5}	5.47	5.39	5.53	526062	558403	6.15
Aroclor-1260	8.27	7.37	9.17	1316283	1345019	2.18
Aroclor-1260 {2}	8.95	8.04	9.84	746714	739515	0.96
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2009661	2.73
Aroclor-1260 {4}	9.92	9.01	10.81	881089	877001	0.46
Aroclor-1260 {5}	10.98	10.07	11.87	560921	618498	10.26

Data File: R5549.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2196889	8.10
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4461606	13.19
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9839288	14.68
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4234414	6.79
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3367797	9.43
Aroclor-1260	7.89	6.99	8.79	3549219	3871049	9.07
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5022358	1.94
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4127982	9.24
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9453756	9.88
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6430633	7.94

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-R

Data File: R5578.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	391384	4.11
Aroclor-1016 {2}	4.01	3.93	4.07	502815	500770	0.41
Aroclor-1016 {3}	4.57	4.49	4.63	666673	674861	1.23
Aroclor-1016 {4}	5.07	4.99	5.13	364492	313288	14.05
Aroclor-1016 {5}	5.47	5.39	5.53	526062	454383	13.63
Aroclor-1260	8.27	7.37	9.17	1316283	1220831	7.25
Aroclor-1260 {2}	8.95	8.04	9.84	746714	677072	9.33
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1880293	3.88
Aroclor-1260 {4}	9.91	9.01	10.81	881089	860179	2.37
Aroclor-1260 {5}	10.97	10.07	11.87	560921	556739	0.75

Data File: R5578.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2234181	9.93
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4414562	12.00
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9710610	13.18
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4123096	3.98
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3317720	7.80
Aroclor-1260	7.89	6.99	8.79	3549219	3282030	7.53
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4229125	17.43
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4093050	10.01
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9245640	11.87
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6598220	5.54

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-R

Data File: R5583.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	395102	5.10
Aroclor-1016 {2}	4.01	3.93	4.07	502815	510660	1.56
Aroclor-1016 {3}	4.57	4.49	4.63	666673	683880	2.58
Aroclor-1016 {4}	5.07	4.99	5.13	364492	362653	0.50
Aroclor-1016 {5}	5.48	5.39	5.53	526062	524256	0.34
Aroclor-1260	8.28	7.37	9.17	1316283	1272211	3.35
Aroclor-1260 {2}	8.95	8.04	9.84	746714	703751	5.75
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1928324	1.43
Aroclor-1260 {4}	9.92	9.01	10.81	881089	847744	3.78
Aroclor-1260 {5}	10.98	10.07	11.87	560921	500489	10.77

Data File: R5583.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.68	3.82	2032357	2326594	14.48
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4504671	14.28
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9954053	16.02
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	4325919	9.09
Aroclor-1016 {5}	5.52	5.43	5.57	3077584	3421996	11.19
Aroclor-1260	7.90	6.99	8.79	3549219	3929064	10.70
Aroclor-1260 {2}	8.16	7.24	9.04	5121959	5067615	1.06
Aroclor-1260 {3}	9.76	8.84	10.64	4548141	4416877	2.89
Aroclor-1260 {4}	10.27	9.36	11.16	10490734	9708752	7.45
Aroclor-1260 {5}	10.86	9.95	11.75	6985560	6619494	5.24

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.07 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA150629-16	06/30/2015	18:42	2.72		12.07		2.87		12.55	
PCB	LCSA150629-16	06/30/2015	18:59	2.72		12.07		2.87		12.55	
PCB	LCSDA150629-16	06/30/2015	19:17	2.72		12.07		2.87		12.55	
FB	E15-05346-027	06/30/2015	19:34	2.71		12.07		2.87		12.55	
FB	E15-05430-103	06/30/2015	19:51	2.71		12.07		2.87		12.55	
FB-1	E15-05338-007	06/30/2015	20:09	2.72		12.07		2.87		12.55	
FB-06221	E15-05367-040	06/30/2015	20:26	2.72		12.07		2.87		12.55	
FB-06231	E15-05428-030	06/30/2015	20:44	2.72		12.07		2.88		12.55	
FB-06241	E15-05428-032	06/30/2015	21:01	2.71		12.06		2.87		12.55	
FB-06251	E15-05467-012	06/30/2015	21:19	2.72		12.07		2.87		12.55	
FIELD_BL	E15-05470-016	06/30/2015	21:36	2.71		12.07		2.87		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-08	07/02/2015	11:21	2.77		12.11		2.91		12.56	
PCB	LCSS150701-08	07/02/2015	11:38	2.77		12.11		2.91		12.56	
PCB	05367-005MS	07/02/2015	11:56	2.77		12.11		2.90		12.56	
PCB	05367-005MSD	07/02/2015	12:13	2.77		12.11		2.90		12.55	
E-18_(0.	E15-05367-005	07/02/2015	12:31	2.77		12.11		2.91		12.56	
E-18_(2.	E15-05367-006	07/02/2015	12:48	2.77		12.11		2.90		12.56	
E-11_(0.	E15-05367-011	07/02/2015	13:05	2.77		12.11		2.90		12.55	
E-11_(2.	E15-05367-012	07/02/2015	13:23	2.77		12.11		2.91		12.56	
E-12_(0.	E15-05367-013	07/02/2015	14:15	2.77		12.11		2.90		12.55	
E-12_(2.	E15-05367-014	07/02/2015	14:32	2.77		12.11		2.91		12.56	
E-14_(0.	E15-05367-015	07/02/2015	14:49	2.77		12.11		2.91		12.56	
E-14_(2.	E15-05367-016	07/02/2015	15:07	2.77		12.11		2.91		12.56	
X-2_(2.0	E15-05367-024	07/02/2015	15:24	2.77		12.11		2.91		12.56	
E-8_(0.5	E15-05367-025	07/02/2015	15:41	2.77		12.11		2.90		12.56	
E-8_(2.0	E15-05367-026	07/02/2015	15:59	2.77		12.11		2.91		12.56	
E-17_(2.	E15-05367-028	07/02/2015	16:32	2.77		12.11		2.91		12.56	
E-9_(0.5	E15-05367-029	07/02/2015	16:50	2.77		12.11		2.91		12.56	
E-9_(2.0	E15-05367-030	07/02/2015	17:07	2.77		12.11		2.91		12.56	
E-19_(0.	E15-05428-007	07/02/2015	17:59	2.77		12.11		2.90		12.56	
E-19_(2.	E15-05428-008	07/02/2015	18:16	2.77		12.11		2.90		12.56	
E-27_(0.	E15-05428-009	07/02/2015	18:34	2.77		12.11		2.91		12.56	
E-27_(2.	E15-05428-010	07/02/2015	18:51	2.77		12.11		2.90		12.56	
E-25_(0.	E15-05428-012	07/02/2015	19:08	2.77		12.11		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-08	07/02/2015	11:21	2.77		12.11		2.91		12.56	
PCB	LCSS150701-08	07/02/2015	11:38	2.77		12.11		2.91		12.56	
E-18_(0.	E15-05367-005DL	07/03/2015	07:00	2.78		12.11		2.91		12.56	
E-11_(0.	E15-05367-011DL	07/03/2015	07:17	2.78		12.11		2.91		12.56	
E-12_(0.	E15-05367-013DL	07/03/2015	07:34	2.78		12.12		2.91		12.56	
E-14_(0.	E15-05367-015DL	07/03/2015	07:52	2.78		12.12		2.91		12.56	
E-17_(0.	E15-05367-027	07/06/2015	10:25	2.78		12.12		2.92		12.57	
E-9_(0.5	E15-05367-029	07/06/2015	10:53	2.78		12.12		2.92		12.56	
E-19_(0.	E15-05428-007DL	07/06/2015	11:11	2.77		12.12		2.91		12.56	
E-27_(0.	E15-05428-009DL	07/06/2015	11:28	2.78		12.11		2.91		12.55	
E-25_(0.	E15-05428-012DL	07/06/2015	11:45	2.77		12.12		2.91		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-07	07/06/2015	17:32	2.77		12.11		2.91		12.56	
PCB	LCSS150701-07	07/06/2015	17:50	2.78		12.11		2.91		12.56	
PCB	05367-003MS	07/06/2015	18:07	2.77		12.11		2.91		12.55	
PCB	05367-003MSD	07/06/2015	18:25	2.77		12.11		2.91		12.56	
E-3_(4.5	E15-05367-004	07/06/2015	18:59	2.77		12.12		2.91		12.55	
E-4_(2.0	E15-05367-008	07/06/2015	19:34	2.79		12.12		2.92		12.56	
E-4_(3.0	E15-05367-009	07/06/2015	19:51	2.78		12.11		2.91		12.56	
E-4_(4.5	E15-05367-010	07/06/2015	20:09	2.77		12.12		2.91		12.56	
X-1_(4.5	E15-05367-023	07/06/2015	20:26	2.78		12.11		2.91		12.56	
E-6_(0.5	E15-05367-039	07/06/2015	20:44	2.77		12.11		2.91		12.56	
E-6_(2.0	E15-05367-041	07/06/2015	21:01	2.78		12.11		2.91		12.56	
E-6_(3.0	E15-05367-042	07/06/2015	21:19	2.78		12.12		2.91		12.56	
E-6_(4.0	E15-05367-043	07/06/2015	21:36	2.79		12.12		2.92		12.56	
E-1_(0.5	E15-05428-014	07/06/2015	23:55	2.77		12.11		2.91		12.56	
E-1_(2.0	E15-05428-015	07/07/2015	00:12	2.77		12.11		2.91		12.56	
E-1_(3.0	E15-05428-016	07/07/2015	00:29	2.77		12.12		2.91		12.56	
E-1_(4.5	E15-05428-017	07/07/2015	00:47	2.77		12.12		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-07	07/06/2015	17:32	2.77		12.11		2.91		12.56	
PCB	LCSS150701-07	07/06/2015	17:50	2.78		12.11		2.91		12.56	
E-3_(2.0	E15-05367-003	07/07/2015	14:00	2.78		12.12		2.92		12.57	
E-4_(0.5	E15-05367-007	07/07/2015	14:17	2.78		12.12		2.91		12.56	
E-4_(2.0	E15-05367-008DL	07/07/2015	14:34	2.78		12.12		2.91		12.56	
E-4_(3.0	E15-05367-009DL	07/07/2015	14:52	2.78		12.12		2.91		12.56	
E-4_(4.5	E15-05367-010DL	07/07/2015	15:09	2.78		12.12		2.91		12.56	
X-1_(4.5	E15-05367-023DL	07/07/2015	15:26	2.78		12.12		2.91		12.56	
E-6_(0.5	E15-05367-039DL	07/07/2015	15:44	2.78		12.12		2.91		12.56	
X-3_(0.5	E15-05428-011	07/07/2015	16:01	2.78		12.12		2.91		12.57	
E-1_(0.5	E15-05428-014DL	07/07/2015	16:18	2.78		12.11		2.92		12.56	
E-2_(0.5	E15-05428-020	07/07/2015	16:36	2.78		12.12		2.92		12.57	
E-2_(2.0	E15-05428-021	07/07/2015	16:53	2.78		12.12		2.92		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.07 **TCMX 2** 2.88 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150630-12	07/06/2015	10:58	2.72		12.07		2.88		12.56	
PCB	LCSS150630-12	07/06/2015	11:16	2.72		12.06		2.87		12.55	
PCB	05559-023MS	07/06/2015	11:33	2.72		12.06		2.87		12.55	
PCB	05559-023MSD	07/06/2015	11:51	2.72		12.06		2.87		12.55	
DRAINAGE	E15-05559-023	07/06/2015	12:13	2.72		12.07		2.88		12.55	
GYM-1/0.	E15-05559-024	07/06/2015	12:30	2.72		12.06		2.87		12.55	
GYM-2/0.	E15-05559-025	07/06/2015	12:48	2.72		12.06		2.87		12.55	
DSB-W/0.	E15-05559-029	07/06/2015	13:05	2.72		12.06		2.87		12.55	
E-16_(0.	E15-05367-017	07/06/2015	13:45	2.72		12.06		2.88		12.55	
E-16_(2.	E15-05367-018	07/06/2015	14:03	2.72		12.06		2.87		12.55	
PZ-2_(0.	E15-05367-019	07/06/2015	14:20	2.72		12.06		2.87		12.55	
PZ-2_(2.	E15-05367-020	07/06/2015	14:38	2.72		12.06		2.87		12.55	
PZ-2_(4.	E15-05367-021	07/06/2015	14:55	2.72		12.06		2.87		12.55	
PZ-2_(6.	E15-05367-022	07/06/2015	15:13	2.72		12.06		2.87		12.55	
PZ-1_(0.	E15-05367-031	07/06/2015	15:30	2.72		12.06		2.87		12.55	
PZ-1_(2.	E15-05367-032	07/06/2015	15:48	2.72		12.06		2.87		12.56	
PZ-1_(2.	E15-05367-033	07/06/2015	16:05	2.72		12.07		2.87		12.55	
PZ-1_(4.	E15-05367-034	07/06/2015	16:41	2.72		12.07		2.88		12.56	
E-5_(0.5	E15-05367-035	07/06/2015	16:58	2.72		12.07		2.88		12.55	
E-5_(3.0	E15-05367-036	07/06/2015	17:23	2.72		12.06		2.88		12.55	
E-5_(2.0	E15-05367-037	07/06/2015	17:40	2.72		12.07		2.87		12.55	
E-5_(4.5	E15-05367-038	07/06/2015	17:58	2.72		12.06		2.87		12.55	
E-3_(3.0	E15-05367-001	07/06/2015	18:15	2.72		12.06		2.87		12.55	
E-16_(0.	E15-05367-017DL	07/06/2015	18:50	2.72		12.07		2.87		12.61	
E-5_(0.5	E15-05367-035DL	07/06/2015	19:08	2.72		12.06		2.88		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.07 **TCMX 2** 2.88 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150630-12	07/06/2015	10:58	2.72		12.07		2.88		12.56	
PCB	LCSS150630-12	07/06/2015	11:16	2.72		12.06		2.87		12.55	
E-3_(0.5	E15-05367-002	07/07/2015	09:16	0.00	D	0.00	D	0.00	D	0.00	D

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5543.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:15
Operator : JS
Sample : E-3_(3.0,E15-05367-001,S,30.42g,8.20,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:52:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3766.7E6	19900.9E6	187.304	163.030
Spiked Amount 200.000			Recovery	=	93.65%	81.52%
2) S DCB	12.06	12.55	1828.8E6	7617.6E6	221.370	221.902m
Spiked Amount 200.000			Recovery	=	110.69%	110.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	161.3E6	832.6E6	122.533	234.584 #
34) L8 Aroclor-1260 {2}	8.94	8.14	151.2E6	1386.2E6	202.550	270.636 #
35) L8 Aroclor-1260 {3}	9.42	9.74	407.5E6	1537.9E6	208.293	338.148 #
36) L8 Aroclor-1260 {4}	9.91	10.26	233.6E6	1254.0E6	265.123	119.536 #
37) L8 Aroclor-1260 {5}	10.97	10.85	124.9E6	1539.7E6	222.674m	220.409m
Sum Aroclor-1260			1078.5E6	6550.4E6	1021.173	1183.313
Average Aroclor-1260					204.235	236.663
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

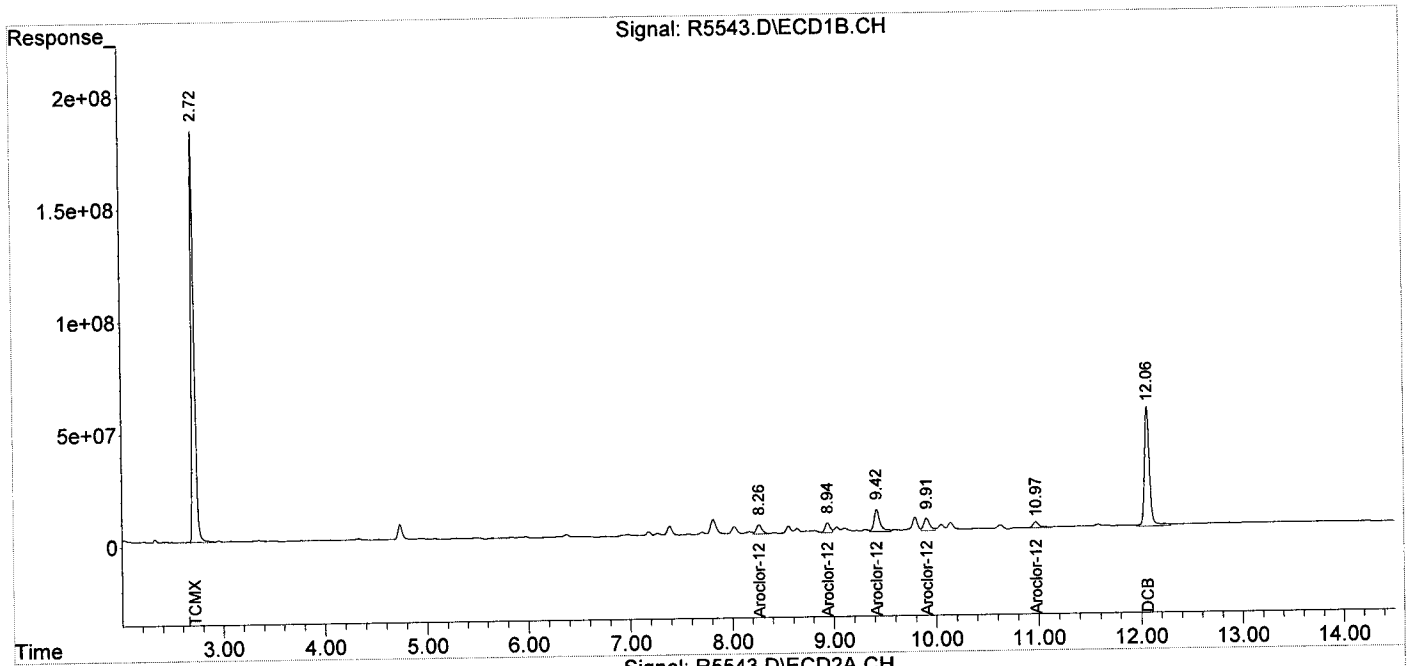
E15-05367-0442

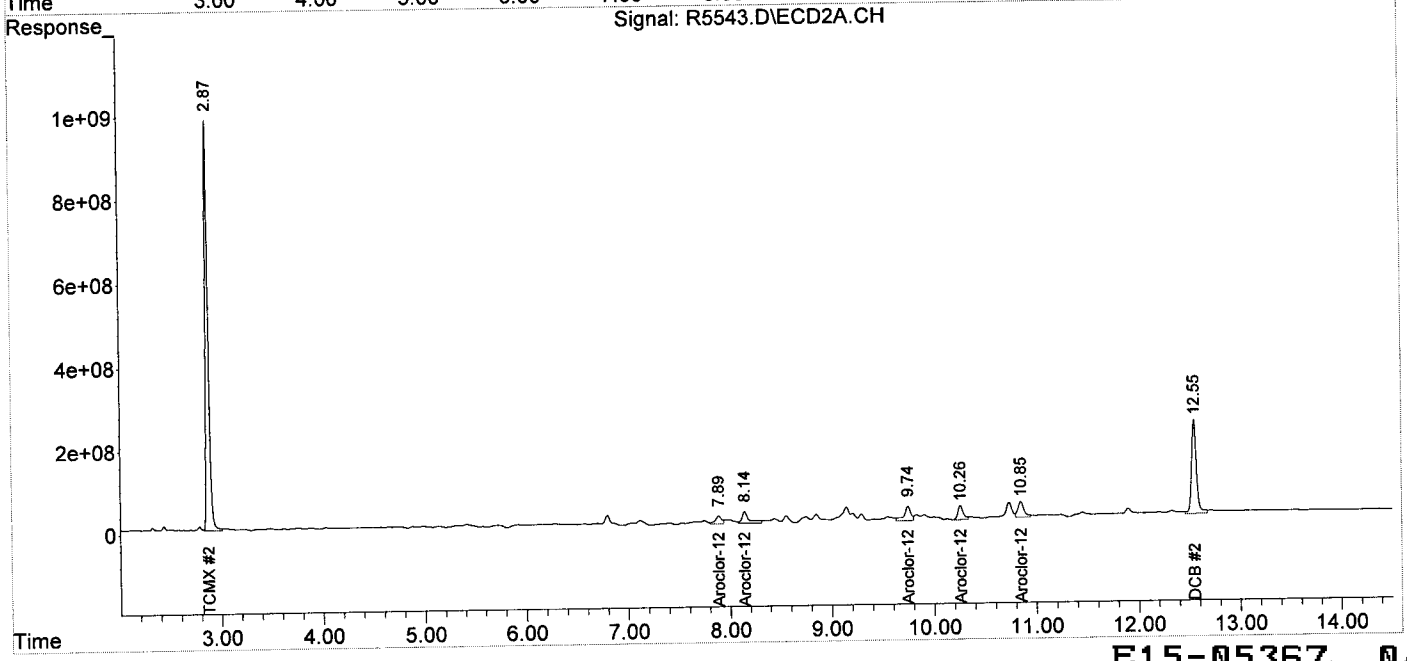
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5543.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:15
Operator : JS
Sample : E-3_(3.0,E15-05367-001,S,30.42g,8.20,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:52:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5579.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:16
Operator : JS
Sample : E-3_(0.5,E15-05367-002,S,30.25g,22.1,5
Misc : 150630-12,06/30/15,06/23/15,500
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 15:09:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.27	7.90	2098.7E6	3433.6E6	1594.449	967.419 #
34) L8 Aroclor-1260	{2}	8.95	8.15	1005.4E6	5320.9E6	1346.385	1038.845
35) L8 Aroclor-1260	{3}	9.42	9.75	3026.0E6	5838.6E6	1546.839	1283.729
36) L8 Aroclor-1260	{4}	9.91	10.26	1514.9E6	13679.9E6	1719.354	1303.999
37) L8 Aroclor-1260	{5}	10.98	10.86	772.5E6	9690.8E6	1377.143	1387.264
Sum Aroclor-1260				8417.5E6	37963.8E6	7584.170	5981.256
Average Aroclor-1260						1516.834	1196.251
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

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

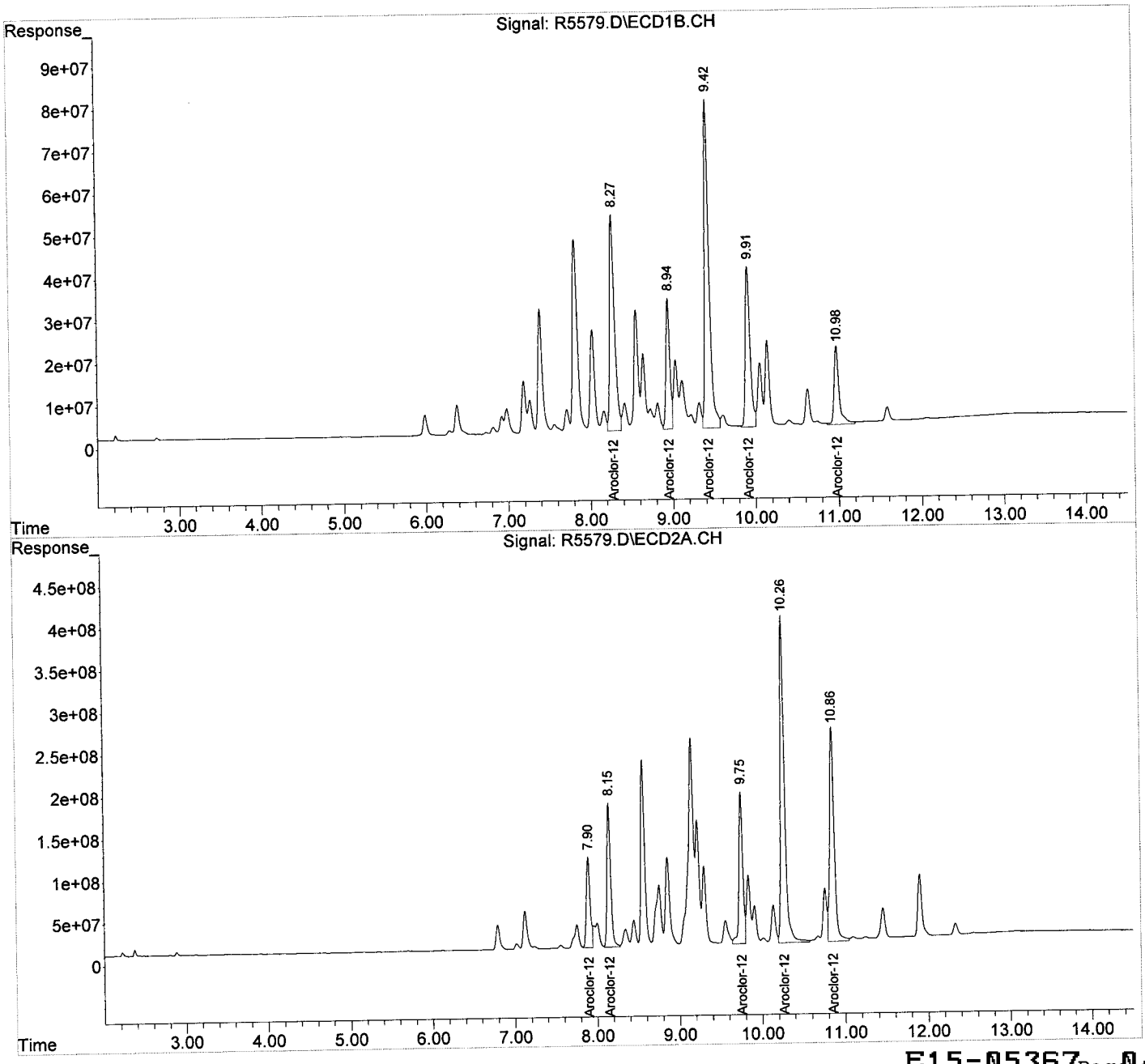
E15-05367-0444

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5579.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:16
Operator : JS
Sample : E-3_(0.5,E15-05367-002,S,30.25g,22.1,5
Misc : 150630-12,06/30/15,06/23/15,500
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 15:09:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3132.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:00
Operator : JS
Sample : E-3_(2.0,E15-05367-003,S,30.40g,12.7,5
Misc : 150701-07,07/01/15,06/23/15,500
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:27:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.92	28261674	16127016	0.424	0.465	
Spiked Amount 200.000			Recovery	=	0.21%	0.23%	
2) S DCB	12.12	12.57	9915162	4943709	0.484m	0.400m	
Spiked Amount 200.000			Recovery	=	0.24%	0.20%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.34	7.93	1418.0E6	249.8E6	342.398	240.111	#
34) L8 Aroclor-1260 {2}	9.01	8.18	663.9E6	367.9E6	281.876	241.862	
35) L8 Aroclor-1260 {3}	9.49	9.78	1826.7E6	407.3E6	306.667	279.831	
36) L8 Aroclor-1260 {4}	9.97	10.29	881.6E6	961.6E6	328.652	283.753	
37) L8 Aroclor-1260 {5}	11.04	10.88	387.4E6	706.8E6	259.229	292.957	
Sum Aroclor-1260			5177.6E6	2693.4E6	1518.822	1338.514	
Average Aroclor-1260					303.764	267.703	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

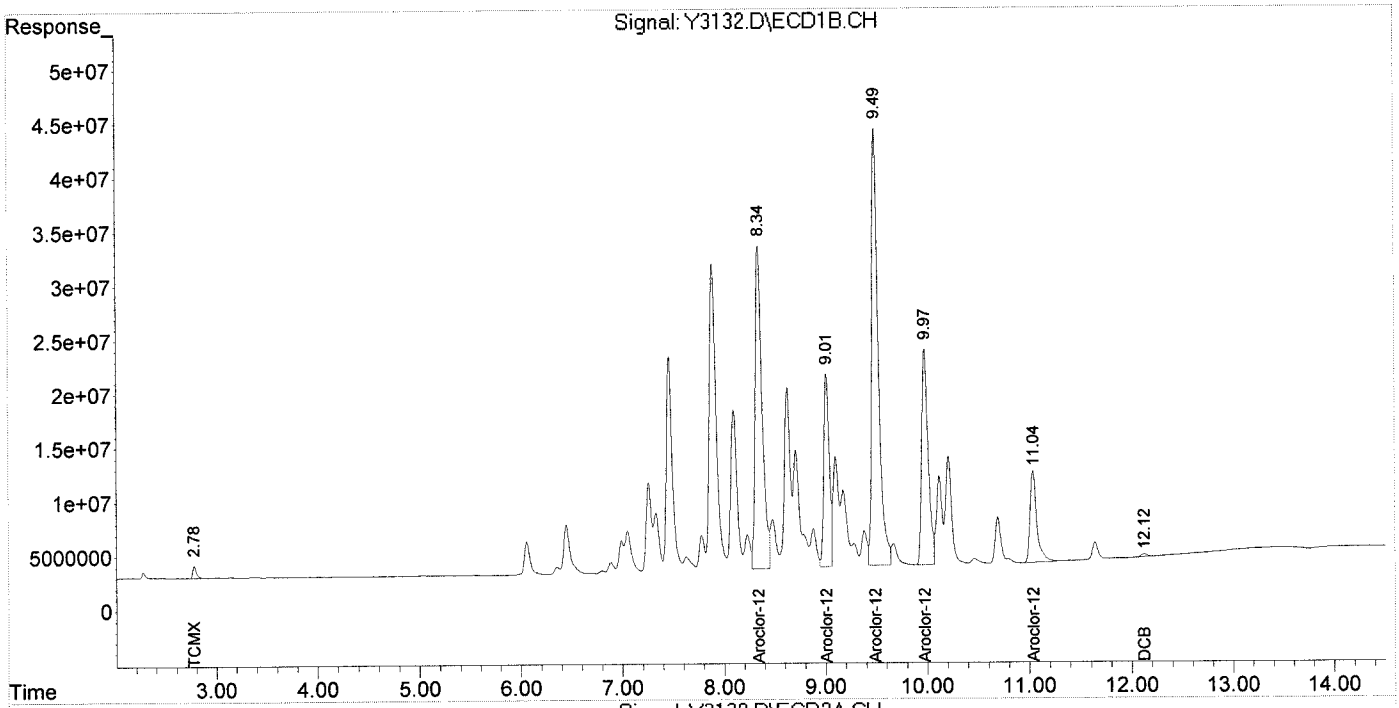
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

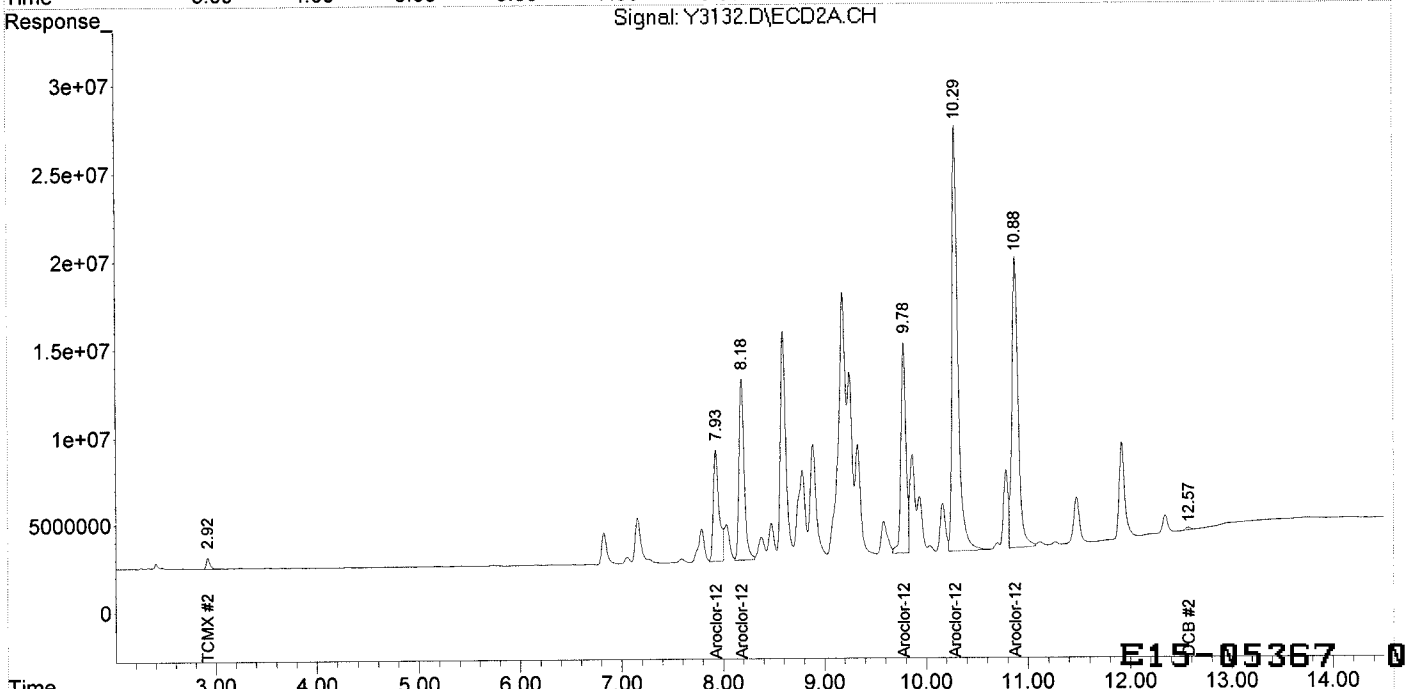
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3132.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:00
Operator : JS
Sample : E-3_(2.0,E15-05367-003,S,30.40g,12.7,5
Misc : 150701-07,07/01/15,06/23/15,500
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:27:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0447

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3079.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:59
Operator : JS
Sample : E-3_(4.5,E15-05367-004,S,30.95g,7.10,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:07:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.77	2.91	12275.8E6	6145.2E6	184.312	177.315	
Spiked Amount 200.000			Recovery	=	92.16%	88.66%	
2) S DCB	12.12	12.55	4106.1E6	2748.2E6	200.469	222.343	
Spiked Amount 200.000			Recovery	=	100.23%	111.17%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.34	7.92	130.0E6	35558835	31.386	34.177	
34) L8 Aroclor-1260 {2}	9.00	8.17	89753179	53065595	38.106	34.883	
35) L8 Aroclor-1260 {3}	9.49	9.77	197.3E6	61266262	33.129	42.096	#
36) L8 Aroclor-1260 {4}	9.97	10.28	107.1E6	127.6E6	39.928	37.647	
37) L8 Aroclor-1260 {5}	11.03	10.87	55001669	98690964	36.803	40.904	
Sum Aroclor-1260			579.2E6	376.2E6	179.353	189.707	
Average Aroclor-1260					35.871	37.941	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

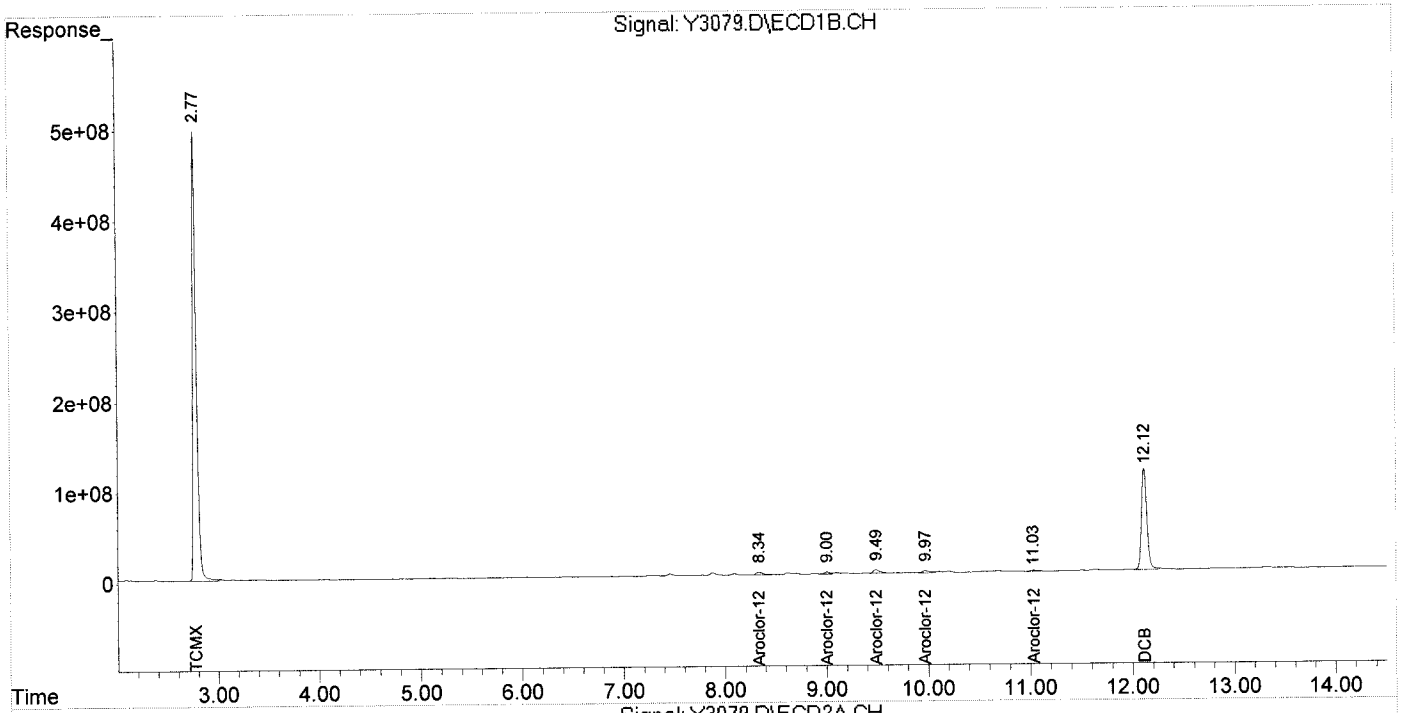
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

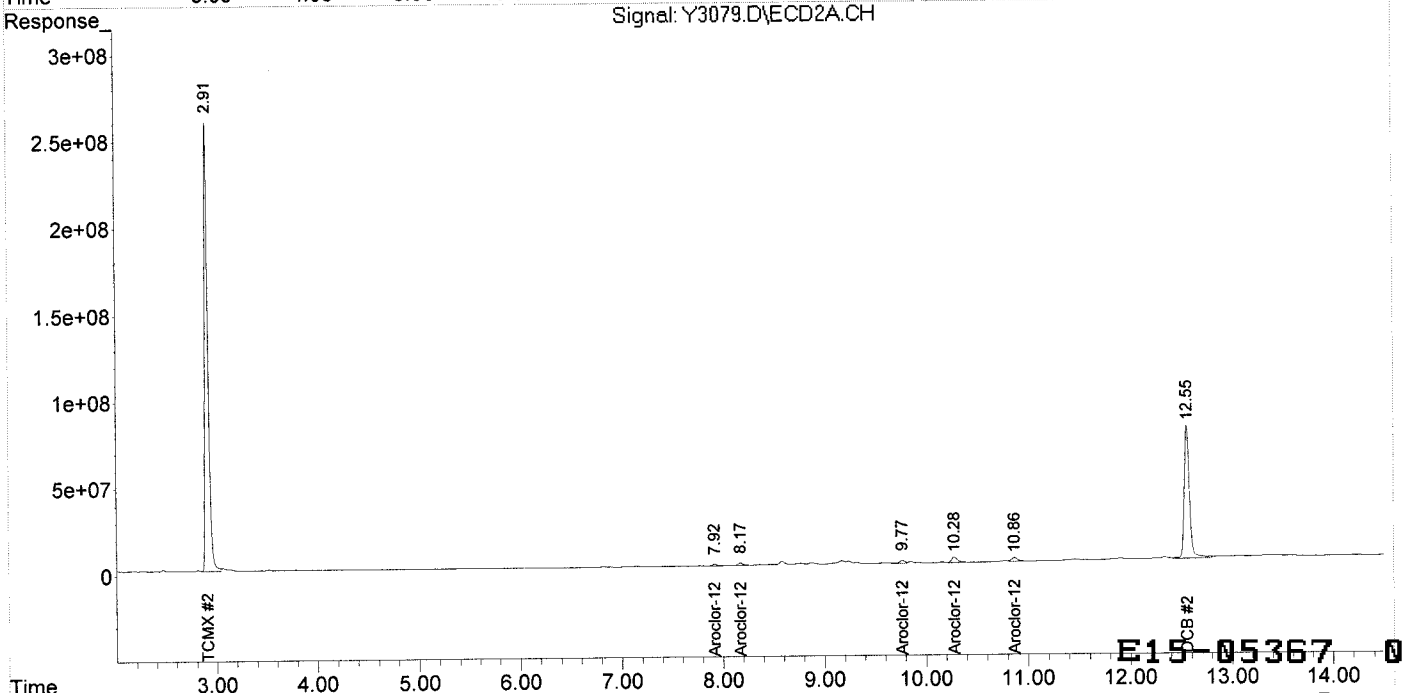
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3079.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:59
Operator : JS
Sample : E-3_(4.5,E15-05367-004,S,30.95g,7.10,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:07:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y2998.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 12:31
Operator : JS
Sample : E-18_(0.,E15-05367-005,S,5.11g,14.4,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:24:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10740.3E6	6201.5E6	161.257	178.938
Spiked Amount 200.000			Recovery	=	80.63%	89.47%
2) S DCB	12.11	12.56	3125.0E6	2137.9E6	152.574	172.969
Spiked Amount 200.000			Recovery	=	76.29%	86.48%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	11174.5E6	2369.0E6	2698.281	2276.951
34) L8 Aroclor-1260 {2}	9.00	8.17	4767.8E6	3430.3E6	2024.239	2254.979
35) L8 Aroclor-1260 {3}	9.48	9.76	14046.6E6	3797.3E6	2358.186	2609.109
36) L8 Aroclor-1260 {4}	9.96	10.27	7172.1E6	9331.0E6	2673.549	2753.518
37) L8 Aroclor-1260 {5}	11.02	10.86	4442.3E6	6732.5E6	2972.507	2790.424
Sum Aroclor-1260			41603.4E6	25660.2E6	12726.762	12684.981
Average Aroclor-1260					2545.352	2536.996
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

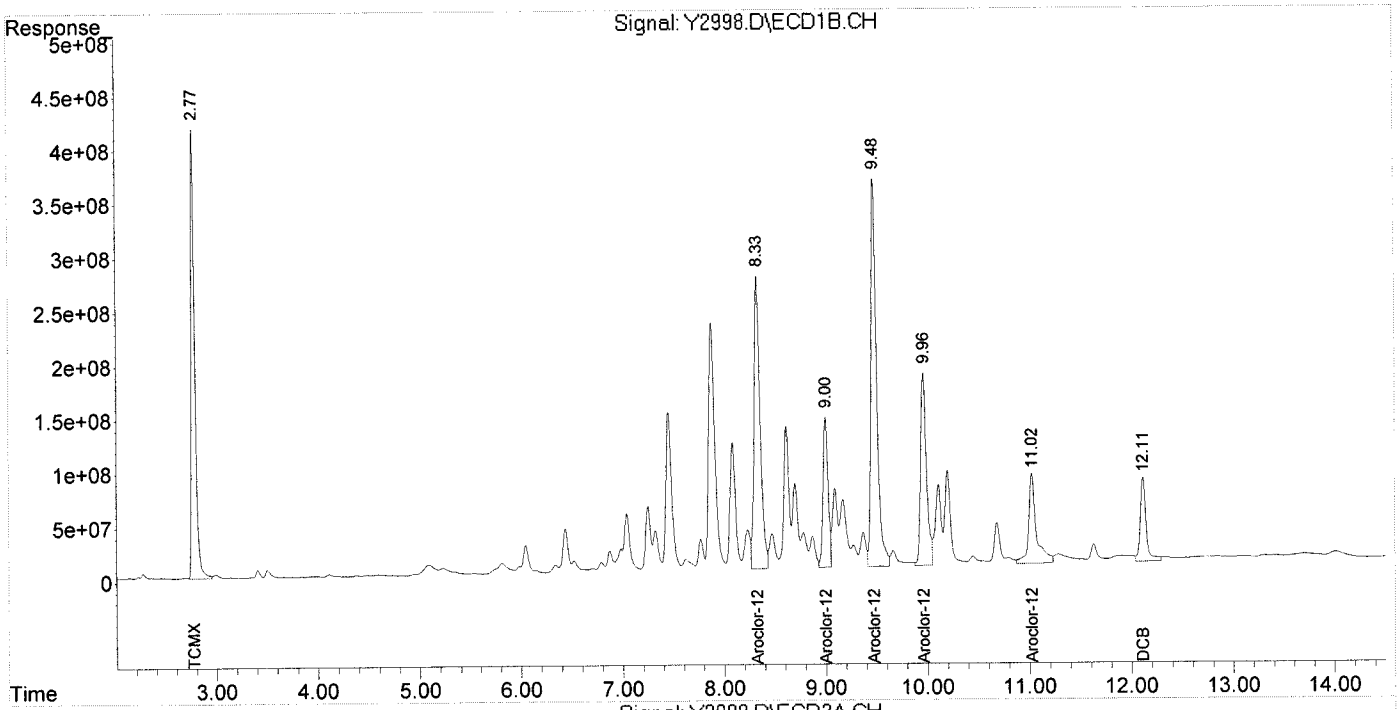
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

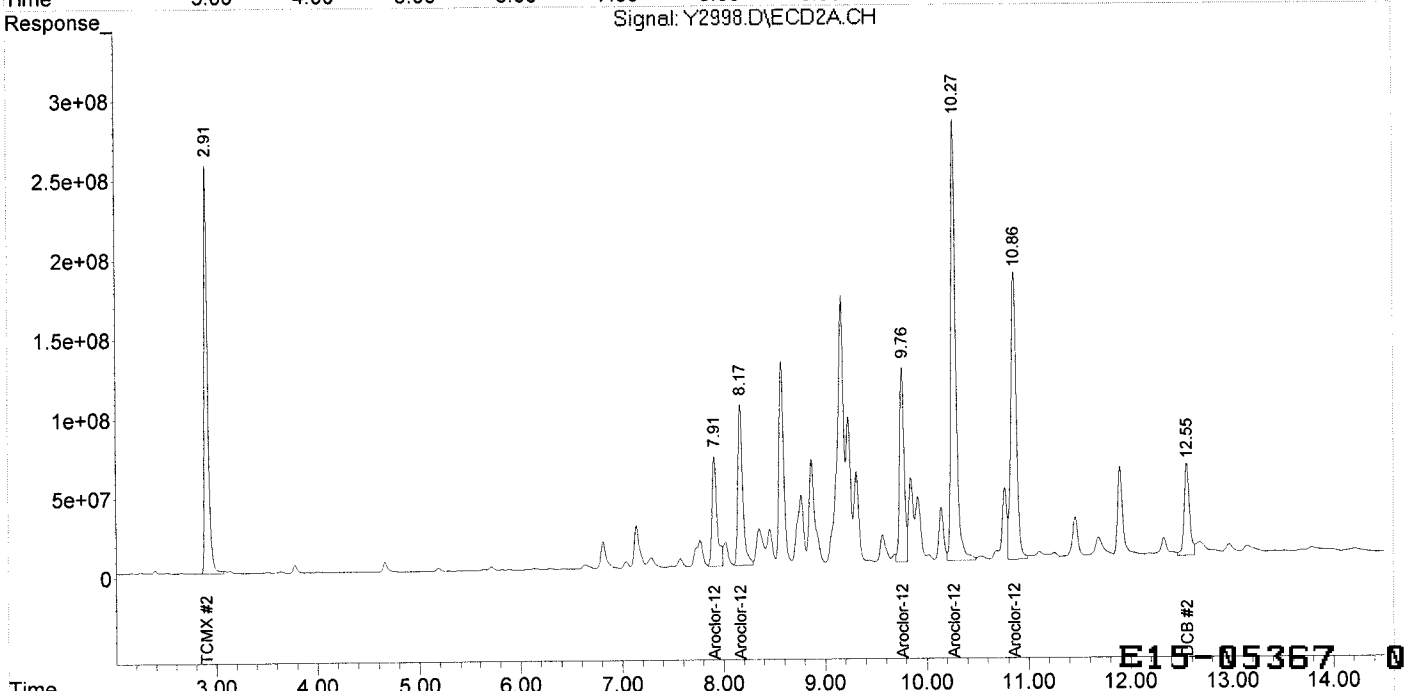
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y2998.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 12:31
Operator : JS
Sample : E-18_(0.,E15-05367-005,S,5.11g,14.4,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:24:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3050.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:00
Operator : JS
Sample : E-18_(0.,E15-05367-005DL,S,5.11g,14.4,20
Misc : 150701-08,07/01/15,06/23/15,10
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:25:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1419.1E6	696.4E6	21.307	20.094
Spiked Amount 200.000			Recovery	=	10.65%	10.05%
2) S DCB	12.11	12.56	293.5E6	204.4E6	14.331m	16.538m
Spiked Amount 200.000			Recovery	=	7.17%	8.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1354.3E6	272.8E6	327.023	262.149
34) L8 Aroclor-1260 {2}	9.01	8.17	570.4E6	366.5E6	242.163	240.905
35) L8 Aroclor-1260 {3}	9.48	9.77	1611.5E6	401.1E6	270.538	275.620
36) L8 Aroclor-1260 {4}	9.97	10.28	761.0E6	978.8E6	283.661	288.844
37) L8 Aroclor-1260 {5}	11.03	10.87	398.5E6	734.8E6	266.662	304.567
Sum Aroclor-1260			4695.6E6	2754.0E6	1390.046	1372.084
Average Aroclor-1260					278.009	274.417
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

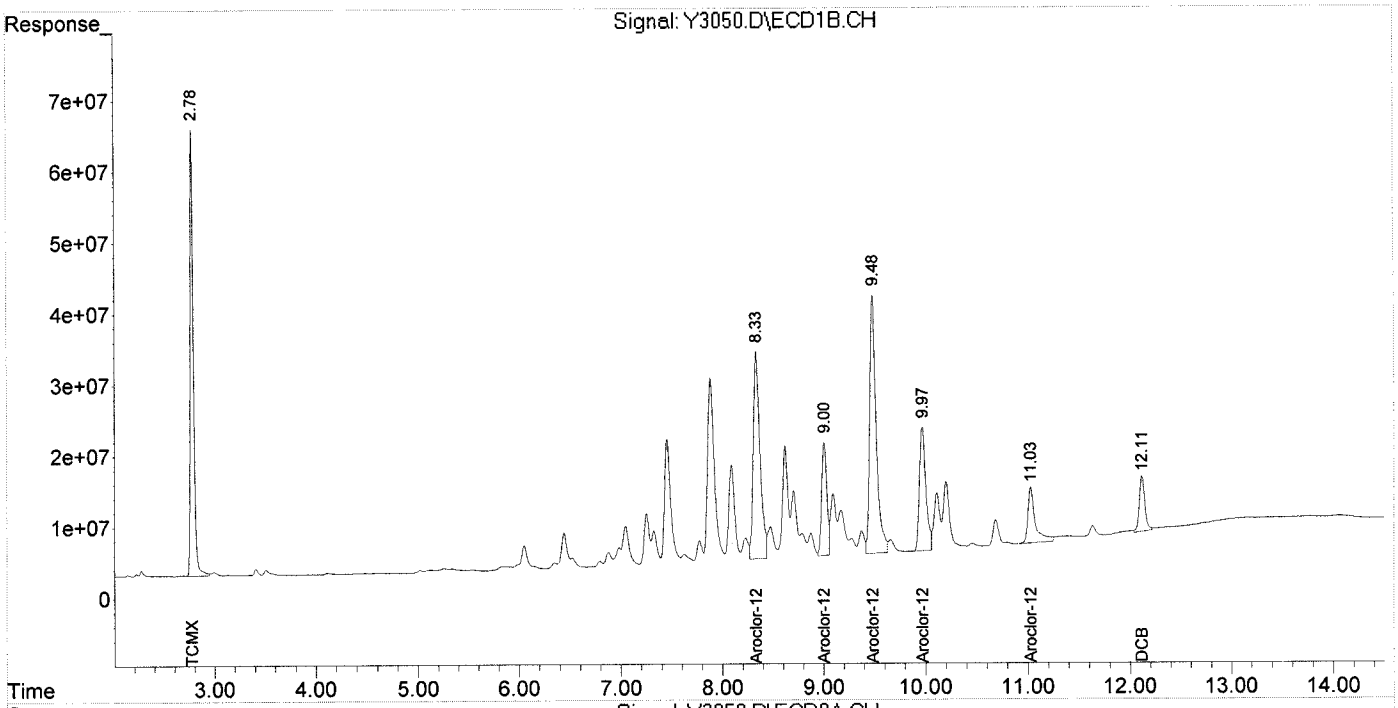
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

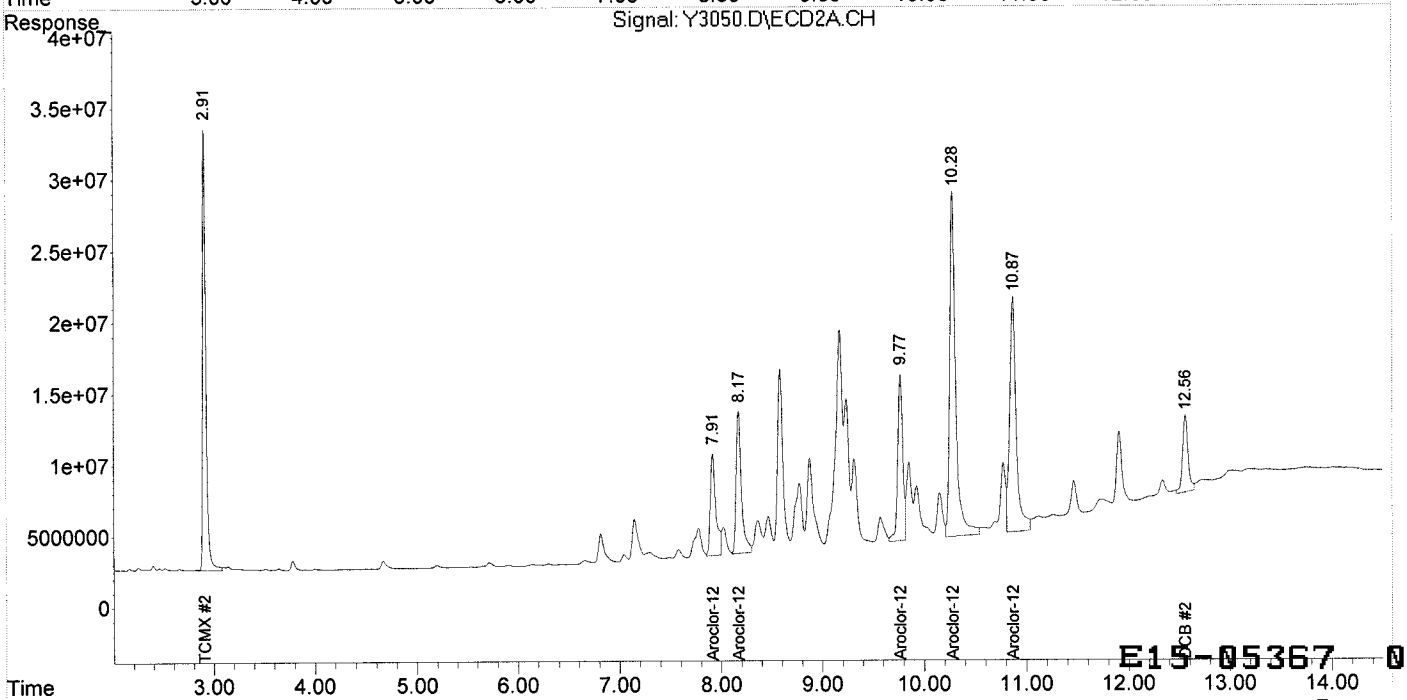
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3050.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:00
Operator : JS
Sample : E-18_(0.,E15-05367-005DL,S,5.11g,14.4,20
Misc : 150701-08,07/01/15,06/23/15,10
ALS Vial : 51 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:25:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y2999.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 12:48
Operator : JS
Sample : E-18_(2.,E15-05367-006,S,5.37g,6.90,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:23:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	12910.7E6	6372.3E6	193.845	183.867
Spiked Amount 200.000			Recovery	=	96.92%	91.93%
2) S DCB	12.11	12.56	2838.3E6	2740.8E6	138.571	221.749 #
Spiked Amount 200.000			Recovery	=	69.29%	110.87%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	891.6E6	174.0E6	215.303	167.205
34) L8 Aroclor-1260 {2}	9.00	8.17	368.8E6	239.7E6	156.571	157.577
35) L8 Aroclor-1260 {3}	9.48	9.77	1077.7E6	286.0E6	180.931	196.524
36) L8 Aroclor-1260 {4}	9.96	10.28	537.8E6	609.3E6	200.487	179.807
37) L8 Aroclor-1260 {5}	11.02	10.87	295.5E6	521.1E6	197.754	215.989
Sum Aroclor-1260			3171.5E6	1830.1E6	951.045	917.102
Average Aroclor-1260					190.209	183.420
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

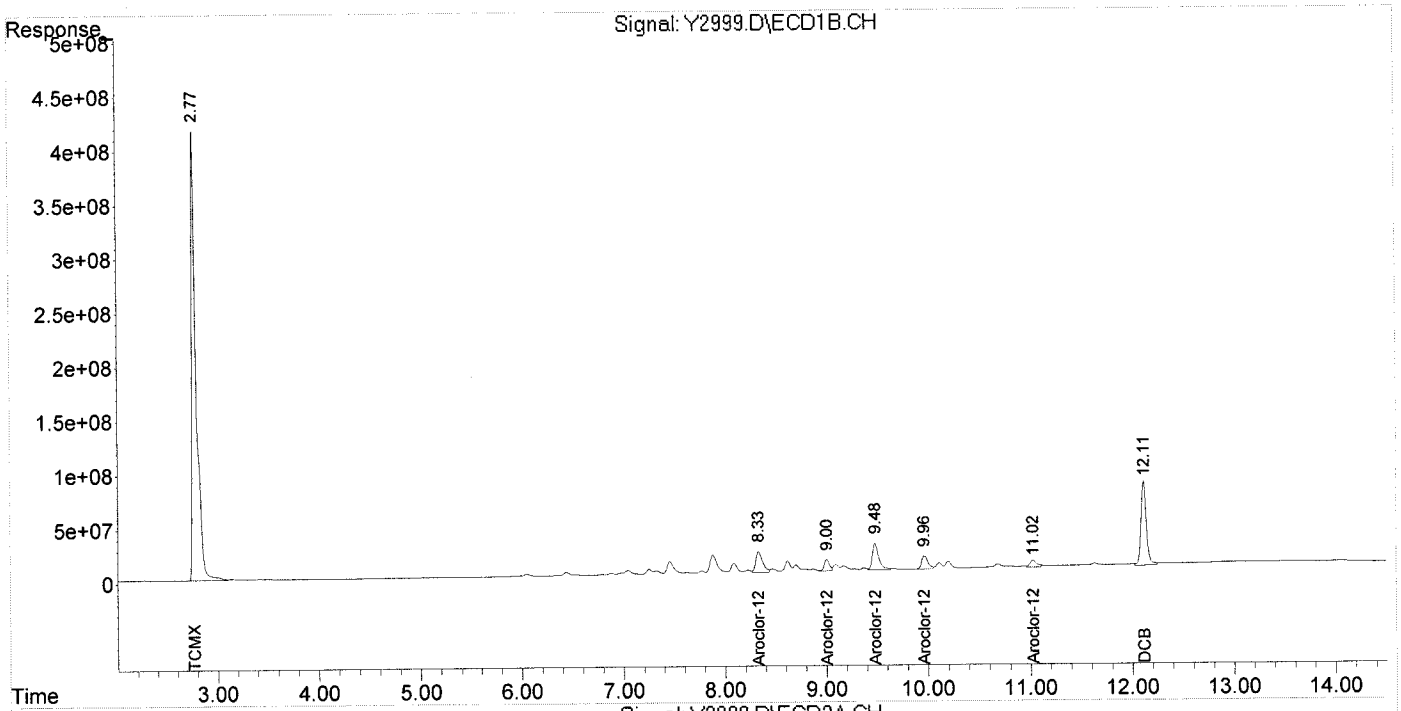
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

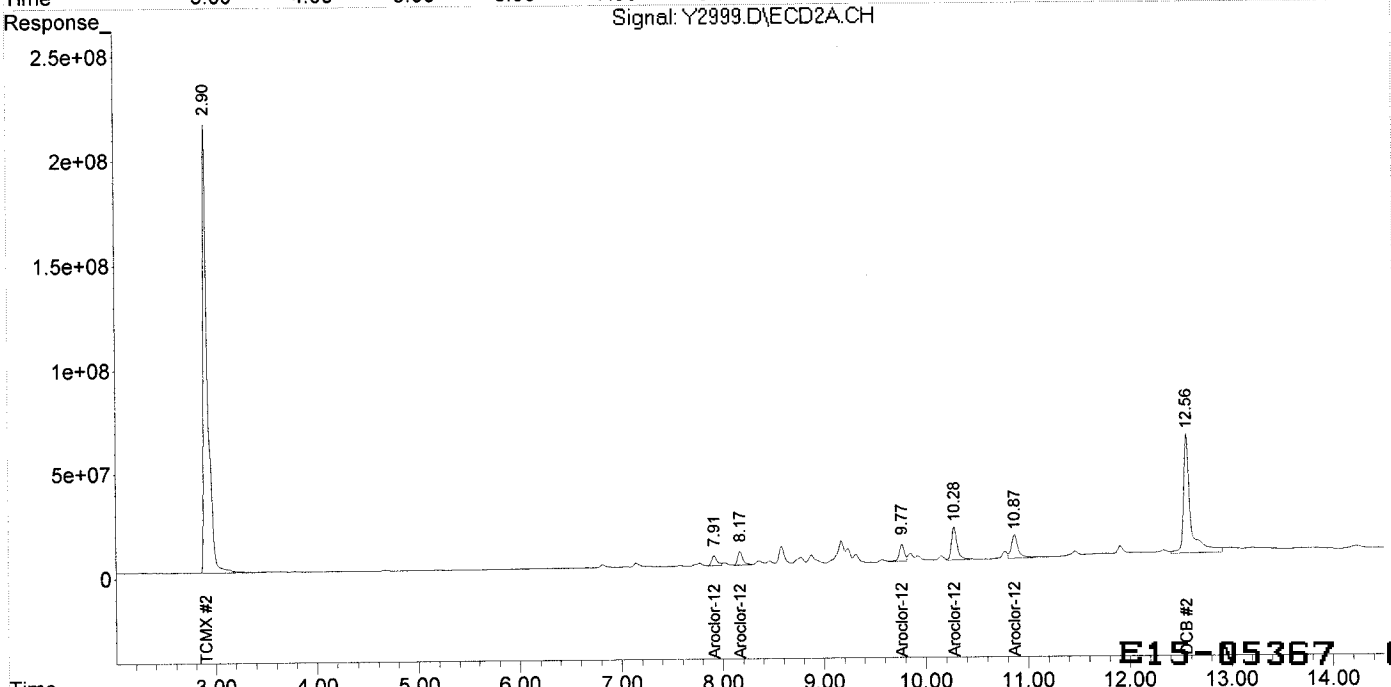
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y2999.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 12:48
Operator : JS
Sample : E-18_(2.,E15-05367-006,S,5.37g,6.90,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:23:16 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0455

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3133.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:17
Operator : JS
Sample : E-4_(0.5,E15-05367-007,S,30.26g,13.1,5
Misc : 150701-07,07/01/15,06/23/15,500
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:28:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	29813363	17325100	0.448	0.500m
Spiked Amount 200.000			Recovery	=	0.22%	0.25%
2) S DCB	12.12	12.56	11510253	6603826	0.562m	0.534m
Spiked Amount 200.000			Recovery	=	0.28%	0.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1655.6E6	263.9E6	399.781	253.649 #
34) L8 Aroclor-1260 {2}	9.00	8.17	804.0E6	385.8E6	341.374	253.616 #
35) L8 Aroclor-1260 {3}	9.49	9.77	2340.3E6	489.2E6	392.899	336.143
36) L8 Aroclor-1260 {4}	9.97	10.28	1159.8E6	1220.6E6	432.355	360.202
37) L8 Aroclor-1260 {5}	11.03	10.87	503.3E6	905.5E6	336.800	375.287
Sum Aroclor-1260			6463.2E6	3265.0E6	1903.208	1578.897
Average Aroclor-1260					380.642	315.779
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

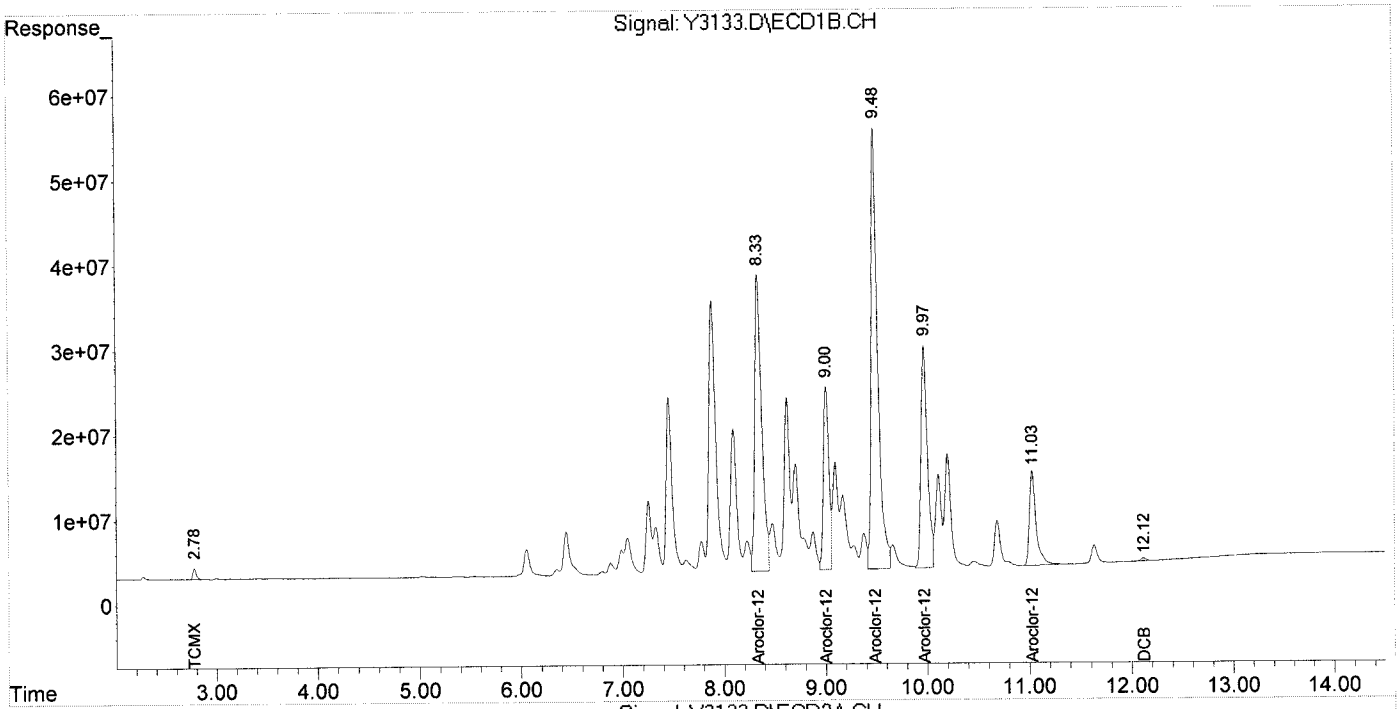
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

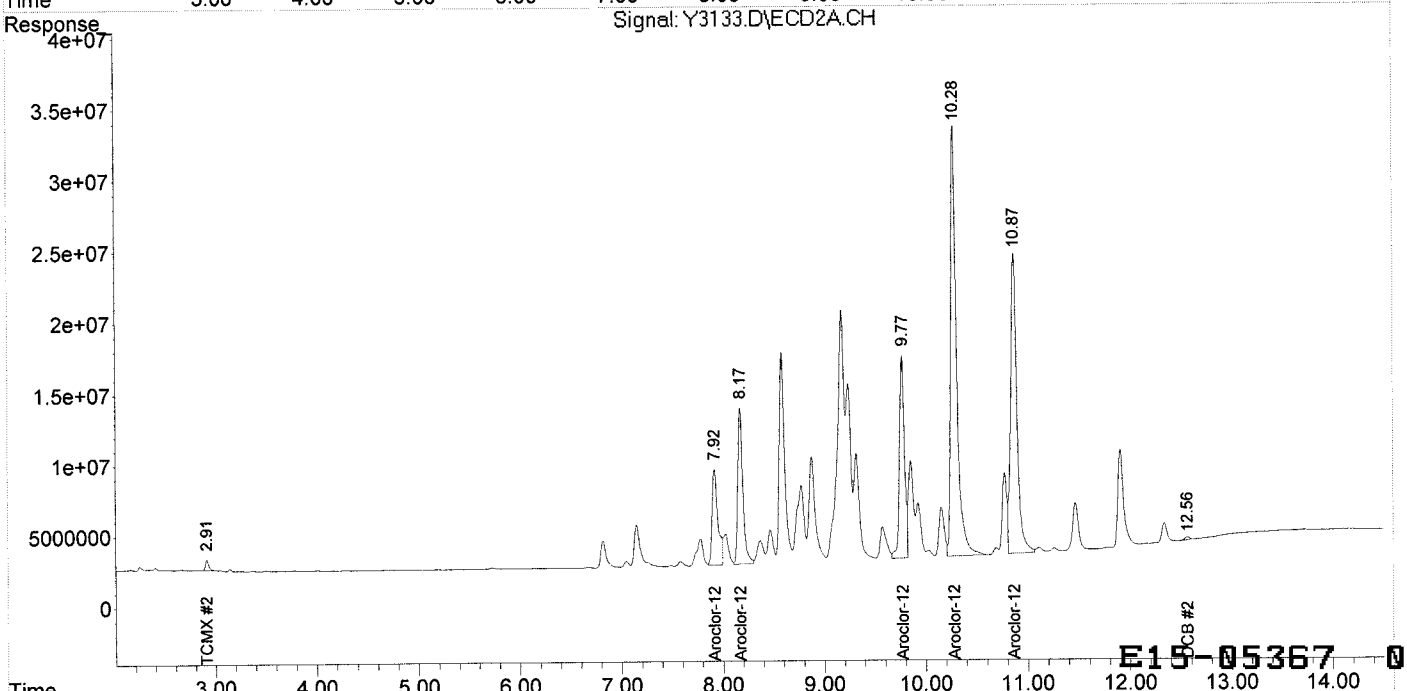
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3133.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:17
Operator : JS
Sample : E-4_(0.5,E15-05367-007,S,30.26g,13.1,5
Misc : 150701-07,07/01/15,06/23/15,500
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:28:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0457

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3081.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:34
Operator : JS
Sample : E-4_(2.0,E15-05367-008,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:07:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.92	8318.0E6	4417.3E6	124.889	127.457
Spiked Amount 200.000			Recovery	=	62.44%	63.73%
2) S DCB	12.12	12.56	3869.3E6	2479.7E6	188.909	200.625
Spiked Amount 200.000			Recovery	=	94.45%	100.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	22100.4E6	3363.5E6	5336.520	3232.757 #
34) L8 Aroclor-1260 {2}	9.00	8.17	10900.3E6	5452.4E6	4627.913	3584.220
35) L8 Aroclor-1260 {3}	9.48	9.77	32770.8E6	8114.4E6	5501.648	5575.400
36) L8 Aroclor-1260 {4}	9.97	10.27	17151.3E6	22558.5E6	6393.501	6656.868
37) L8 Aroclor-1260 {5}	11.02	10.86	7927.2E6	16566.0E6	5304.361	6866.122 #
Sum Aroclor-1260			90850.1E6	56054.9E6	27163.943	25915.366
Average Aroclor-1260					5432.789	5183.073
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

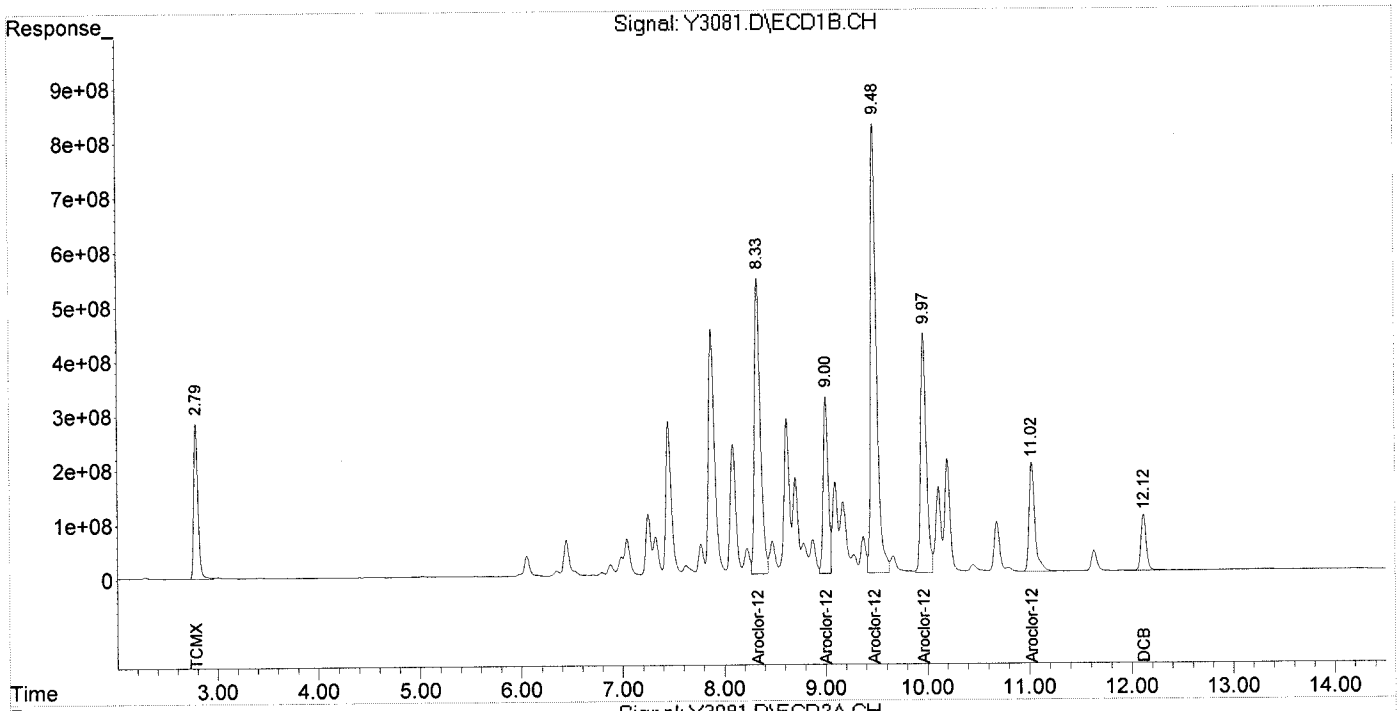
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

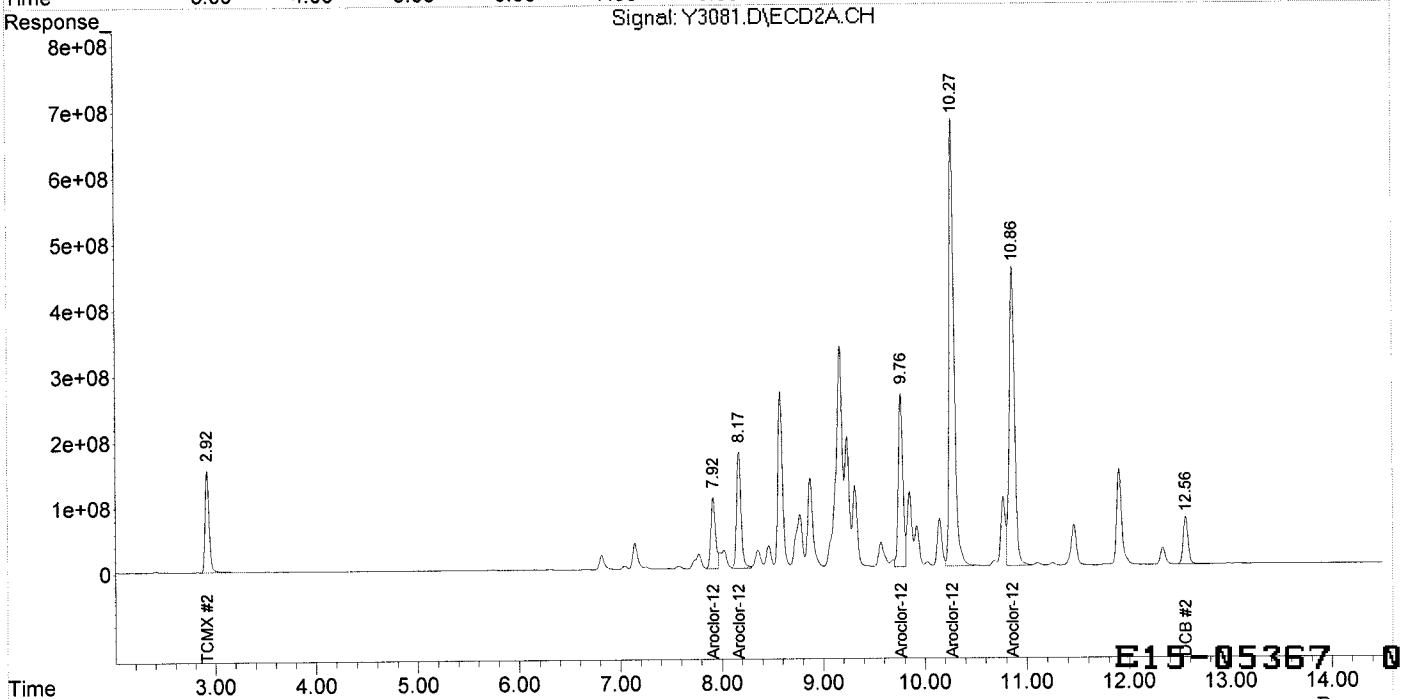
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3081.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:34
Operator : JS
Sample : E-4_(2.0,E15-05367-008,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:07:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3134.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:34
Operator : JS
Sample : E-4_(2.0,E15-05367-008DL,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,10
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:29:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1140.1E6	550.4E6	17.118	15.882
Spiked Amount 200.000			Recovery =		8.56%	7.94%
2) S DCB	12.12	12.56	399.8E6	252.5E6	19.520	20.429
Spiked Amount 200.000			Recovery =		9.76%	10.21%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	2753.9E6	432.8E6	664.971	415.984 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1348.1E6	630.4E6	572.378	414.418 #
35) L8 Aroclor-1260 {3}	9.48	9.77	3926.1E6	841.6E6	659.125	578.233
36) L8 Aroclor-1260 {4}	9.97	10.28	1968.2E6	2101.6E6	733.677	620.171
37) L8 Aroclor-1260 {5}	11.03	10.87	858.6E6	1551.3E6	574.537	642.964
Sum Aroclor-1260			10854.9E6	5557.7E6	3204.688	2671.770
Average Aroclor-1260					640.938	534.354
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

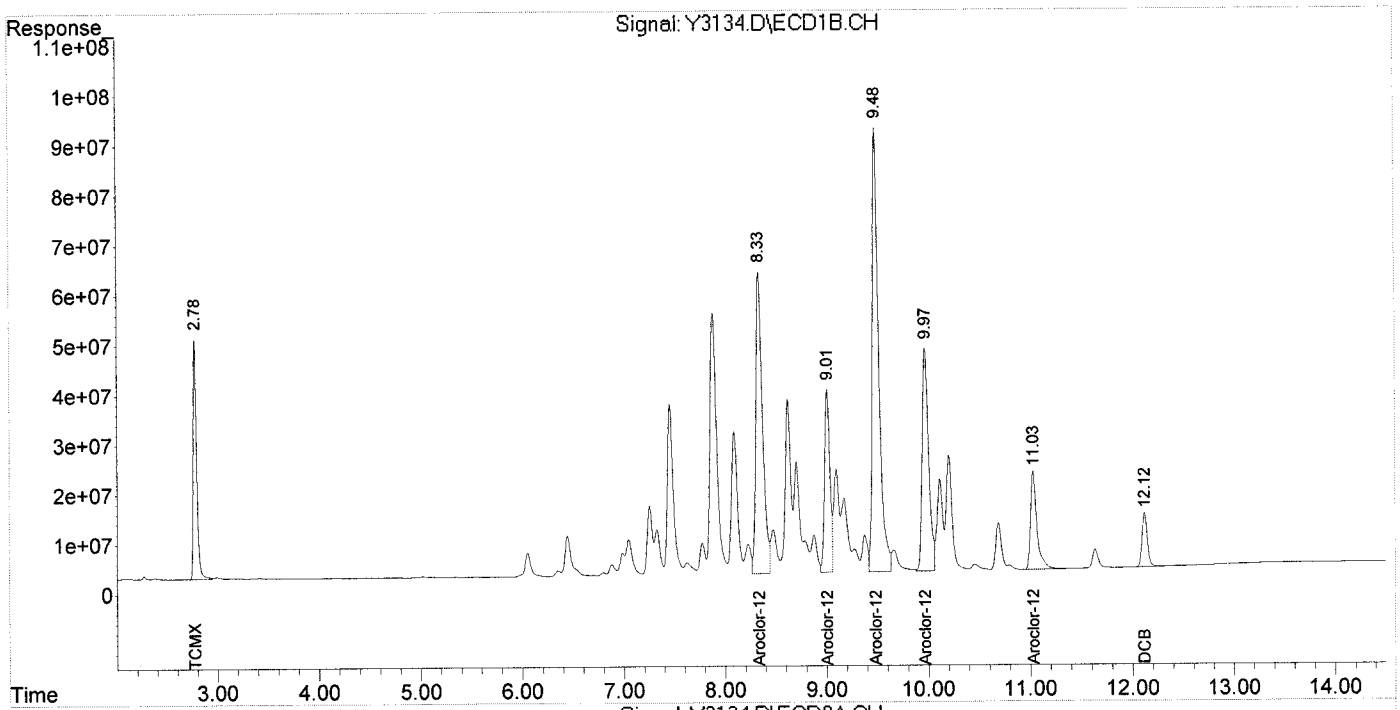
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

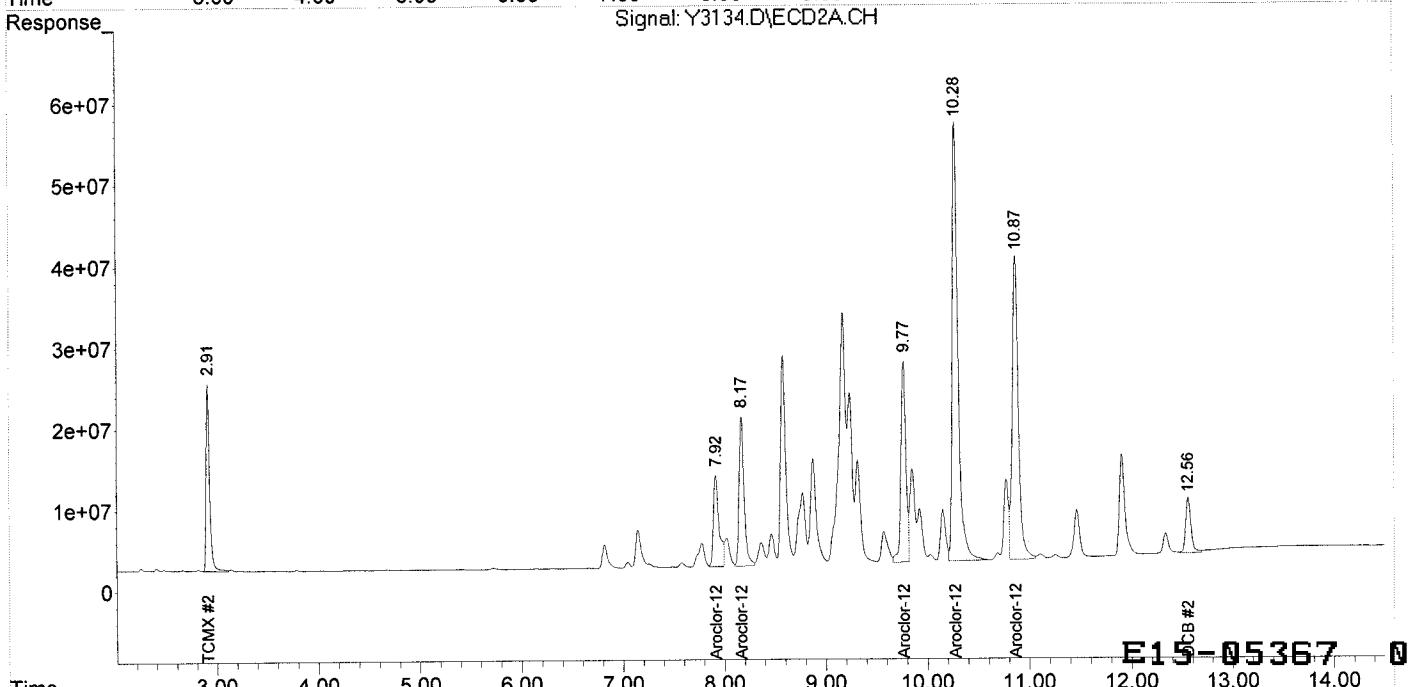
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3134.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:34
Operator : JS
Sample : E-4_(2.0,E15-05367-008DL,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,10
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:29:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0461

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3082.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:51
Operator : JS
Sample : E-4_(3.0,E15-05367-009,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:08:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	10137.6E6	5234.5E6	152.208	151.036
Spiked Amount 200.000			Recovery	=	76.10%	75.52%
2) S DCB	12.11	12.56	3487.0E6	2309.8E6	170.246	186.879
Spiked Amount 200.000			Recovery	=	85.12%	93.44%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	19214.7E6	2843.5E6	4639.702	2732.959 #
34) L8 Aroclor-1260 {2}	9.00	8.17	9599.6E6	4603.1E6	4075.672	3025.876 #
35) L8 Aroclor-1260 {3}	9.48	9.76	27384.1E6	6738.0E6	4597.322	4629.682
36) L8 Aroclor-1260 {4}	9.96	10.27	14630.5E6	17904.9E6	5453.820	5283.627
37) L8 Aroclor-1260 {5}	11.02	10.86	6581.2E6	13262.0E6	4403.719	5496.683
Sum Aroclor-1260			77410.1E6	45351.5E6	23170.234	21168.827
Average Aroclor-1260					4634.047	4233.765
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

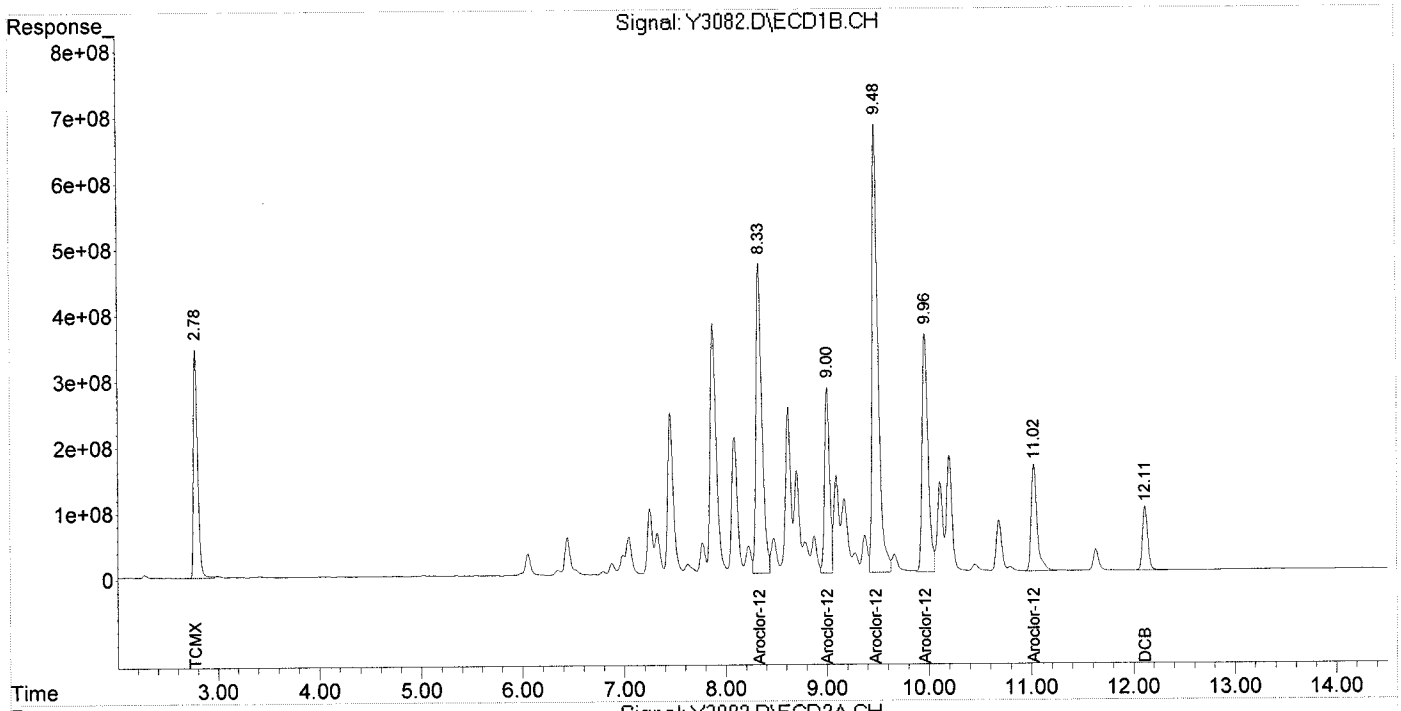
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

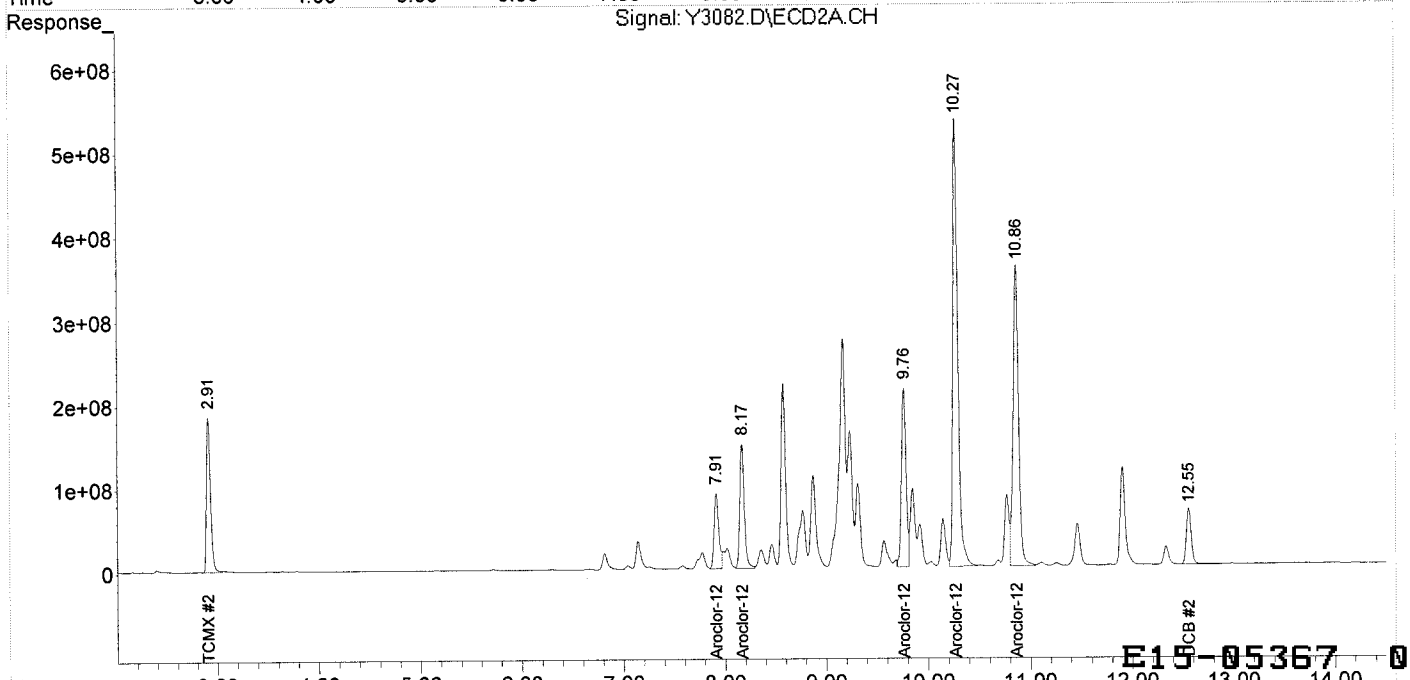
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3082.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:51
Operator : JS
Sample : E-4_(3.0,E15-05367-009,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:08:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3135.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:52
Operator : JS
Sample : E-4_(3.0,E15-05367-009DL,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,10
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:30:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1411.9E6	678.4E6	21.199	19.575
Spiked Amount 200.000			Recovery	=	10.60%	9.79%
2) S DCB	12.12	12.56	371.8E6	242.7E6	18.151	19.634m
Spiked Amount 200.000			Recovery	=	9.08%	9.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	2341.1E6	380.5E6	565.289	365.692 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1171.6E6	557.3E6	497.424	366.380 #
35) L8 Aroclor-1260 {3}	9.48	9.77	3241.5E6	723.3E6	544.190	497.004
36) L8 Aroclor-1260 {4}	9.97	10.28	1624.9E6	1755.5E6	605.697	518.044
37) L8 Aroclor-1260 {5}	11.03	10.87	715.7E6	1305.6E6	478.890	541.137
Sum Aroclor-1260			9094.7E6	4722.3E6	2691.491	2288.258
Average Aroclor-1260					538.298	457.652
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

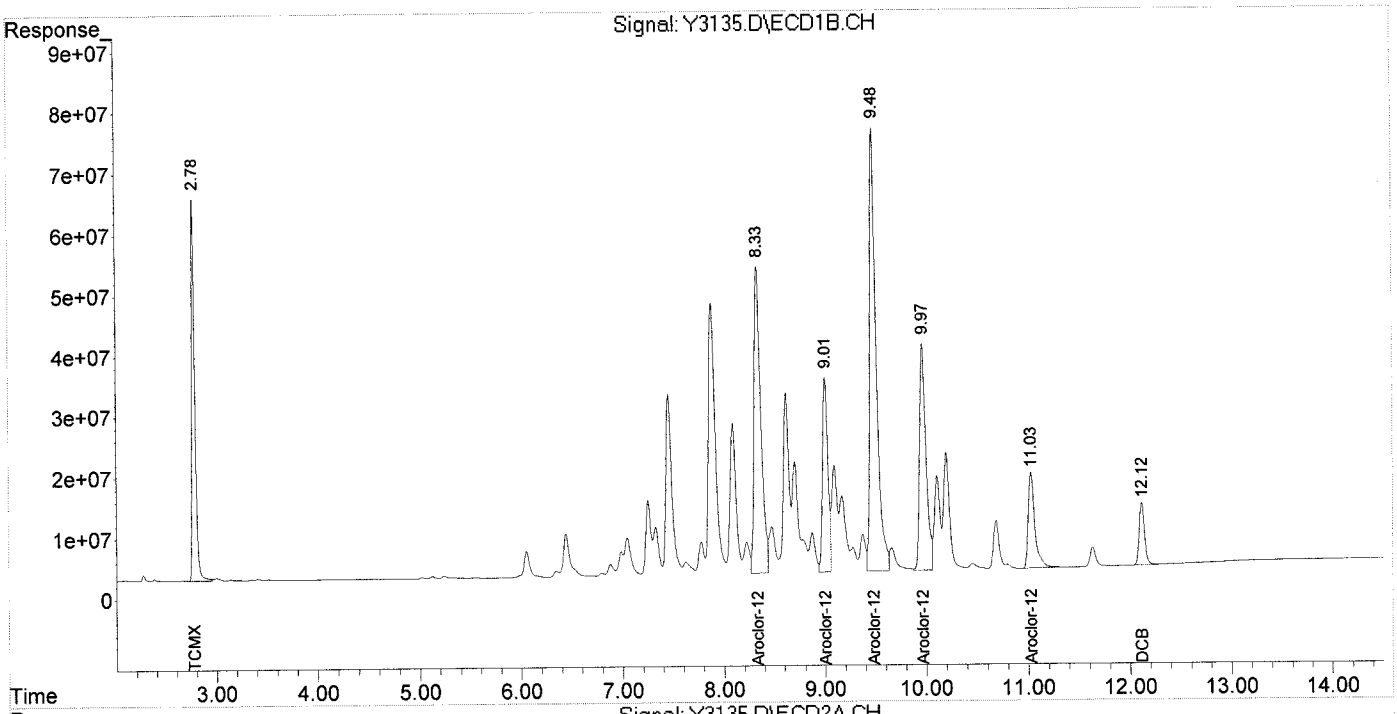
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

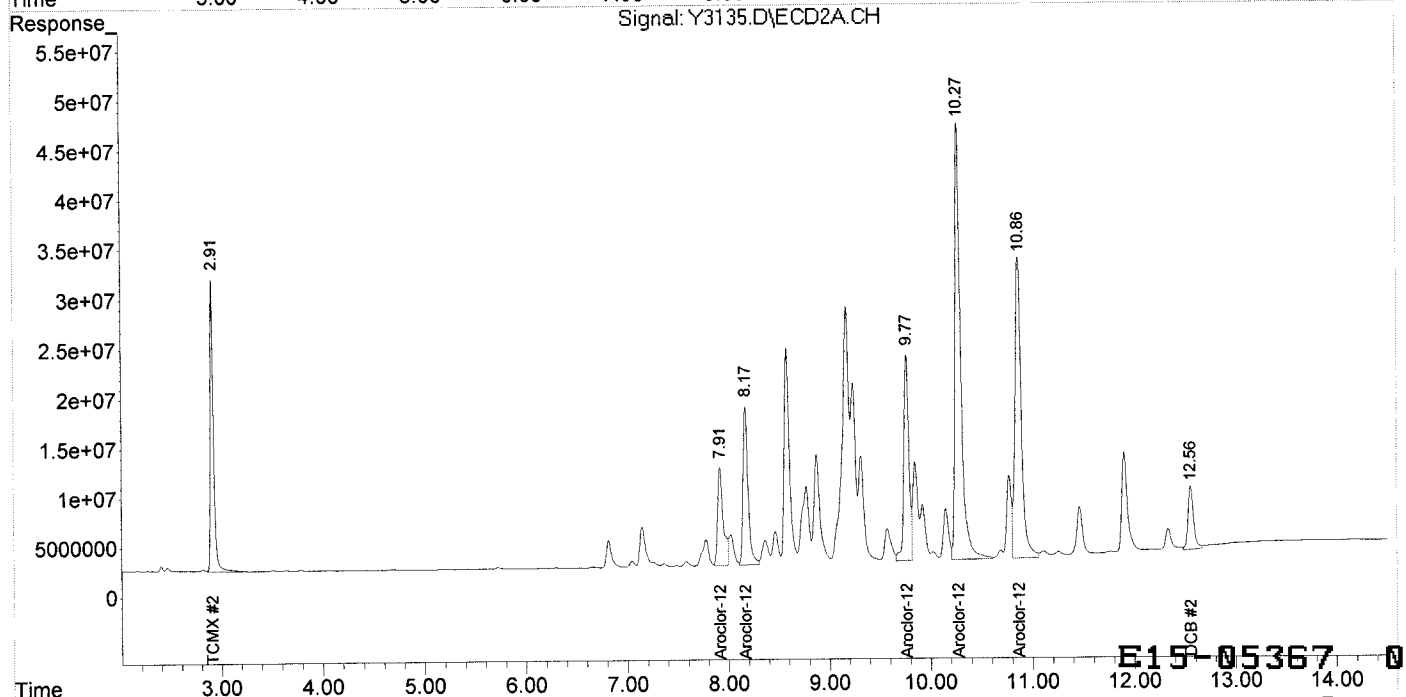
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3135.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 14:52
Operator : JS
Sample : E-4_(3.0,E15-05367-009DL,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,10
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:30:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3083.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:09
Operator : JS
Sample : E-4_(4.5,E15-05367-010,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:08:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10576.8E6	5473.4E6	158.803	157.930
Spiked Amount 200.000			Recovery	=	79.40%	78.97%
2) S DCB	12.12	12.56	3288.9E6	2116.8E6	160.572	171.257
Spiked Amount 200.000			Recovery	=	80.29%	85.63%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	46709.8E6	7221.3E6	11278.861	6940.588 #
34) L8 Aroclor-1260 {2}	9.00	8.17	22780.8E6	11887.0E6	9671.993	7814.074
35) L8 Aroclor-1260 {3}	9.48	9.77	67270.1E6	16915.1E6	11293.480	11622.385
36) L8 Aroclor-1260 {4}	9.96	10.27	35064.1E6	46611.3E6	13070.846	13754.673
37) L8 Aroclor-1260 {5}	11.03	10.86	15554.0E6	33625.8E6	10407.657	13936.879 #
Sum Aroclor-1260			187378.7E6	116260.5E6	55722.836	54068.599
Average Aroclor-1260					11144.567	10813.720
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

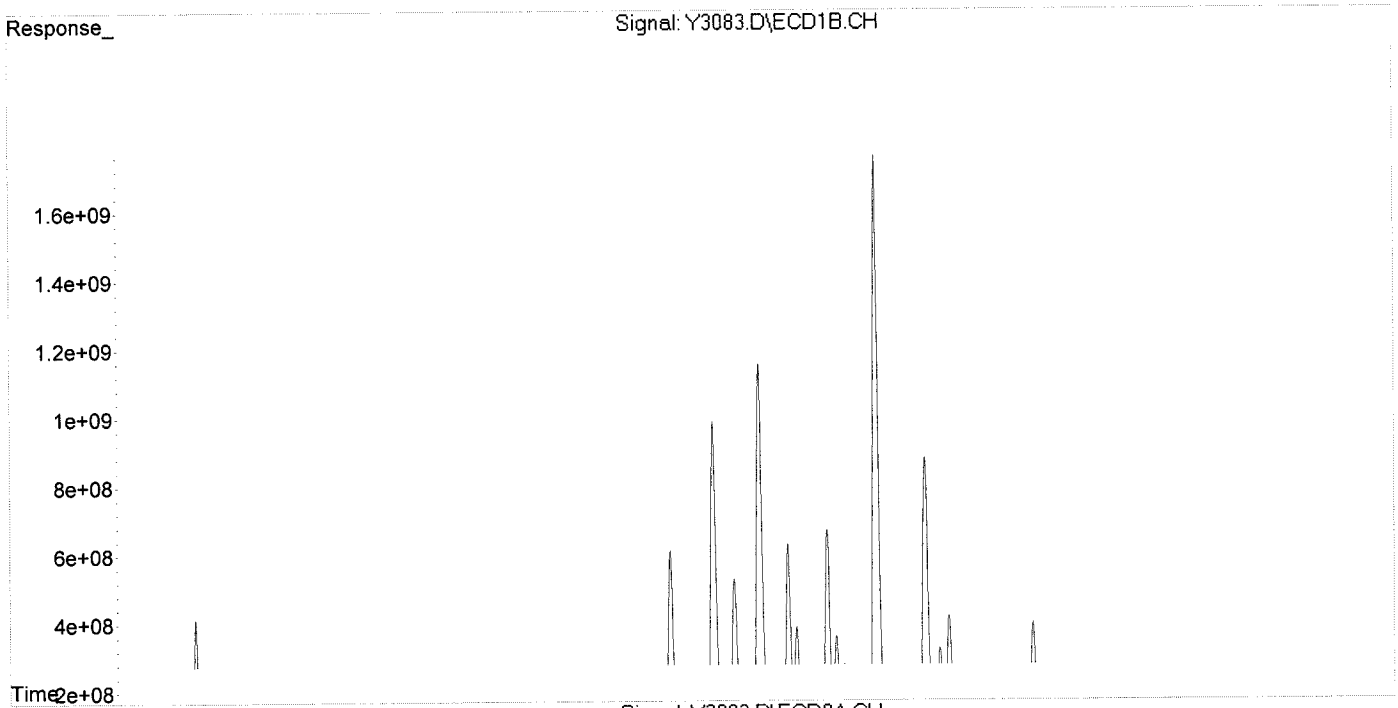
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

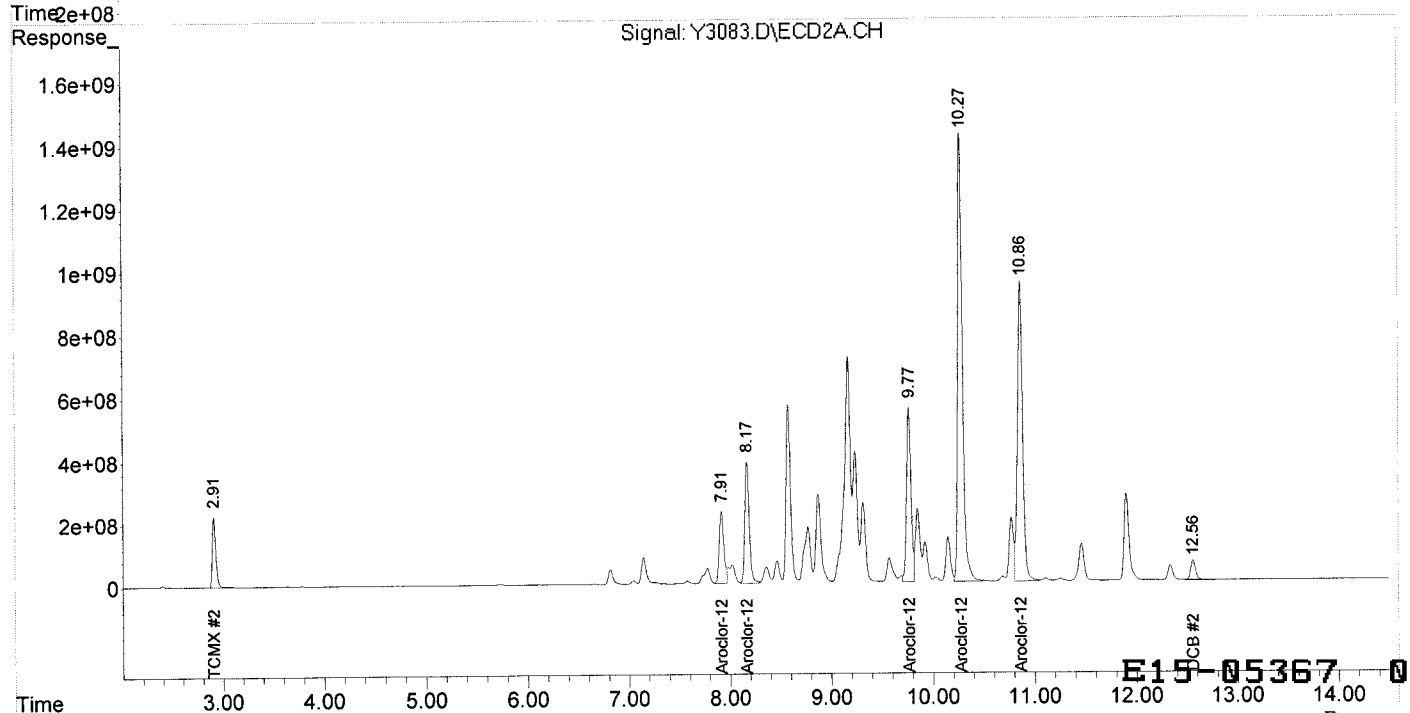
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3083.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:09
Operator : JS
Sample : E-4_(4.5,E15-05367-010,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:08:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367-0467

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3136.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:09
Operator : JS
Sample : E-4_(4.5,E15-05367-010DL,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:30:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	724.6E6	351.9E6	10.879	10.155
Spiked Amount 200.000			Recovery	=	5.44%	5.08%
2) S DCB	12.12	12.56	251.3E6	166.0E6	12.270	13.428
Spiked Amount 200.000			Recovery	=	6.13%	6.71%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	3493.5E6	533.6E6	843.573	512.863 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1801.2E6	800.0E6	764.726	525.916 #
35) L8 Aroclor-1260 {3}	9.48	9.77	5135.0E6	1078.9E6	862.070	741.283
36) L8 Aroclor-1260 {4}	9.97	10.28	2615.5E6	2694.5E6	974.962	795.136
37) L8 Aroclor-1260 {5}	11.03	10.87	1167.2E6	2027.4E6	780.991	840.302
Sum Aroclor-1260			14212.3E6	7134.4E6	4226.322	3415.500
Average Aroclor-1260					845.264	683.100
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

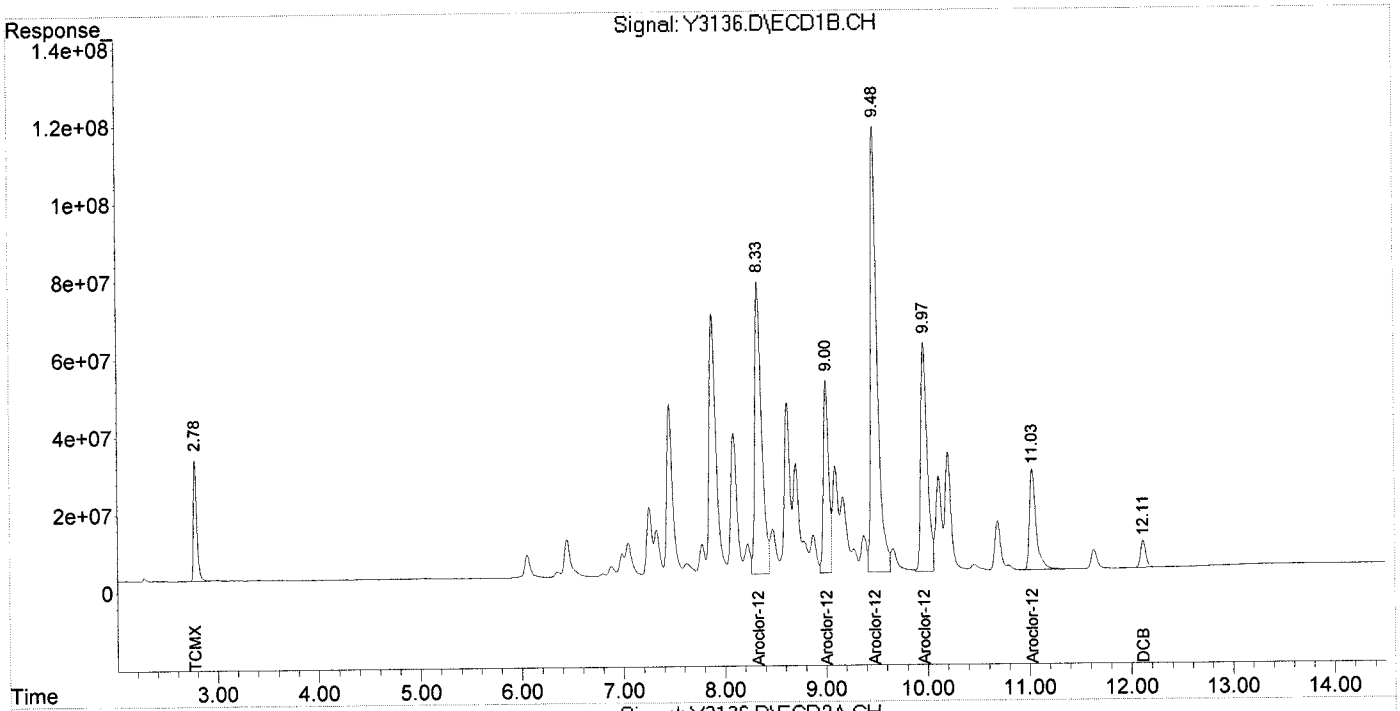
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

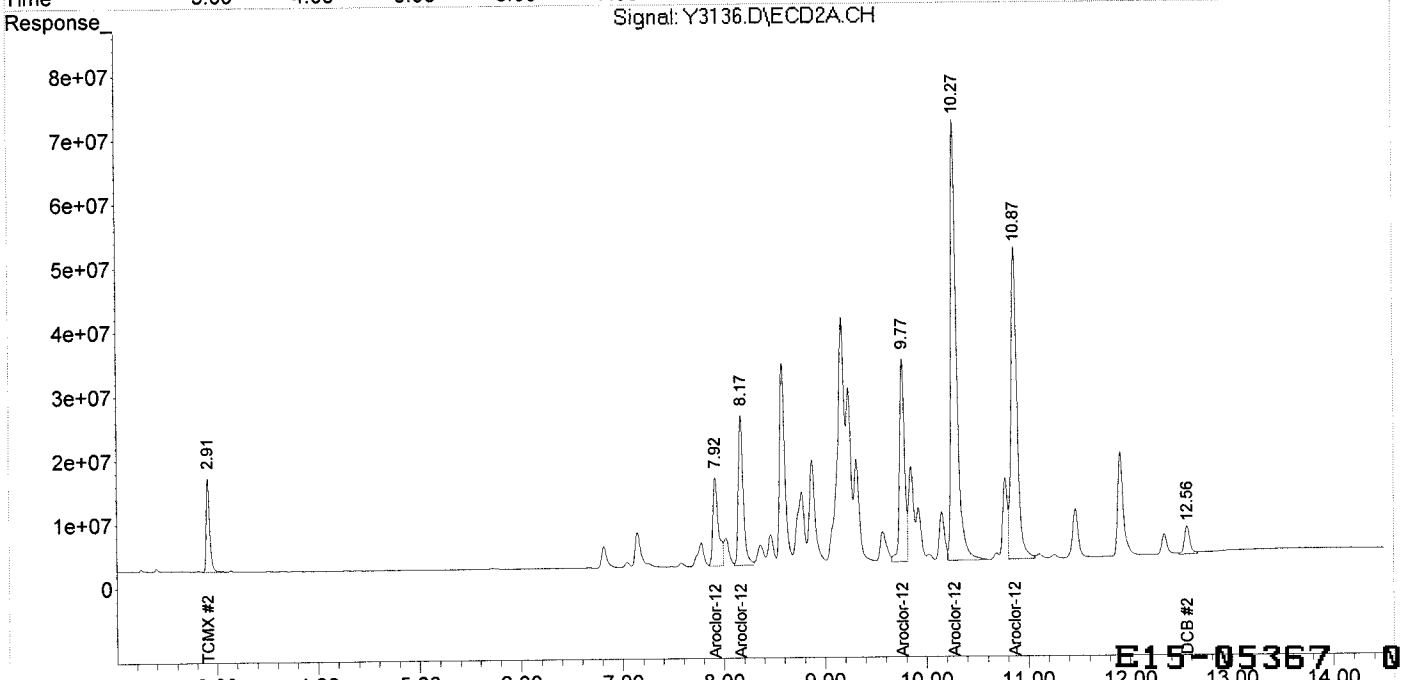
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3136.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:09
Operator : JS
Sample : E-4_(4.5,E15-05367-010DL,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:30:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3000.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:05
Operator : JS
Sample : E-11_(0.,E15-05367-011,S,5.48g,18.4,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:22:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	10326.8E6	6170.7E6	155.048	178.051
Spiked Amount 200.000			Recovery	=	77.52%	89.03%
2) S DCB	12.11	12.55	3412.5E6	2120.9E6	166.609	171.593
Spiked Amount 200.000			Recovery	=	83.30%	85.80%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.91	20063.3E6	3030.3E6	4844.608	2912.501 #
34) L8 Aroclor-1260 {2}	9.00	8.17	8777.9E6	5937.2E6	3726.804	3902.918
35) L8 Aroclor-1260 {3}	9.48	9.76	27379.8E6	7077.0E6	4596.603	4862.640
36) L8 Aroclor-1260 {4}	9.96	10.27	14524.2E6	19195.0E6	5414.180	5664.323
37) L8 Aroclor-1260 {5}	11.02	10.86	7873.6E6	13779.4E6	5268.497	5711.155
Sum Aroclor-1260			78618.8E6	49019.0E6	23850.692	23053.538
Average Aroclor-1260					4770.138	4610.708
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

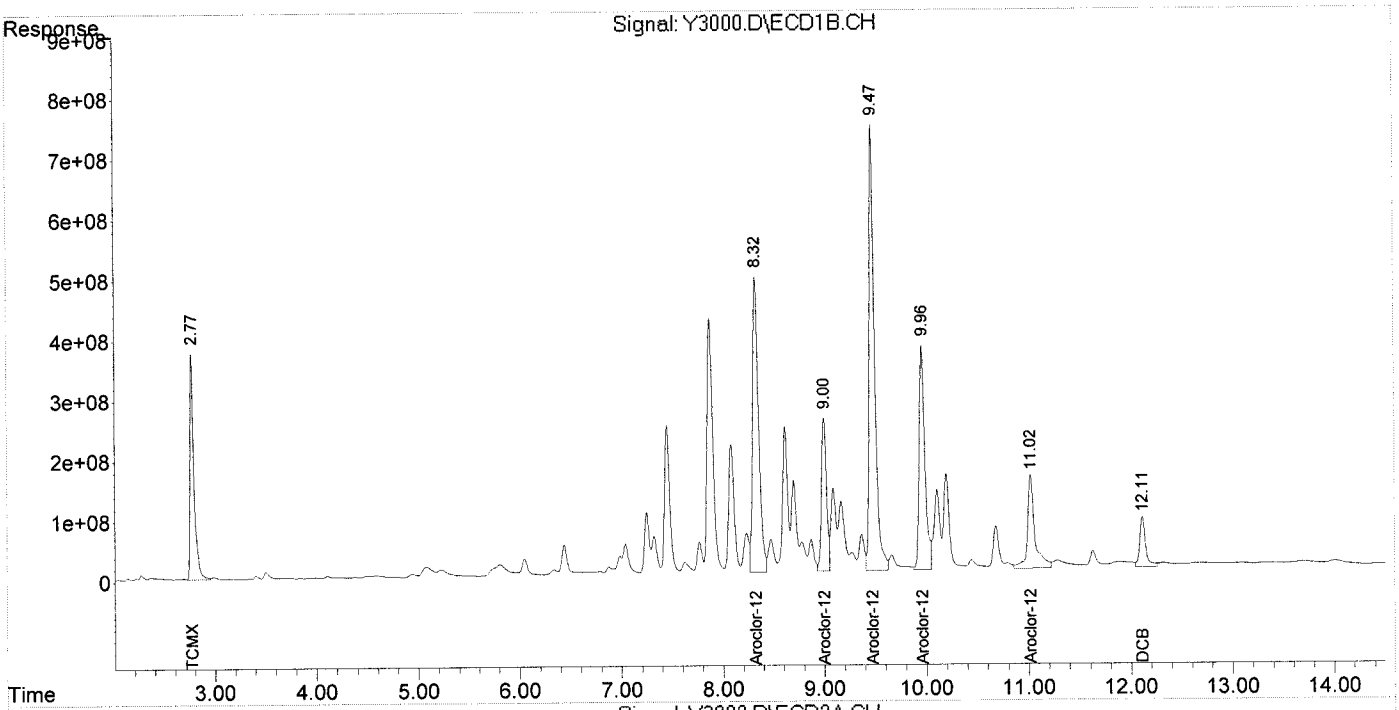
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

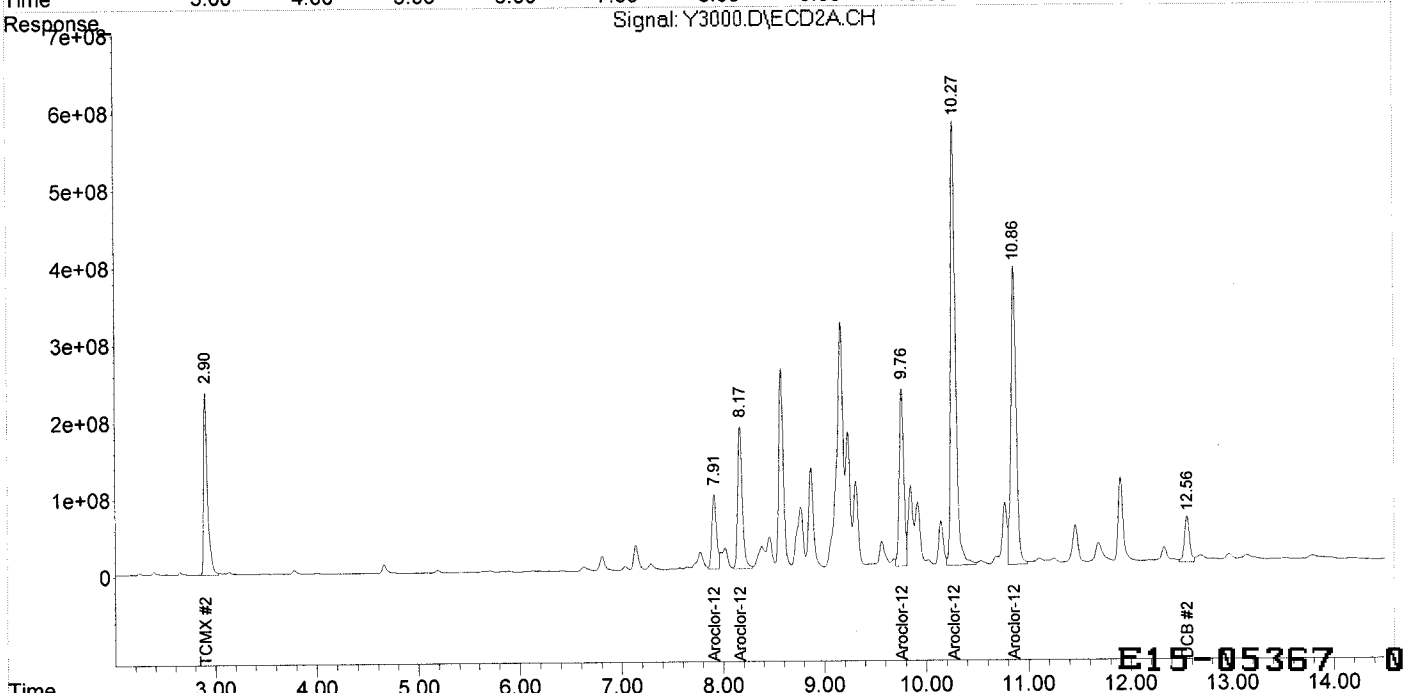
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3000.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:05
Operator : JS
Sample : E-11_(0.,E15-05367-011,S,5.48g,18.4,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:22:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0471

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3051.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:17
Operator : JS
Sample : E-11_(0.,E15-05367-011DL,S,5.48g,18.4,20
Misc : 150701-08,07/01/15,06/23/15,10
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:26:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1335.3E6	667.5E6	20.049	19.261
Spiked Amount 200.000			Recovery	=	10.02%	9.63%
2) S DCB	12.11	12.56	293.1E6	221.1E6	14.309m	17.892m#
Spiked Amount 200.000			Recovery	=	7.15%	8.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	2444.8E6	367.0E6	590.346	352.779 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1030.2E6	603.1E6	437.370	396.474
35) L8 Aroclor-1260 {3}	9.48	9.77	2972.4E6	671.0E6	499.019	461.021
36) L8 Aroclor-1260 {4}	9.97	10.28	1457.5E6	1686.7E6	543.327	497.730
37) L8 Aroclor-1260 {5}	11.02	10.87	653.3E6	1225.3E6	437.124	507.830
Sum Aroclor-1260			8558.2E6	4553.1E6	2507.186	2215.834
Average Aroclor-1260					501.437	443.167
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

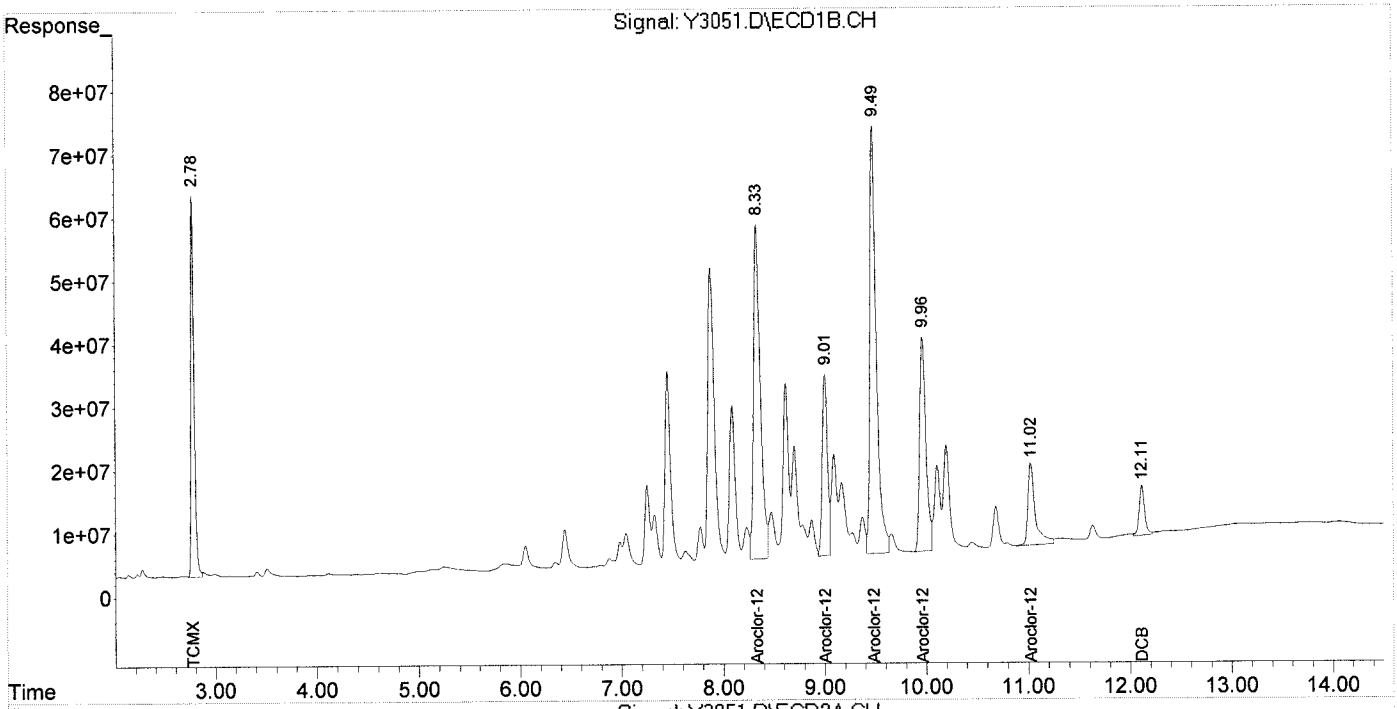
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

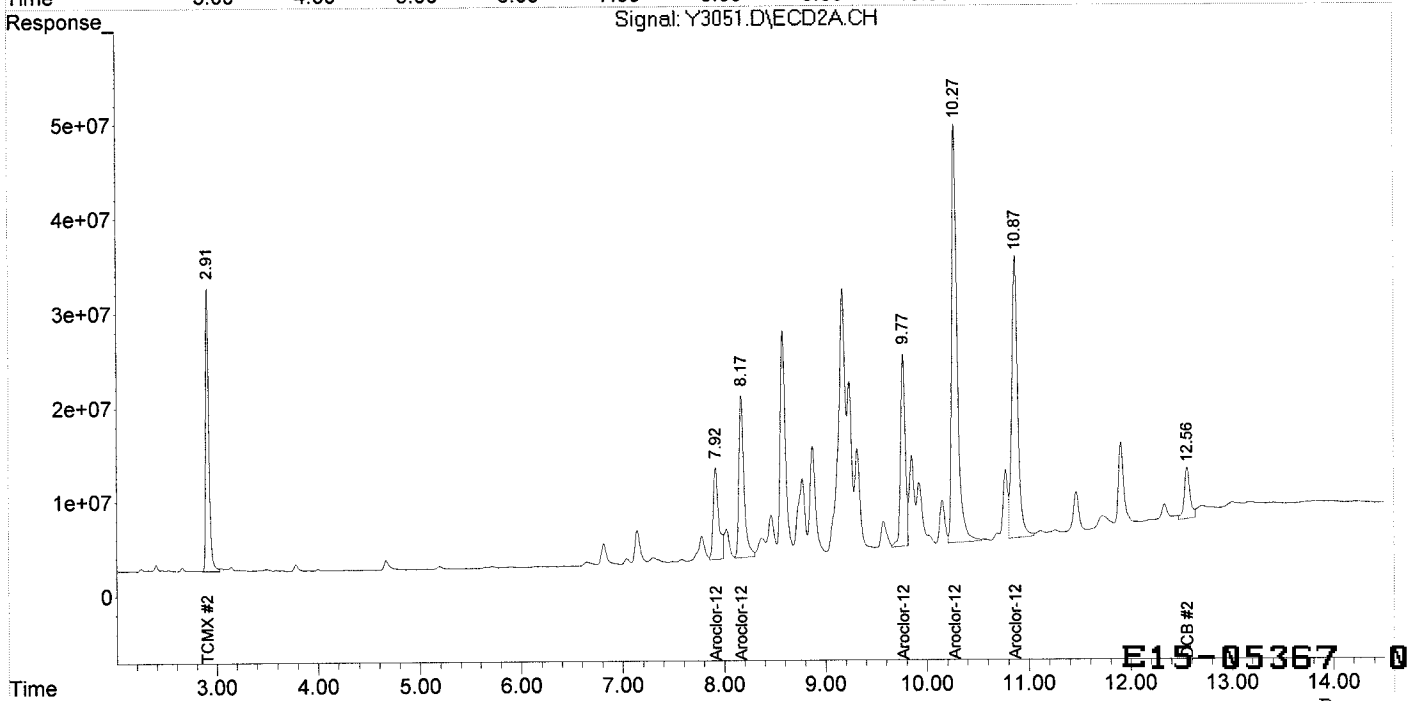
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3051.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:17
Operator : JS
Sample : E-11_(0.,E15-05367-011DL,S,5.48g,18.4,20
Misc : 150701-08,07/01/15,06/23/15,10
ALS Vial : 52 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:26:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3001.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:23
Operator : JS
Sample : E-11_(2.,E15-05367-012,S,5.84g,10.8,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:21:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12073.6E6	6284.7E6	181.276	181.341
Spiked Amount 200.000			Recovery	=	90.64%	90.67%
2) S DCB	12.11	12.56	2970.5E6	2919.5E6	145.027	236.202 #
Spiked Amount 200.000			Recovery	=	72.51%	118.10%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

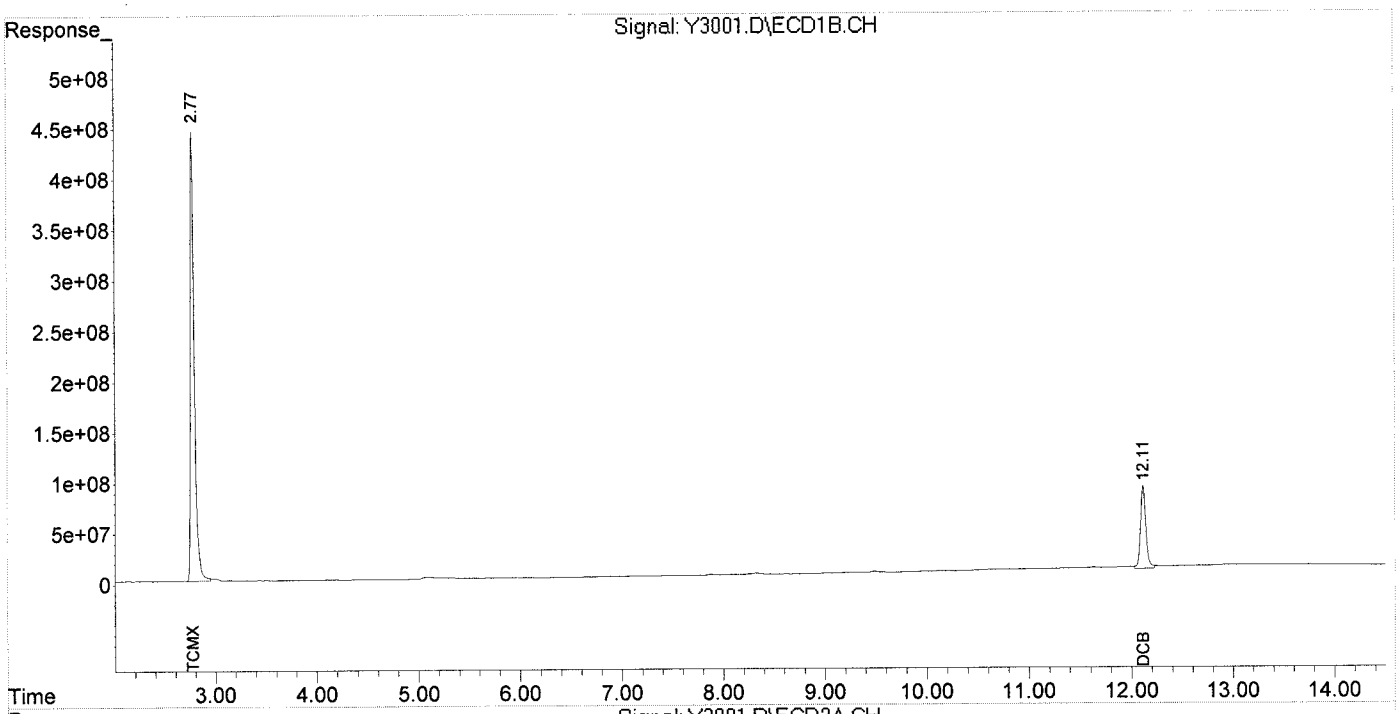
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

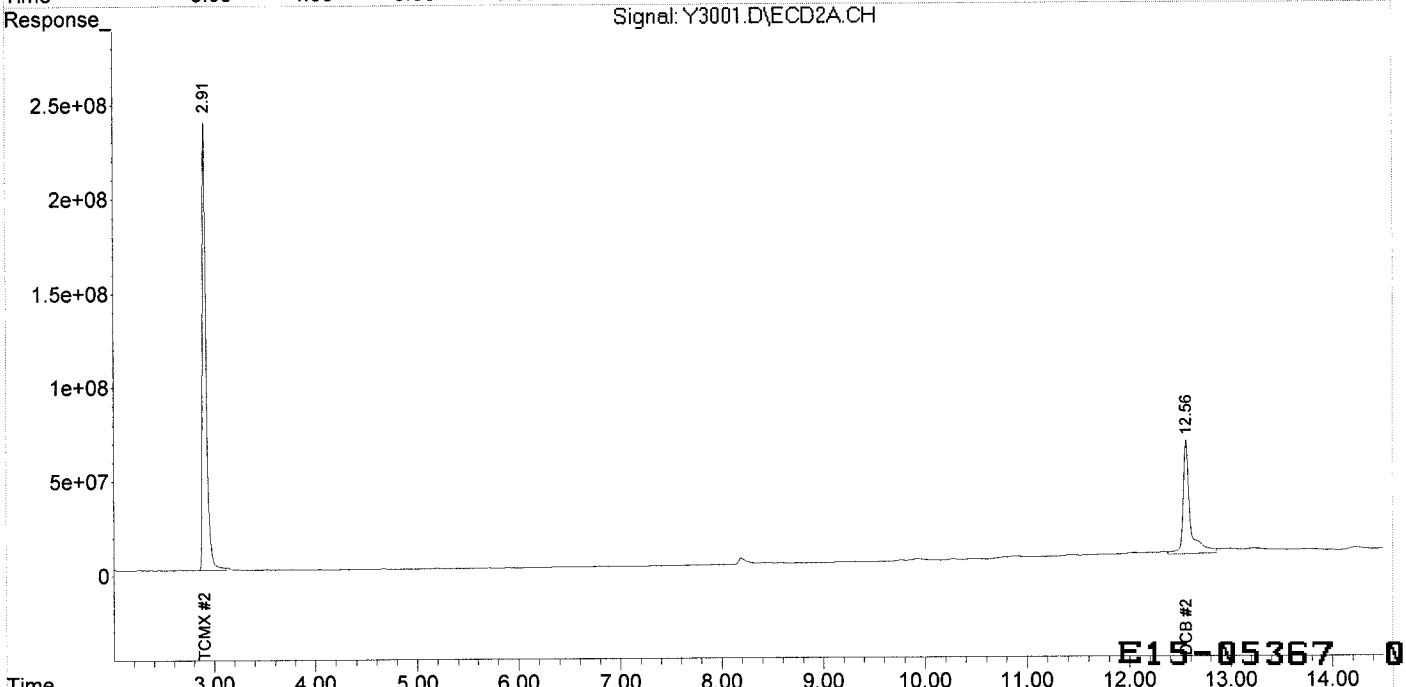
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3001.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:23
Operator : JS
Sample : E-11_(2.,E15-05367-012,S,5.84g,10.8,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:21:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3004.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:15
Operator : JS
Sample : E-12_(0.,E15-05367-013,S,5.27g,17.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:17:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	10151.3E6	6242.2E6	152.414	180.114
Spiked Amount 200.000			Recovery	=	76.21%	90.06%
2) S DCB	12.11	12.55	3646.1E6	2244.4E6	178.015	181.587
Spiked Amount 200.000			Recovery	=	89.01%	90.79%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.91	97524.7E6	21951.3E6	23548.964	21097.921
34) L8 Aroclor-1260 {2}	9.00	8.17	43514.7E6	34698.2E6	18474.947	22809.241
35) L8 Aroclor-1260 {3}	9.49	9.76	107174.7E6	41256.4E6	17992.773	28347.329 #
36) L8 Aroclor-1260 {4}	9.96	10.29	71497.9E6	89538.9E6	26652.259	26422.317
37) L8 Aroclor-1260 {5}	11.02	10.86	30776.4E6	77262.9E6	20593.510	32023.114 #
Sum Aroclor-1260			350488.3E6	264707.6E6	107262.453	130699.923
Average Aroclor-1260					21452.491	26139.985
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

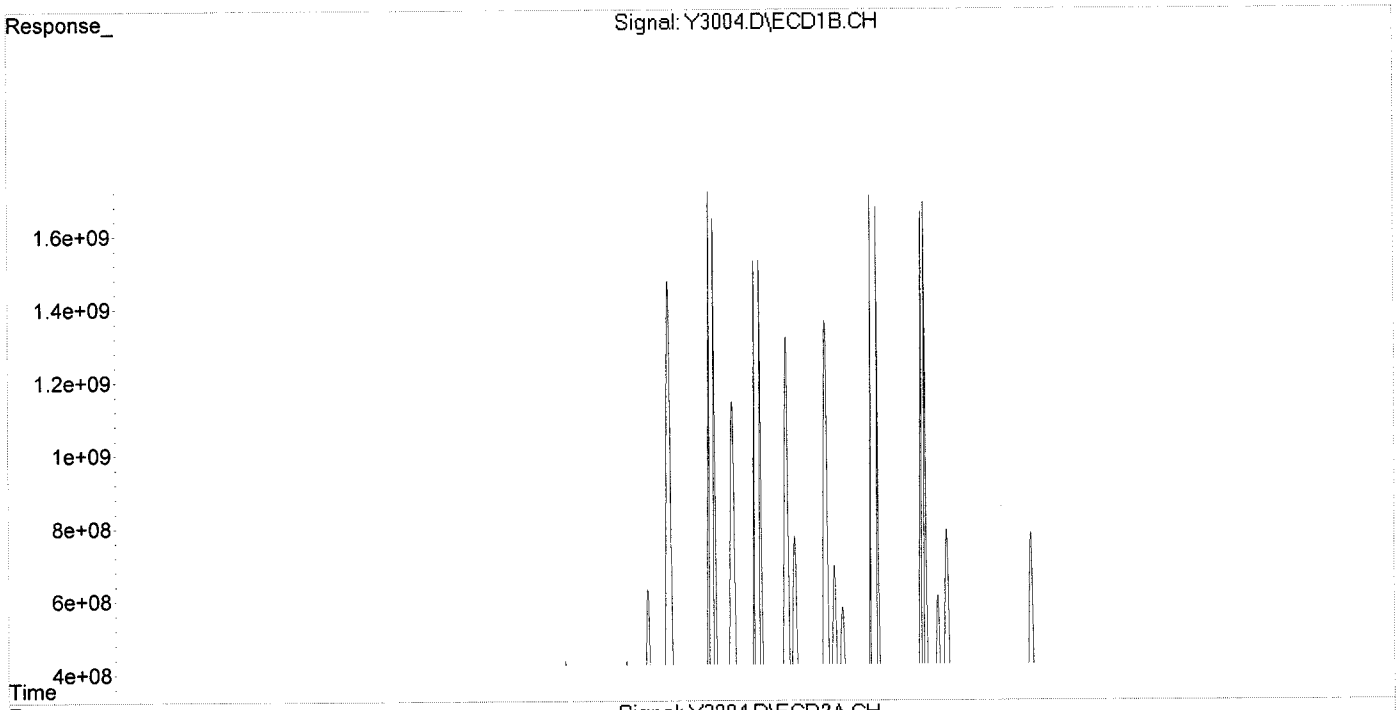
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

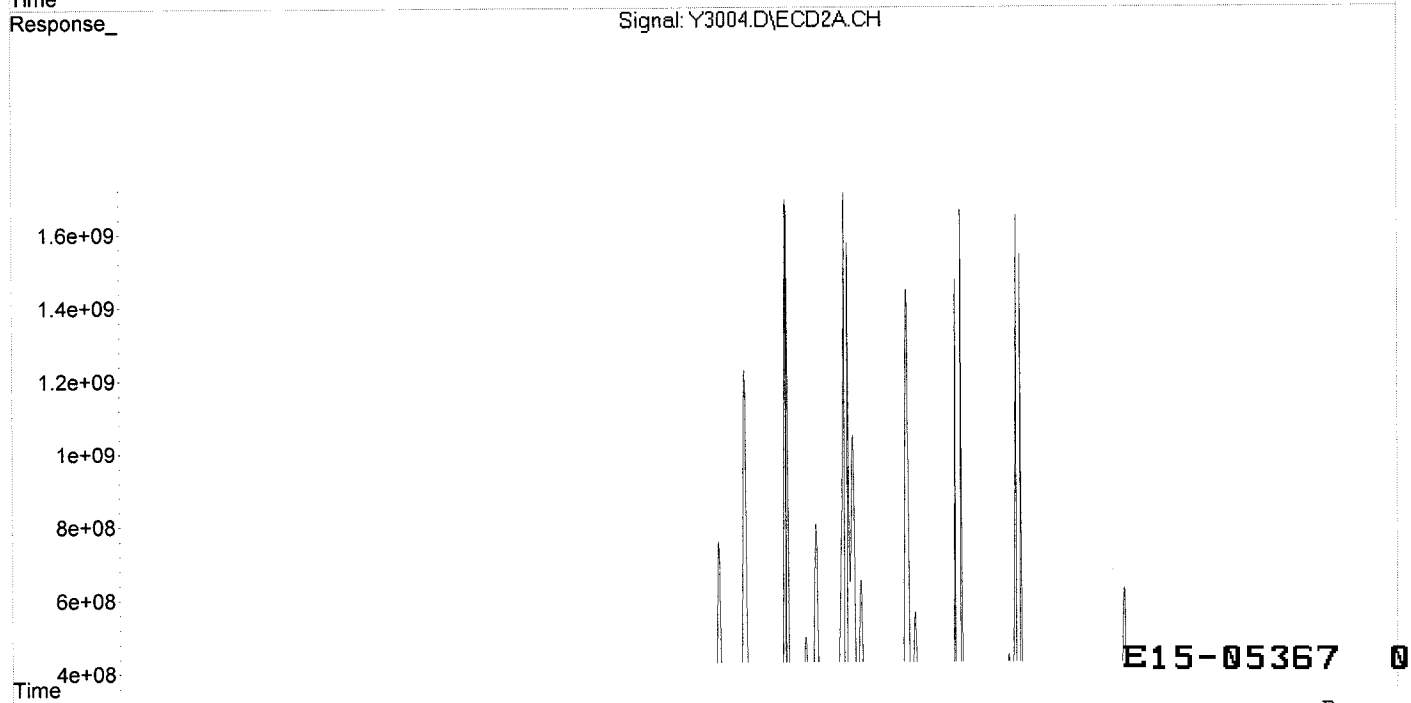
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3004.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:15
Operator : JS
Sample : E-12_(0.,E15-05367-013,S,5.27g,17.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:17:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

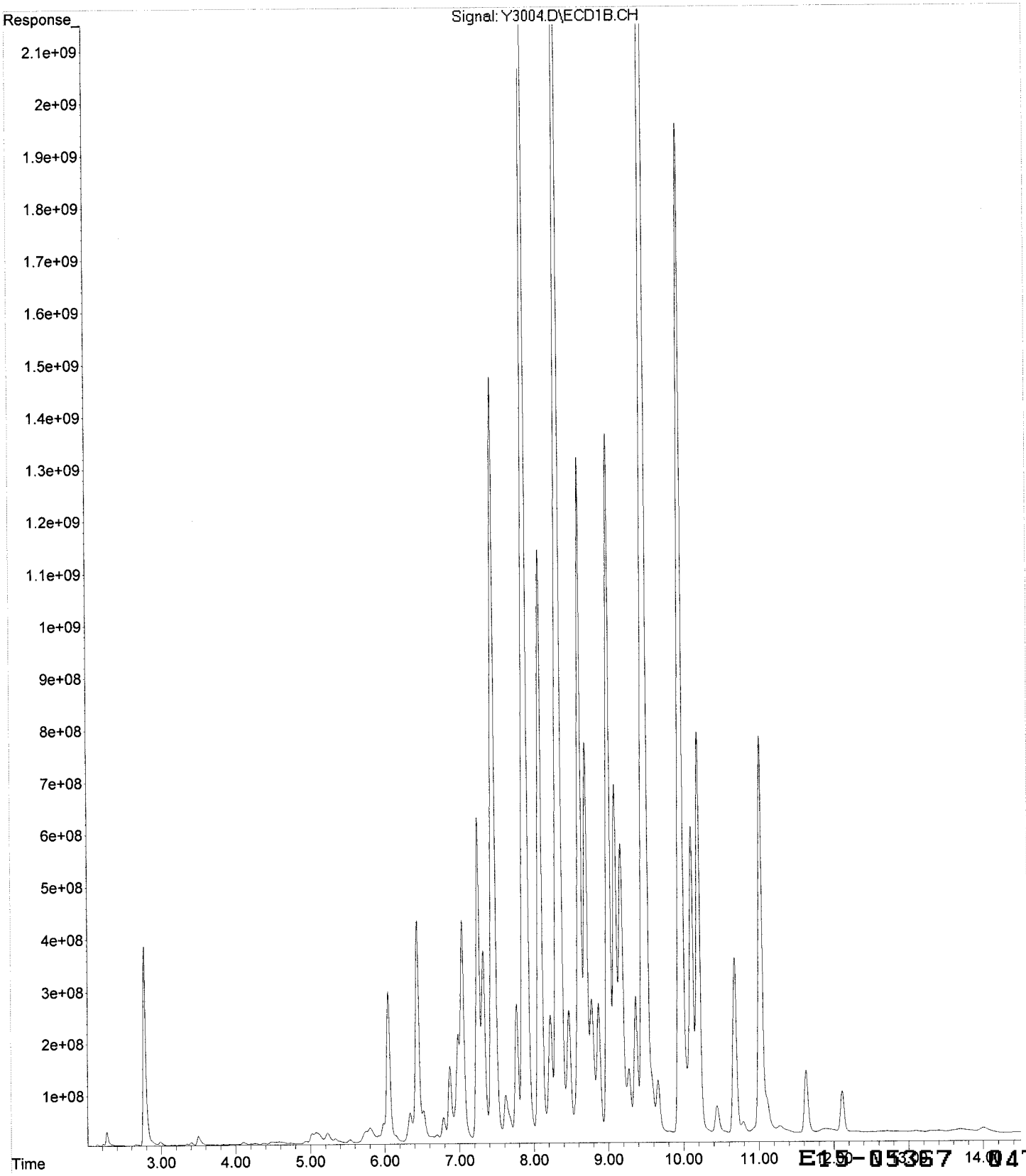
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



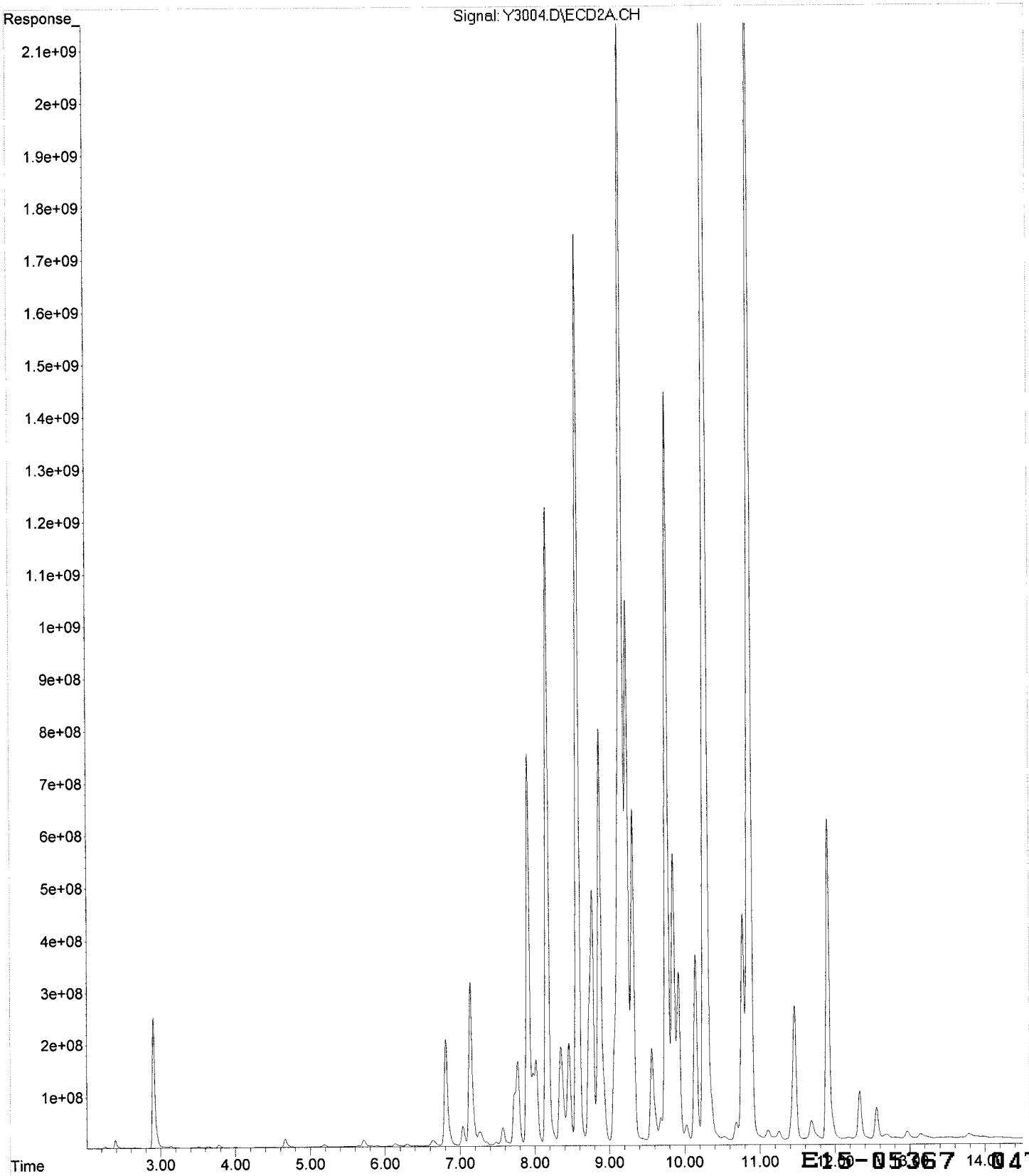


E15-05367 0477

File : C:\MSDChem\1\DATA\07-02-15\Y3004.D
Operator : JS
Acquired : 02 Jul 2015 14:15 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-12_(0.,E15-05367-013,S,5.27g,17.3,20
Misc Info : 150701-08,07/01/15,06/23/15,1
Vial Number: 10



File : C:\MSDChem\1\DATA\07-02-15\Y3004.D
Operator : JS
Acquired : 02 Jul 2015 14:15 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-12_(0.,E15-05367-013,S,5.27g,17.3,20
Misc Info : 150701-08,07/01/15,06/23/15,1
Vial Number: 10



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3052.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:34
Operator : JS
Sample : E-12_(0.,E15-05367-013DL,S,5.27g,17.3,20
Misc : 150701-08,07/01/15,06/23/15,100
ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:28:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.91	154.8E6	94633609	2.325	2.731	
Spiked Amount 200.000			Recovery	=	1.16%	1.37%	
2) S DCB	12.12	12.56	37729601	27177849	1.842m	2.199m	
Spiked Amount 200.000			Recovery	=	0.92%	1.10%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.34	7.92	1468.0E6	303.2E6	354.467	291.456	
34) L8 Aroclor-1260 {2}	9.01	8.17	618.3E6	415.3E6	262.513	272.999	
35) L8 Aroclor-1260 {3}	9.48	9.77	1670.7E6	399.2E6	280.489	274.319	
36) L8 Aroclor-1260 {4}	9.97	10.28	806.0E6	935.2E6	300.450	275.957	
37) L8 Aroclor-1260 {5}	11.03	10.87	316.2E6	670.3E6	211.578	277.815	#
Sum Aroclor-1260			4879.2E6	2723.2E6	1409.497	1392.545	
Average Aroclor-1260					281.899	278.509	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

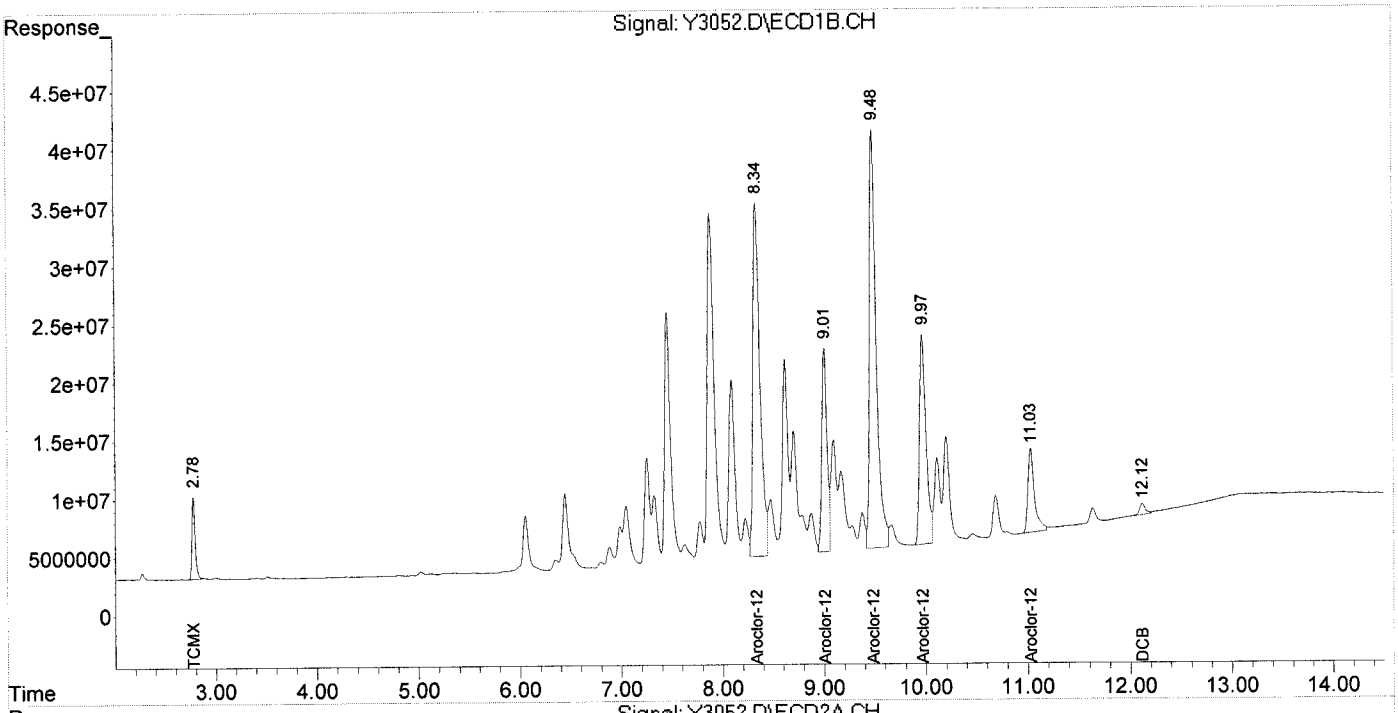
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

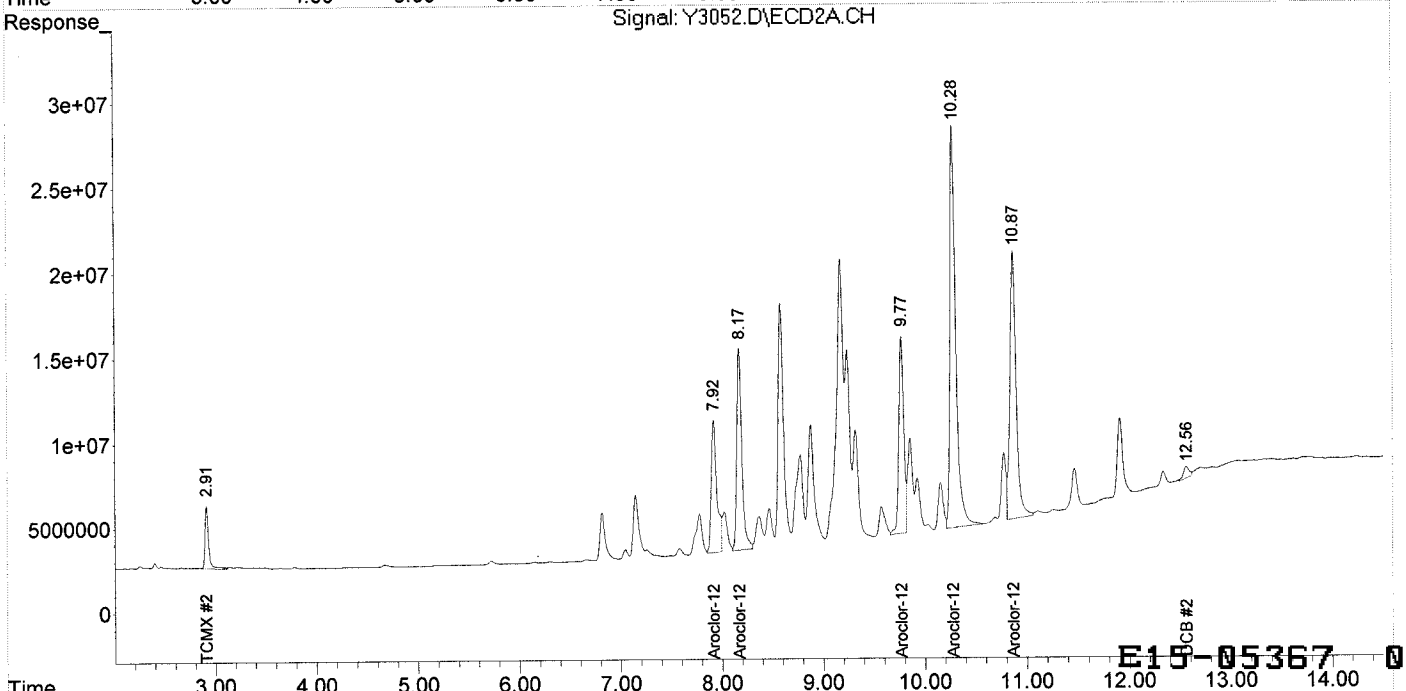
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3052.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:34
Operator : JS
Sample : E-12_(0.,E15-05367-013DL,S,5.27g,17.3,20
Misc : 150701-08,07/01/15,06/23/15,100
ALS Vial : 53 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:28:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3005.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:32
Operator : JS
Sample : E-12_(2.,E15-05367-014,S,5.25g,13.0,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:46:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11736.4E6	6180.0E6	176.213	178.317
Spiked Amount 200.000			Recovery	=	88.11%	89.16%
2) S DCB	12.11	12.56	2928.3E6	3130.4E6	142.969	253.264 #
Spiked Amount 200.000			Recovery	=	71.48%	126.63%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	2274.0E6	455.5E6	549.093	437.749
34) L8 Aroclor-1260 {2}	9.00	8.17	970.3E6	718.2E6	411.950	472.111
35) L8 Aroclor-1260 {3}	9.48	9.77	2664.0E6	669.4E6	447.243	459.915
36) L8 Aroclor-1260 {4}	9.96	10.27	1422.8E6	1529.7E6	530.359	451.391
37) L8 Aroclor-1260 {5}	11.02	10.87	717.3E6	1208.7E6	479.968m	500.960
Sum Aroclor-1260			8048.3E6	4581.3E6	2418.612	2322.125
Average Aroclor-1260					483.722	464.425
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

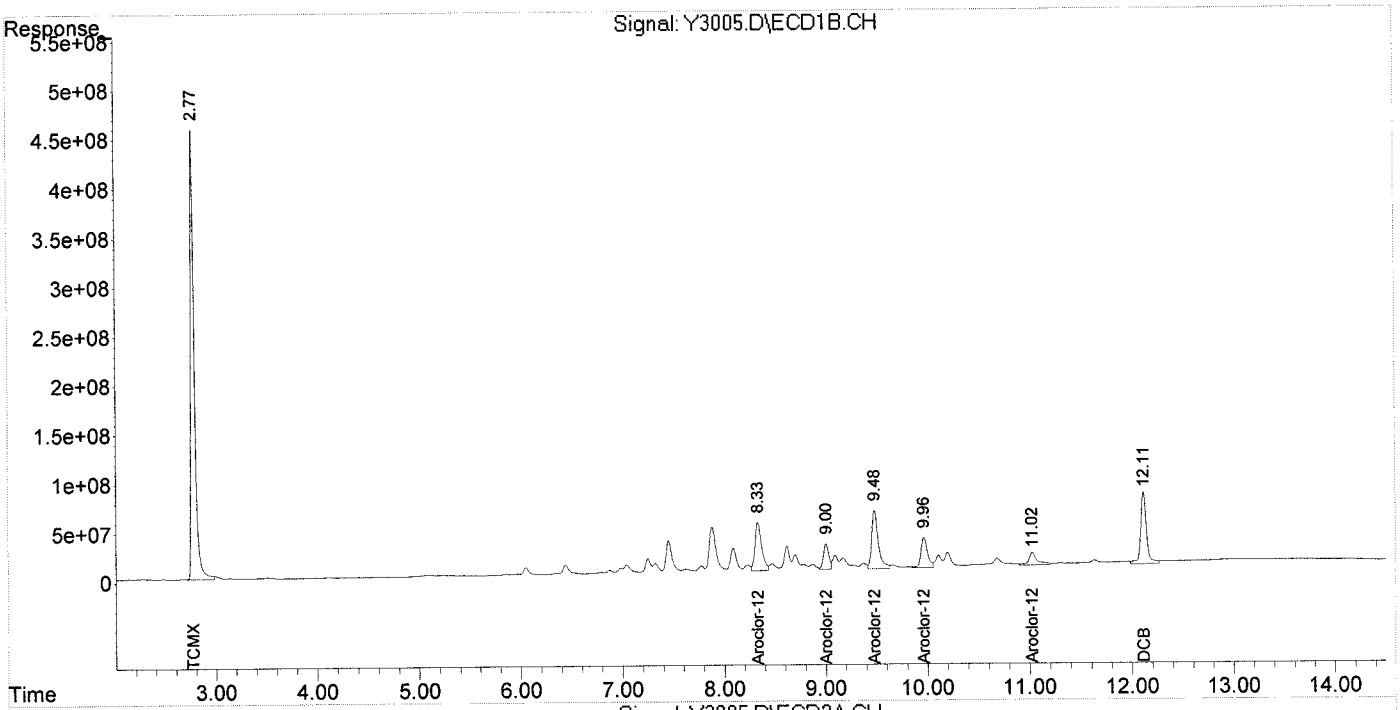
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

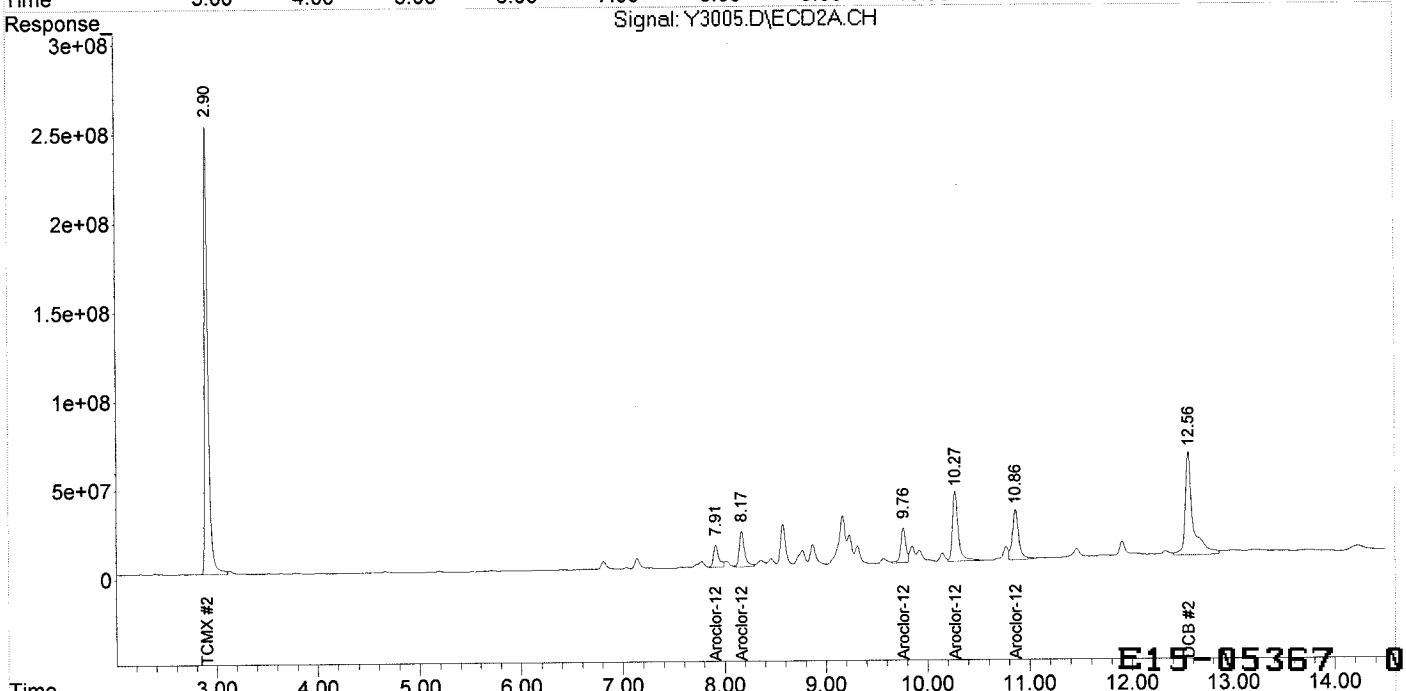
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3005.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:32
Operator : JS
Sample : E-12_(2.,E15-05367-014,S,5.25g,13.0,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:46:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0483

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3006.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:49
Operator : JS
Sample : E-14_{0.,E15-05367-015,S,5.61g,12.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:02:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10208.5E6	5925.2E6	153.273	170.965
Spiked Amount 200.000			Recovery	=	76.64%	85.48%
2) S DCB	12.11	12.56	3393.9E6	2057.9E6	165.699	166.495
Spiked Amount 200.000			Recovery	=	82.85%	83.25%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	33910.9E6	6915.1E6	8188.342	6646.237
34) L8 Aroclor-1260 {2}	9.00	8.17	16170.7E6	10443.8E6	6865.555	6865.321
35) L8 Aroclor-1260 {3}	9.48	9.76	49842.1E6	13609.3E6	8367.635	9350.953
36) L8 Aroclor-1260 {4}	9.96	10.27	25225.1E6	35886.1E6	9403.149	10589.751
37) L8 Aroclor-1260 {5}	11.02	10.86	13257.7E6	25758.9E6	8871.186	10676.280
Sum Aroclor-1260			138406.5E6	92613.1E6	41695.867	44128.542
Average Aroclor-1260					8339.173	8825.708
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

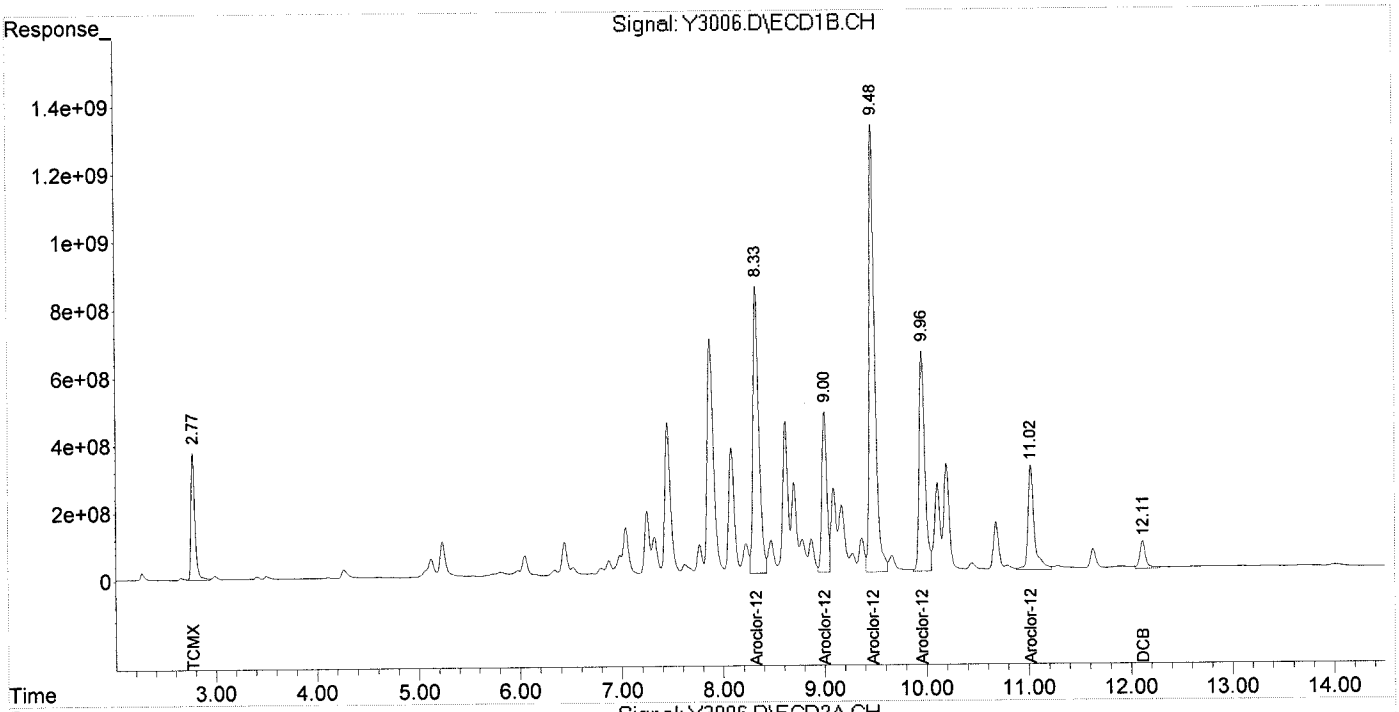
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

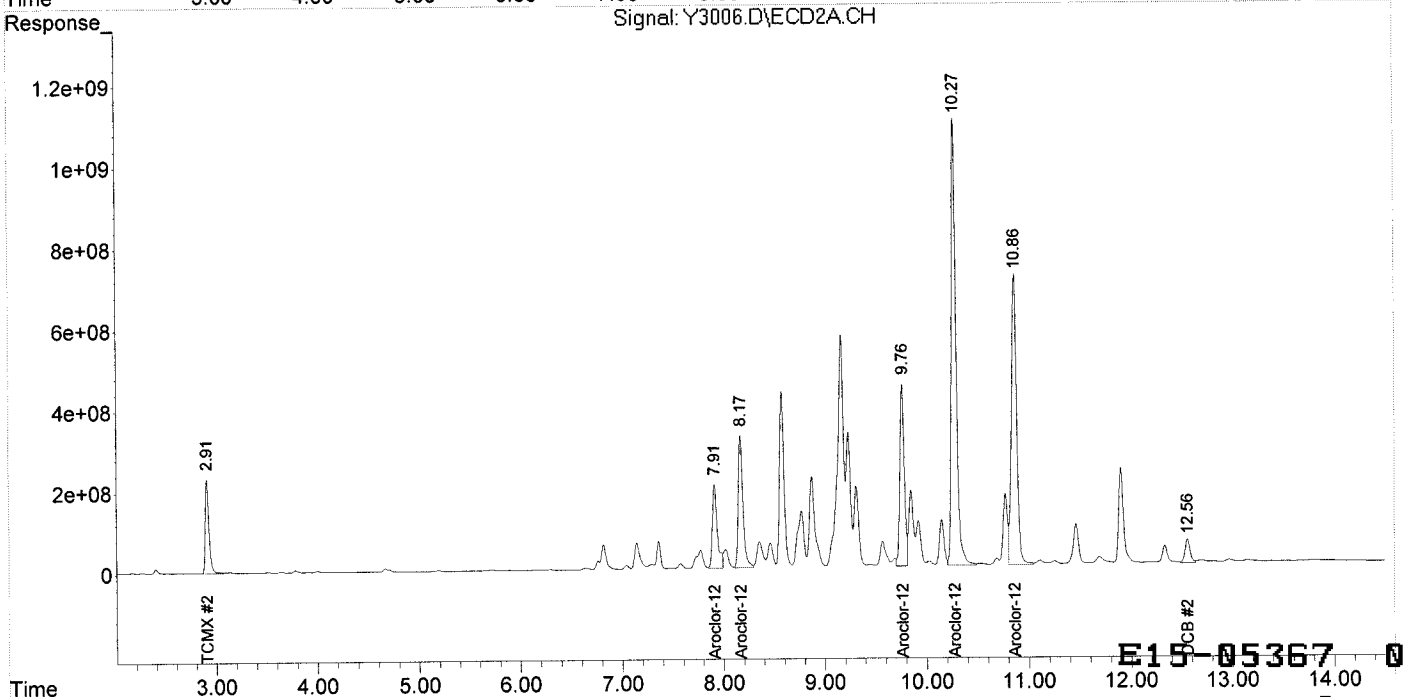
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3006.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 14:49
Operator : JS
Sample : E-14_(0.,E15-05367-015,S,5.61g,12.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:02:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3053.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:52
Operator : JS
Sample : E-14_(0.,E15-05367-015DL,S,5.61g,12.3,20
Misc : 150701-08,07/01/15,06/23/15,20
ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	681.2E6	337.9E6	10.227	9.750
Spiked Amount 200.000			Recovery	=	5.11%	4.88%
2) S DCB	12.12	12.56	164.7E6	128.3E6	8.040m	10.377m#
Spiked Amount 200.000			Recovery	=	4.02%	5.19%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	2157.8E6	400.7E6	521.028	385.102 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1042.1E6	560.4E6	442.443	368.363
35) L8 Aroclor-1260 {3}	9.48	9.77	2896.5E6	672.4E6	486.269	462.028
36) L8 Aroclor-1260 {4}	9.97	10.28	1380.2E6	1604.7E6	514.484	473.523
37) L8 Aroclor-1260 {5}	11.03	10.87	656.7E6	1183.5E6	439.393	490.520
Sum Aroclor-1260			8133.2E6	4421.6E6	2403.617	2179.537
Average Aroclor-1260					480.723	435.907
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

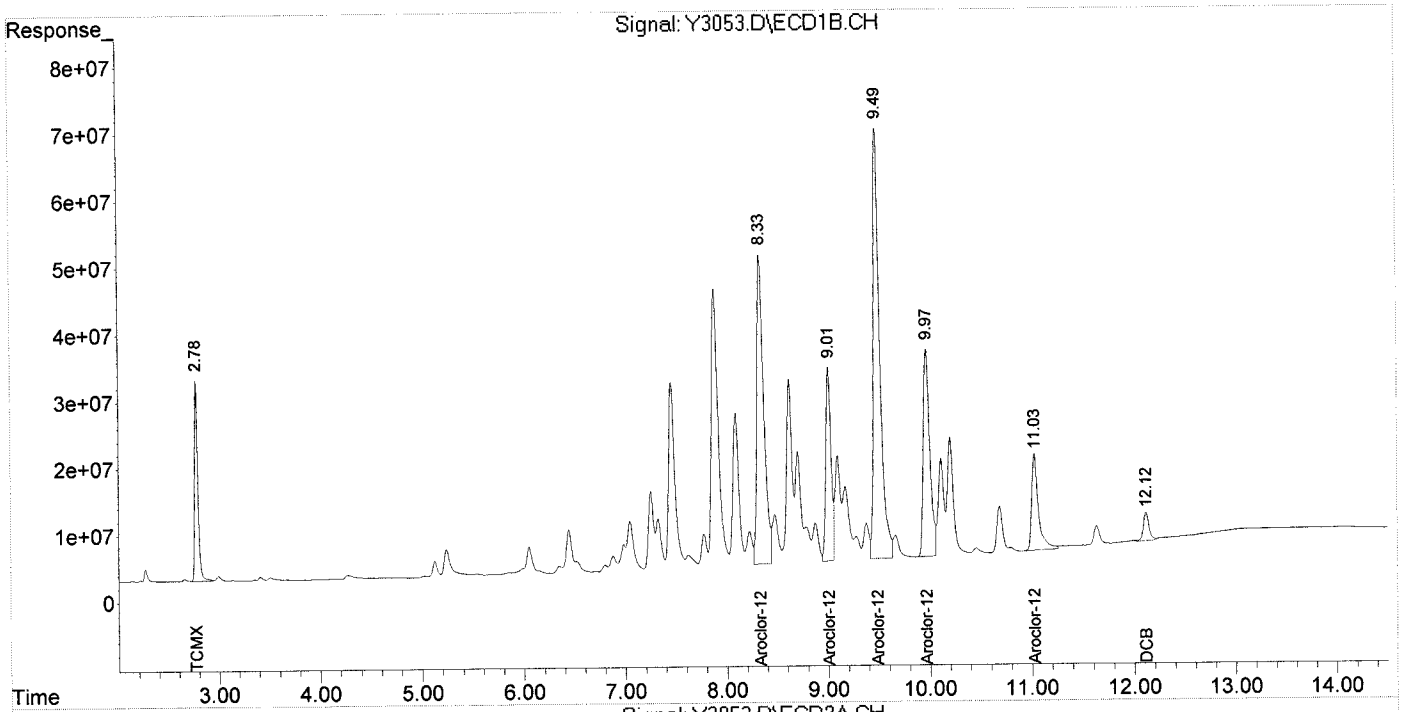
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

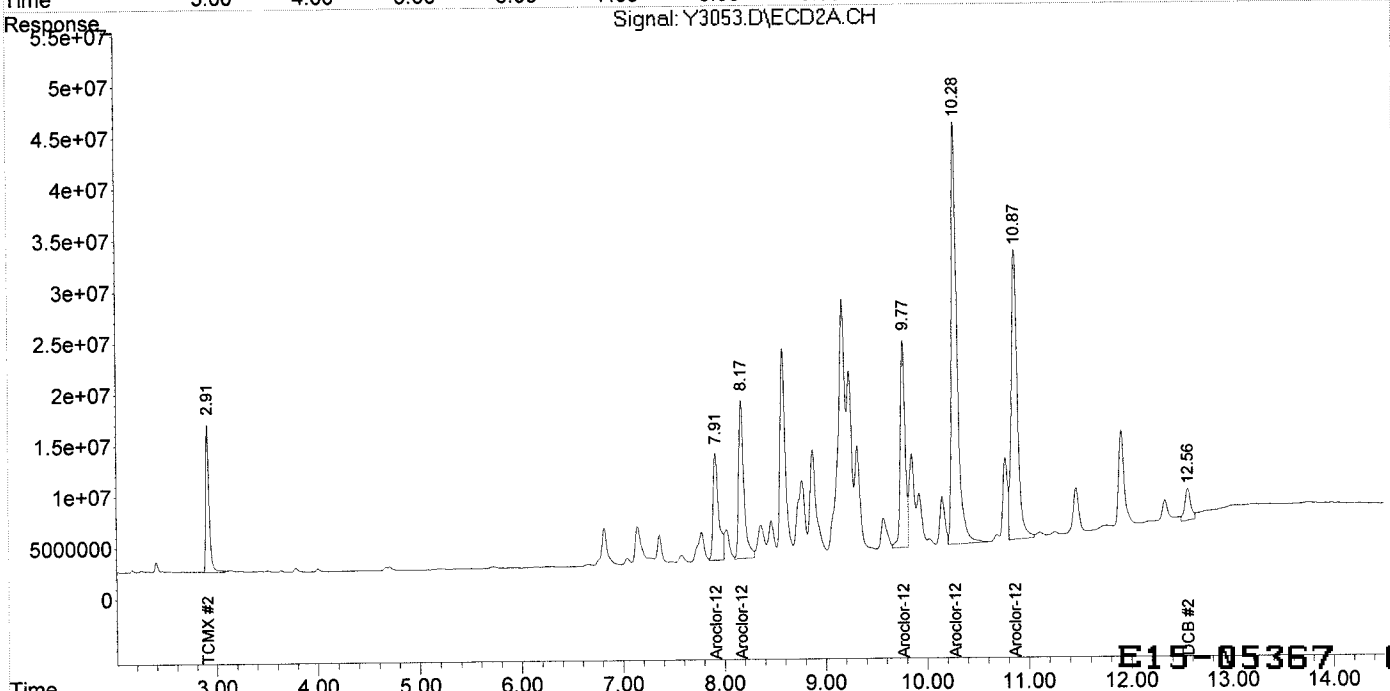
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3053.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 7:52
Operator : JS
Sample : E-14_(0.,E15-05367-015DL,S,5.61g,12.3,20
Misc : 150701-08,07/01/15,06/23/15,20
ALS Vial : 54 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:28:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3007.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:07
Operator : JS
Sample : E-14_(2.,E15-05367-016,S,5.37g,11.7,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:19:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11754.9E6	6227.4E6	176.490	179.687
Spiked Amount 200.000			Recovery	=	88.25%	89.84%
2) S DCB	12.11	12.56	2941.0E6	2254.9E6	143.589	182.430 #
Spiked Amount 200.000			Recovery	=	71.79%	91.22%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	5102.3E6	954.0E6	1232.040	916.898 #
34) L8 Aroclor-1260 {2}	9.00	8.17	2209.9E6	1447.6E6	938.264	951.621
35) L8 Aroclor-1260 {3}	9.48	9.77	6440.9E6	1620.4E6	1081.308	1113.389
36) L8 Aroclor-1260 {4}	9.96	10.28	3108.1E6	3800.1E6	1158.590	1121.379
37) L8 Aroclor-1260 {5}	11.02	10.86	1917.7E6	2796.0E6	1283.223	1158.843
Sum Aroclor-1260			18778.9E6	10618.1E6	5693.424	5262.129
Average Aroclor-1260					1138.685	1052.426
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

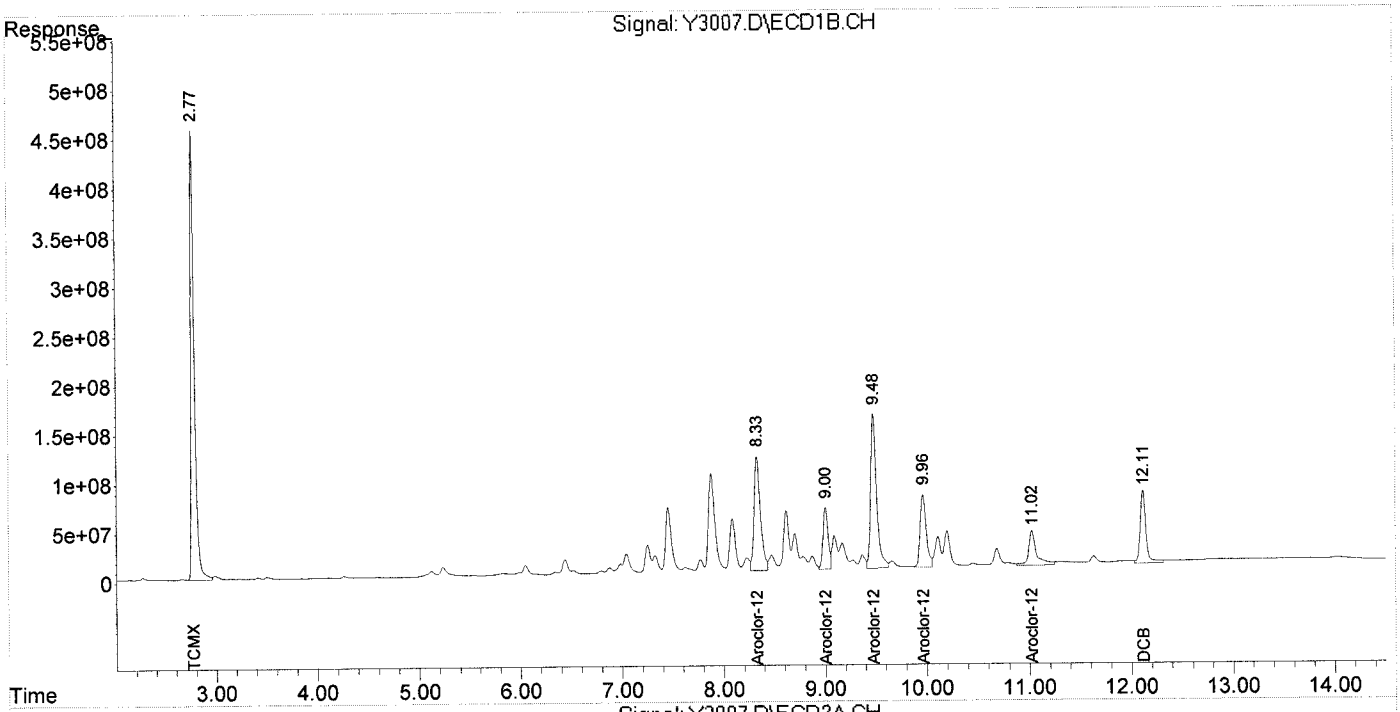
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

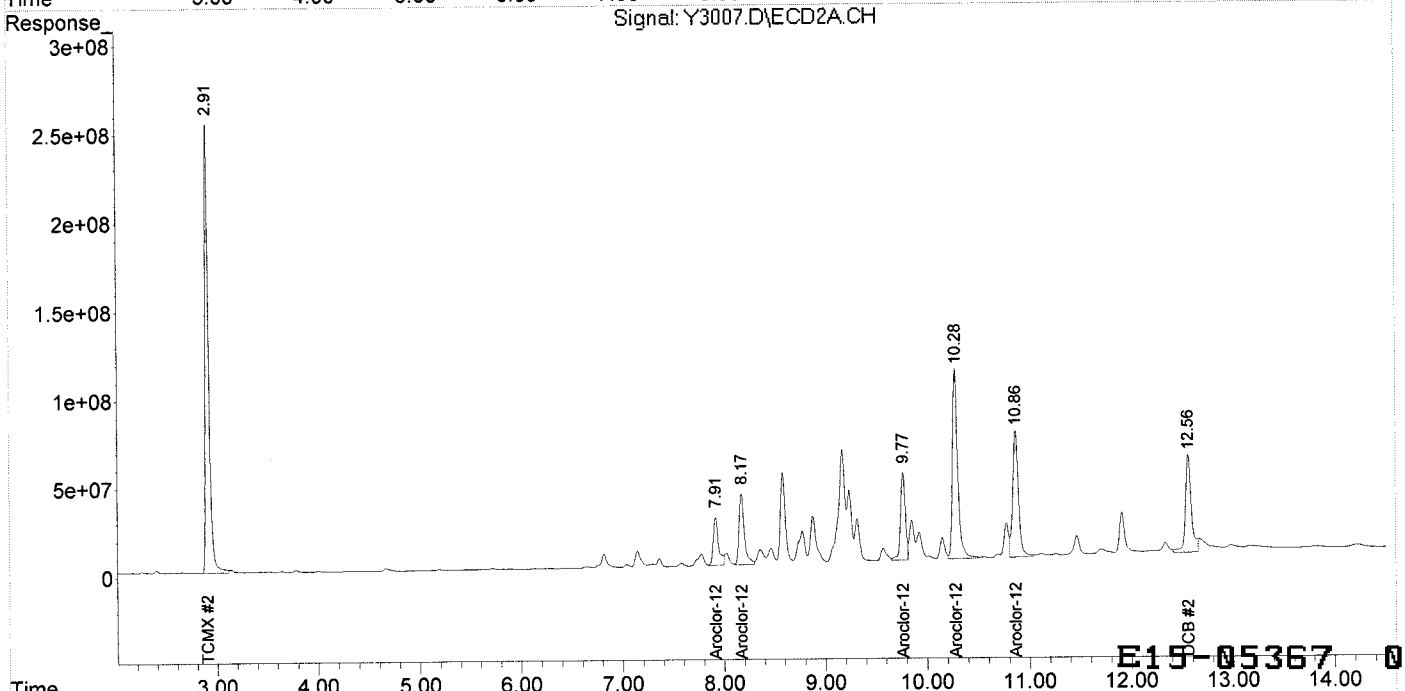
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3007.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:07
Operator : JS
Sample : E-14_(2.,E15-05367-016,S,5.37g,11.7,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:19:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:45
Operator : JS
Sample : E-16_(0.,E15-05367-017,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:23:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.72	2.88	1341.3E6	7462.3E6	66.696	61.132
Spiked Amount	200.000			Recovery	=	33.35%	30.57%
2) S DCB		12.06	12.55	534.1E6	2467.1E6	64.654	71.868
Spiked Amount	200.000			Recovery	=	32.33%	35.93%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.26	7.89	7221.7E6	10245.4E6	5486.413	2886.667 #
34) L8 Aroclor-1260	{2}	8.94	8.15	3309.9E6	16088.4E6	4432.619	3141.065 #
35) L8 Aroclor-1260	{3}	9.42	9.75	10390.0E6	19572.1E6	5311.154	4303.320
36) L8 Aroclor-1260	{4}	9.90	10.26	5088.4E6	44043.8E6	5775.097	4198.355 #
37) L8 Aroclor-1260	{5}	10.97	10.85	2530.4E6	32465.8E6	4511.124	4647.553
Sum Aroclor-1260				28540.3E6	122415.5E6	25516.406	19176.960
Average Aroclor-1260						5103.281	3835.392
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

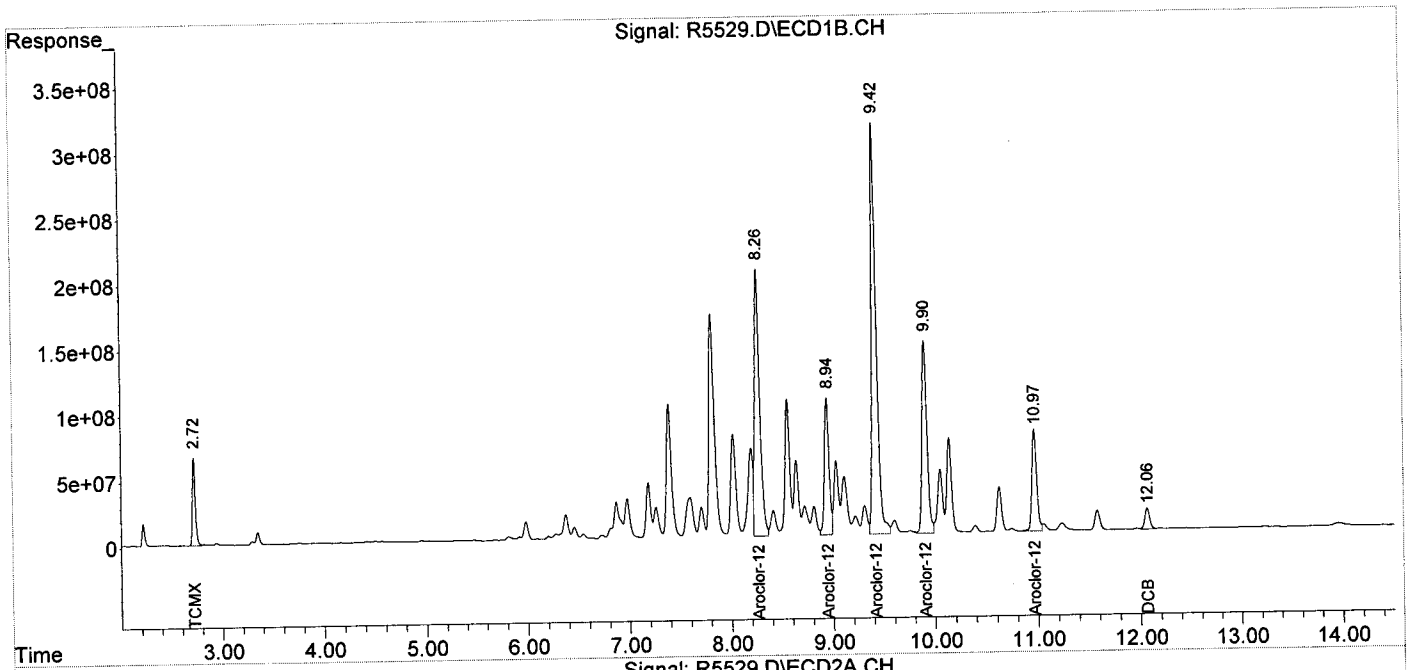
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

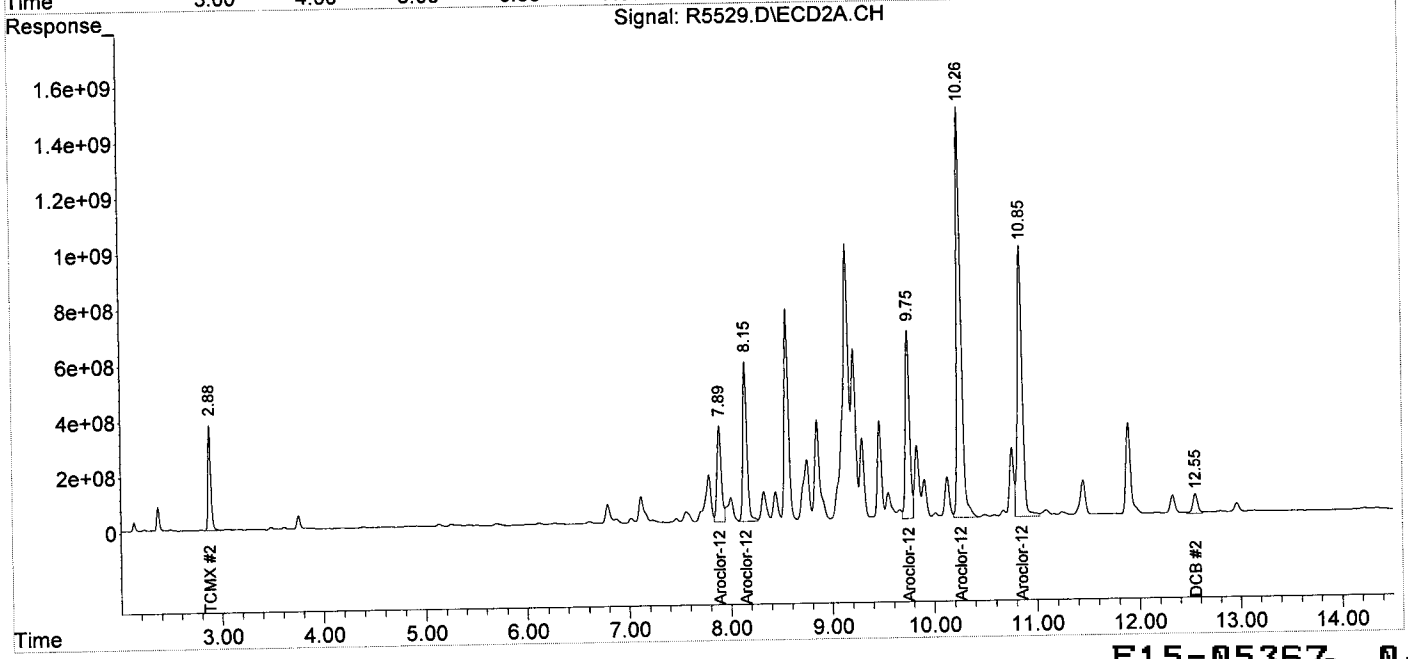
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5529.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:45
Operator : JS
Sample : E-16_(0.,E15-05367-017,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:23:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5545.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:50
Operator : JS
Sample : E-16_(0.,E15-05367-017DL,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:54:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	164.5E6	895.0E6	8.181	7.332
Spiked Amount 200.000			Recovery	=	4.09%	3.67%
2) S DCB	12.07	12.61	69982446	3630.3E6	8.471m	105.751m#
Spiked Amount 200.000			Recovery	=	4.24%	52.88%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	755.1E6	1068.7E6	573.682	301.099 #
34) L8 Aroclor-1260 {2}	8.94	8.14	380.4E6	1590.1E6	509.468	310.450 #
35) L8 Aroclor-1260 {3}	9.42	9.75	961.2E6	2224.7E6	491.333m	489.135m
36) L8 Aroclor-1260 {4}	9.91	10.26	500.8E6	4633.7E6	568.422m	441.697
37) L8 Aroclor-1260 {5}	10.97	10.85	249.3E6	4188.4E6	444.470m	599.578m#
Sum Aroclor-1260			2846.9E6	13705.5E6	2587.374	2141.958
Average Aroclor-1260					517.475	428.392
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

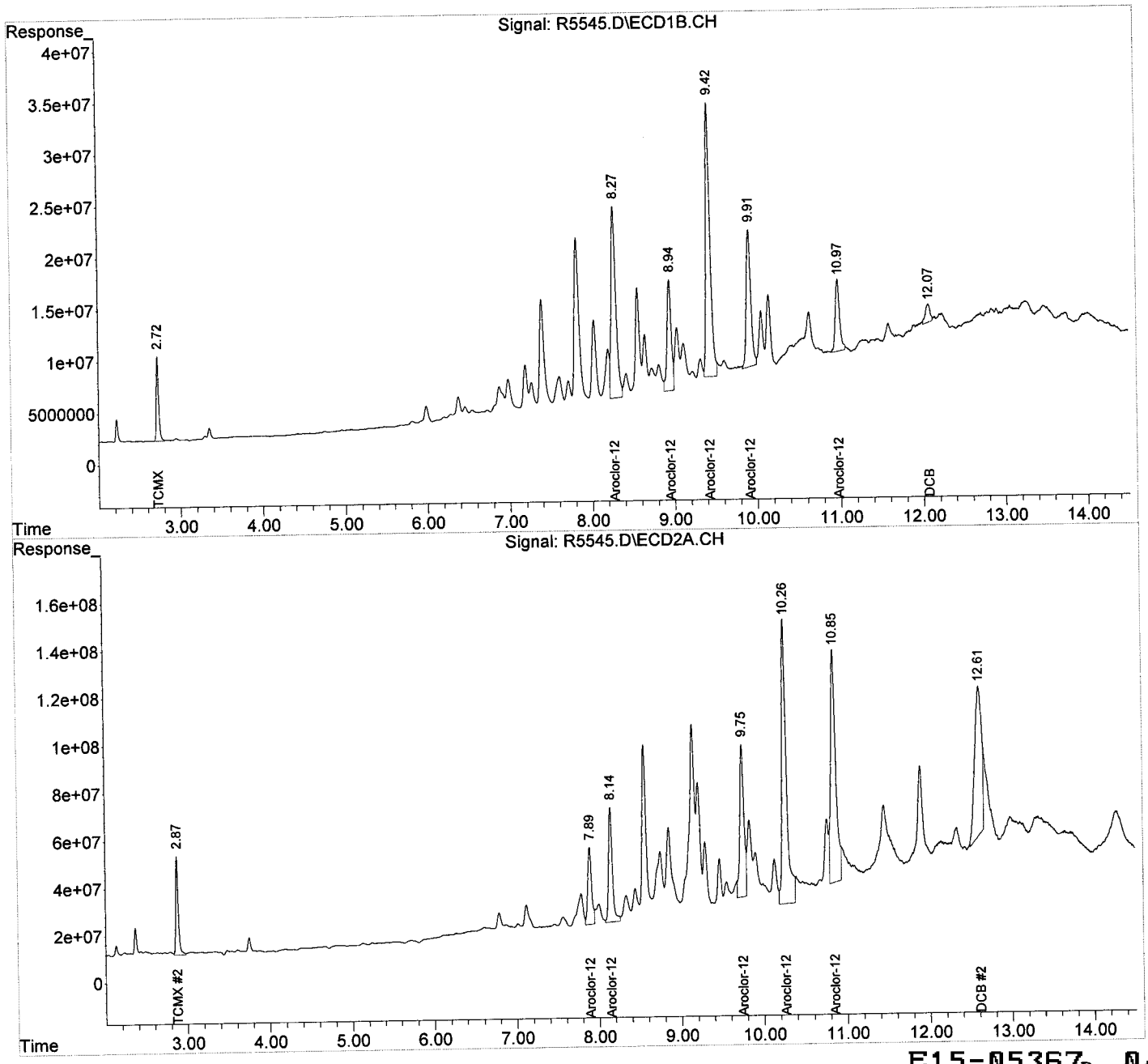
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5545.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 18:50
Operator : JS
Sample : E-16_(0.,E15-05367-017DL,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:54:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:03
Operator : JS
Sample : E-16_(2.,E15-05367-018,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:31:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	697.4E6	4016.3E6	34.679	32.902
Spiked Amount 200.000			Recovery	=	17.34%	16.45%
2) S DCB	12.06	12.55	364.6E6	1577.2E6	44.132m	45.944m
Spiked Amount 200.000			Recovery	=	22.07%	22.97%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

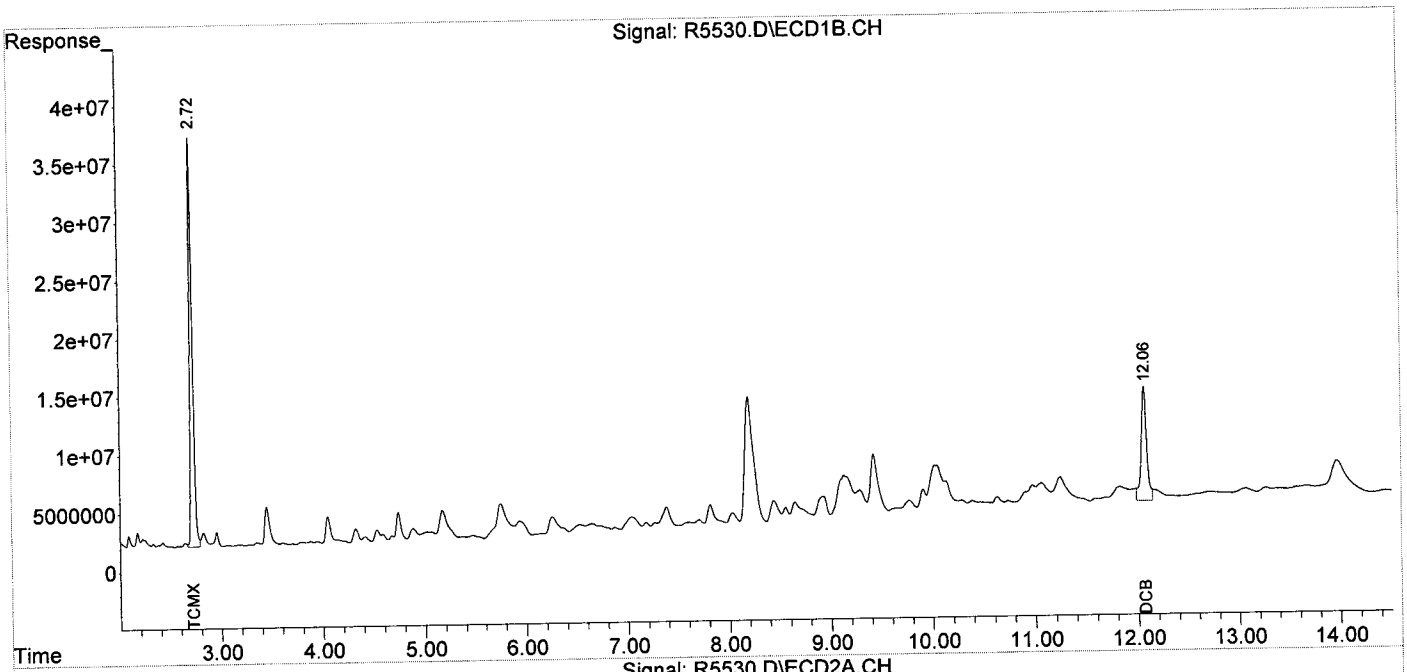
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

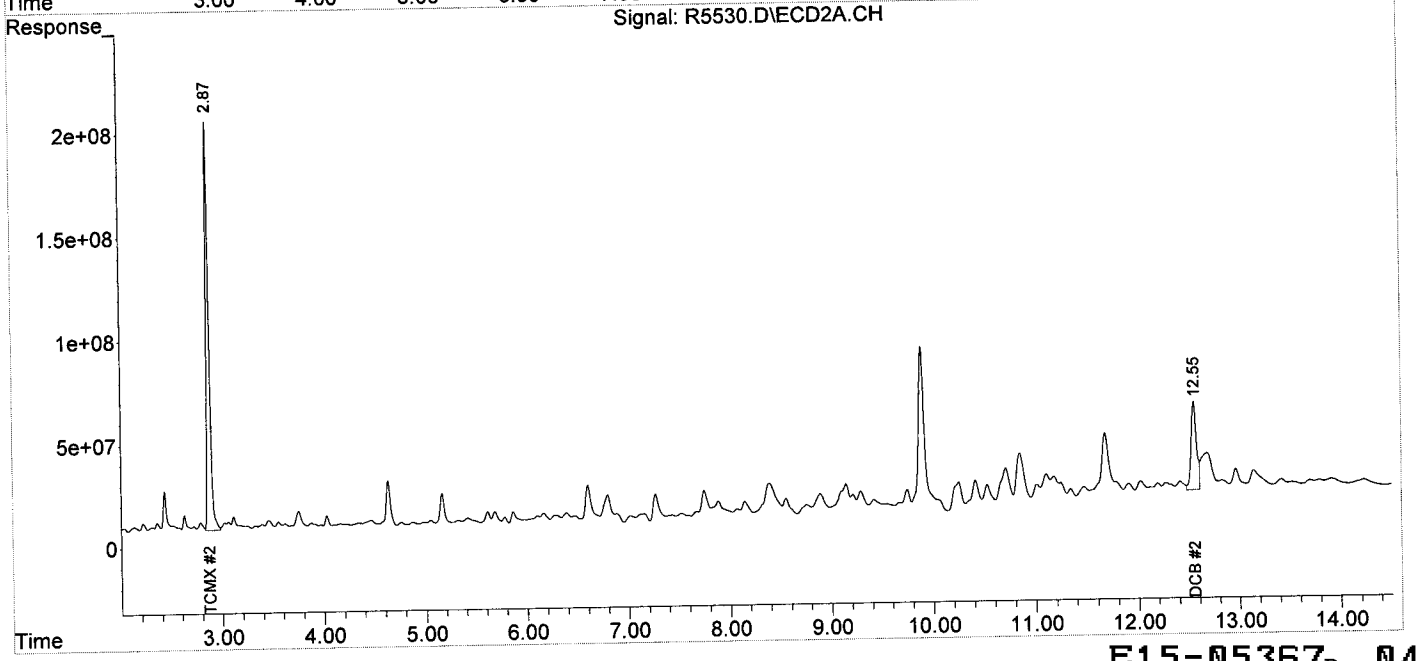
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5530.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:03
Operator : JS
Sample : E-16_(2.,E15-05367-018,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:31:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5531.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:20
Operator : JS
Sample : PZ-2_(0.,E15-05367-019,S,30.20g,20.8,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:32:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	1993.7E6	9220.7E6	99.136	75.537
Spiked Amount 200.000			Recovery	=	49.57%	37.77%
2) S DCB	12.06	12.55	1068.5E6	6058.8E6	129.330	176.493 #
Spiked Amount 200.000			Recovery	=	64.67%	88.25%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.88	1464.2E6	1572.1E6	1112.385	442.955 #
34) L8 Aroclor-1260 {2}	8.94	8.14	764.3E6	2470.2E6	1023.591	482.283 #
35) L8 Aroclor-1260 {3}	9.42	9.74	2140.7E6	3698.7E6	1094.276	813.236 #
36) L8 Aroclor-1260 {4}	9.90	10.25	1125.8E6	9550.1E6	1277.739	910.332 #
37) L8 Aroclor-1260 {5}	10.97	10.84	614.1E6	6561.5E6	1094.732	939.295
Sum Aroclor-1260			6109.1E6	23852.6E6	5602.722	3588.102
Average Aroclor-1260					1120.544	717.620
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

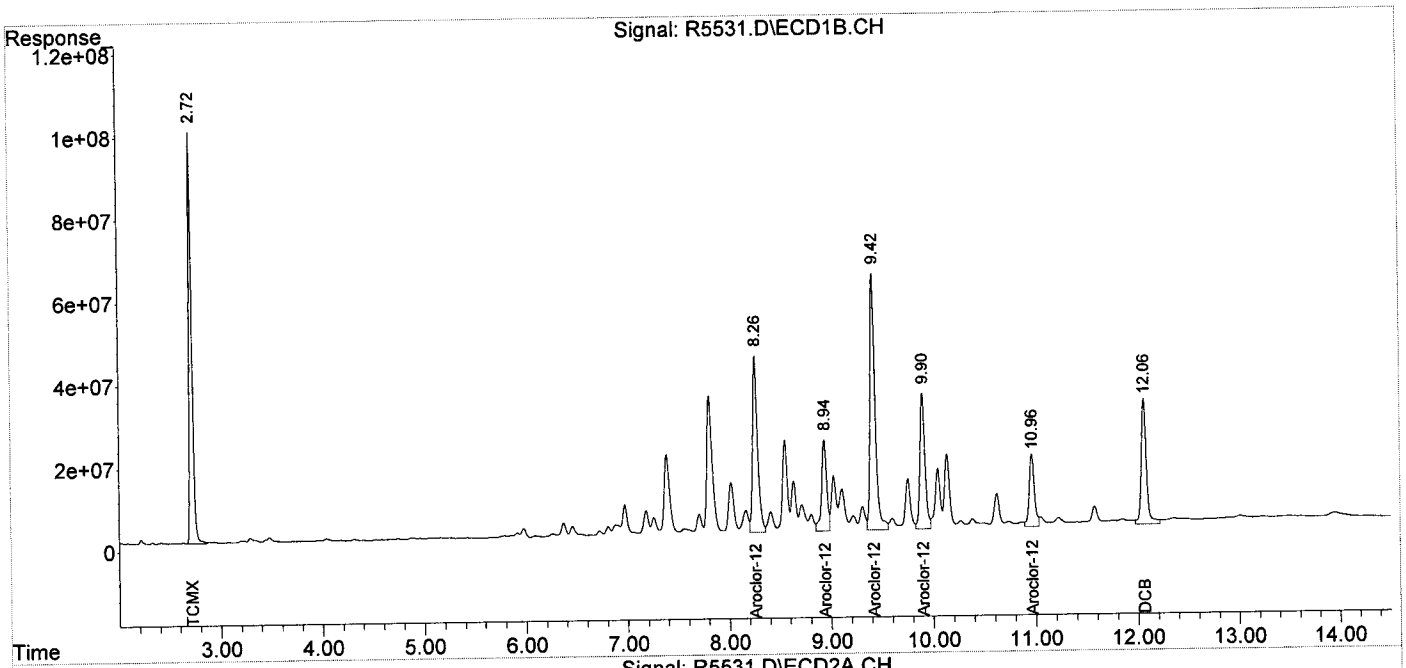
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

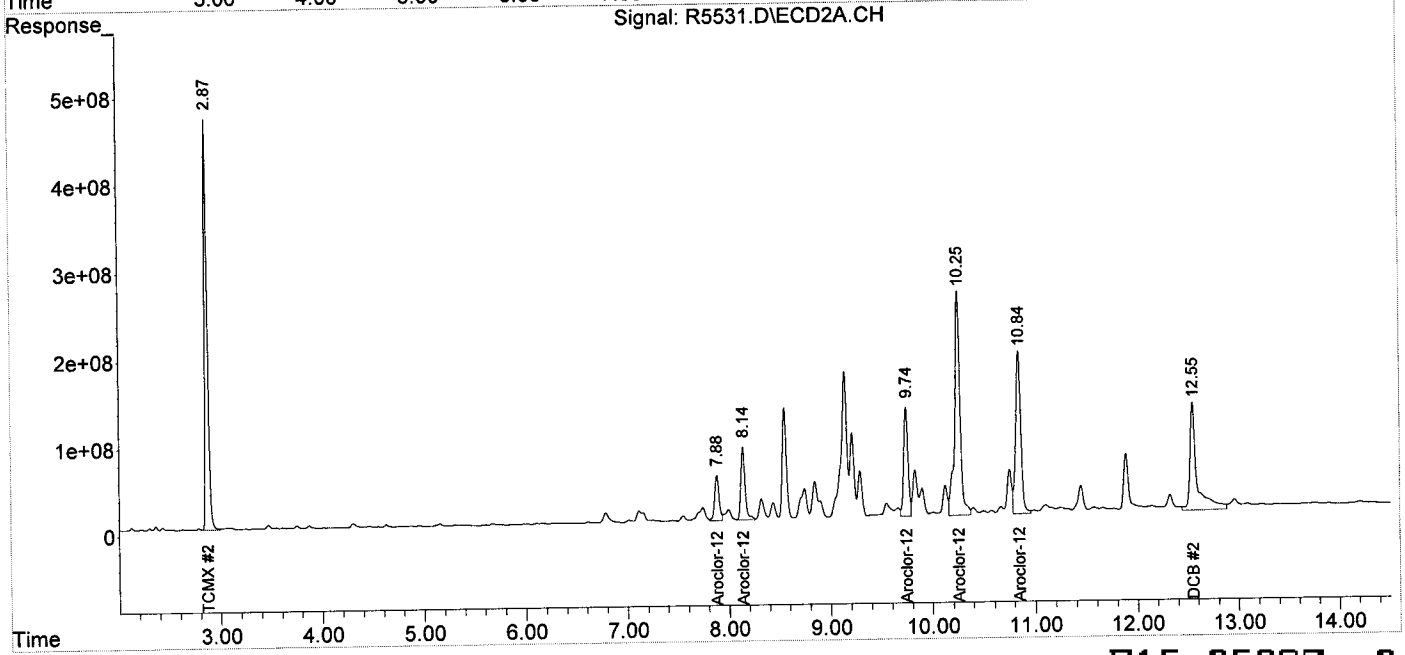
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5531.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:20
Operator : JS
Sample : PZ-2_(0.,E15-05367-019,S,30.20g,20.8,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:32:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5532.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:38
Operator : JS
Sample : PZ-2_(2.,E15-05367-020,S,30.22g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:33:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	2294.3E6	10721.3E6	114.086	87.830
Spiked Amount 200.000			Recovery	=	57.04%	43.91%
2) S DCB	12.06	12.55	1236.0E6	5180.6E6	149.605	150.910
Spiked Amount 200.000			Recovery	=	74.80%	75.45%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.88	376.1E6	484.4E6	285.703	136.474 #
34) L8 Aroclor-1260 {2}	8.94	8.14	216.2E6	590.3E6	289.544	115.248 #
35) L8 Aroclor-1260 {3}	9.42	9.74	600.8E6	808.8E6	307.139	177.840 #
36) L8 Aroclor-1260 {4}	9.90	10.25	285.1E6	1994.1E6	323.551	190.084 #
37) L8 Aroclor-1260 {5}	10.97	10.85	165.1E6	1887.4E6	294.415	270.186
Sum Aroclor-1260			1643.3E6	5765.0E6	1500.353	889.832
Average Aroclor-1260					300.071	177.966
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

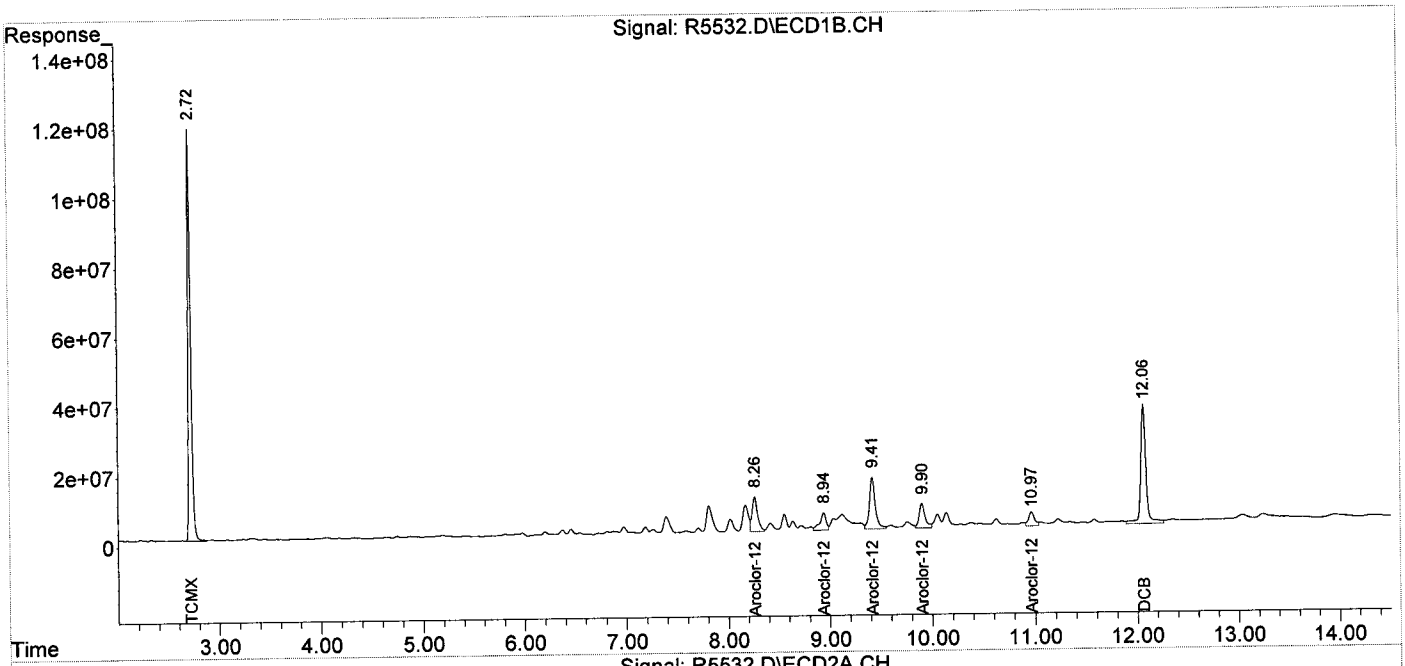
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

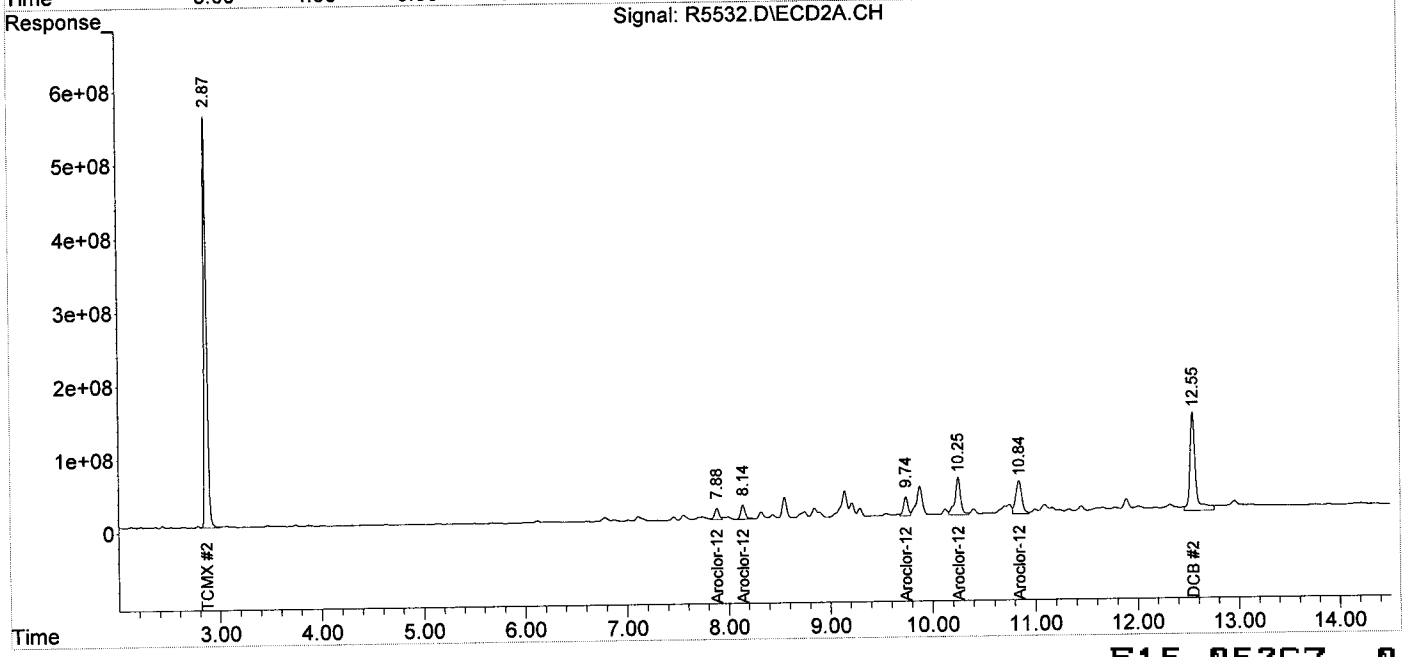
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5532.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:38
Operator : JS
Sample : PZ-2_(2.,E15-05367-020,S,30.22g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:33:33 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5533.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:55
Operator : JS
Sample : PZ-2_(4.,E15-05367-021,S,30.24g,7.70,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:36:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3526.3E6	18071.6E6	175.346	148.044
Spiked Amount 200.000			Recovery	=	87.67%	74.02%
2) S DCB	12.06	12.55	1613.1E6	8567.9E6	195.261	249.583 #
Spiked Amount 200.000			Recovery	=	97.63%	124.79%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.88	44865875	47422797	34.085m	13.361m#
34) L8 Aroclor-1260 {2}	8.94	8.14	18393443	95190086	24.633	18.585m
35) L8 Aroclor-1260 {3}	9.42	9.75	44842050	147.1E6	22.922	32.342m#
36) L8 Aroclor-1260 {4}	9.91	10.26	26271582	235.2E6	29.817	22.424m
37) L8 Aroclor-1260 {5}	10.98	10.85	14780214	219.9E6	26.350m	31.477m
Sum Aroclor-1260			149.2E6	744.8E6	137.807	118.188
Average Aroclor-1260					27.561	23.638
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

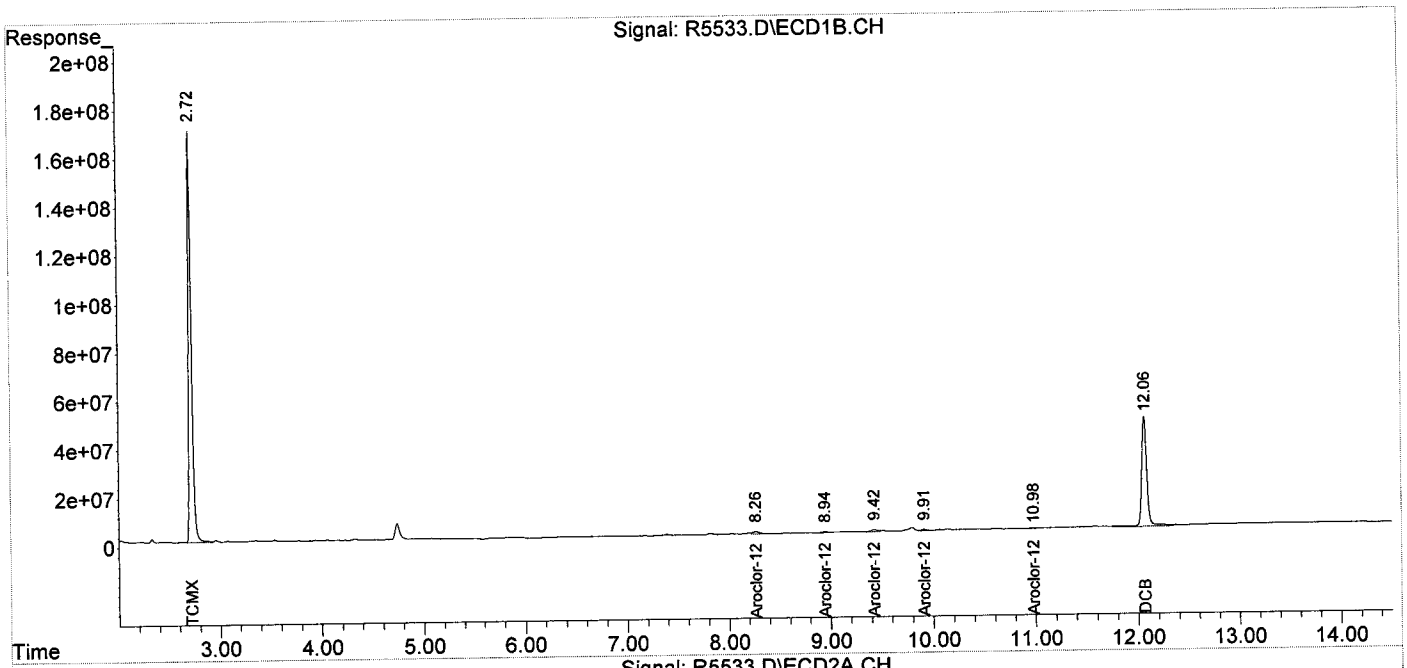
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

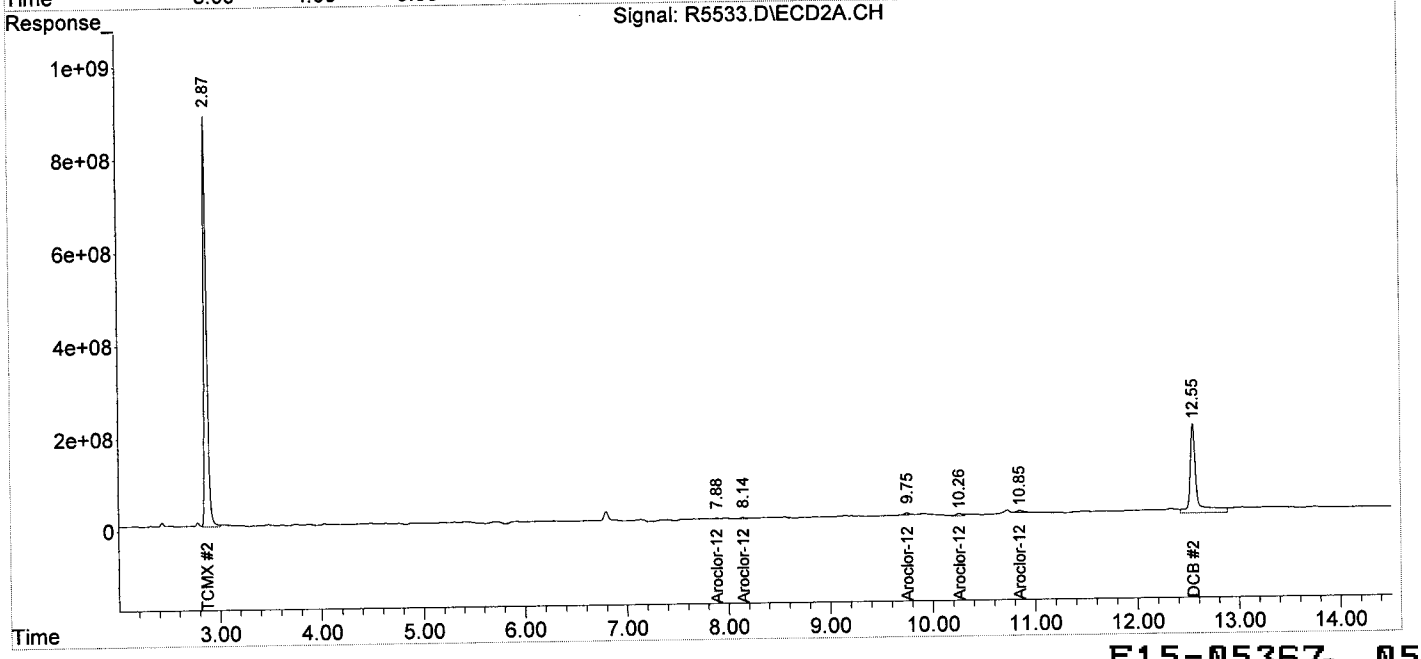
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5533.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:55
Operator : JS
Sample : PZ-2_(4.,E15-05367-021,S,30.24g,7.70,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:36:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5534.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:13
Operator : JS
Sample : PZ-2_(6.,E15-05367-022,S,30.55g,14.1,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:37:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	4121.6E6	21457.9E6	204.952	175.786
Spiked Amount 200.000			Recovery	=	102.48%	87.89%
2) S DCB	12.06	12.55	1860.7E6	7435.3E6	225.221	216.590m
Spiked Amount 200.000			Recovery	=	112.61%	108.30%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

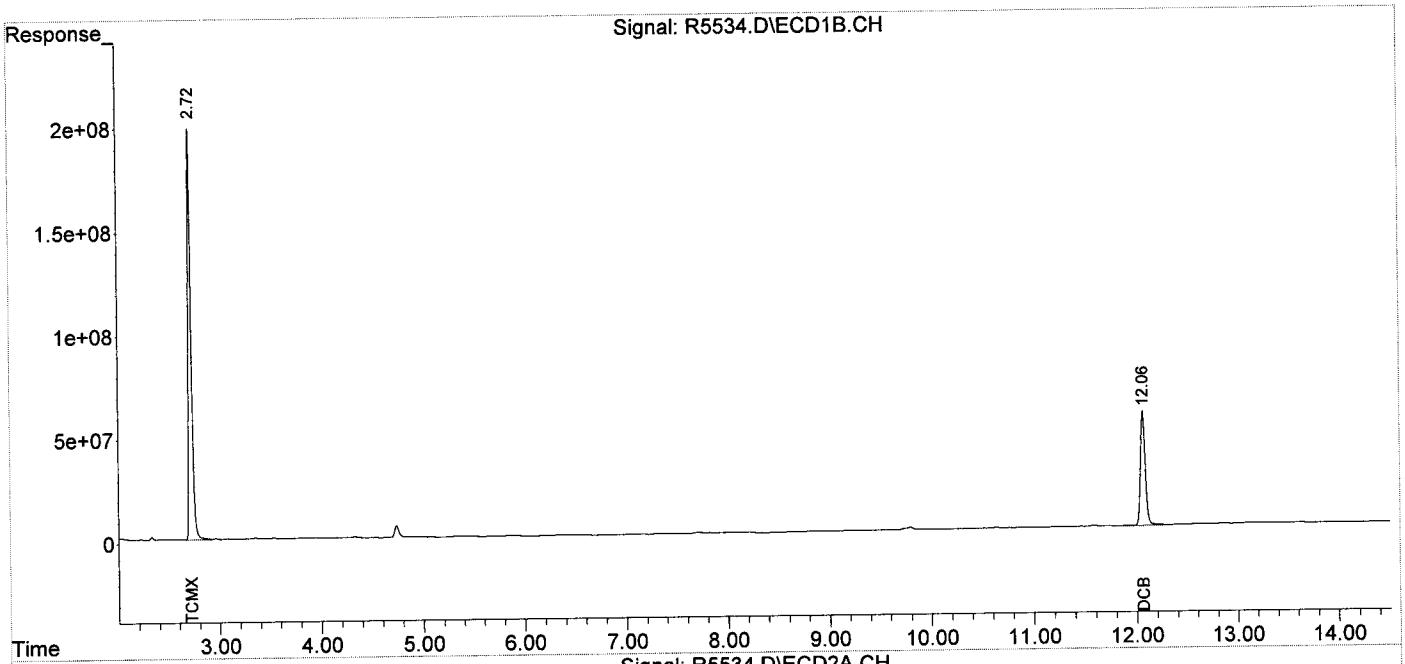
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

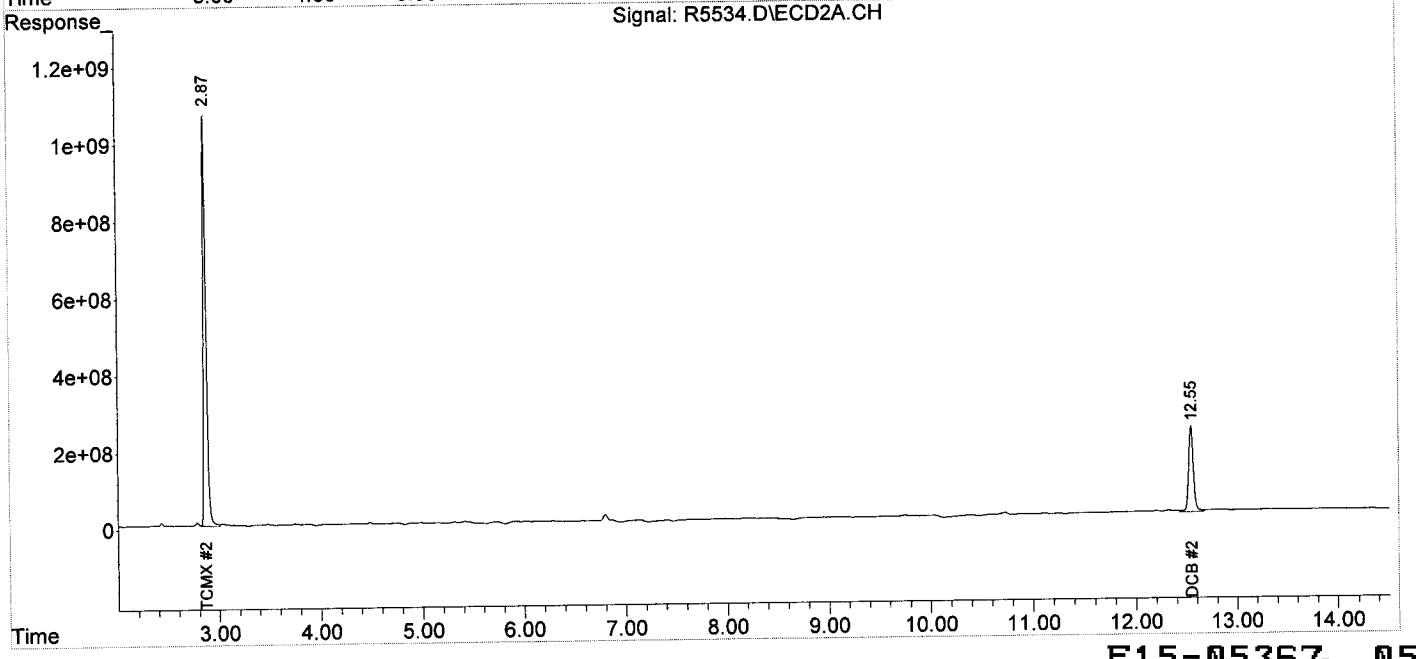
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5534.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:13
Operator : JS
Sample : PZ-2_(6.,E15-05367-022,S,30.55g,14.1,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:37:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3084.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:26
Operator : JS
Sample : X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:09:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	8860.6E6	4628.3E6	133.036	133.544
Spiked Amount 200.000			Recovery	=	66.52%	66.77%
2) S DCB	12.11	12.56	3438.2E6	2221.6E6	167.860	179.741
Spiked Amount 200.000			Recovery	=	83.93%	89.87%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	53724.3E6	7825.7E6	12972.624	7521.494 #
34) L8 Aroclor-1260 {2}	9.00	8.17	27143.3E6	13179.4E6	11524.174	8663.597
35) L8 Aroclor-1260 {3}	9.48	9.77	81322.4E6	20485.1E6	13652.634	14075.374
36) L8 Aroclor-1260 {4}	9.97	10.28	42764.3E6	58411.8E6	15941.269	17236.913
37) L8 Aroclor-1260 {5}	11.03	10.87	19552.4E6	42430.7E6	13083.129	17586.261 #
Sum Aroclor-1260			224506.7E6	142332.7E6	67173.829	65083.639
Average Aroclor-1260					13434.766	13016.728
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

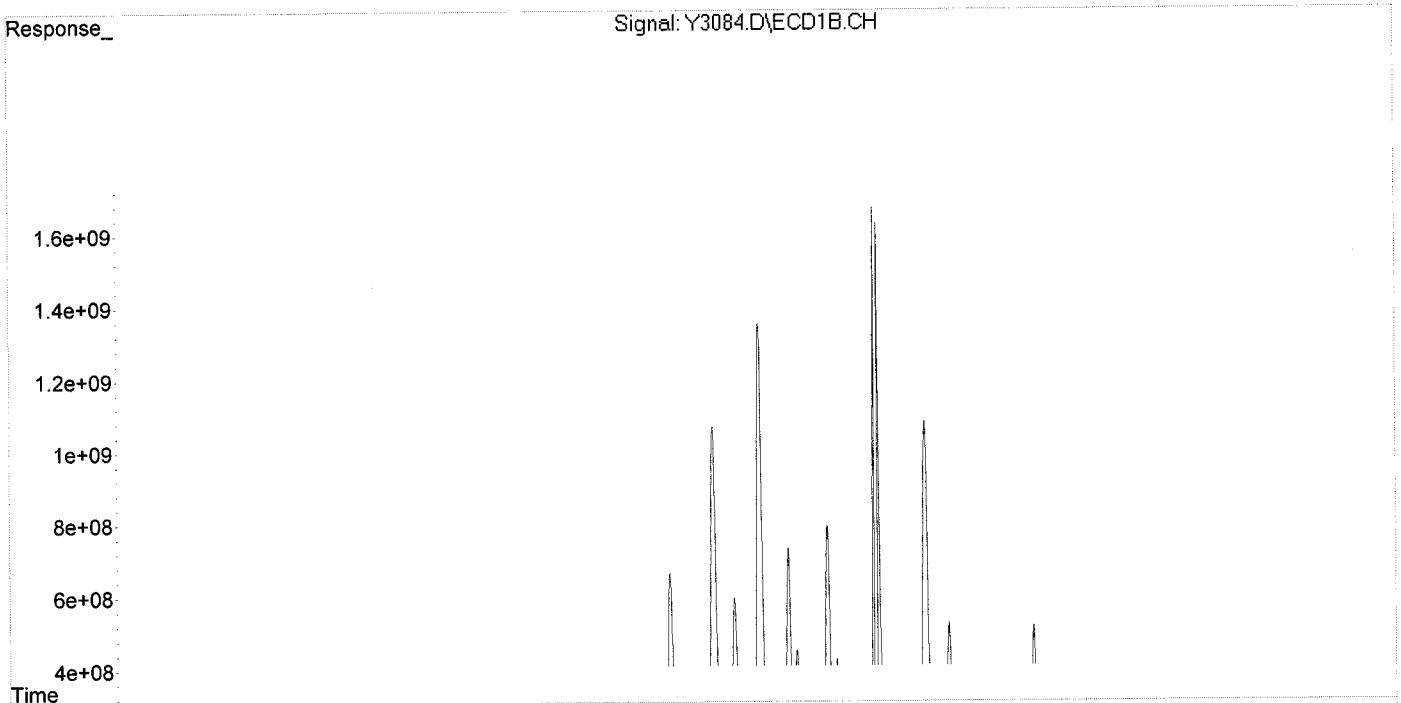
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

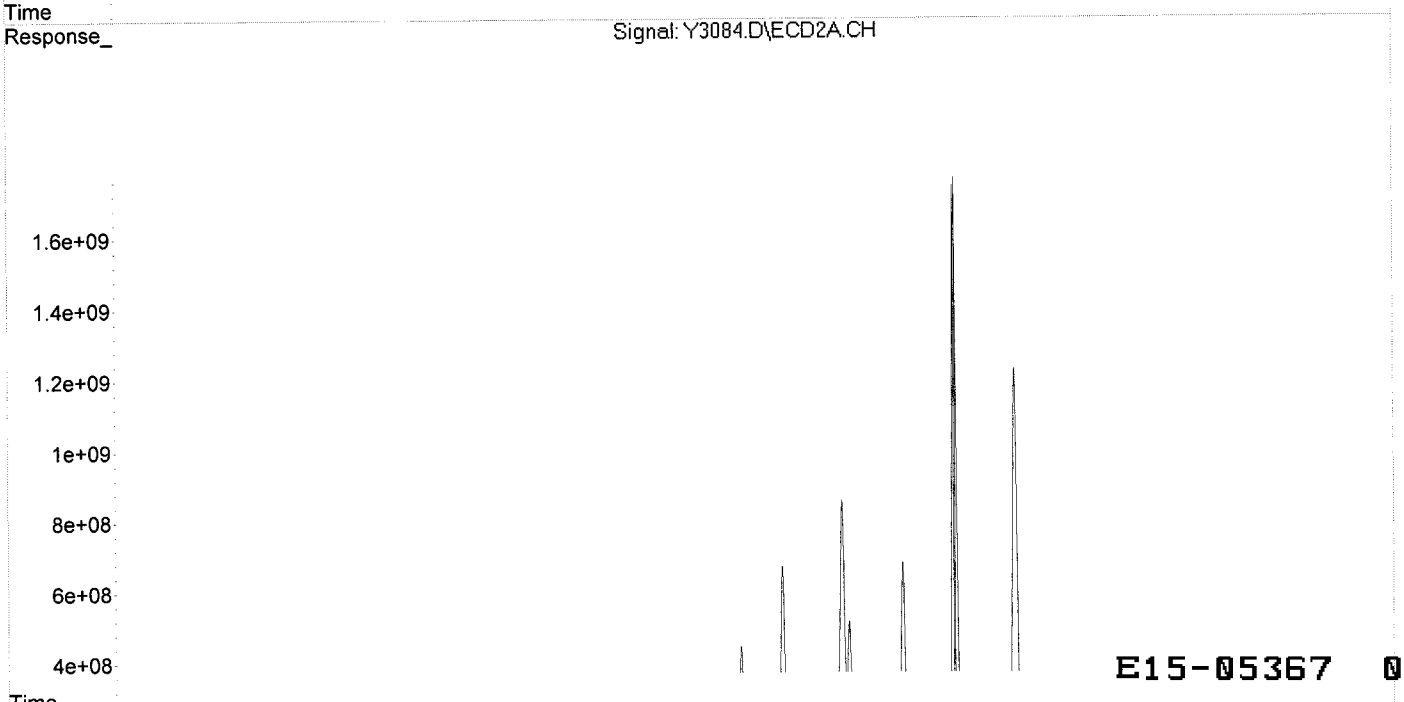
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3084.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:26
Operator : JS
Sample : X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:09:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

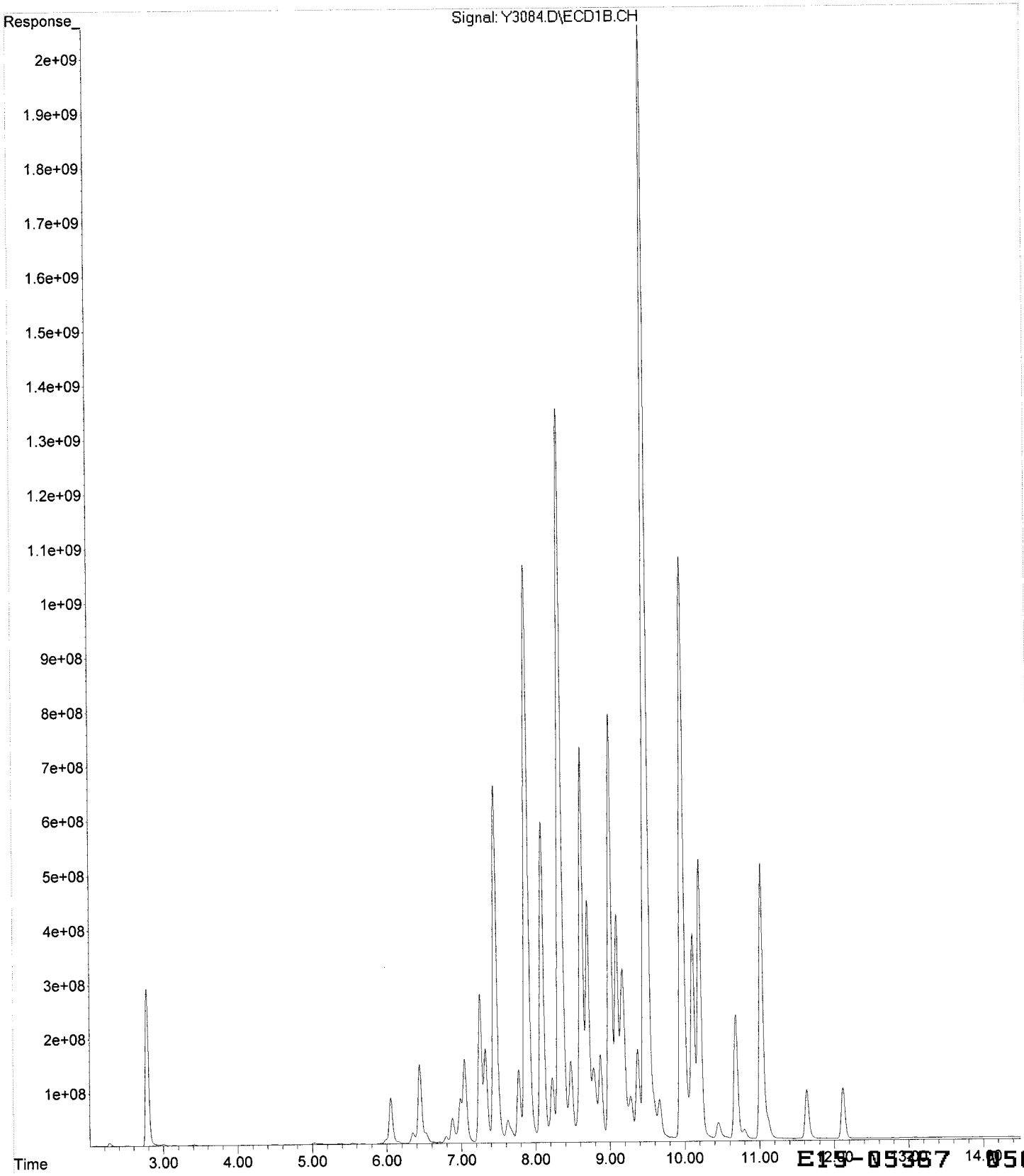
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



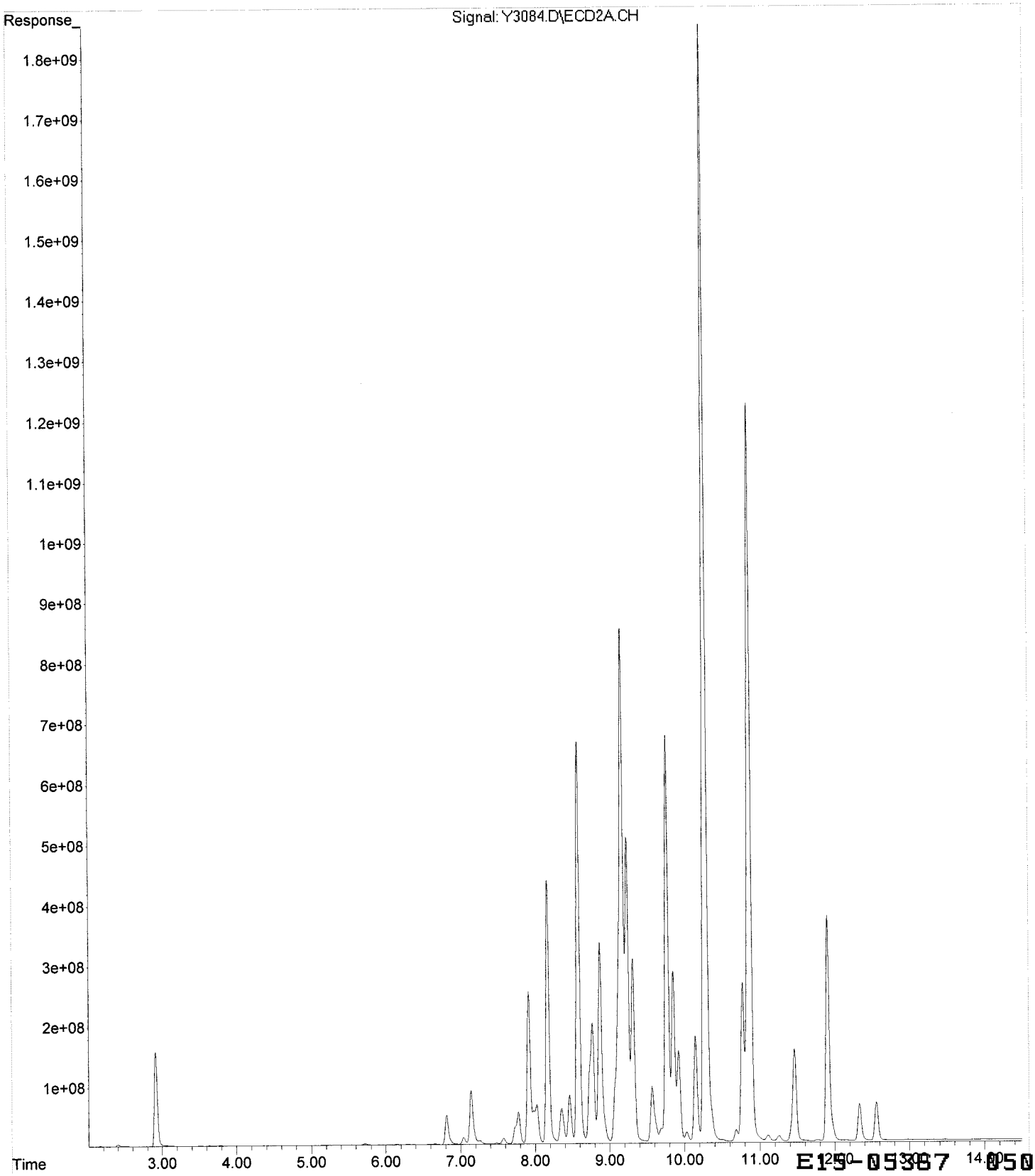


E15-05367 0505

File : C:\MSDChem\1\DATA\07-06-15\Y3084.D
Operator : JS
Acquired : 06 Jul 2015 20:26 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc Info : 150701-07,07/01/15,06/23/15,1
Vial Number: 27



File : C:\MSDChem\1\DATA\07-06-15\Y3084.D
Operator : JS
Acquired : 06 Jul 2015 20:26 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc Info : 150701-07,07/01/15,06/23/15,1
Vial Number: 27



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3137.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:26
Operator : JS
Sample : X-1_(4.5,E15-05367-023DL,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	638.2E6	311.4E6	9.582	8.986
Spiked Amount 200.000			Recovery	=	4.79%	4.49%
2) S DCB	12.12	12.56	189.7E6	131.4E6	9.261	10.629
Spiked Amount 200.000			Recovery	=	4.63%	5.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	3408.7E6	526.2E6	823.096	505.774 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1739.7E6	792.6E6	738.618	521.008 #
35) L8 Aroclor-1260 {3}	9.48	9.77	4877.8E6	1047.4E6	818.890	719.675
36) L8 Aroclor-1260 {4}	9.97	10.28	2462.8E6	2555.2E6	918.065	754.013
37) L8 Aroclor-1260 {5}	11.03	10.87	1068.8E6	1901.6E6	715.152	788.163
Sum Aroclor-1260			13557.8E6	6823.0E6	4013.822	3288.634
Average Aroclor-1260					802.764	657.727
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

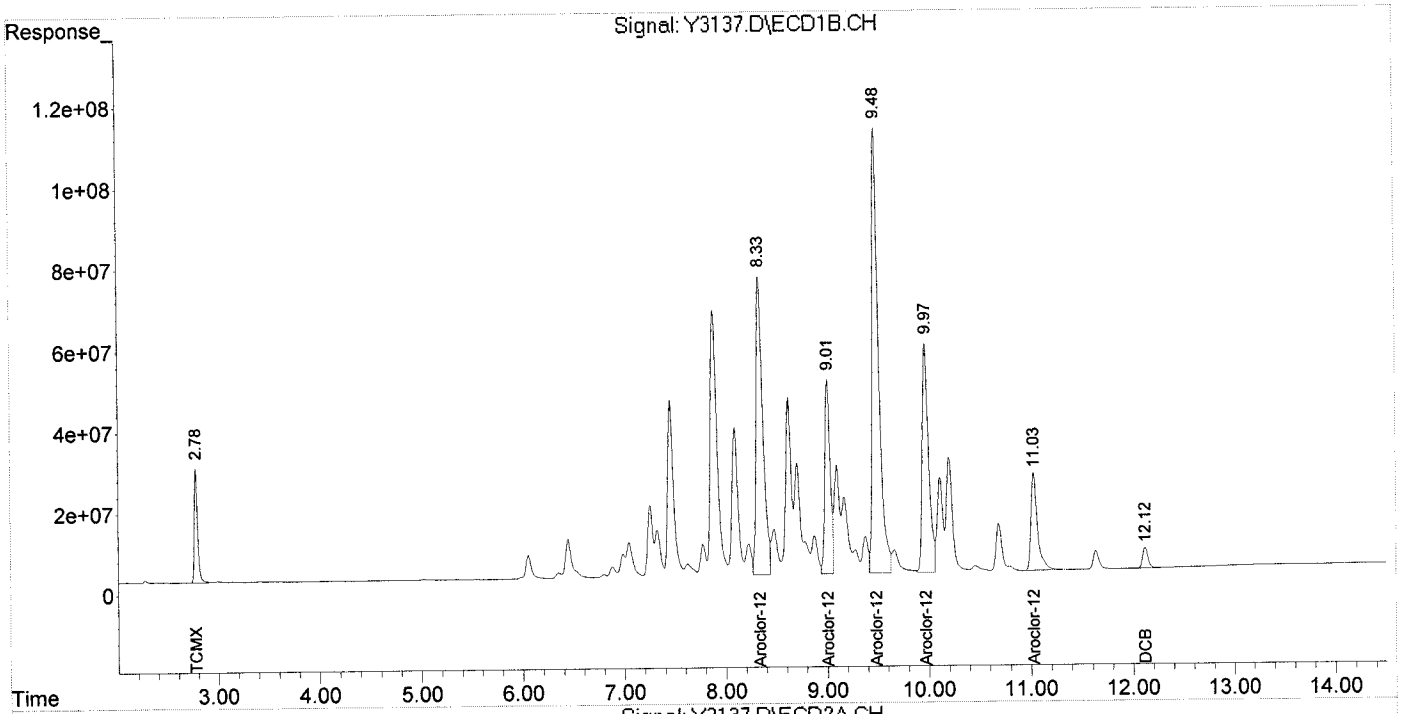
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

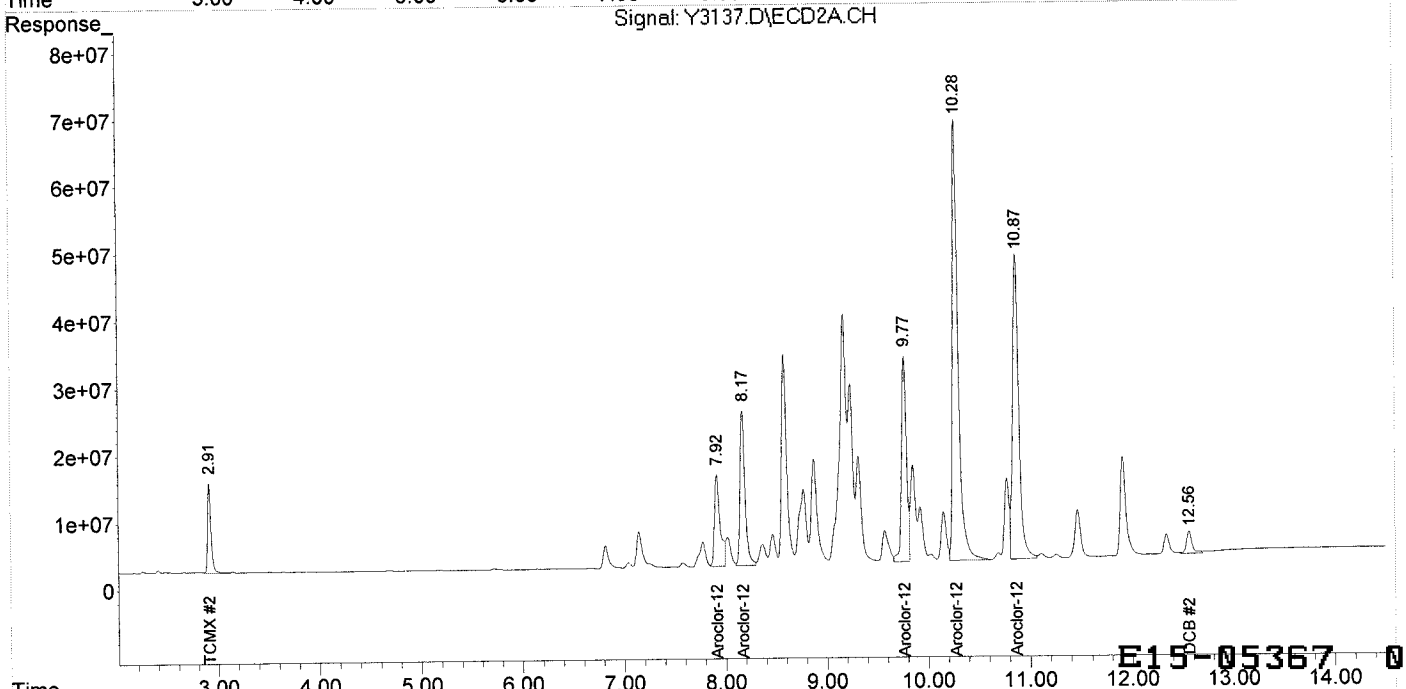
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3137.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:26
Operator : JS
Sample : X-1_(4.5,E15-05367-023DL,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:31:23 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3008.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:24
Operator : JS
Sample : X-2_(2.0,E15-05367-024,S,5.64g,6.50,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:49:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13004.4E6	6422.9E6	195.251	185.328
Spiked Amount 200.000			Recovery	=	97.63%	92.66%
2) S DCB	12.11	12.56	2932.9E6	2173.8E6	143.190	175.874
Spiked Amount 200.000			Recovery	=	71.59%	87.94%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	592.4E6	112.7E6	143.033	108.361
34) L8 Aroclor-1260 {2}	9.00	8.17	256.2E6	145.5E6	108.769	95.673
35) L8 Aroclor-1260 {3}	9.48	9.77	767.4E6	173.1E6	128.833	118.959
36) L8 Aroclor-1260 {4}	9.97	10.28	377.3E6	422.5E6	140.634	124.686
37) L8 Aroclor-1260 {5}	11.02	10.87	191.6E6	347.6E6	128.237	144.060
Sum Aroclor-1260			2184.9E6	1201.5E6	649.507	591.739
Average Aroclor-1260					129.901	118.348
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

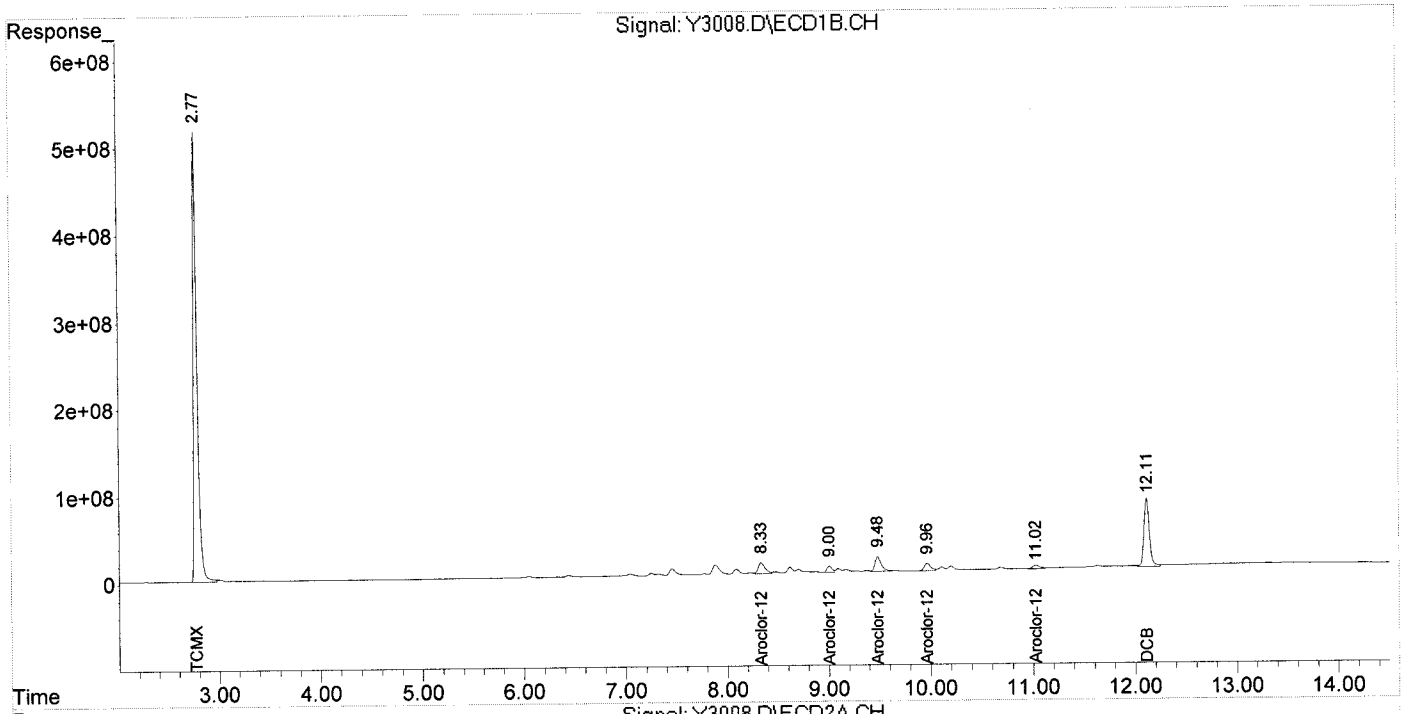
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

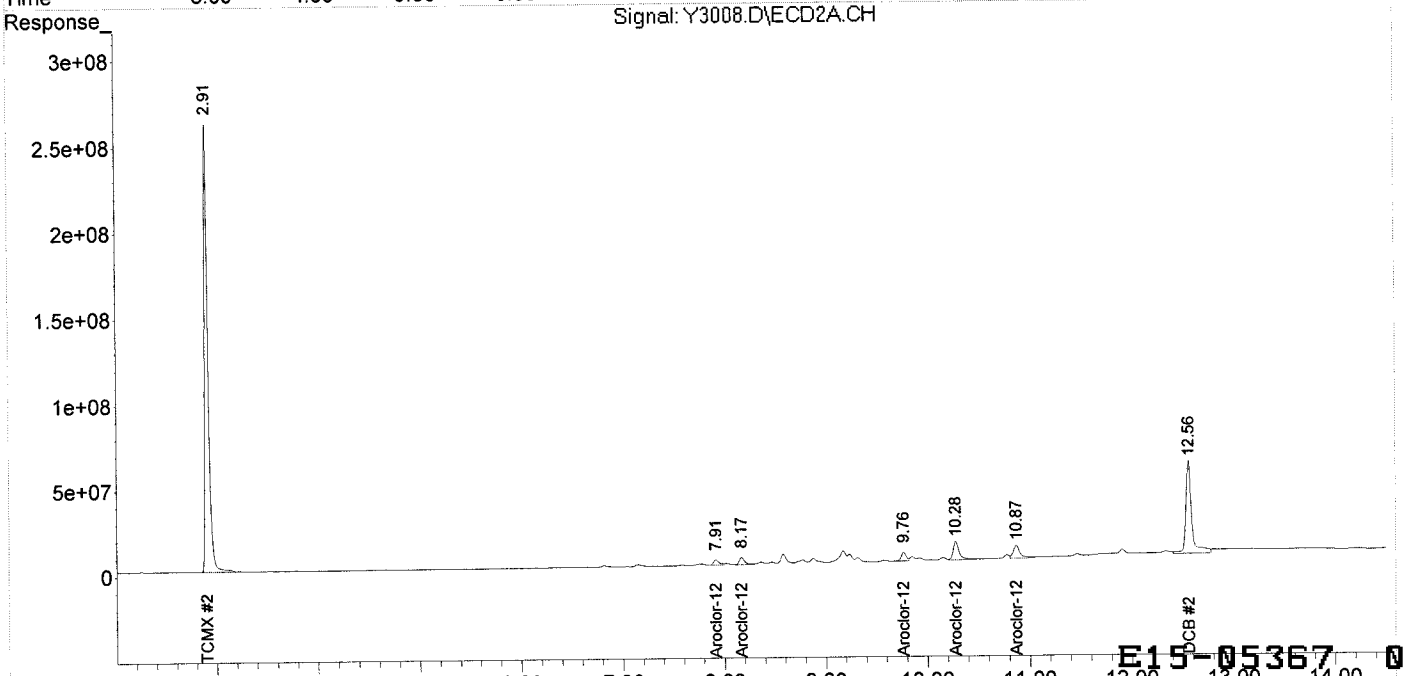
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3008.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:24
Operator : JS
Sample : X-2_(2.0,E15-05367-024,S,5.64g,6.50,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:49:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3009.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:41
Operator : JS
Sample : E-8_(0.5,E15-05367-025,S,5.65g,8.90,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:54:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.77	2.90	11232.3E6	6165.4E6	168.645	177.898	
Spiked Amount 200.000			Recovery	=	84.32%	88.95%	
2) S DCB	12.11	12.56	3038.9E6	1819.5E6	148.366	147.211	
Spiked Amount 200.000			Recovery	=	74.18%	73.61%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.33	7.92	4708.6E6	939.5E6	1136.980	902.931	
34) L8 Aroclor-1260 {2}	9.00	8.17	2147.2E6	1739.0E6	911.621	1143.142	#
35) L8 Aroclor-1260 {3}	9.48	9.77	6018.8E6	1457.5E6	1010.451	1001.420	
36) L8 Aroclor-1260 {4}	9.96	10.27	3059.7E6	3595.2E6	1140.555	1060.918	
37) L8 Aroclor-1260 {5}	11.02	10.87	1942.2E6	2658.6E6	1299.597	1101.892	
Sum Aroclor-1260			17876.5E6	10389.6E6	5499.204	5210.302	
Average Aroclor-1260					1099.841	1042.060	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

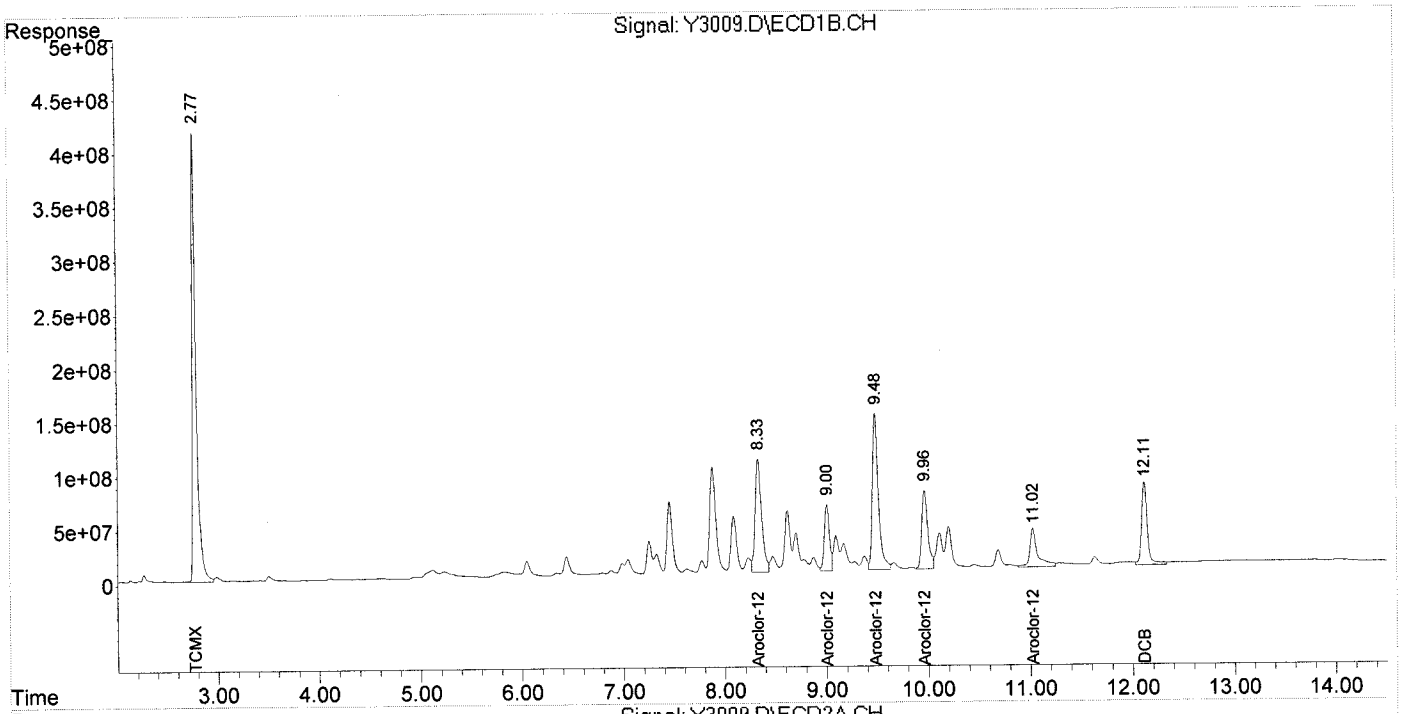
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

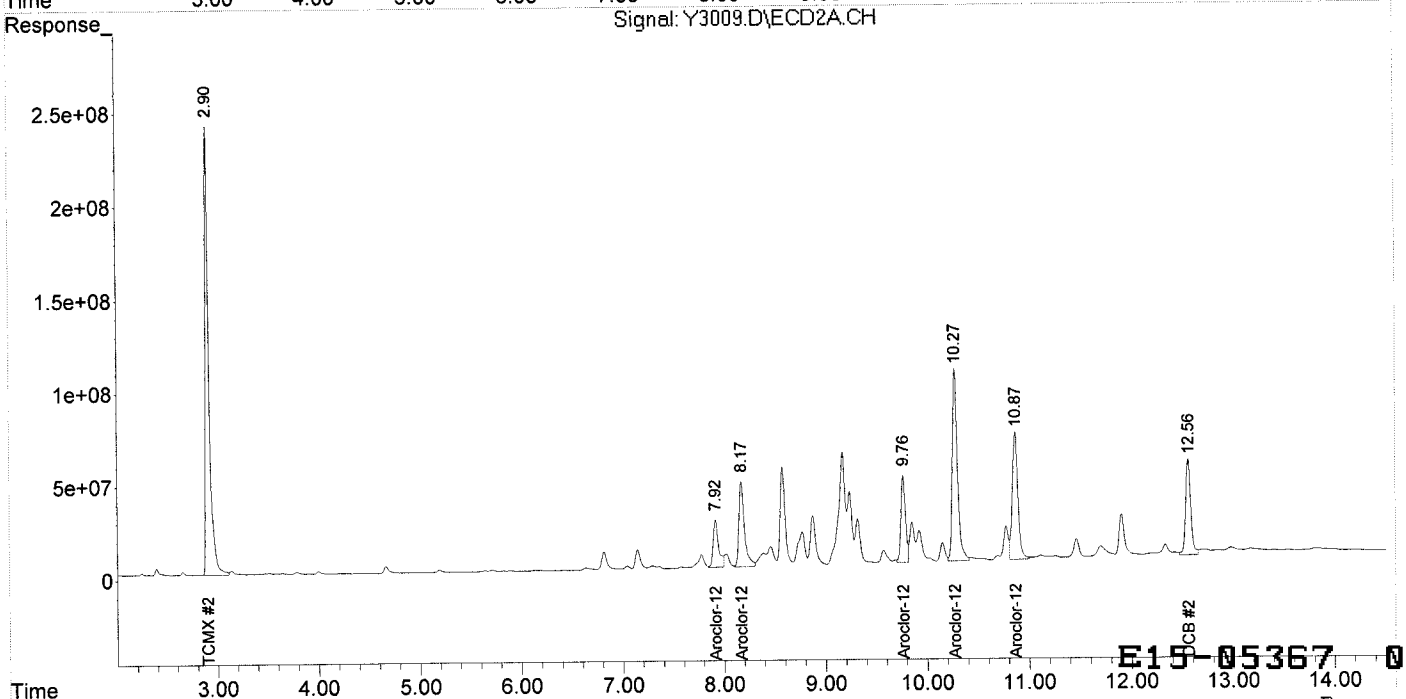
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3009.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:41
Operator : JS
Sample : E-8_(0.5,E15-05367-025,S,5.65g,8.90,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 15:54:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0513

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3010.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:59
Operator : JS
Sample : E-8_(2.0,E15-05367-026,S,5.74g,14.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:26:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12014.2E6	6229.0E6	180.384	179.732
Spiked Amount 200.000			Recovery	=	90.19%	89.87%
2) S DCB	12.11	12.56	3082.3E6	2375.6E6	150.487	192.203 #
Spiked Amount 200.000			Recovery	=	75.24%	96.10%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

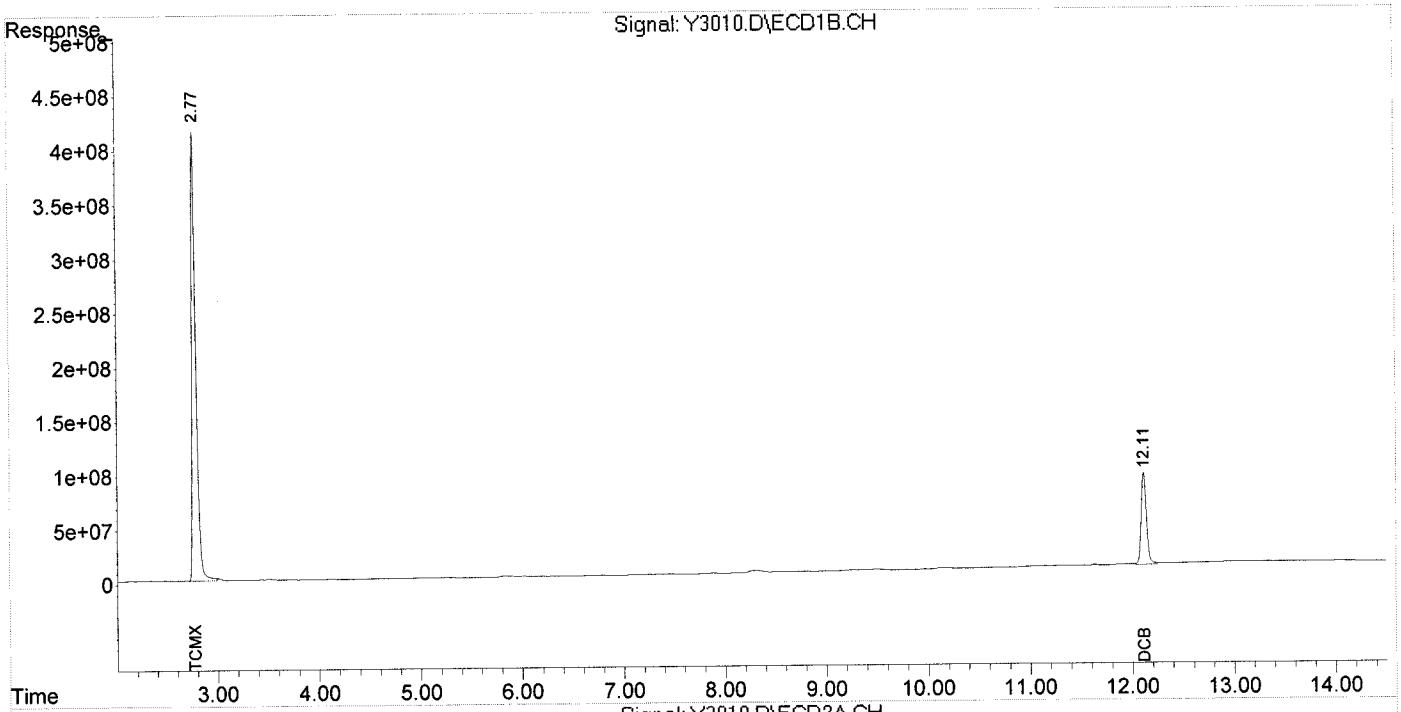
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

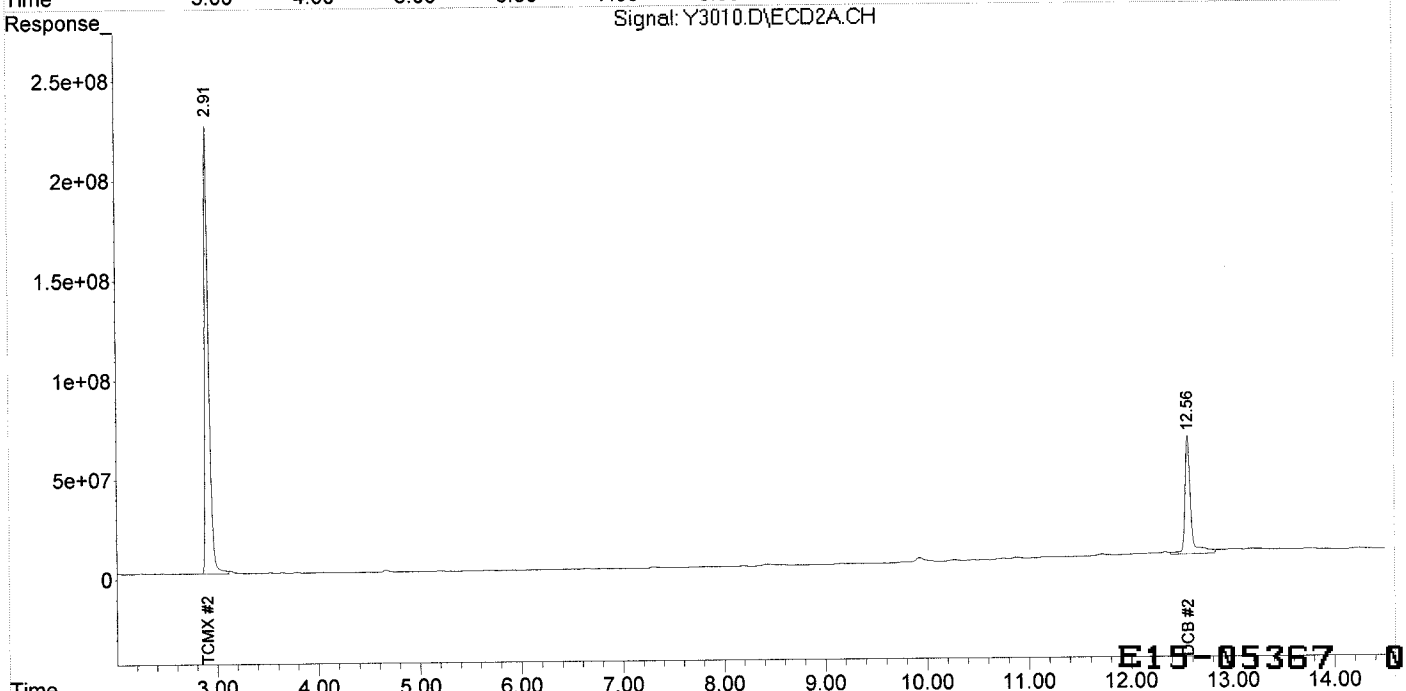
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3010.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 15:59
Operator : JS
Sample : E-8_(2.0,E15-05367-026,S,5.74g,14.3,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:26:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3057.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:25
Operator : JS
Sample : E-17_(0.,E15-05367-027,S,5.66g,18.5,20
Misc : 150701-08,07/01/15,06/23/15,200
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:32:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.92	58591925	35861801	0.880	1.035
Spiked Amount 200.000			Recovery	=	0.44%	0.52%
2) S DCB	12.12	12.57	14073649	10416872	0.687m	0.843m
Spiked Amount 200.000			Recovery	=	0.34%	0.42%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	1315.3E6	256.7E6	317.597	246.769
34) L8 Aroclor-1260 {2}	9.01	8.18	618.2E6	351.9E6	262.452	231.338
35) L8 Aroclor-1260 {3}	9.49	9.77	1689.1E6	396.2E6	283.564	272.254
36) L8 Aroclor-1260 {4}	9.97	10.28	786.3E6	923.8E6	293.122	272.609
37) L8 Aroclor-1260 {5}	11.03	10.87	345.8E6	654.7E6	231.365	271.355
Sum Aroclor-1260			4754.6E6	2583.4E6	1388.101	1294.325
Average Aroclor-1260					277.620	258.865
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

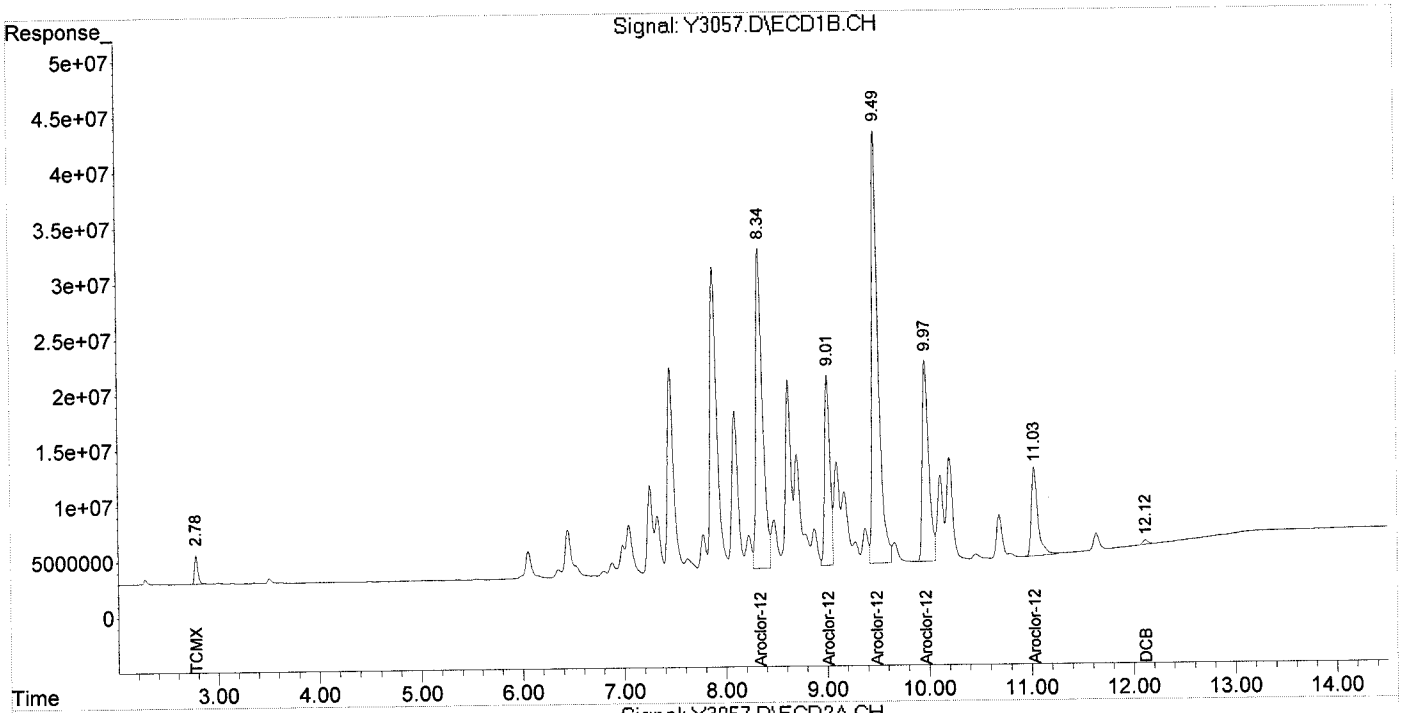
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

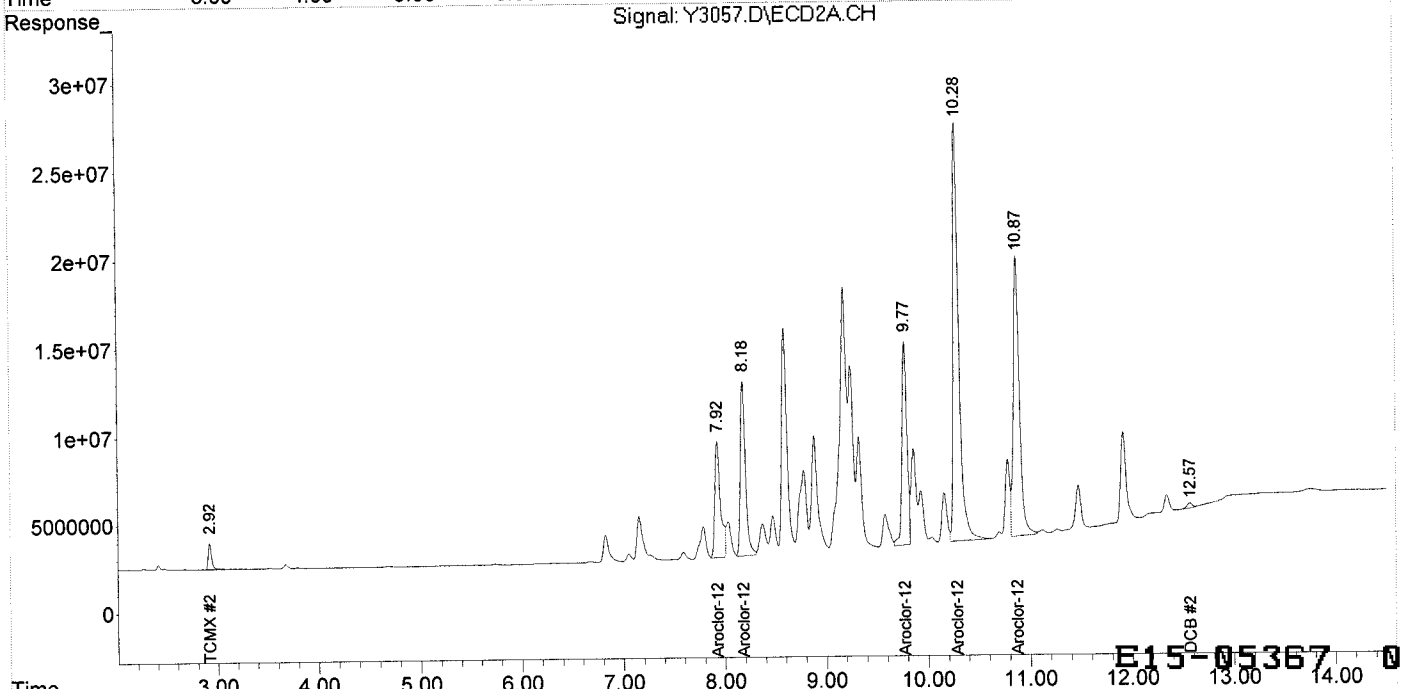
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3057.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:25
Operator : JS
Sample : E-17_(0.,E15-05367-027,S,5.66g,18.5,20
Misc : 150701-08,07/01/15,06/23/15,200
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:32:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3012.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 16:32
Operator : JS
Sample : E-17_(2.,E15-05367-028,S,5.35g,28.6,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:27:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11511.7E6	6791.5E6	172.840	195.962
Spiked Amount 200.000			Recovery	=	86.42%	97.98%
2) S DCB	12.11	12.56	3936.0E6	3341.8E6	192.167	270.371 #
Spiked Amount 200.000			Recovery	=	96.08%	135.19%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	2290.0E6	492.4E6	552.958	473.275
34) L8 Aroclor-1260 {2}	9.00	8.17	1350.9E6	764.7E6	573.558	502.700
35) L8 Aroclor-1260 {3}	9.48	9.77	3576.9E6	965.7E6	600.507	663.501
36) L8 Aroclor-1260 {4}	9.96	10.27	1890.6E6	2270.4E6	704.745m	669.980
37) L8 Aroclor-1260 {5}	11.02	10.86	1159.2E6	1807.9E6	775.660m	749.331
Sum Aroclor-1260			10267.6E6	6301.1E6	3207.428	3058.786
Average Aroclor-1260					641.486	611.757
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

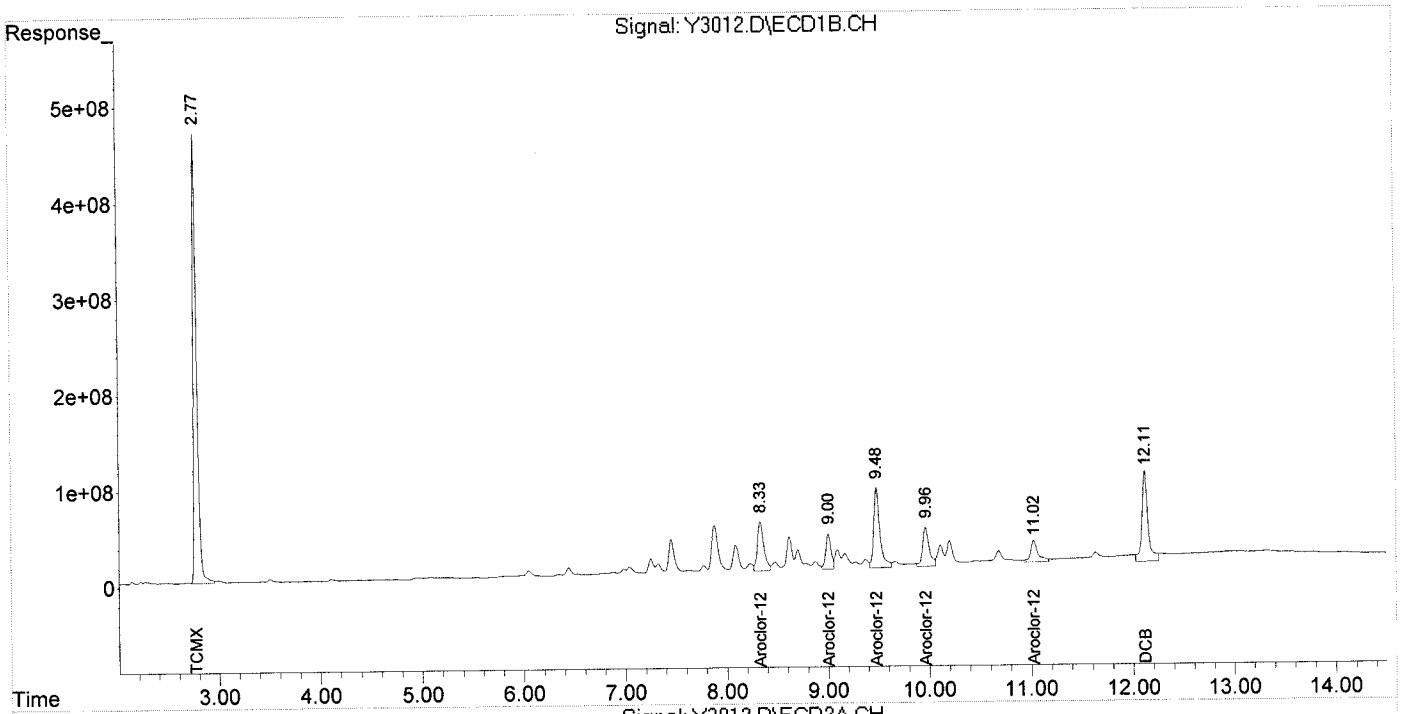
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

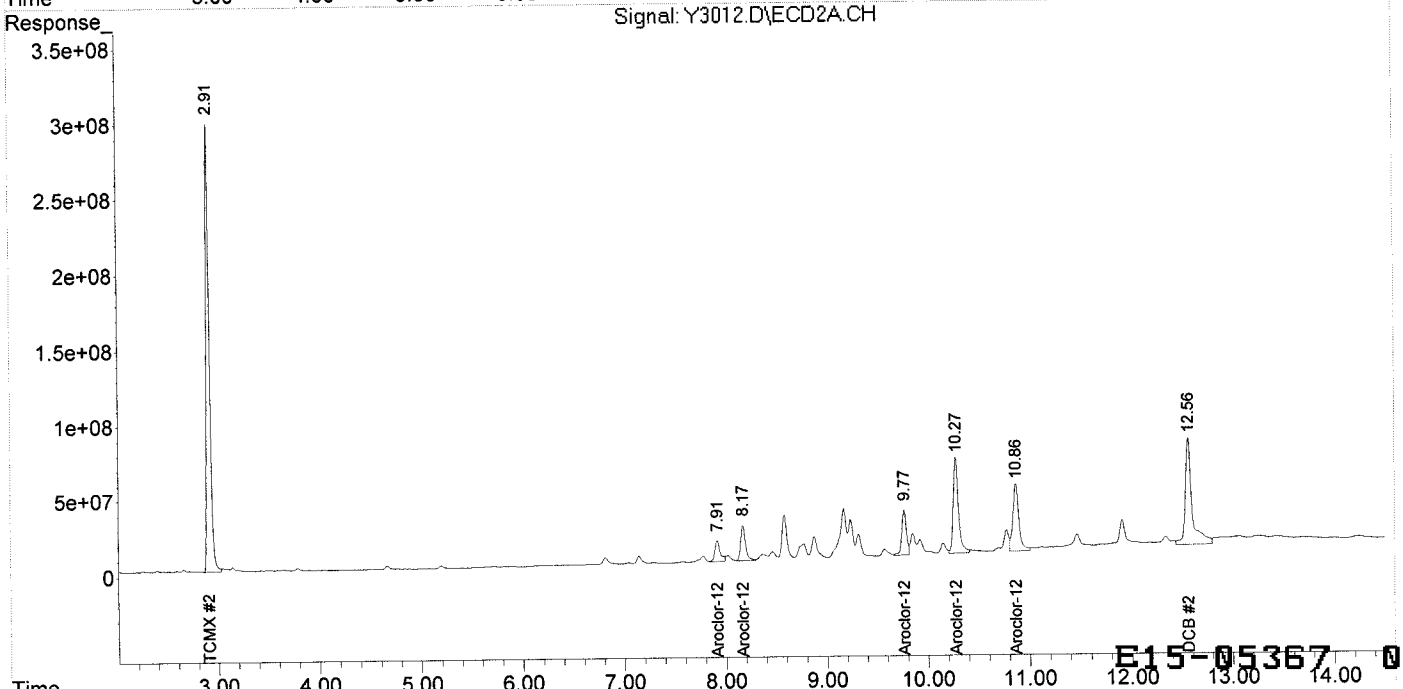
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3012.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 16:32
Operator : JS
Sample : E-17_(2.,E15-05367-028,S,5.35g,28.6,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:27:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3058.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:53
Operator : JS
Sample : E-9_(0.5,E15-05367-029,S,5.74g,18.0,20
Misc : 150701-08,07/01/15,06/23/15,5
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:33:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.92	2309.4E6	1274.4E6	34.674	36.771
Spiked Amount 200.000			Recovery	=	17.34%	18.39%
2) S DCB	12.12	12.56	555.3E6	355.7E6	27.110m	28.775m
Spiked Amount 200.000			Recovery	=	13.56%	14.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1702.1E6	311.4E6	410.994	299.263 #
34) L8 Aroclor-1260 {2}	9.01	8.18	866.8E6	549.4E6	368.025	361.183
35) L8 Aroclor-1260 {3}	9.48	9.77	2412.5E6	609.4E6	405.023	418.753
36) L8 Aroclor-1260 {4}	9.97	10.28	1166.5E6	1369.7E6	434.843	404.180
37) L8 Aroclor-1260 {5}	11.03	10.87	594.7E6	1107.4E6	397.958	458.992
Sum Aroclor-1260			6742.7E6	3947.4E6	2016.843	1942.372
Average Aroclor-1260					403.369	388.474
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

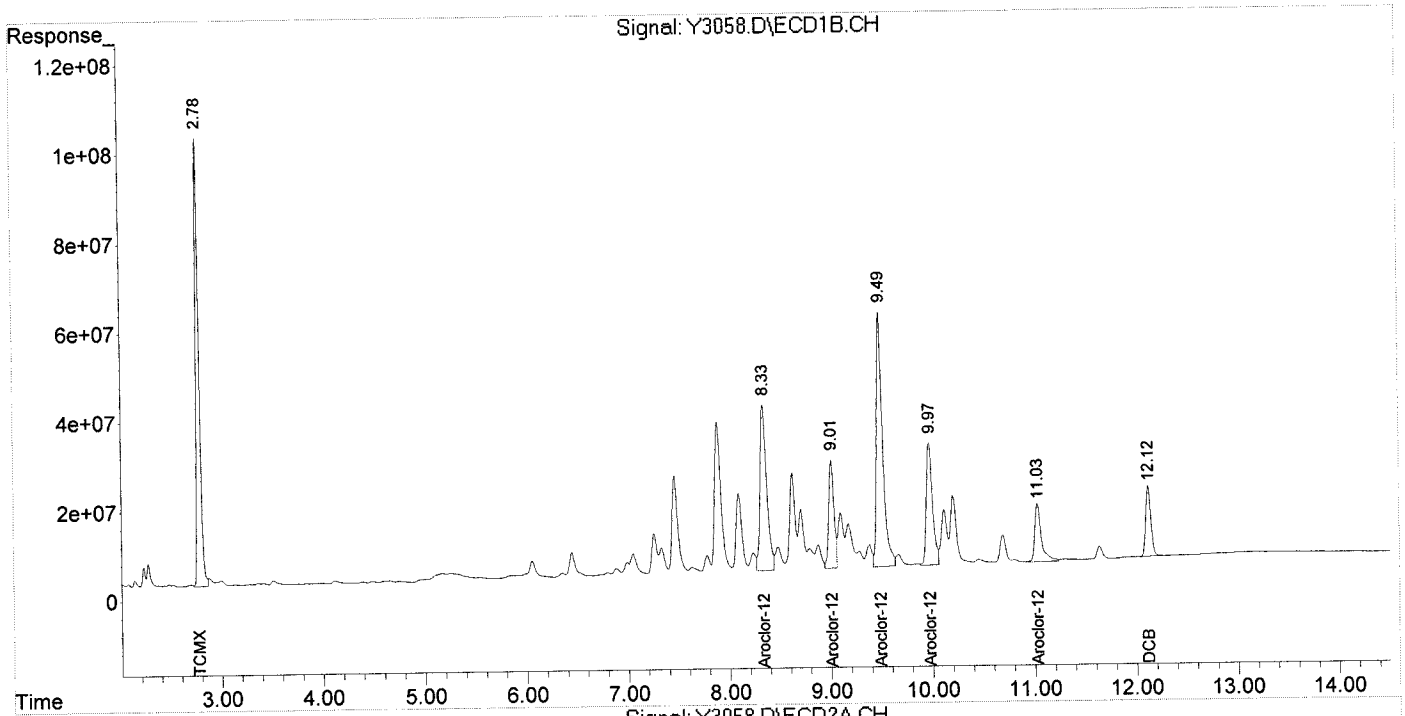
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

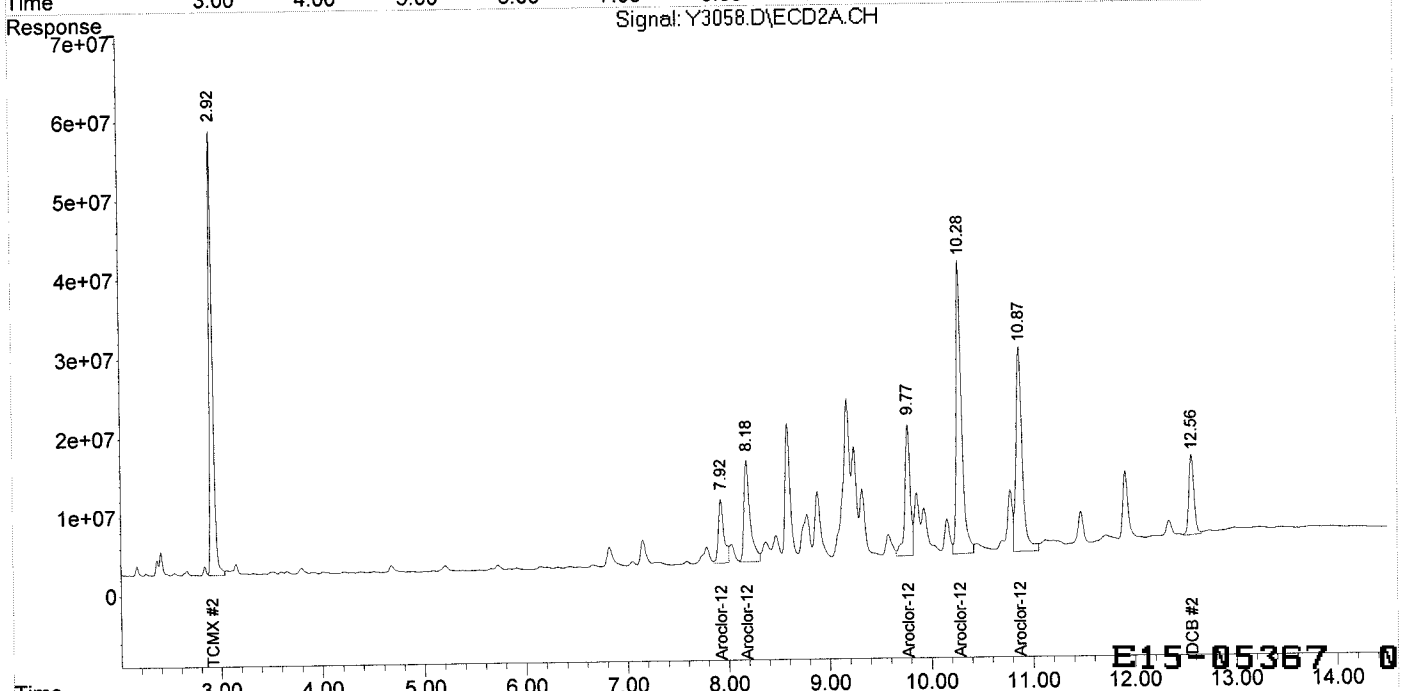
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3058.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:53
Operator : JS
Sample : E-9_(0.5,E15-05367-029,S,5.74g,18.0,20
Misc : 150701-08,07/01/15,06/23/15,5
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:33:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3014.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 17:07
Operator : JS
Sample : E-9_(2.0,E15-05367-030,S,5.33g,8.50,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:33:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12360.0E6	6175.3E6	185.576	178.182
Spiked Amount 200.000			Recovery	=	92.79%	89.09%
2) S DCB	12.11	12.56	3031.6E6	2175.3E6	148.012	175.992
Spiked Amount 200.000			Recovery	=	74.01%	88.00%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	57547536	25730855	13.896	24.731 #
34) L8 Aroclor-1260 {2}	9.00	8.17	66847324	61052345	28.381	40.133 #
35) L8 Aroclor-1260 {3}	9.48	9.77	220.6E6	56842658	37.035	39.057
36) L8 Aroclor-1260 {4}	9.97	10.28	118.3E6	143.9E6	44.102	42.451
37) L8 Aroclor-1260 {5}	11.03	10.87	78472454	98674729	52.508m	40.898m
Sum Aroclor-1260			541.8E6	386.2E6	175.923	187.269
Average Aroclor-1260					35.185	37.454
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

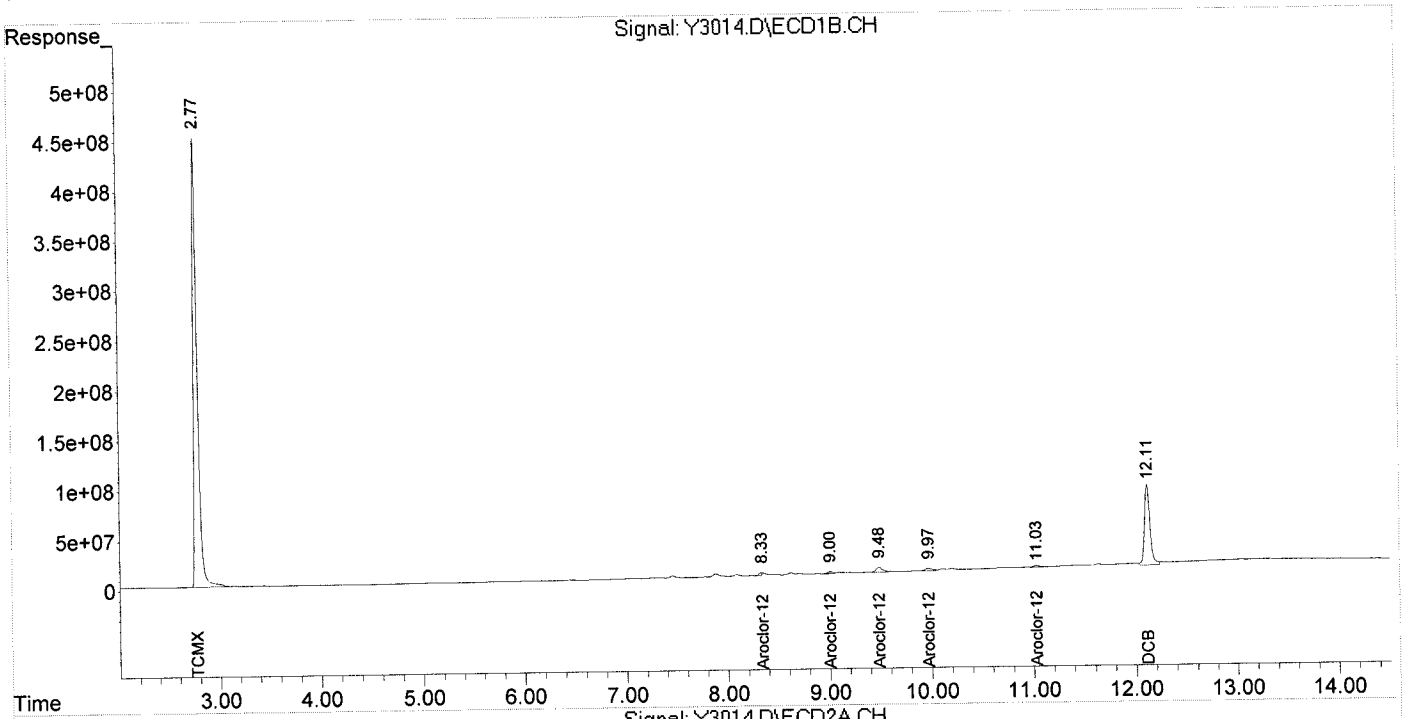
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

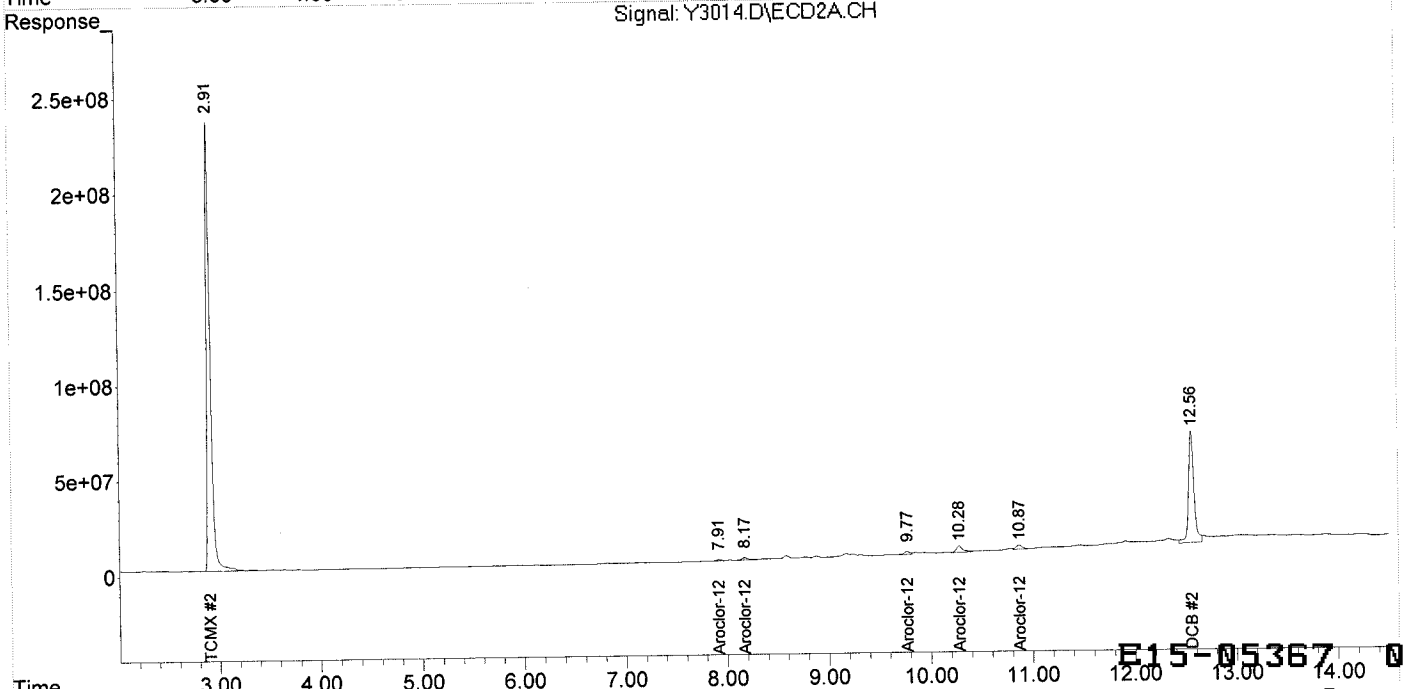
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3014.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 17:07
Operator : JS
Sample : E-9_(2.0,E15-05367-030,S,5.33g,8.50,20
Misc : 150701-08,07/01/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:33:08 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367_0523

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5535.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:30
Operator : JS
Sample : PZ-1_(0.,E15-05367-031,S,30.13g,30.2,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:38:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	634.1E6	3581.4E6	31.534	29.339
Spiked Amount 200.000			Recovery	=	15.77%	14.67%
2) S DCB	12.06	12.55	385.2E6	1524.2E6	46.622	44.400
Spiked Amount 200.000			Recovery	=	23.31%	22.20%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.89	2046.9E6	3214.6E6	1555.048	905.713 #
34) L8 Aroclor-1260 {2}	8.94	8.14	915.0E6	4629.2E6	1225.305	903.795 #
35) L8 Aroclor-1260 {3}	9.42	9.74	2829.4E6	5620.5E6	1446.318	1235.773
36) L8 Aroclor-1260 {4}	9.90	10.25	1374.4E6	13064.9E6	1559.888	1245.371
37) L8 Aroclor-1260 {5}	10.97	10.85	738.3E6	9145.4E6	1316.267	1309.193
Sum Aroclor-1260			7903.9E6	35674.6E6	7102.826	5599.846
Average Aroclor-1260					1420.565	1119.969
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

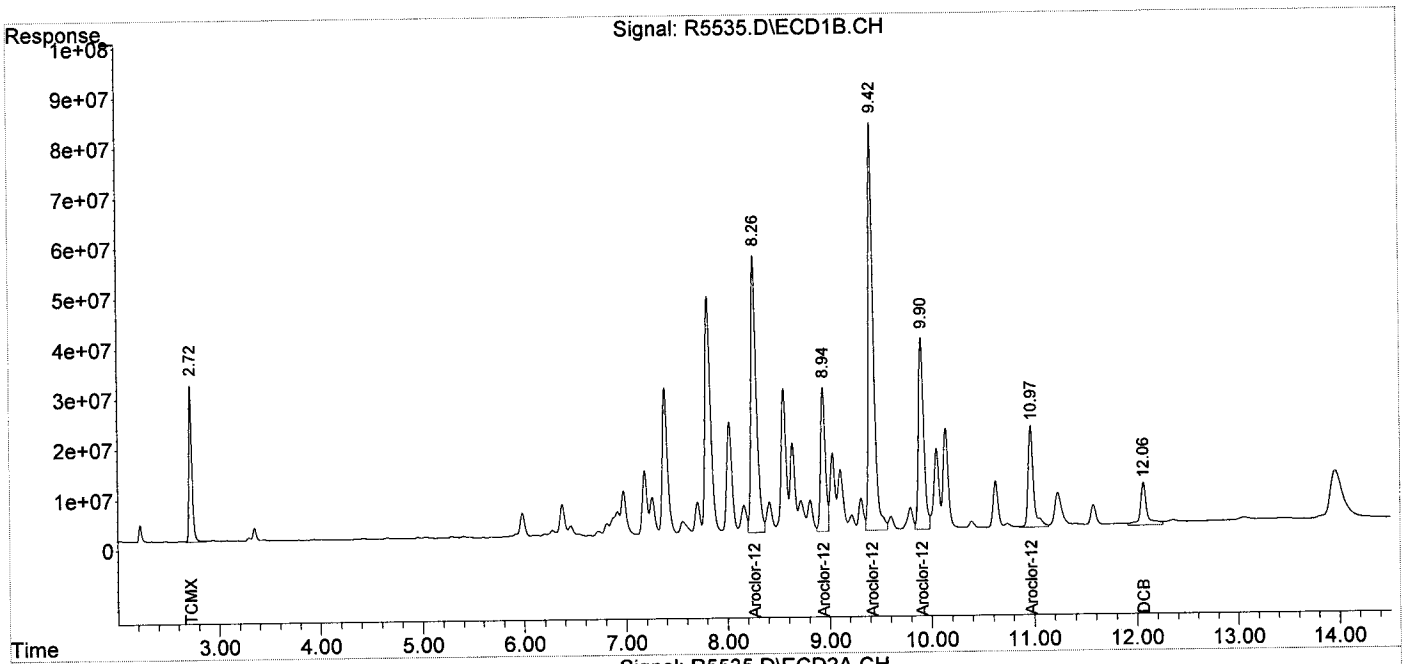
E15-05367_0524

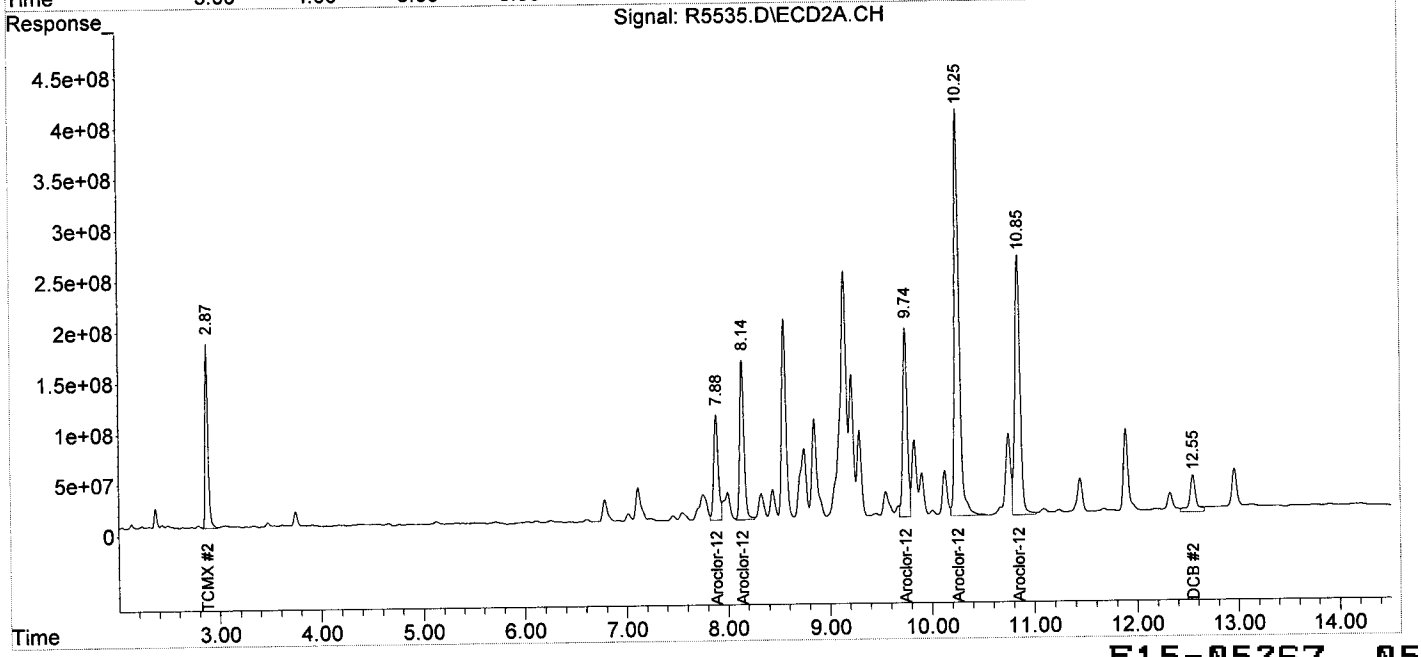
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5535.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:30
Operator : JS
Sample : PZ-1_(0.,E15-05367-031,S,30.13g,30.2,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:38:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5536.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:48
Operator : JS
Sample : PZ-1_(2.,E15-05367-032,S,30.23g,15.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 15:27:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	551.5E6	3131.4E6	27.422	25.652
Spiked Amount 200.000			Recovery	=	13.71%	12.83%
2) S DCB	12.06	12.56	384.7E6	2049.0E6	46.565	59.686 #
Spiked Amount 200.000			Recovery	=	23.28%	29.84%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	353.1E6	675.8E6	268.261	190.412 #
34) L8 Aroclor-1260 {2}	8.94	8.14	157.1E6	863.0E6	210.454	168.483
35) L8 Aroclor-1260 {3}	9.42	9.74	494.6E6	1160.2E6	252.817	255.100
36) L8 Aroclor-1260 {4}	9.90	10.25	244.2E6	2432.3E6	277.189	231.849
37) L8 Aroclor-1260 {5}	10.97	10.85	155.9E6	1772.0E6	277.864	253.661
Sum Aroclor-1260			1404.9E6	6903.2E6	1286.585	1099.505
Average Aroclor-1260					257.317	219.901
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

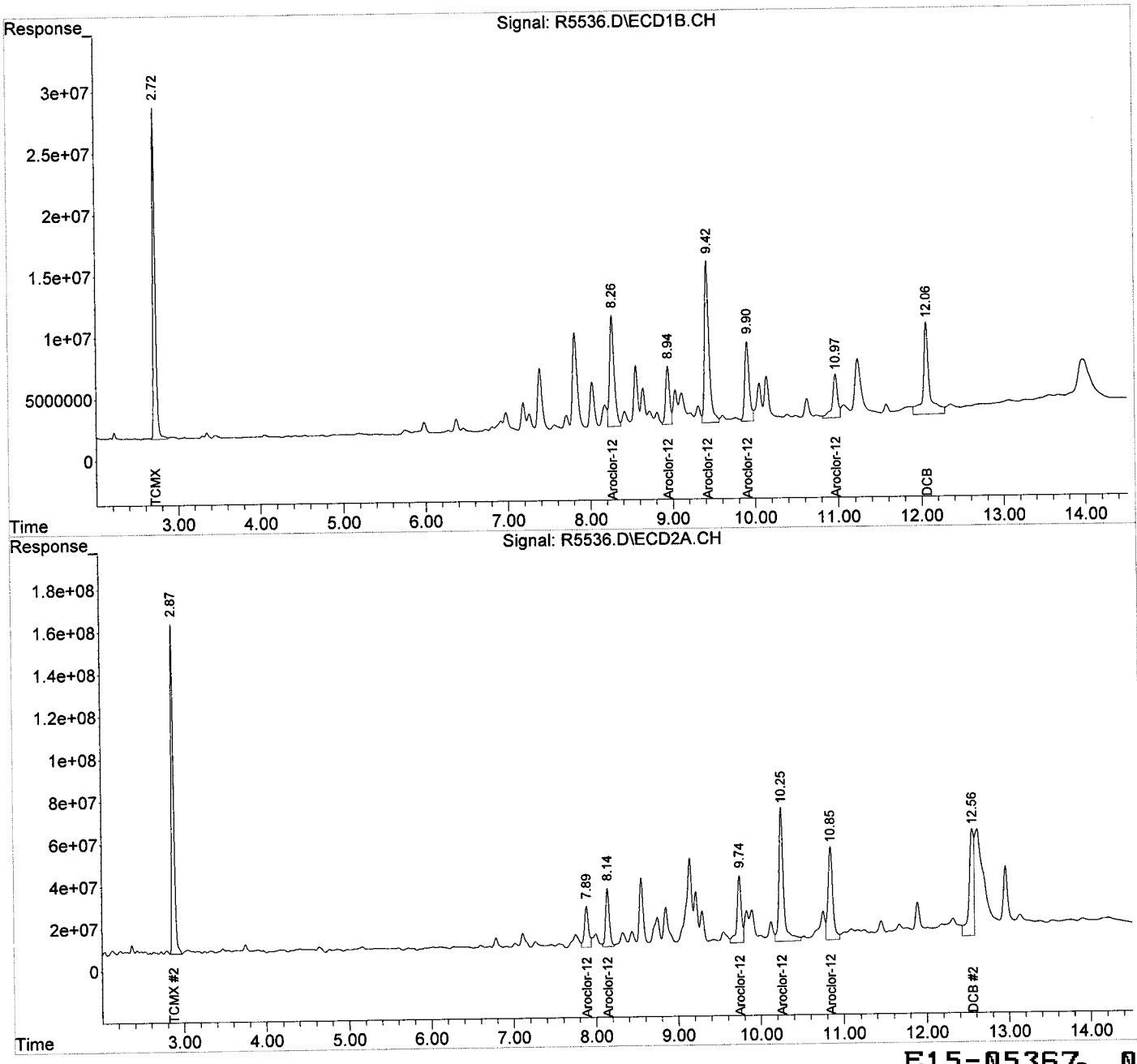
E15-05367_0526

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5536.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 15:48
Operator : JS
Sample : PZ-1_(2.,E15-05367-032,S,30.23g,15.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 15:27:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:05
Operator : JS
Sample : PZ-1_(2.,E15-05367-033,S,30.66g,8.90,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:40:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	667.6E6	3819.5E6	33.197	31.289
Spiked Amount 200.000			Recovery	=	16.60%	15.64%
2) S DCB	12.07	12.55	394.4E6	1570.7E6	47.737	45.754m
Spiked Amount 200.000			Recovery	=	23.87%	22.88%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	419.7E6	741.6E6	318.881	208.951 #
34) L8 Aroclor-1260 {2}	8.94	8.14	198.0E6	1034.0E6	265.105	201.882
35) L8 Aroclor-1260 {3}	9.42	9.74	581.3E6	1296.7E6	297.172	285.099
36) L8 Aroclor-1260 {4}	9.91	10.26	289.7E6	2803.7E6	328.745	267.256
37) L8 Aroclor-1260 {5}	10.97	10.85	171.9E6	2068.6E6	306.535	296.126
Sum Aroclor-1260			1660.6E6	7944.6E6	1516.438	1259.315
Average Aroclor-1260					303.288	251.863
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

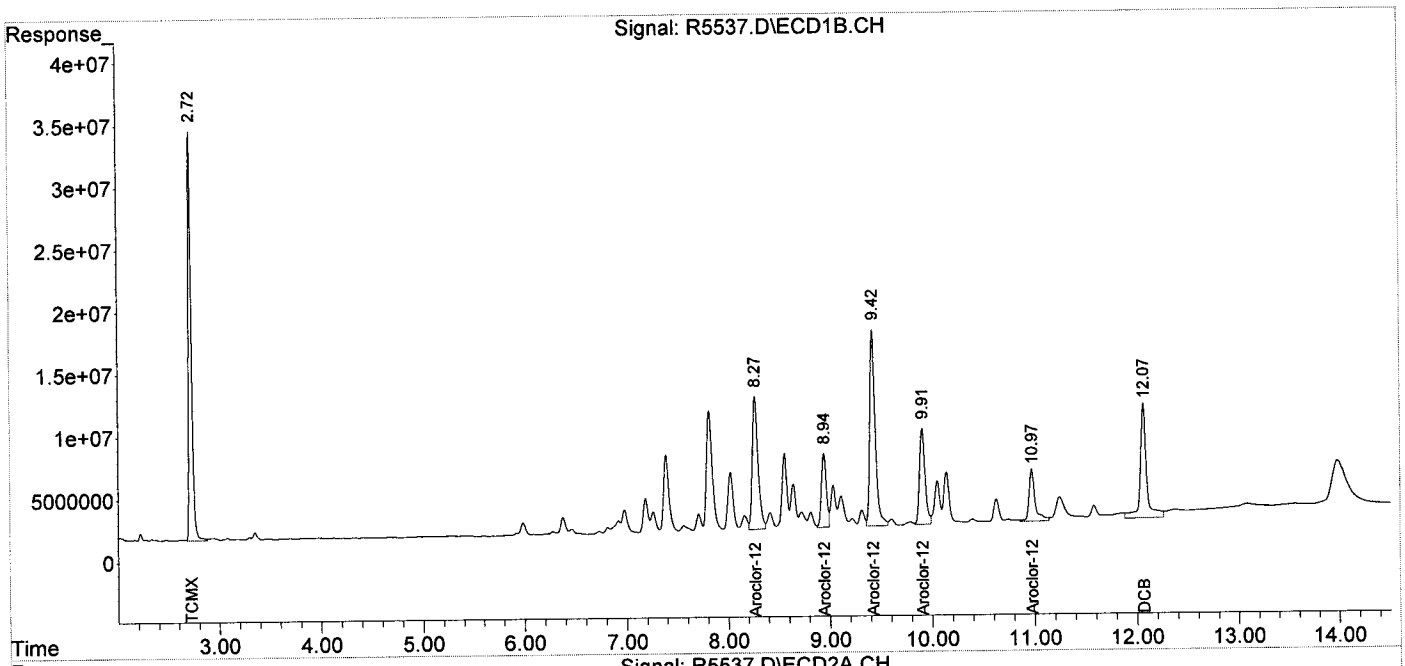
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

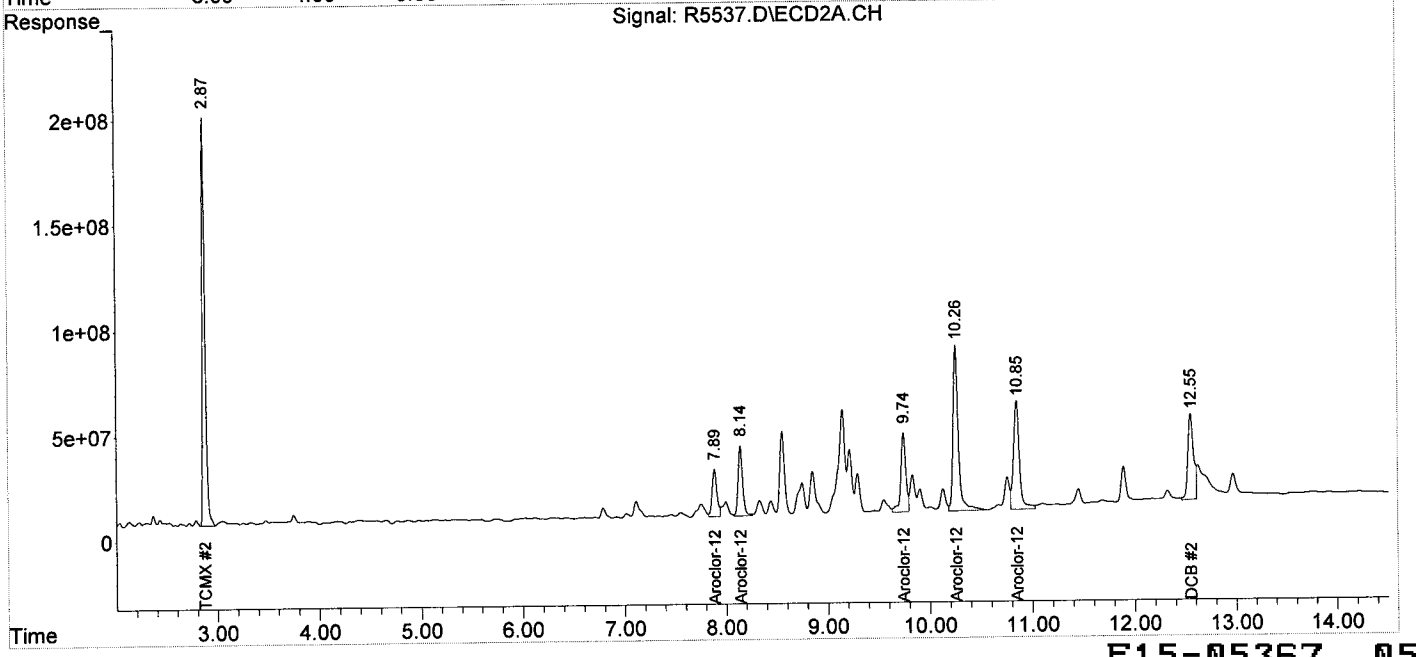
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5537.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:05
Operator : JS
Sample : PZ-1_(2.,E15-05367-033,S,30.66g,8.90,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:40:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5538.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:41
Operator : JS
Sample : PZ-1_(4.,E15-05367-034,S,30.65g,12.0,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:41:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3405.7E6	19345.1E6	169.350	158.477
Spiked Amount 200.000			Recovery	=	84.67%	79.24%
2) S DCB	12.07	12.56	1644.6E6	7669.5E6	199.064	223.414m
Spiked Amount 200.000			Recovery	=	99.53%	111.71%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.90	81982544	212.9E6	62.283	59.975
34) L8 Aroclor-1260 {2}	8.95	8.15	40757113	264.6E6	54.582	51.654
35) L8 Aroclor-1260 {3}	9.43	9.76	117.8E6	357.3E6	60.211	78.556 #
36) L8 Aroclor-1260 {4}	9.91	10.27	63978152	637.2E6	72.613	60.736
37) L8 Aroclor-1260 {5}	10.98	10.86	37817329	487.1E6	67.420m	69.724
Sum Aroclor-1260			342.3E6	1958.9E6	317.109	320.645
Average Aroclor-1260					63.422	64.129
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

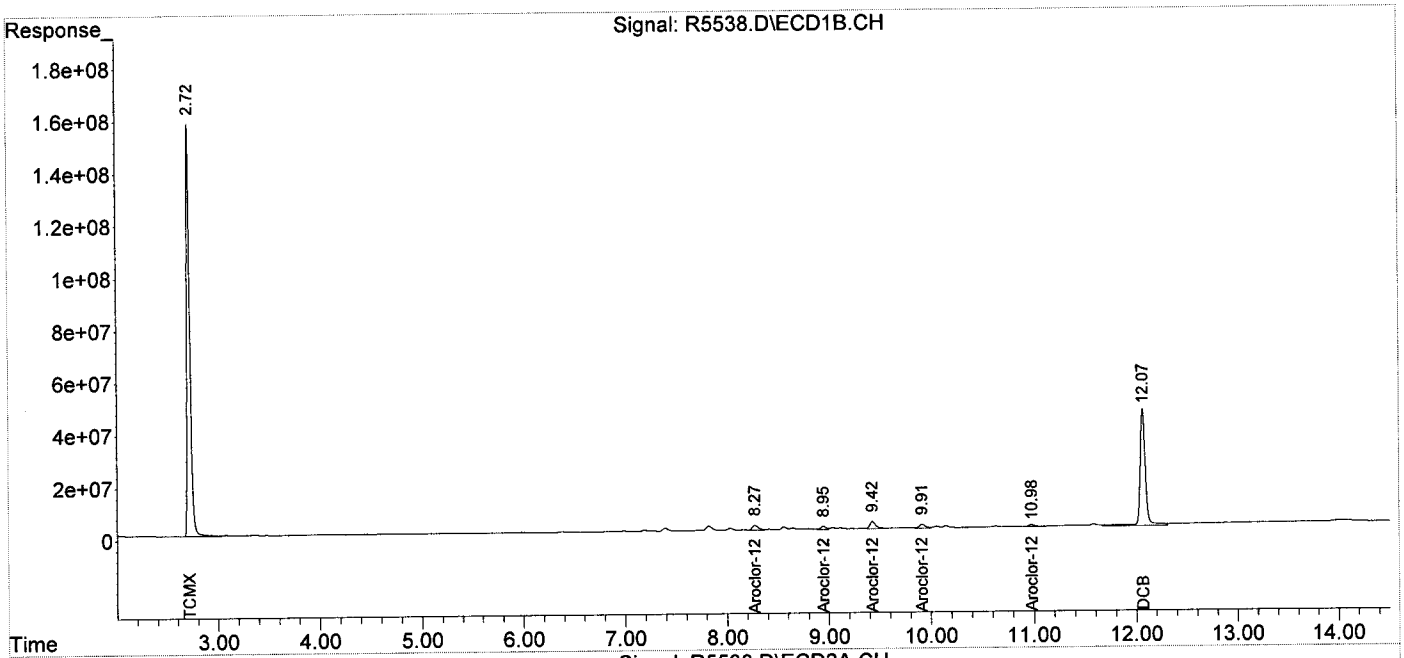
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

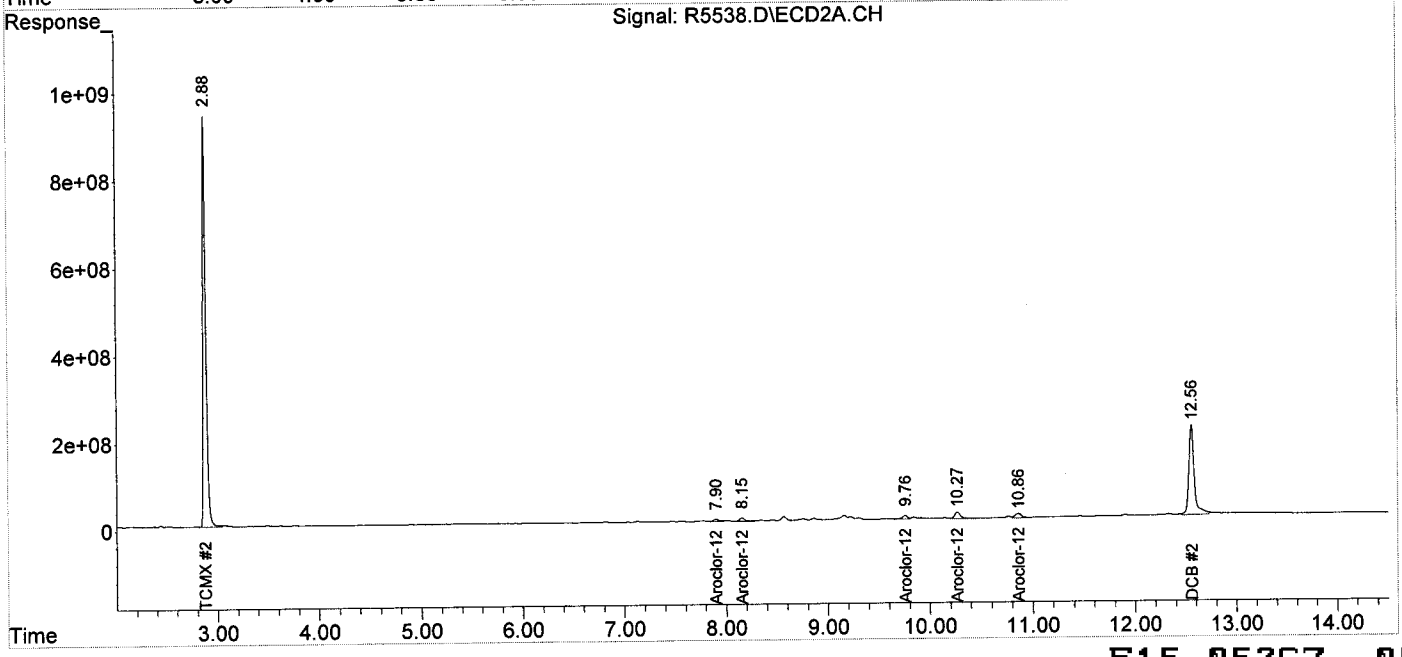
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5538.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:41
Operator : JS
Sample : PZ-1_(4.,E15-05367-034,S,30.65g,12.0,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:41:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5539.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:58
Operator : JS
Sample : E-5_(0.5,E15-05367-035,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:42:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	315.2E6	1837.2E6	15.673	15.050
Spiked Amount 200.000			Recovery =		7.84%	7.52%
2) S DCB	12.07	12.55	130.6E6	863.9E6	15.810	25.164 #
Spiked Amount 200.000			Recovery =		7.91%	12.58%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	5845.5E6	10703.4E6	4440.949	3015.711 #
34) L8 Aroclor-1260 {2}	8.94	8.14	2498.1E6	14297.7E6	3345.396	2791.455
35) L8 Aroclor-1260 {3}	9.42	9.75	7669.0E6	17380.0E6	3920.247	3821.352
36) L8 Aroclor-1260 {4}	9.91	10.26	3820.6E6	37965.2E6	4336.180	3618.925
37) L8 Aroclor-1260 {5}	10.97	10.85	1900.1E6	26111.9E6	3387.504	3737.989
Sum Aroclor-1260			21733.3E6	106458.3E6	19430.276	16985.433
Average Aroclor-1260					3886.055	3397.087
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

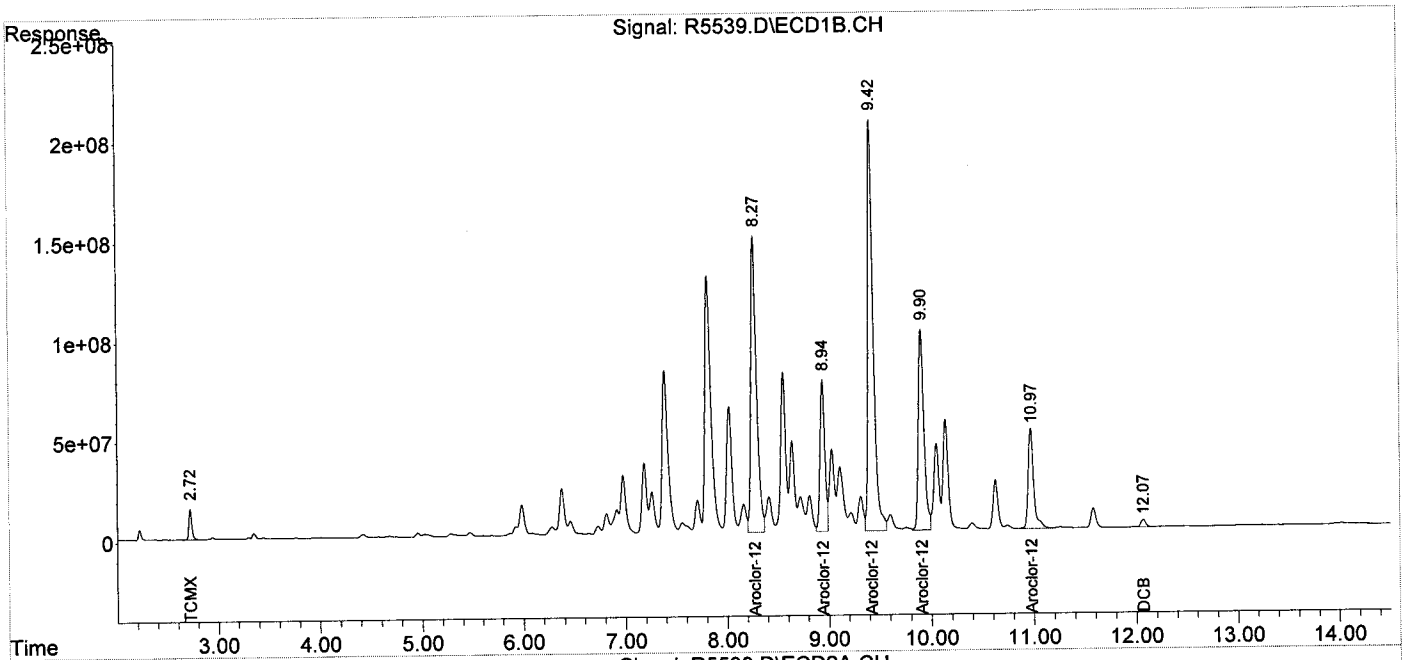
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

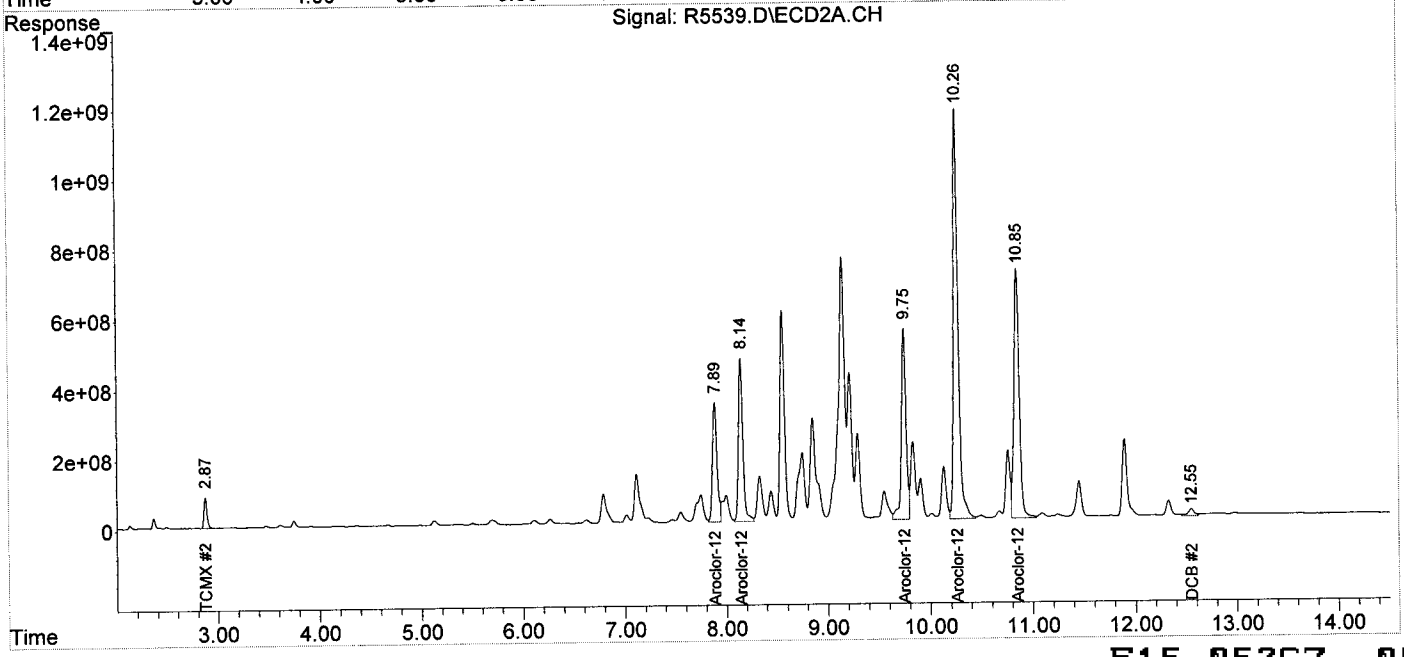
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5539.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 16:58
Operator : JS
Sample : E-5_(0.5,E15-05367-035,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:42:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367_0533

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5546.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:08
Operator : JS
Sample : E-5_(0.5,E15-05367-035DL,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,100
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:56:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	35126963	287.5E6	1.747	2.355 #
Spiked Amount 200.000			Recovery	=	0.87%	1.18%
2) S DCB	12.06	12.55	18814038	47178218	2.277m	1.374m#
Spiked Amount 200.000			Recovery	=	1.14%	0.69%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	553.4E6	1049.5E6	420.395	295.686 #
34) L8 Aroclor-1260 {2}	8.95	8.15	242.8E6	1336.4E6	325.160	260.907
35) L8 Aroclor-1260 {3}	9.43	9.75	698.2E6	1562.0E6	356.927	343.428
36) L8 Aroclor-1260 {4}	9.91	10.26	355.1E6	3344.7E6	403.028	318.821
37) L8 Aroclor-1260 {5}	10.97	10.85	194.1E6	2347.2E6	346.056m	336.001m
Sum Aroclor-1260			2043.6E6	9639.6E6	1851.566	1554.843
Average Aroclor-1260					370.313	310.969
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

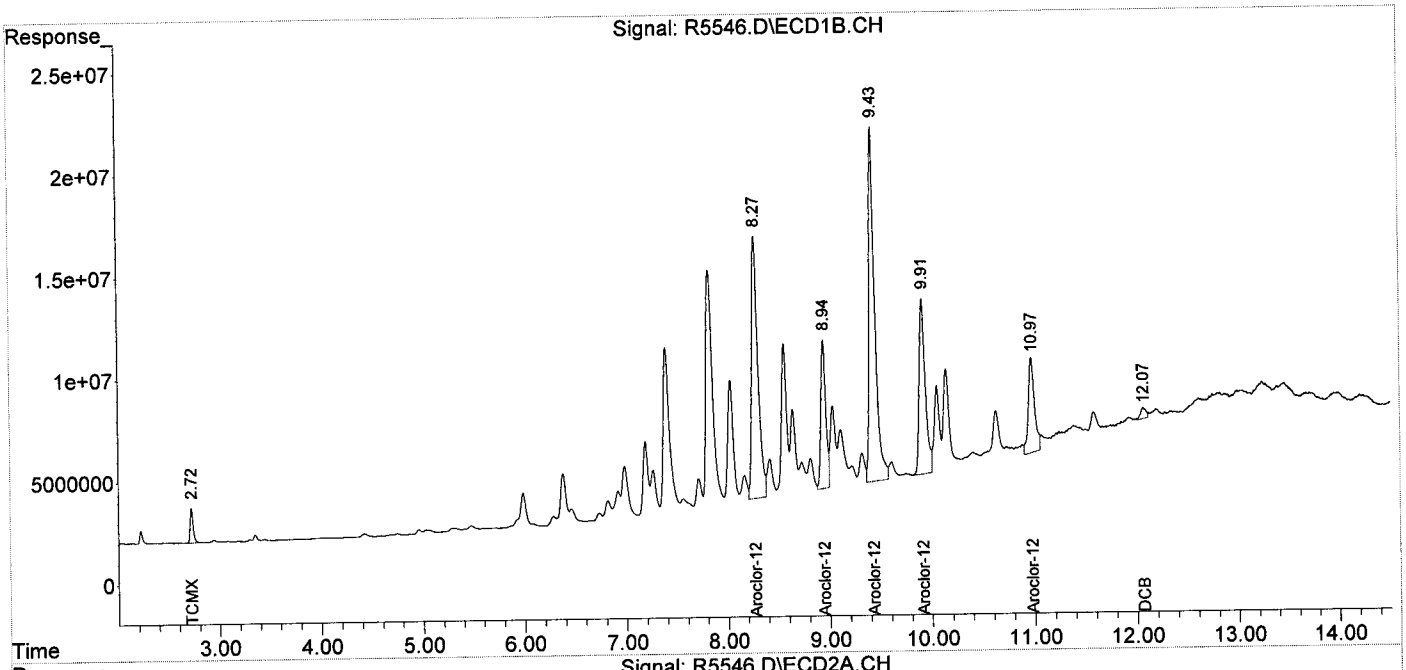
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

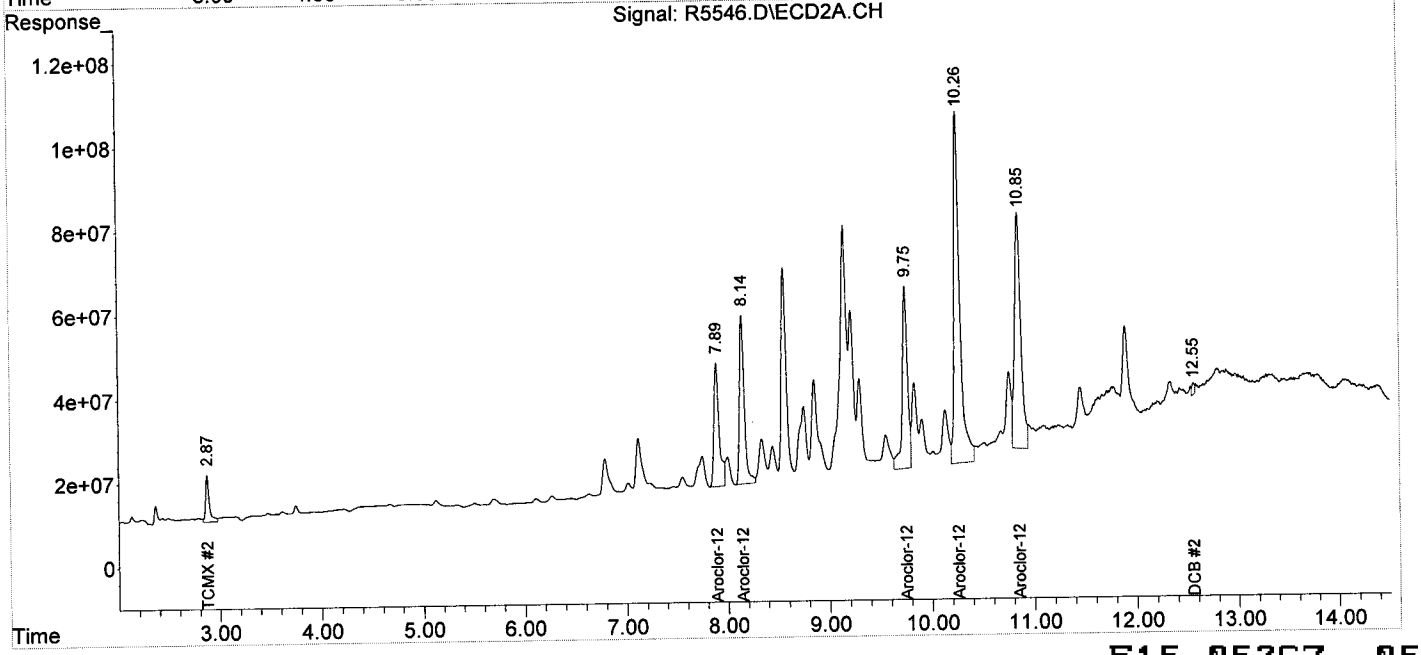
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5546.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 19:08
Operator : JS
Sample : E-5_(0.5,E15-05367-035DL,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,100
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:56:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5540.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:23
Operator : JS
Sample : E-5_(3.0,E15-05367-036,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:46:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.72	2.88	1000.1E6	4957.2E6	49.733	40.610
Spiked Amount 200.000				Recovery	=	24.87%	20.31%
2) S DCB		12.06	12.55	465.9E6	1901.2E6	56.389m	55.381m
Spiked Amount 200.000				Recovery	=	28.19%	27.69%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.26	7.89	412.7E6	922.6E6	313.560	259.951m
34) L8 Aroclor-1260	{2}	8.92	8.15	225.1E6	1035.0E6	301.517m	202.070 #
35) L8 Aroclor-1260	{3}	9.42	9.75	582.6E6	1378.0E6	297.816m	302.978
36) L8 Aroclor-1260	{4}	9.90	10.26	228.3E6	1893.3E6	259.092m	180.472 #
37) L8 Aroclor-1260	{5}	10.97	10.85	159.1E6	2305.5E6	283.636m	330.033m
Sum Aroclor-1260				1607.9E6	7534.3E6	1455.621	1275.503
Average Aroclor-1260						291.124	255.101
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

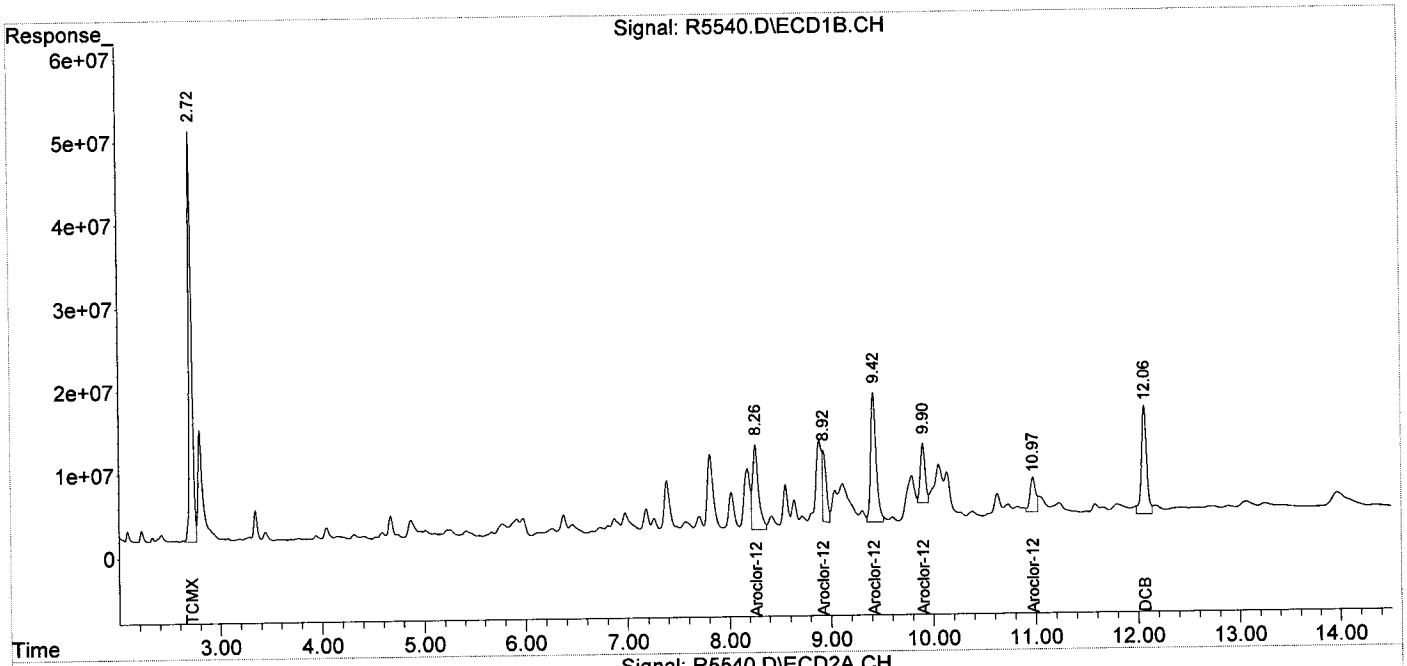
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

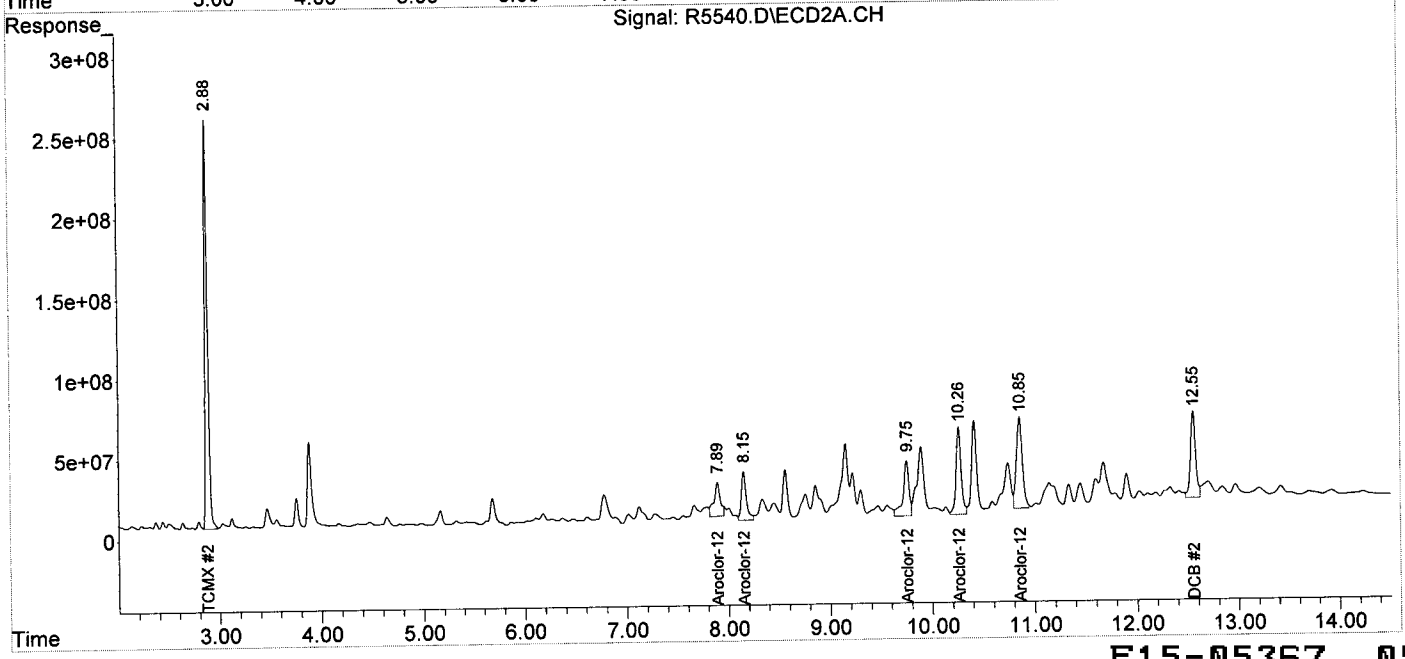
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5540.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:23
Operator : JS
Sample : E-5_(3.0,E15-05367-036,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:46:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5541.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:40
Operator : JS
Sample : E-5_(2.0,E15-05367-037,S,30.09g,16.2,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds								
1) S TCMX		2.72	2.87	302.8E6	1742.5E6	15.059	14.275	
Spiked Amount 200.000				Recovery =		7.53%	7.14%	
2) S DCB		12.07	12.55	121.5E6	602.4E6	14.711m	17.547m	
Spiked Amount 200.000				Recovery =		7.36%	8.77%	
Target Compounds								
Sum Aroclor-1016				0	0	N.D.	N.D.	
Average Aroclor-1016						0.000	0.000	
Sum Aroclor-1221				0	0	N.D.	N.D.	
Average Aroclor-1221						0.000	0.000	
Sum Aroclor-1232				0	0	N.D.	N.D.	
Average Aroclor-1232						0.000	0.000	
Sum Aroclor-1242				0	0	N.D.	N.D.	
Average Aroclor-1242						0.000	0.000	
Sum Aroclor-1248				0	0	N.D.	N.D.	
Average Aroclor-1248						0.000	0.000	
Sum Aroclor-1254				0	0	N.D.	N.D.	
Average Aroclor-1254						0.000	0.000	
33) L8 Aroclor-1260		8.27	7.89	274.9E6	564.4E6	208.879	159.017	
34) L8 Aroclor-1260	{2}	8.94	8.14	74589464	502.7E6	99.890	98.140	
35) L8 Aroclor-1260	{3}	9.42	9.75	189.0E6	738.1E6	96.621	162.278	#
36) L8 Aroclor-1260	{4}	9.91	10.26	97310688	1058.9E6	110.444	100.937	
37) L8 Aroclor-1260	{5}	10.97	10.85	59499152	821.6E6	106.074m	117.618	
Sum Aroclor-1260				695.4E6	3685.6E6	621.908	637.990	
Average Aroclor-1260						124.382	127.598	
Sum Aroclor-1262				0	0	N.D.	N.D.	
Average Aroclor-1262						0.000	0.000	
Sum Aroclor-1268				0	0	N.D.	N.D.	
Average Aroclor-1268						0.000	0.000	

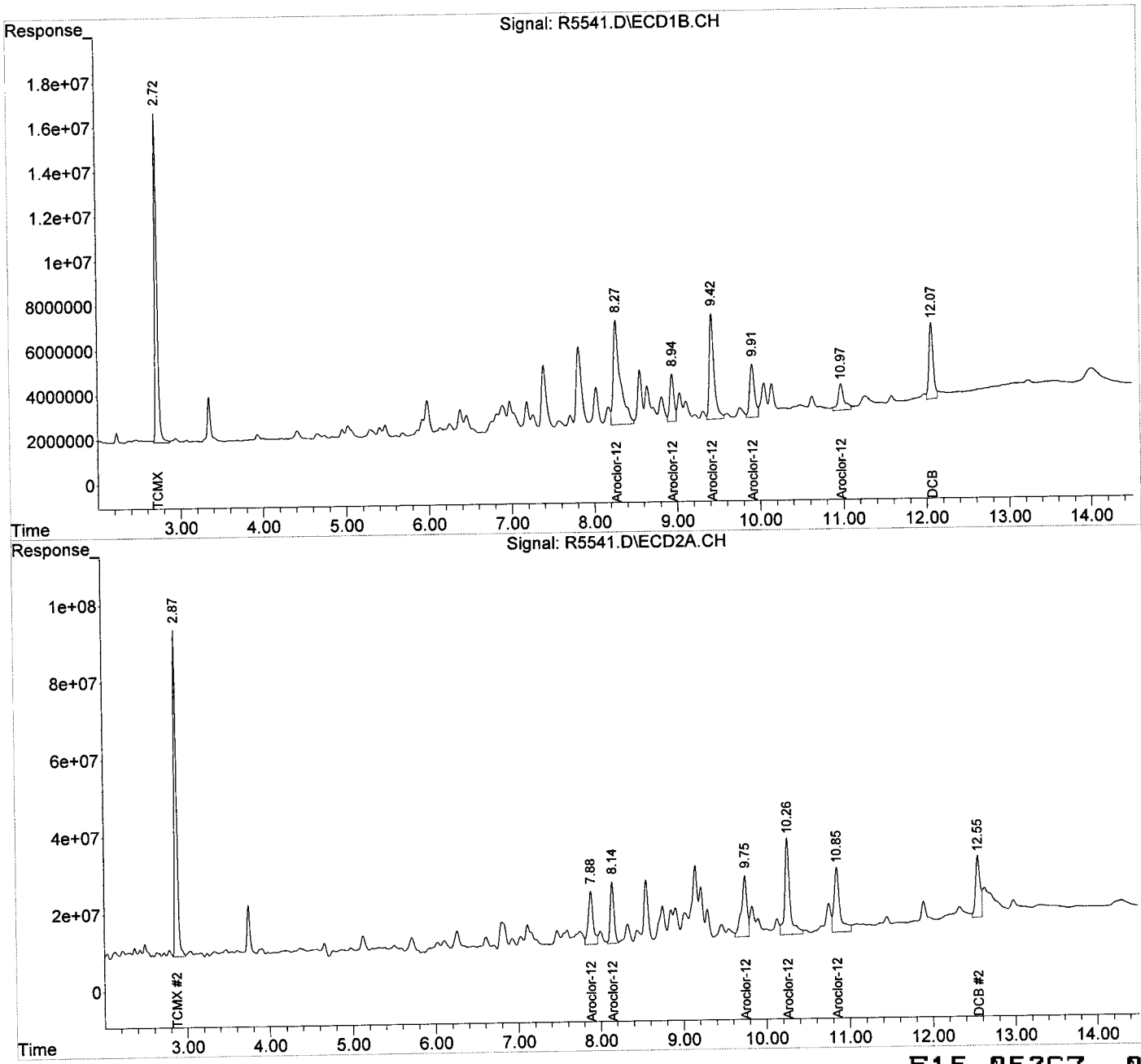
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5541.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:40
Operator : JS
Sample : E-5_(2.0,E15-05367-037,S,30.09g,16.2,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:48:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5542.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:58
Operator : JS
Sample : E-5_(4.5,E15-05367-038,S,30.35g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:50:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	1713.2E6	9604.9E6	85.189	78.684
Spiked Amount 200.000			Recovery	=	42.59%	39.34%
2) S DCB	12.06	12.55	854.0E6	3826.3E6	103.373m	111.461
Spiked Amount 200.000			Recovery	=	51.69%	55.73%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

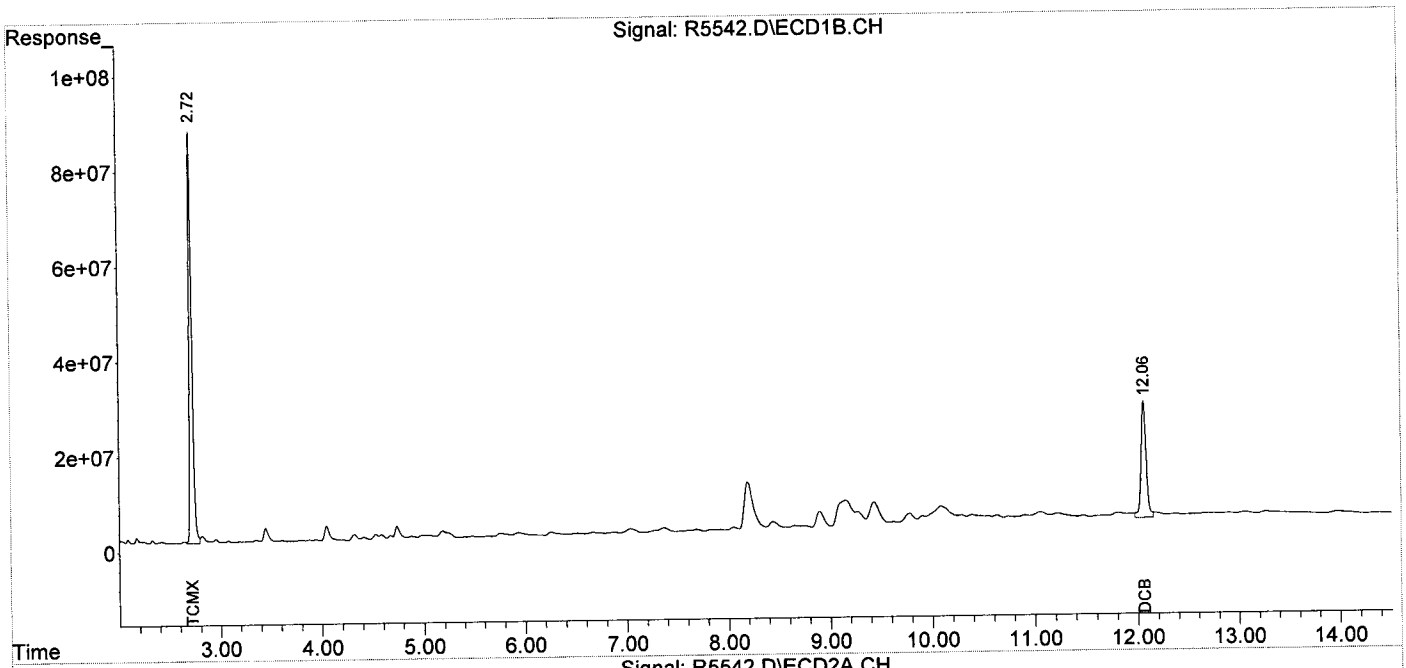
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

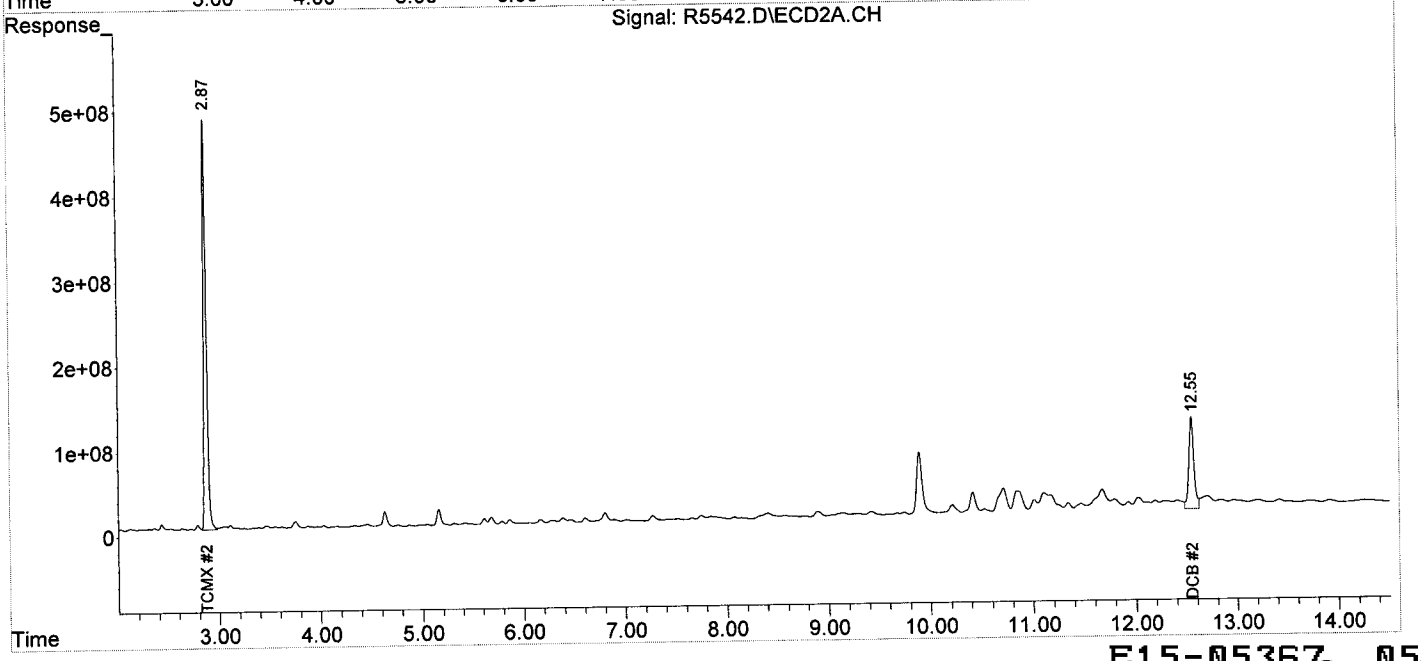
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5542.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:58
Operator : JS
Sample : E-5_(4.5,E15-05367-038,S,30.35g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,2
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 14:50:58 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:44
Operator : JS
Sample : E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:10:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	5686.0E6	3517.3E6	85.371	101.488
Spiked Amount 200.000			Recovery	=	42.69%	50.74%
2) S DCB	12.11	12.56	2143.2E6	1570.3E6	104.637	127.049
Spiked Amount 200.000			Recovery	=	52.32%	63.52%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
32) L7 Aroclor-1254 {5}	8.33	9.17	68073.7E6	53508.8E6	15817.299	23552.847 #
Sum Aroclor-1254			68073.7E6	53508.8E6	15817.299	23552.847
Average Aroclor-1254					15817.299	23552.847
33) L8 Aroclor-1260	8.33	7.91	68073.7E6	12001.6E6	16437.539	11535.037 #
34) L8 Aroclor-1260 {2}	9.00	8.17	30860.4E6	20100.6E6	13102.326	13213.346
35) L8 Aroclor-1260 {3}	9.49	9.77	93041.0E6	28088.2E6	15619.973	19299.474
36) L8 Aroclor-1260 {4}	9.96	10.28	50956.0E6	76915.1E6	18994.856	22697.127
37) L8 Aroclor-1260 {5}	11.02	10.86	22962.6E6	57857.0E6	15365.038	23979.976 #
Sum Aroclor-1260			265893.7E6	194962.5E6	79519.732	90724.959
Average Aroclor-1260					15903.946	18144.992
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

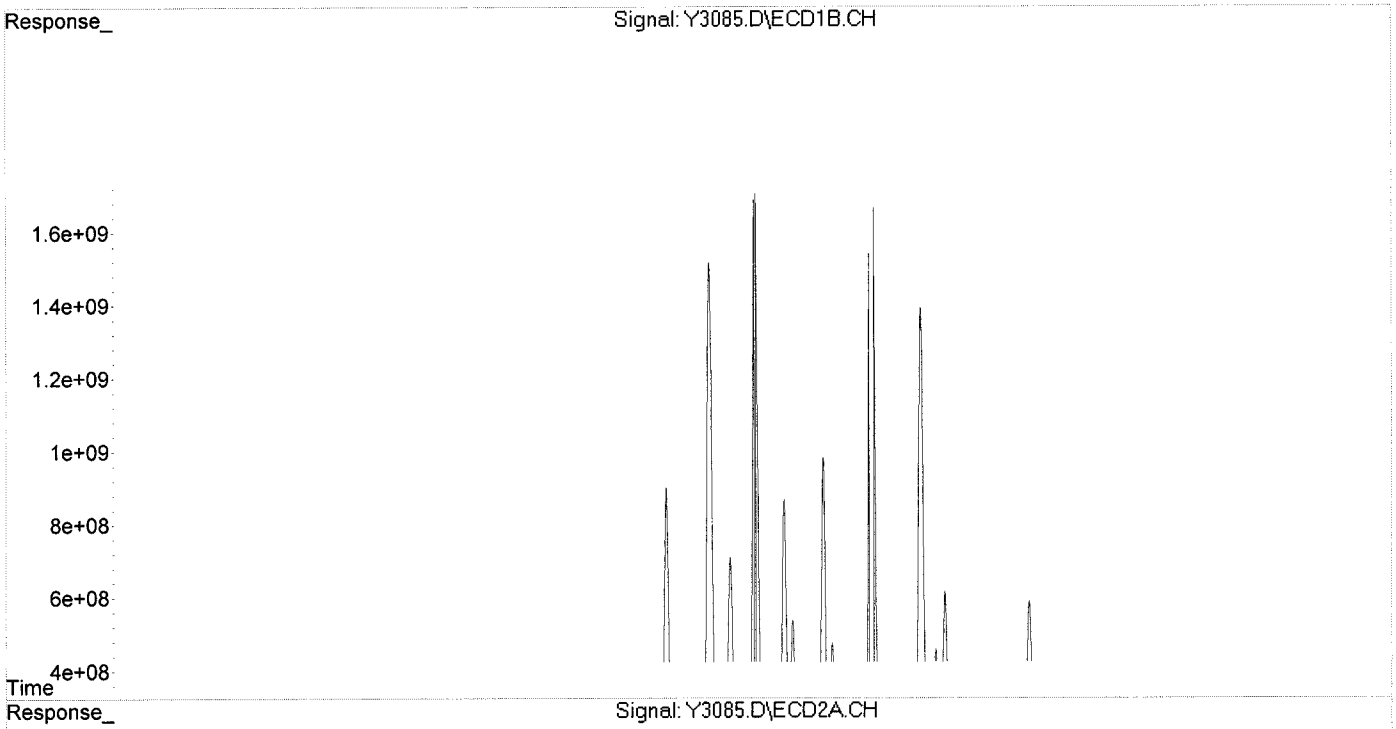
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

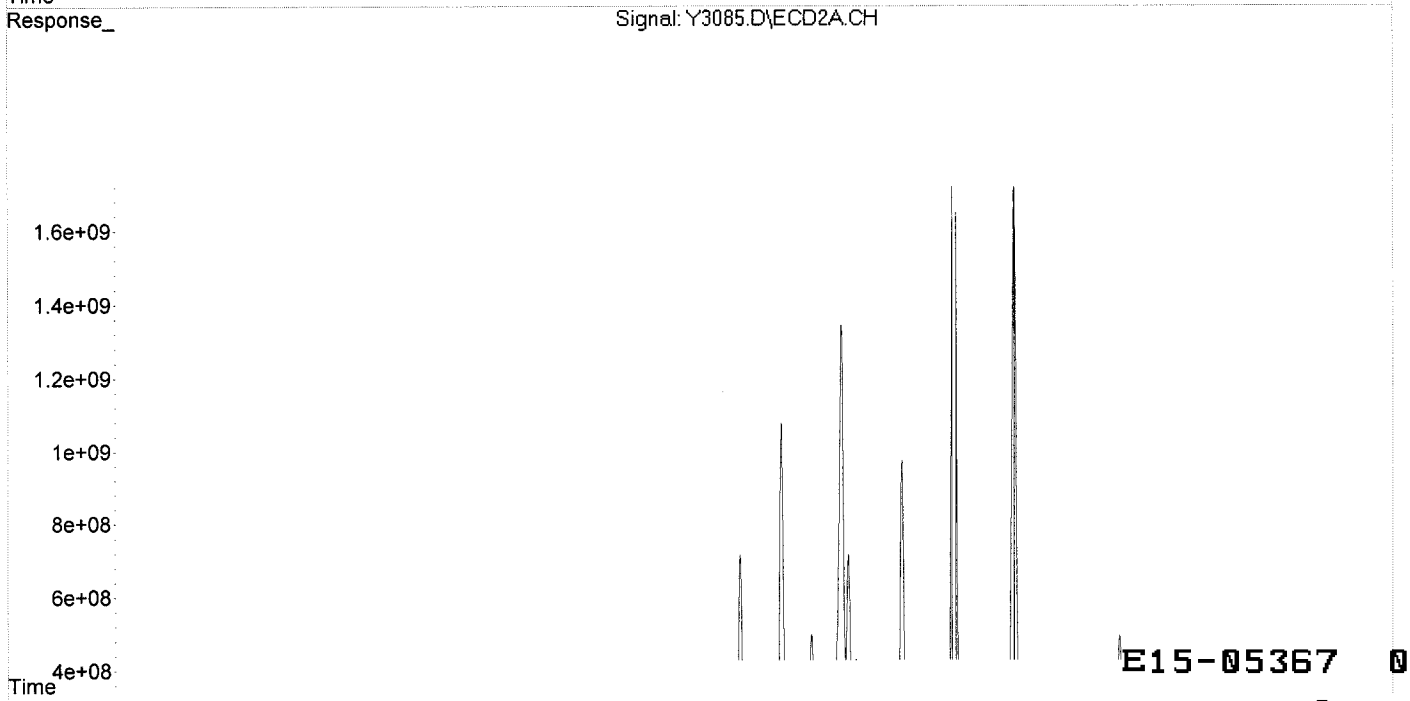
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 20:44
Operator : JS
Sample : E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:10:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

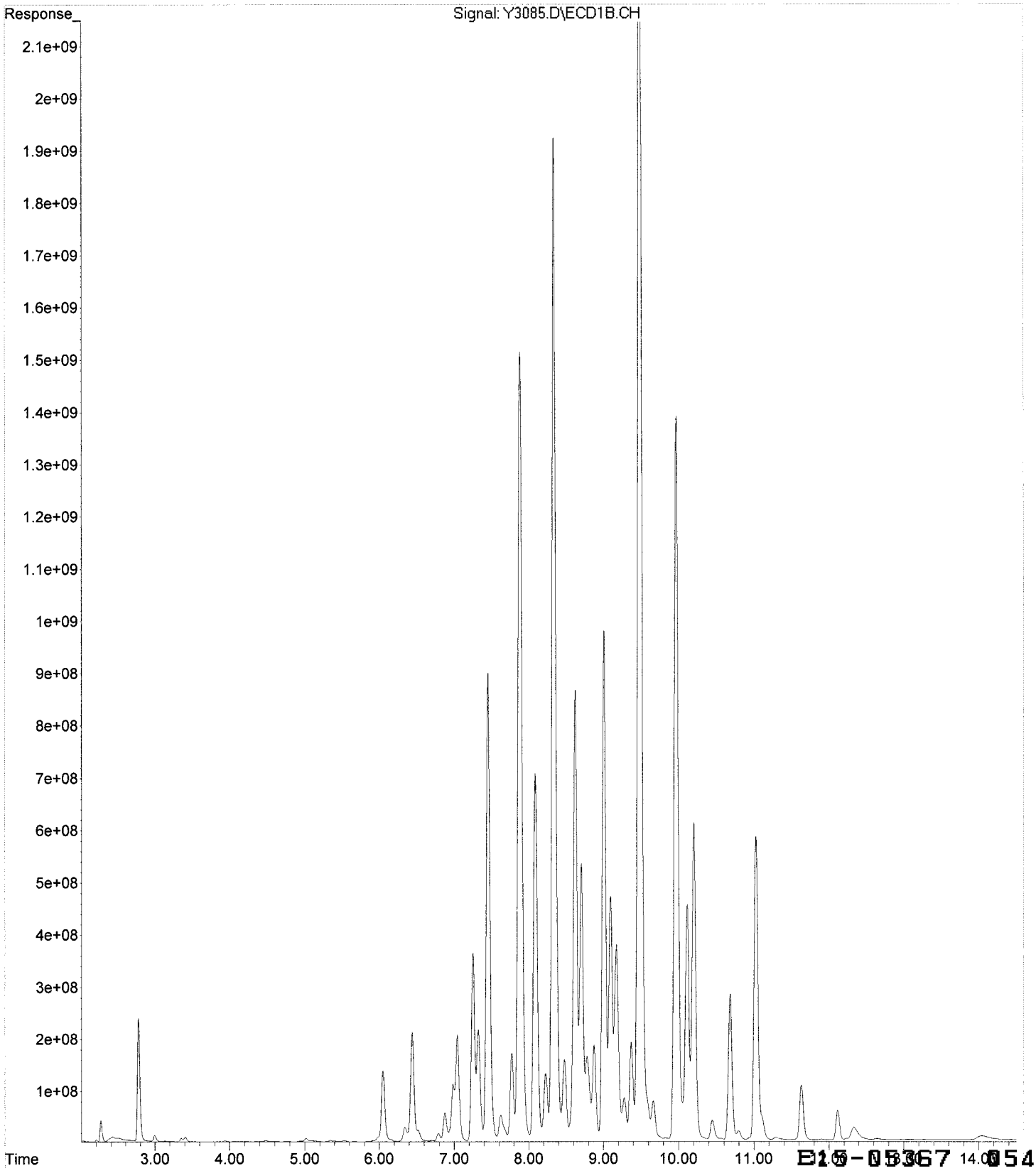
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





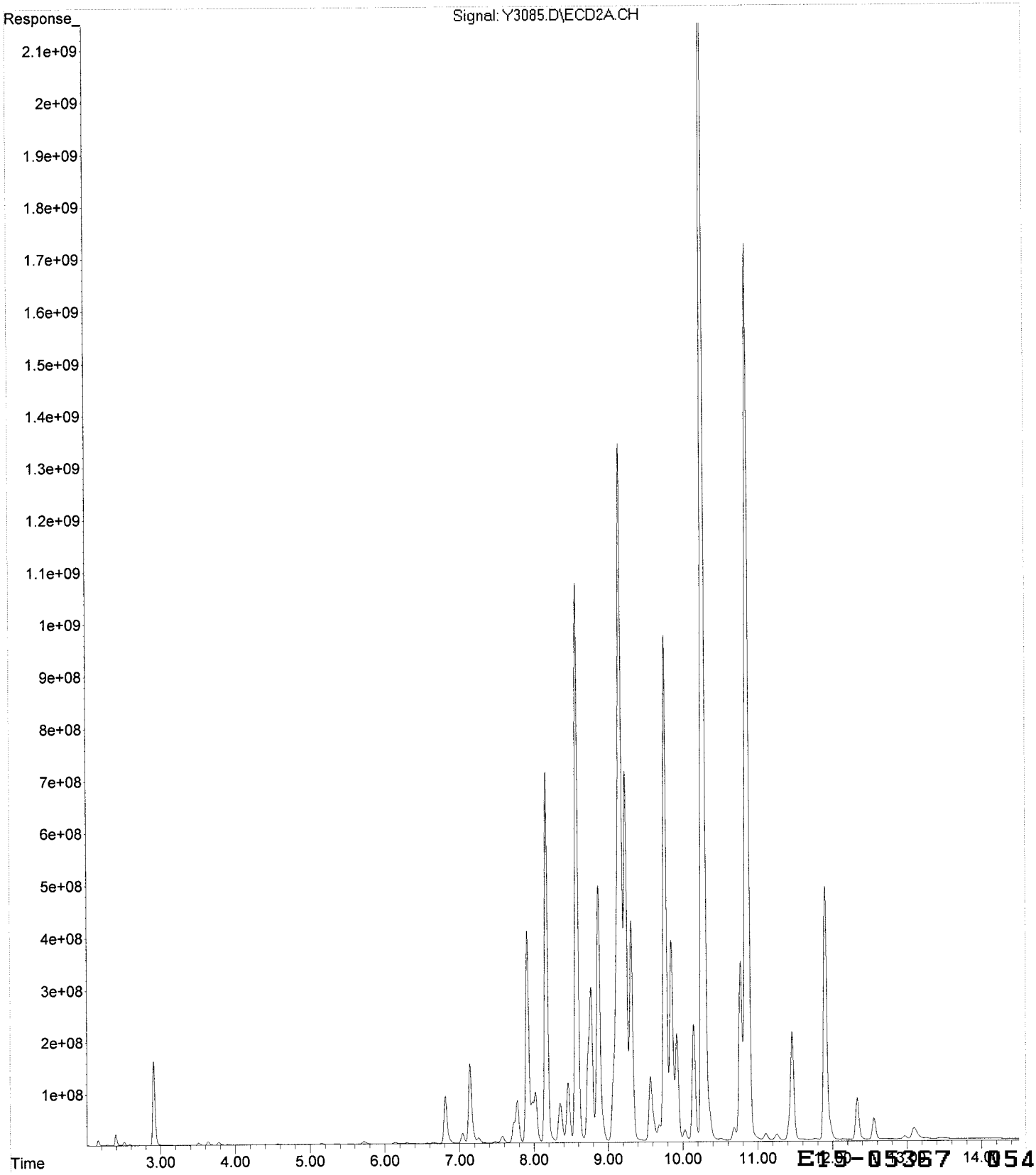
E15-05367 0543

File : C:\MSDChem\1\DATA\07-06-15\Y3085.D
Operator : JS
Acquired : 06 Jul 2015 20:44 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc Info : 150701-07,07/01/15,06/23/15,1
Vial Number: 28



E15-05367 0544

File : C:\MSDChem\1\DATA\07-06-15\Y3085.D
Operator : JS
Acquired : 06 Jul 2015 20:44 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc Info : 150701-07,07/01/15,06/23/15,1
Vial Number: 28



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3138.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:44
Operator : JS
Sample : E-6_(0.5,E15-05367-039DL,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:56:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	445.1E6	230.6E6	6.683	6.653
Spiked Amount 200.000			Recovery	=	3.34%	3.33%
2) S DCB	12.12	12.56	211.5E6	135.9E6	10.325	10.997m
Spiked Amount 200.000			Recovery	=	5.16%	5.50%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	6141.7E6	976.8E6	1483.023	938.795 #
34) L8 Aroclor-1260 {2}	9.01	8.17	2825.8E6	1431.2E6	1199.759	940.829
35) L8 Aroclor-1260 {3}	9.48	9.77	8842.0E6	1930.3E6	1484.420	1326.282
36) L8 Aroclor-1260 {4}	9.97	10.28	4584.9E6	5037.6E6	1709.127	1486.565
37) L8 Aroclor-1260 {5}	11.03	10.86	2231.9E6	3803.6E6	1493.455	1576.459
Sum Aroclor-1260			24626.4E6	13179.4E6	7369.785	6268.929
Average Aroclor-1260					1473.957	1253.786
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

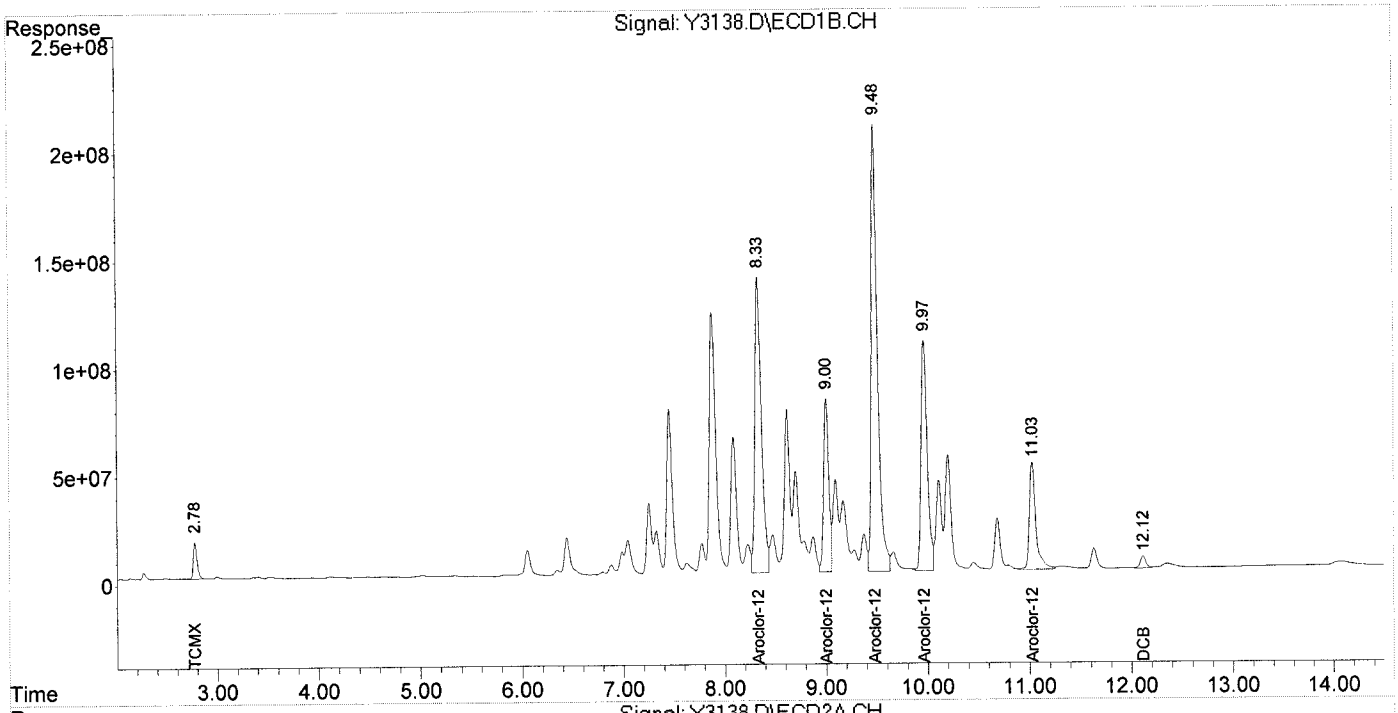
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

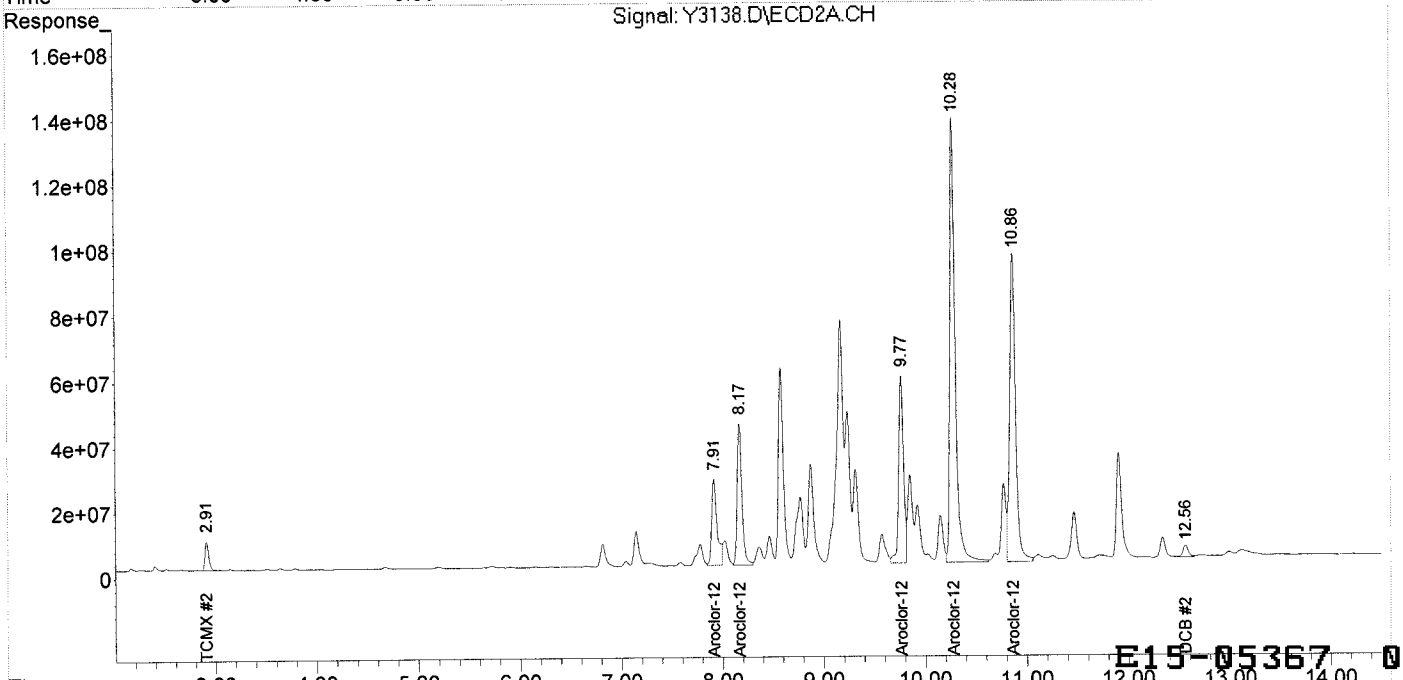
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3138.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 15:44
Operator : JS
Sample : E-6_(0.5,E15-05367-039DL,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,20
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:56:26 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 20:26
Operator : JS
Sample : FB-06221,E15-05367-040,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:38:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3440.8E6	20249.2E6	171.098	165.884
Spiked Amount 200.000			Recovery	=	85.55%	82.94%
2) S DCB	12.07	12.55	1371.4E6	5042.6E6	165.999	146.892
Spiked Amount 200.000			Recovery	=	83.00%	73.45%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

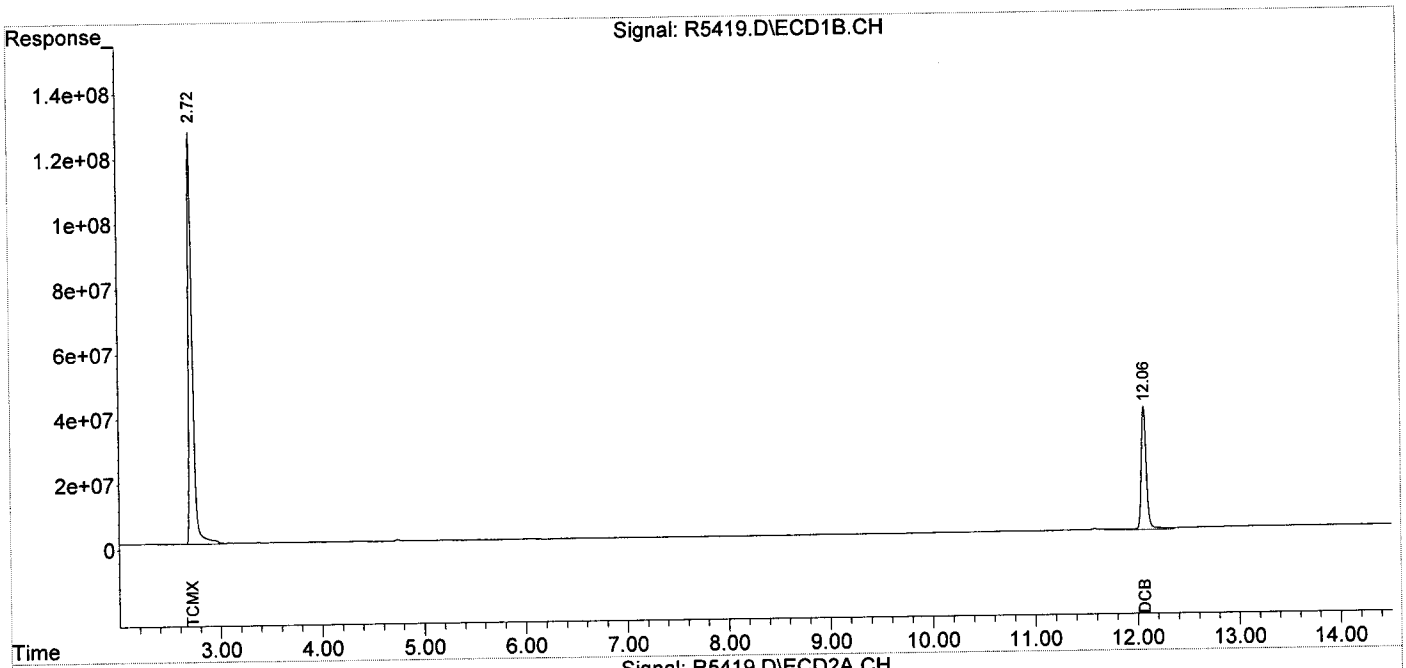
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

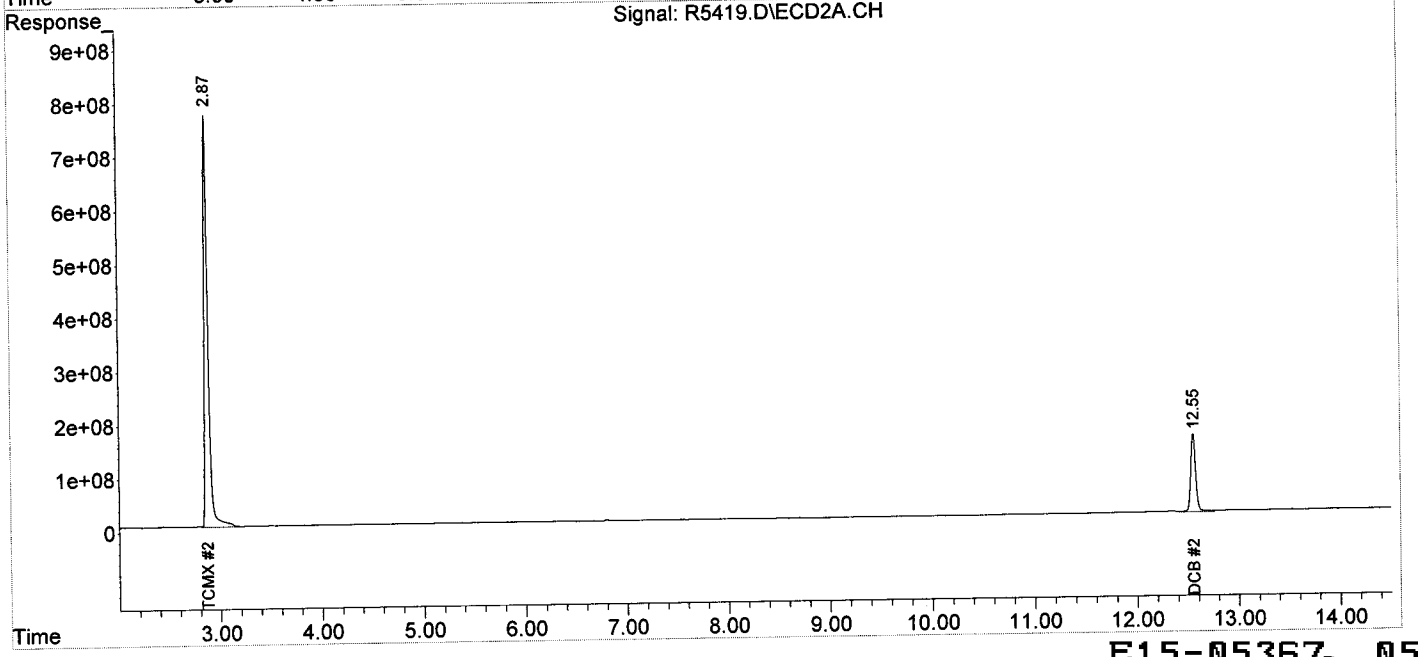
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5419.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 20:26
Operator : JS
Sample : FB-06221,E15-05367-040,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:38:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3086.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:01
Operator : JS
Sample : E-6_(2.0,E15-05367-041,S,30.47g,6.90,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:11:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	9968.6E6	4808.9E6	149.671	138.757
Spiked Amount 200.000			Recovery	=	74.84%	69.38%
2) S DCB	12.11	12.56	3491.0E6	2235.1E6	170.442	180.830
Spiked Amount 200.000			Recovery	=	85.22%	90.42%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	752.4E6	141.9E6	181.676	136.431
34) L8 Aroclor-1260 {2}	9.01	8.17	371.7E6	201.6E6	157.832	132.554
35) L8 Aroclor-1260 {3}	9.48	9.77	1031.9E6	281.8E6	173.236	193.622
36) L8 Aroclor-1260 {4}	9.97	10.28	549.6E6	629.4E6	204.866	185.734
37) L8 Aroclor-1260 {5}	11.03	10.87	273.1E6	473.1E6	182.725	196.081
Sum Aroclor-1260			2978.7E6	1727.9E6	900.333	844.422
Average Aroclor-1260					180.067	168.884
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

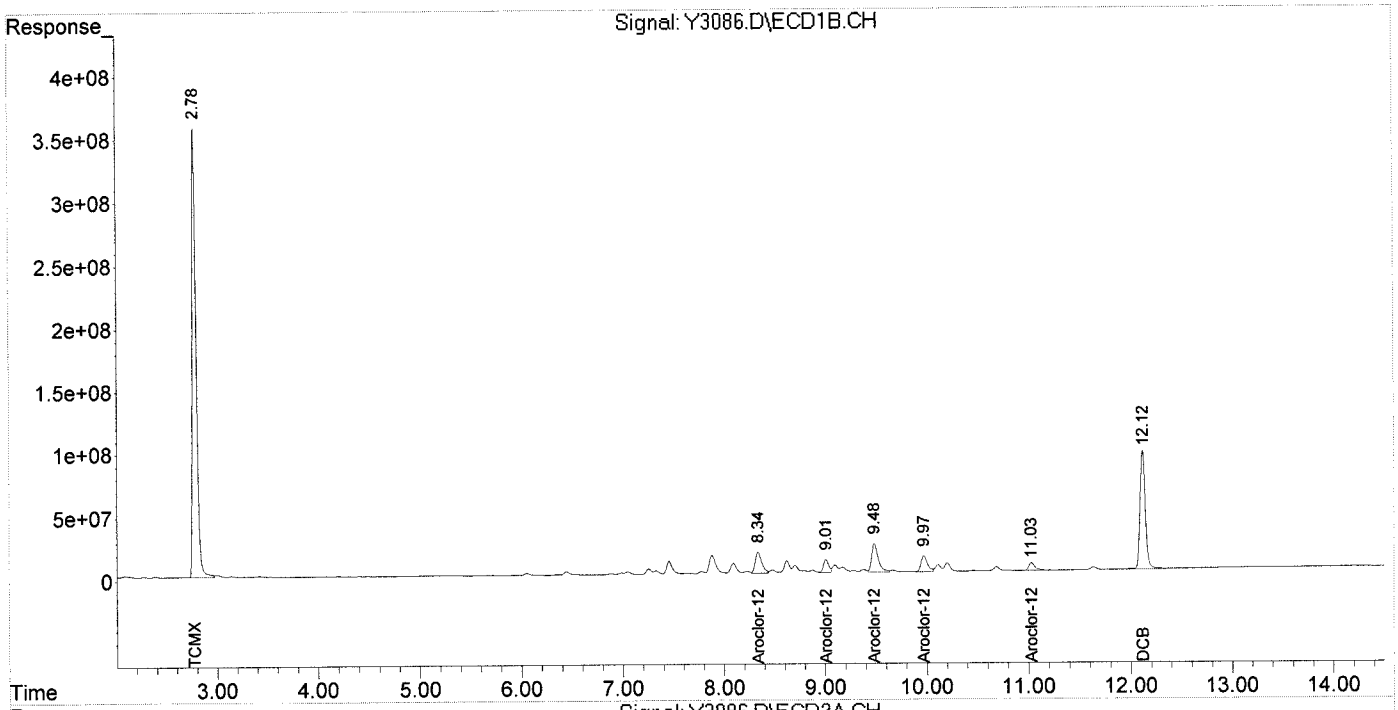
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

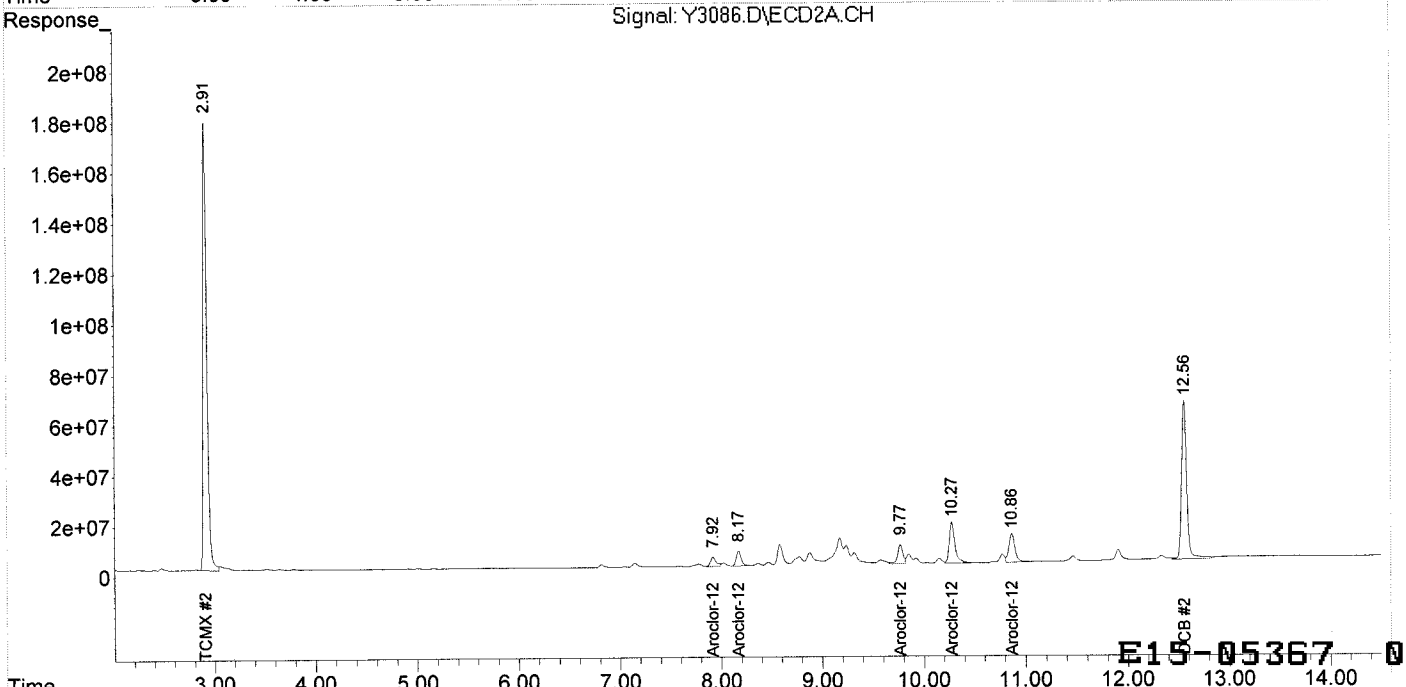
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3086.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:01
Operator : JS
Sample : E-6_(2.0,E15-05367-041,S,30.47g,6.90,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:11:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3087.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:19
Operator : JS
Sample : E-6_(3.0,E15-05367-042,S,30.56g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:13:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	9471.9E6	4575.0E6	142.213	132.008
Spiked Amount 200.000			Recovery	=	71.11%	66.00%
2) S DCB	12.12	12.56	3353.1E6	2123.0E6	163.708	171.765
Spiked Amount 200.000			Recovery	=	81.85%	85.88%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	258.8E6	57728681	62.491	55.485
34) L8 Aroclor-1260 {2}	9.01	8.17	132.4E6	76700382	56.214	50.420
35) L8 Aroclor-1260 {3}	9.48	9.77	348.3E6	95158721	58.473	65.384
36) L8 Aroclor-1260 {4}	9.97	10.28	179.5E6	219.9E6	66.898	64.889
37) L8 Aroclor-1260 {5}	11.03	10.87	99497109	164.8E6	66.577	68.323
Sum Aroclor-1260			1018.5E6	614.3E6	310.653	304.501
Average Aroclor-1260					62.131	60.900
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

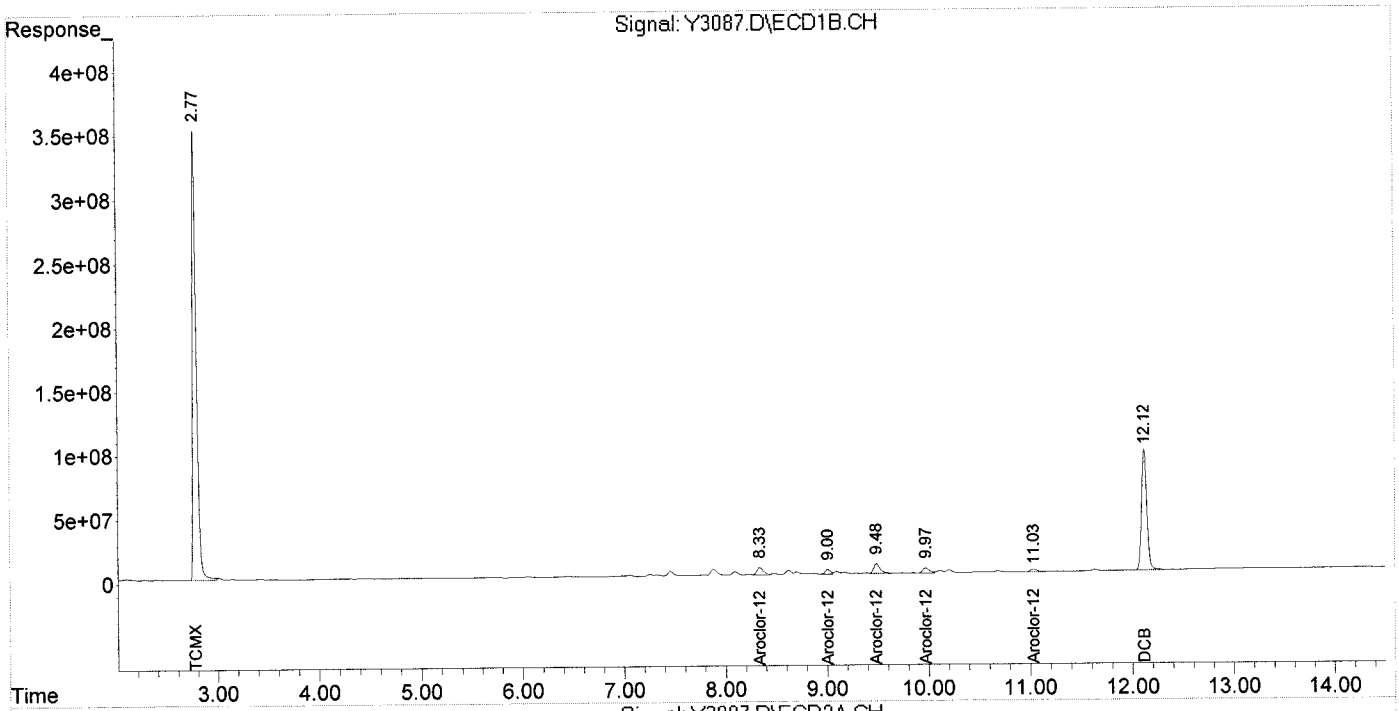
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

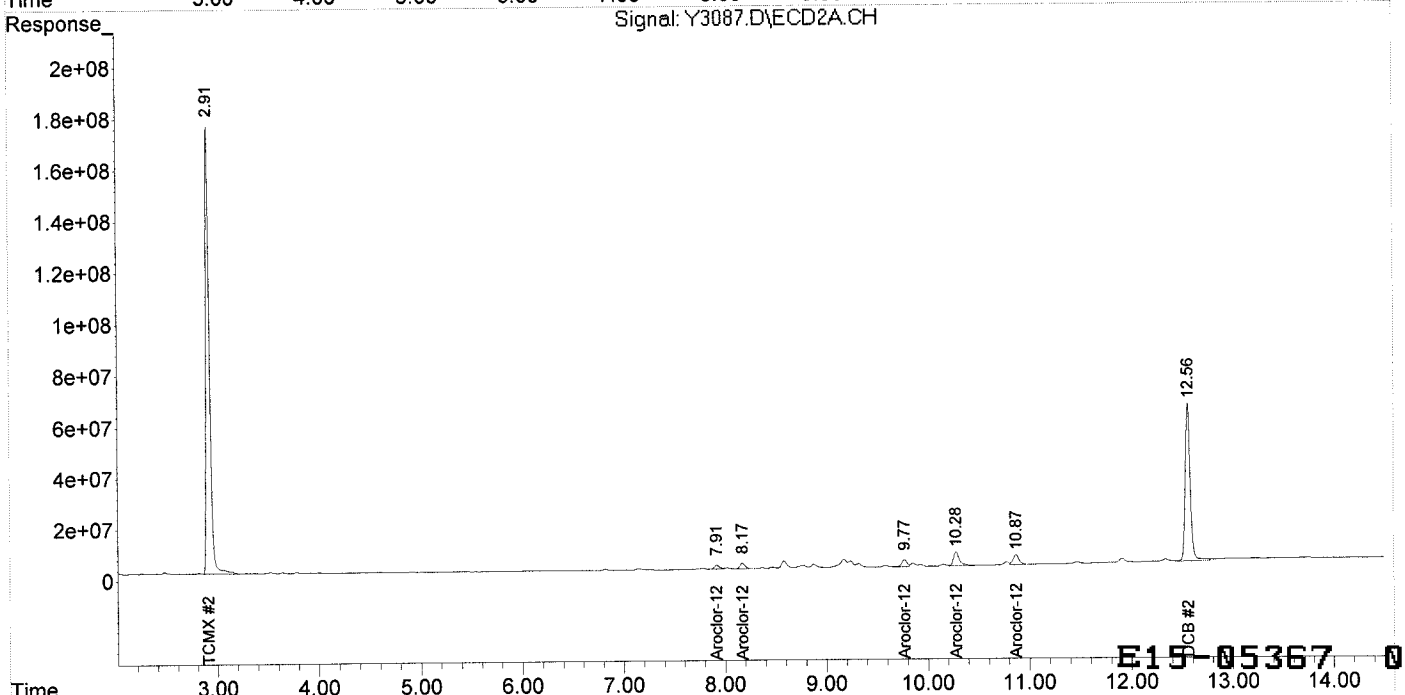
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3087.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:19
Operator : JS
Sample : E-6_(3.0,E15-05367-042,S,30.56g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:13:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3088.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:36
Operator : JS
Sample : E-6_(4.0,E15-05367-043,S,30.57g,10.0,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:17:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.92	8728.7E6	4176.5E6	131.055	120.508
Spiked Amount 200.000			Recovery	=	65.53%	60.25%
2) S DCB	12.12	12.56	3336.2E6	2251.9E6	162.883	182.189
Spiked Amount 200.000			Recovery	=	81.44%	91.09%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	33764972	7659166	8.153	7.361m
34) L8 Aroclor-1260 {2}	9.00	8.17	25632961	11971122	10.883	7.869m#
35) L8 Aroclor-1260 {3}	9.49	9.77	41640137	12774160	6.991	8.777m#
36) L8 Aroclor-1260 {4}	9.97	10.28	25874621	26162616	9.645m	7.720m
37) L8 Aroclor-1260 {5}	11.03	10.87	12806338	21472110	8.569m	8.900m
Sum Aroclor-1260			139.7E6	80039174	44.241	40.628
Average Aroclor-1260					8.848	8.126
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

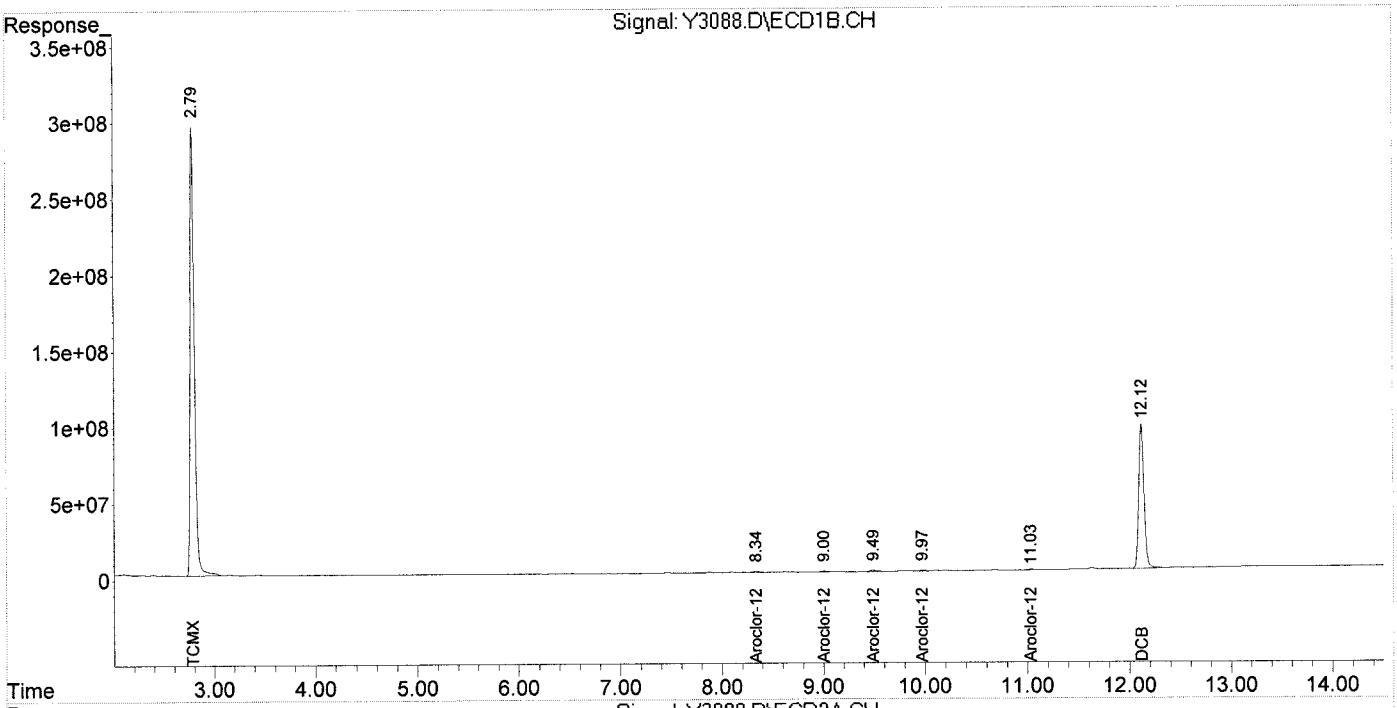
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

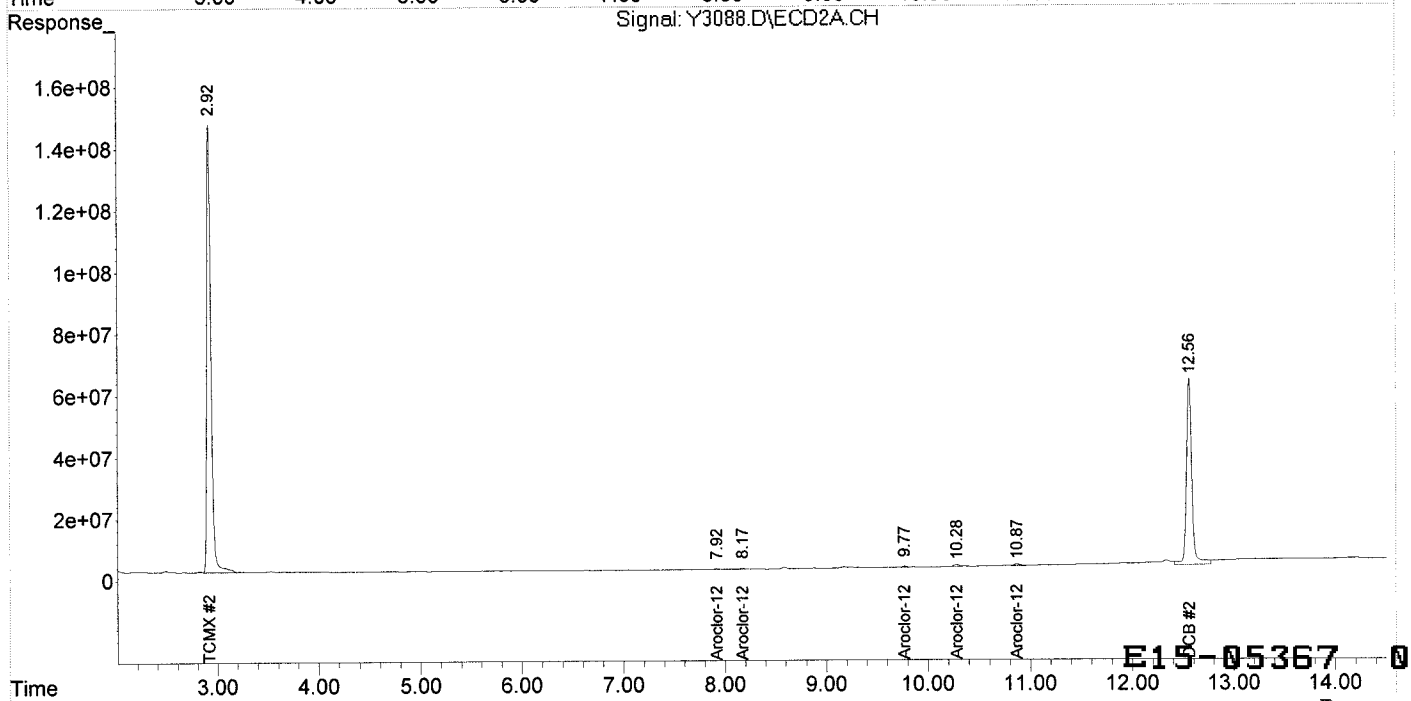
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3088.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:36
Operator : JS
Sample : E-6_(4.0,E15-05367-043,S,30.57g,10.0,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:17:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0555

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA150629-16
Client ID: PCB
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5413.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0556

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3162.4E6	18379.5E6	157.252	150.567
Spiked Amount 200.000			Recovery	=	78.63%	75.28%
2) S DCB	12.07	12.55	1005.6E6	3291.9E6	121.721	95.892
Spiked Amount 200.000			Recovery	=	60.86%	47.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

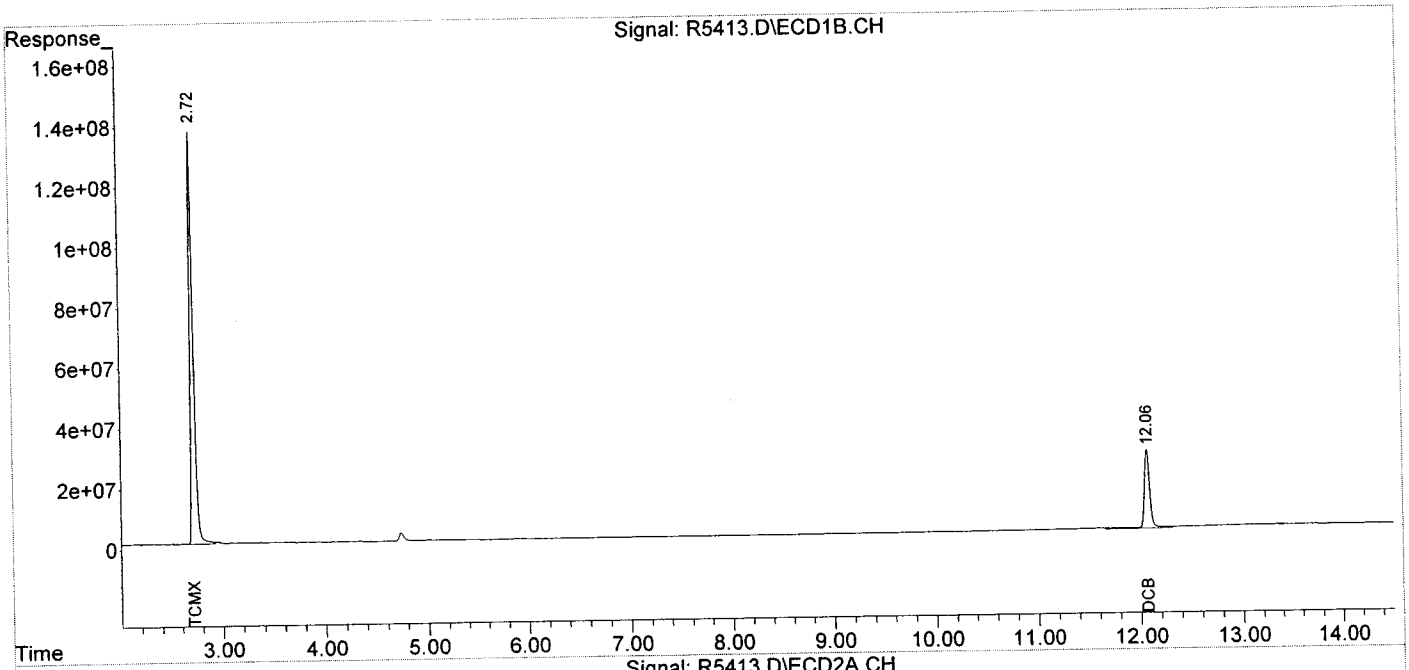
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

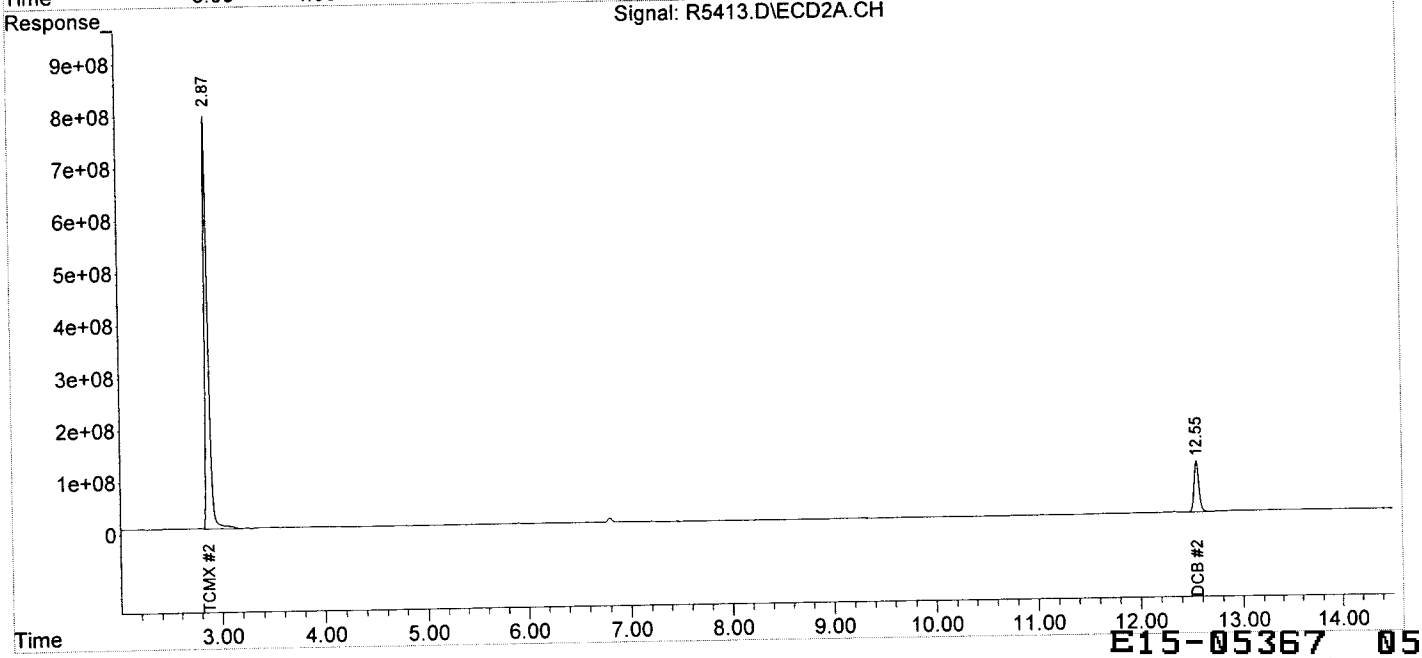
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-08
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y2994.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0559

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y2994.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 11:21
Operator : JS
Sample : PCB,BLKS150701-08,S,5g,0.20
Misc : NA,07/01/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:19:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13772.2E6	6506.8E6	206.780	187.746
Spiked Amount 200.000			Recovery	=	103.39%	93.87%
2) S DCB	12.11	12.56	3193.2E6	1925.2E6	155.903	155.758
Spiked Amount 200.000			Recovery	=	77.95%	77.88%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

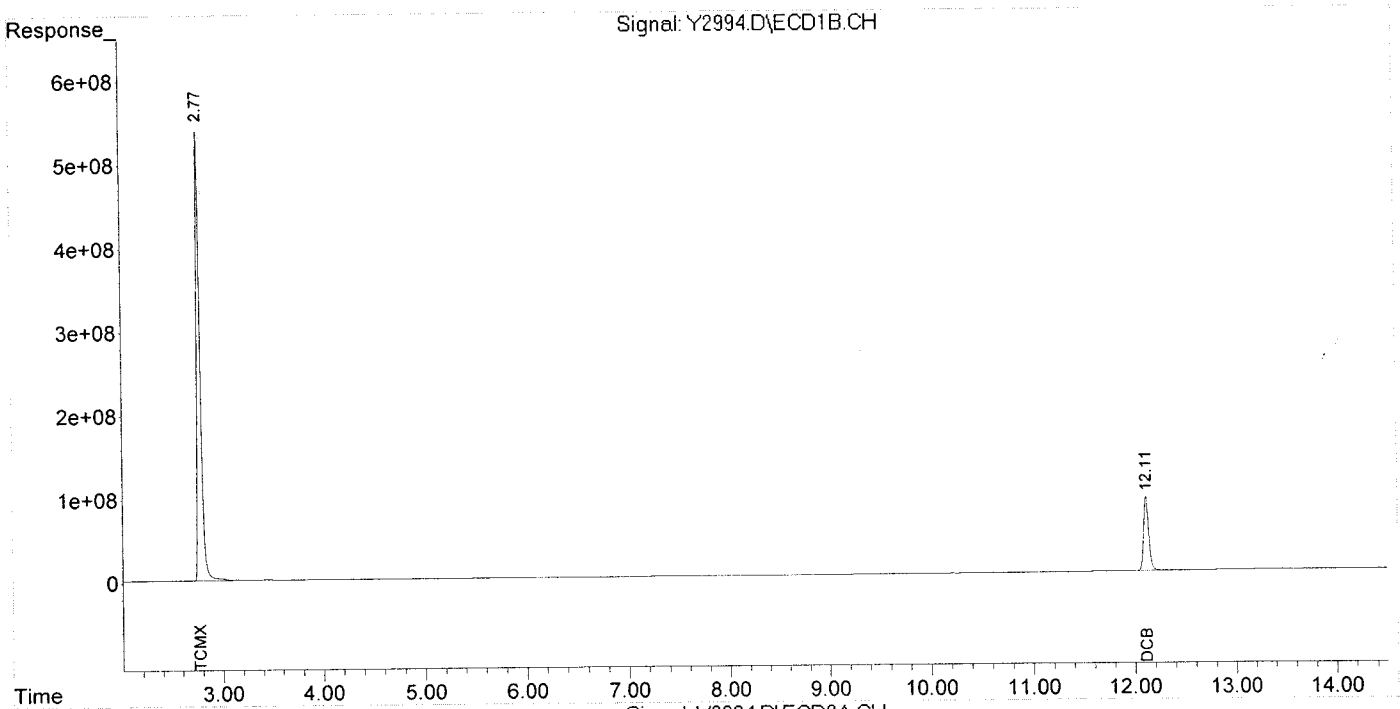
E15-05367 0560

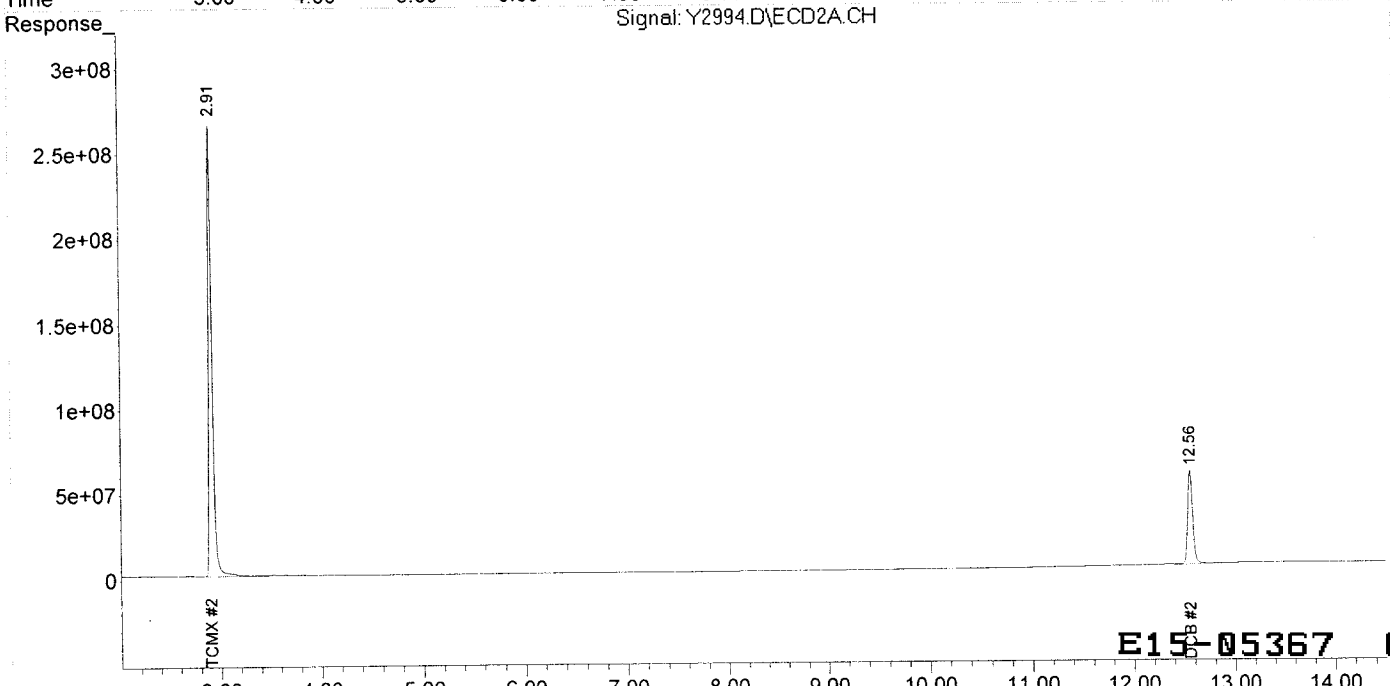
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y2994.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 11:21
Operator : JS
Sample : PCB,BLKS150701-08,S,5g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:19:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-07
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3074.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0562

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:32
Operator : JS
Sample : PCB,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:01:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12186.3E6	6044.2E6	182.968	174.399
Spiked Amount 200.000			Recovery	=	91.48%	87.20%
2) S DCB	12.11	12.56	3334.4E6	2107.9E6	162.795	170.539
Spiked Amount 200.000			Recovery	=	81.40%	85.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

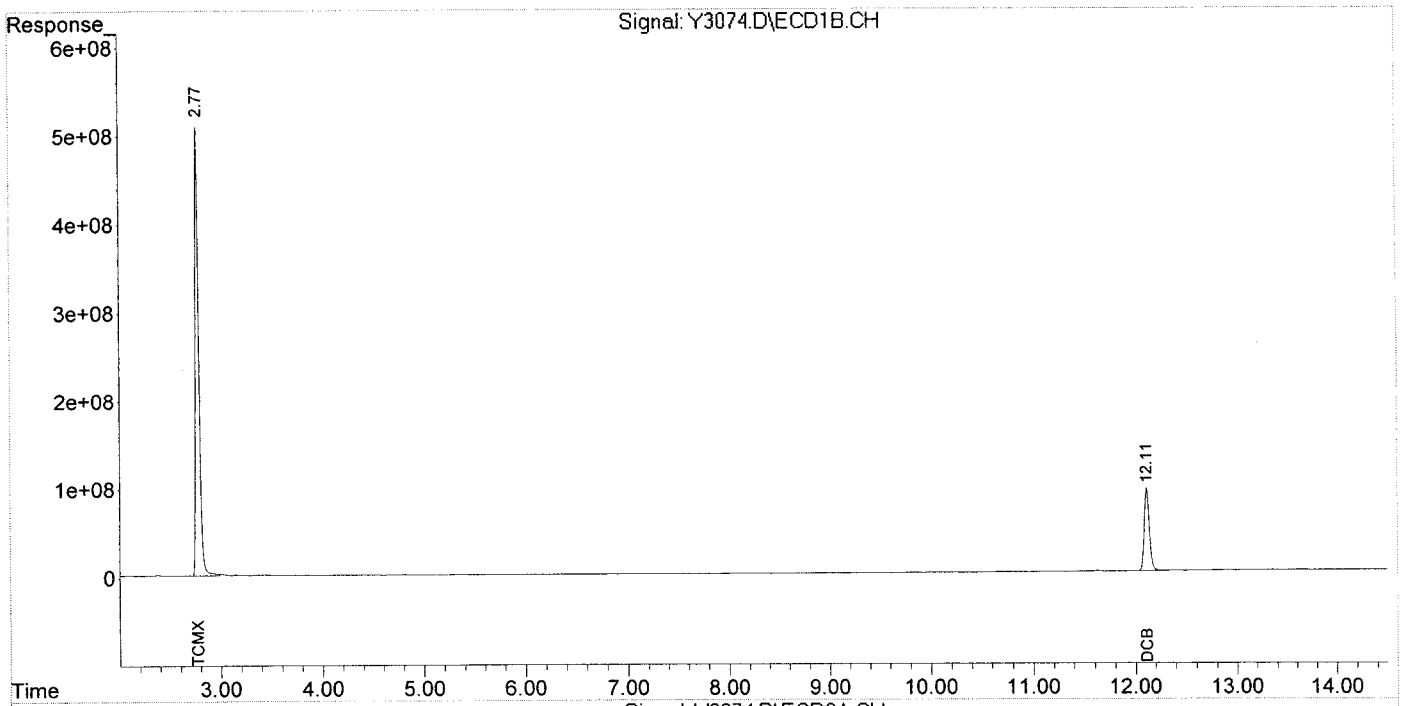
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

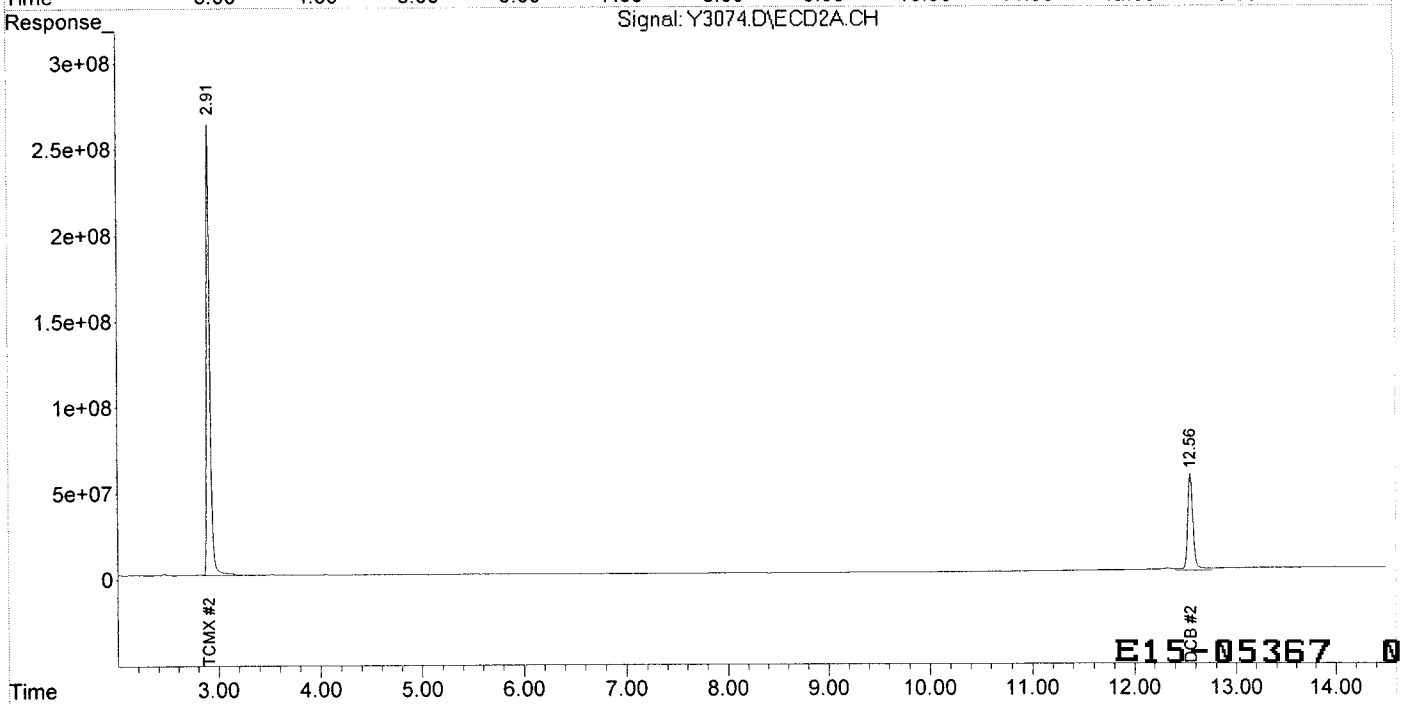
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:32
Operator : JS
Sample : PCB,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:01:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150630-12
Client ID: PCB
Date Received: NA
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: R5520.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

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Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:58
Operator : JS
Sample : PCB,BLKS150630-12,S,30g,0,5
Misc : NA,06/30/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 10:23:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3390.7E6	19291.6E6	168.604	158.039
Spiked Amount 200.000			Recovery	=	84.30%	79.02%
2) S DCB	12.07	12.56	1494.4E6	6348.2E6	180.884	184.924
Spiked Amount 200.000			Recovery	=	90.44%	92.46%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

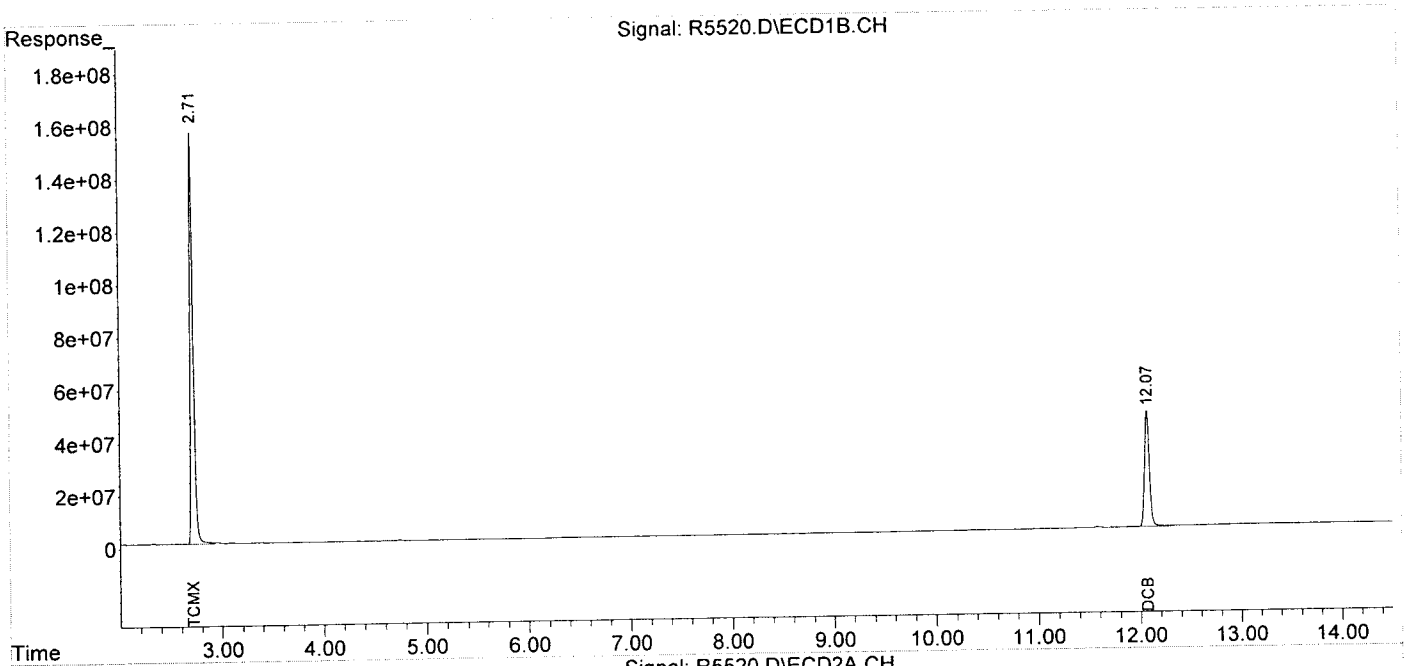
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

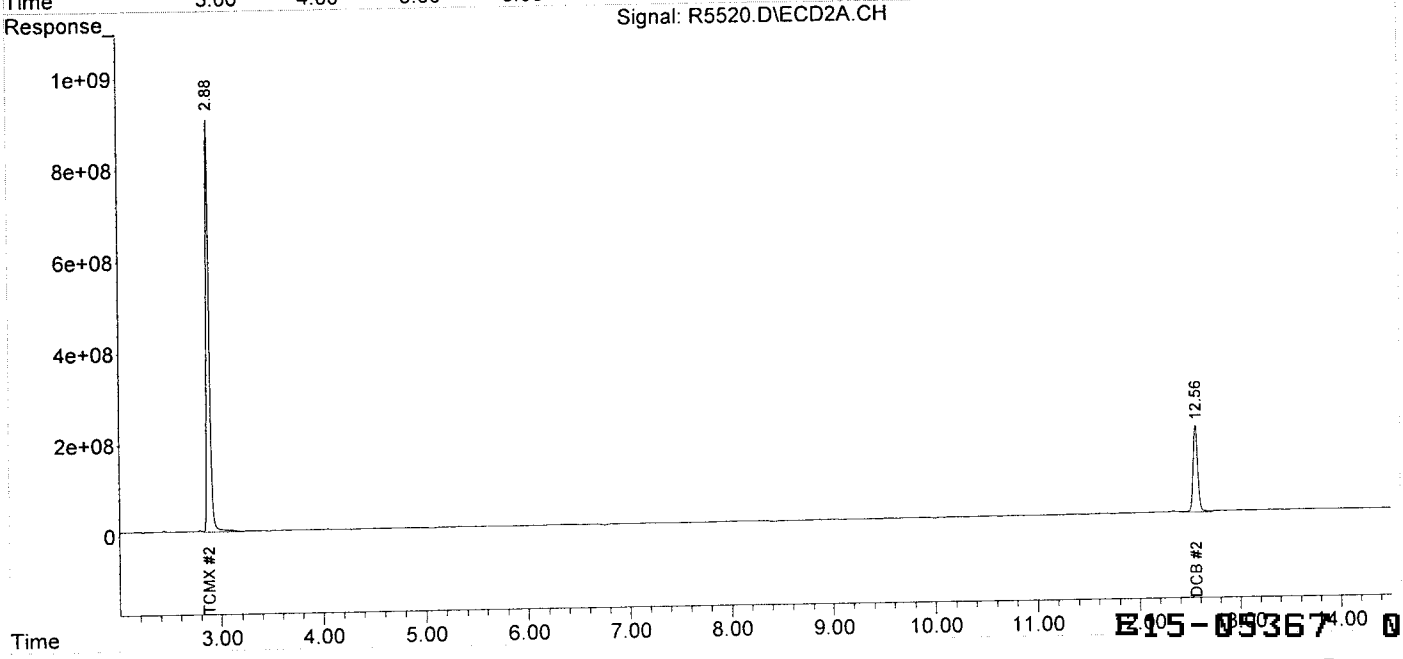
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5520.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:58
Operator : JS
Sample : PCB,BLKS150630-12,S,30g,0,5
Misc : NA,06/30/15,NA,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 10:23:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05367 0567

PESTICIDE DATA

PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150629-16	AQUEOUS	76		44		80		38	
Pest	LCSA150629-16	AQUEOUS	83		55		87		52	
Pest	LCSDA150629-16	AQUEOUS	83		55		86		49	
FB	E15-05346-027	AQUEOUS	83		57		88		51	
FB-06221	E15-05367-040	AQUEOUS	88		57		92		52	
FB-06231	E15-05428-030	AQUEOUS	88		61		91		56	
FB062415	E15-05472-015	AQUEOUS	86		57		91		54	
FB-06241	E15-05428-032	AQUEOUS	85		58		89		52	
FB_06251	E15-05556-022	AQUEOUS	86		61		90		56	
FB	E15-05547-020	AQUEOUS	79		55		83		52	
FIELD_BL	E15-05470-016	AQUEOUS	86		58		91		53	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150701-07	SOIL	74		80		78		80	
Pest	LCSS150701-07	SOIL	79		80		84		81	
Pest	05367-003MS	SOIL	62		84		67		118	
Pest	05367-003MSD	SOIL	57		81		61		74	
AG-6/0.0	E15-05559-022	SOIL	58		57		60		64	
E-3_(2.0	E15-05367-003	SOIL	59		87		65		91	
E-3_(4.5	E15-05367-004	SOIL	81		95		85		97	
E-4_(0.5	E15-05367-007	SOIL	65		99		76		105	
E-4_(2.0	E15-05367-008	SOIL	62		87		67		83	
E-4_(3.0	E15-05367-009	SOIL	70		80		75		77	
E-4_(4.5	E15-05367-010	SOIL	74		86		78		81	
X-1_(4.5	E15-05367-023	SOIL	64		84		68		69	
E-6_(0.5	E15-05367-039	SOIL	48		70		70		100	
E-6_(2.0	E15-05367-041	SOIL	65		78		68		75	
E-6_(3.0	E15-05367-042	SOIL	60		72		63		69	
E-6_(4.0	E15-05367-043	SOIL	60		62		63		60	
X-3_(0.5	E15-05428-011	SOIL	58		85		65		92	
E-1_(0.5	E15-05428-014	SOIL	49		75		56		107	
E-1_(2.0	E15-05428-015	SOIL	66		59		70		64	
E-1_(3.0	E15-05428-016	SOIL	64		65		67		66	
E-1_(4.5	E15-05428-017	SOIL	68		65		70		70	
E-2_(0.5	E15-05428-020	SOIL	57		74		64		85	
E-2_(2.0	E15-05428-021	SOIL	69		83		75		88	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150630-12	SOIL	80		88		78		87	
Pest	LCSS150630-12	SOIL	88		100		86		98	
Pest	05559-023MS	SOIL	73		86		78		88	
Pest	05559-023MSD	SOIL	82		91		84		98	
DRAINAGE	E15-05559-023	SOIL	71		71		75		84	
GYM-1/0.	E15-05559-024	SOIL	82		90		82		93	
GYM-2/0.	E15-05559-025	SOIL	77		88		80		89	
DSB-W/0.	E15-05559-029	SOIL	75		76		74		83	
E-16_(0.	E15-05367-017	SOIL	72		74		79		249	M
E-16_(2.	E15-05367-018	SOIL	78		78		82		104	
PZ-2_(0.	E15-05367-019	SOIL	60		49		62		89	
PZ-2_(2.	E15-05367-020	SOIL	63		75		68		114	
PZ-2_(4.	E15-05367-021	SOIL	75		71		74		88	
PZ-2_(6.	E15-05367-022	SOIL	84		92		82		101	
PZ-1_(0.	E15-05367-031	SOIL	86		92		89		397	M
PZ-1_(2.	E15-05367-032	SOIL	64		81		73		345	M
PZ-1_(2.	E15-05367-033	SOIL	49		41		50		105	
PZ-1_(4.	E15-05367-034	SOIL	79		75		76		92	
E-5_(0.5	E15-05367-035	SOIL	76		60		72		148	
E-5_(3.0	E15-05367-036	SOIL	44		44		58		73	
E-5_(2.0	E15-05367-037	SOIL	82		54		72		102	
E-5_(4.5	E15-05367-038	SOIL	60		64		70		84	
E-3_(3.0	E15-05367-001	SOIL	74		74		71		89	
E-3_(0.5	E15-05367-002	SOIL	D		D		D		D	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD ACCURACY REPORT

Lab ID: BLKA150629-16
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
MS Data file: O9871.D
MSD Data file: O9872.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	Conc. LCSD	%Rec. LCSD	#	%RPD	#
alpha-BHC	100.0	0.0	84.9	85		83.5	84		2	
beta-BHC	100.0	0.0	70.3	70		69.2	69		2	
gamma-BHC (Lindane)	100.0	0.0	87.8	88		86.4	86		2	
delta-BHC	100.0	0.0	83.0	83		82.0	82		1	
Heptachlor	100.0	0.0	74.7	75		72.9	73		2	
Aldrin	100.0	0.0	82.3	82		81.5	82		1	
Heptachlor epoxide	100.0	0.0	80.3	80		78.3	78		3	
Endosulfan I	100.0	0.0	78.7	79		76.1	76		3	
4,4'-DDE	100.0	0.0	80.0	80		75.6	76		6	
Dieldrin	100.0	0.0	70.1	70		67.2	67		4	
Endrin	100.0	0.0	75.9	76		69.2	69		9	
Endosulfan II	100.0	0.0	78.9	79		74.6	75		6	
4,4'-DDD	100.0	0.0	79.5	80		75.2	75		6	
Endrin aldehyde	100.0	0.0	78.1	78		74.8	75		4	
Endosulfan sulfate	100.0	0.0	75.4	75		71.0	71		6	
4,4'-DDT	100.0	0.0	62.4	62		53.6	54		15	
Endrin ketone	100.0	0.0	77.1	77		73.9	74		4	
Methoxychlor	100.0	0.0	64.5	65		57.7	58		11	
alpha-Chlordane	100.0	0.0	79.4	79		76.5	77		4	
gamma-Chlordane	100.0	0.0	80.7	81		78.3	78		3	

	Aqueous	Soil/Sediment
LCS/LCSD Recovery Limits	30-150	30-150
LCS/LCSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150701-07
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9954.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	56.9	57	
beta-BHC	100.0	0.0	51.3	51	
gamma-BHC (Lindane)	100.0	0.0	57.7	58	
delta-BHC	100.0	0.0	54.5	55	
Heptachlor	100.0	0.0	50.3	50	
Aldrin	100.0	0.0	58.7	59	
Heptachlor epoxide	100.0	0.0	57.9	58	
Endosulfan I	100.0	0.0	57.2	57	
4,4'-DDE	100.0	0.0	59.8	60	
Dieldrin	100.0	0.0	52.1	52	
Endrin	100.0	0.0	54.9	55	
Endosulfan II	100.0	0.0	58.1	58	
4,4'-DDD	100.0	0.0	60.5	61	
Endrin aldehyde	100.0	0.0	61.2	61	
Endosulfan sulfate	100.0	0.0	57.2	57	
4,4'-DDT	100.0	0.0	42.9	43	
Endrin ketone	100.0	0.0	58.5	59	
Methoxychlor	100.0	0.0	49.2	49	
alpha-Chlordane	100.0	0.0	58.5	59	
gamma-Chlordane	100.0	0.0	59.3	59	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150630-12
Date Received: NA
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0979.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	65.4	65	
beta-BHC	100.0	0.0	59.6	60	
gamma-BHC (Lindane)	100.0	0.0	64.8	65	
delta-BHC	100.0	0.0	63.4	63	
Heptachlor	100.0	0.0	63.0	63	
Aldrin	100.0	0.0	66.3	66	
Heptachlor epoxide	100.0	0.0	65.3	65	
Endosulfan I	100.0	0.0	66.0	66	
4,4'-DDE	100.0	0.0	66.7	67	
Dieldrin	100.0	0.0	59.4	59	
Endrin	100.0	0.0	76.2	76	
Endosulfan II	100.0	0.0	68.8	69	
4,4'-DDD	100.0	0.0	72.3	72	
Endrin aldehyde	100.0	0.0	67.8	68	
Endosulfan sulfate	100.0	0.0	64.9	65	
4,4'-DDT	100.0	0.0	50.1	50	
Endrin ketone	100.0	0.0	63.1	63	
Methoxychlor	100.0	0.0	60.2	60	
alpha-Chlordane	100.0	0.0	65.5	66	
gamma-Chlordane	100.0	0.0	66.3	66	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-05367-003
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
MS Data file: O9955.D
MSD Data file: O9956.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 10.00g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.7
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
alpha-BHC	100.0	0.0	53.9	54		51.8	52		4	
beta-BHC	100.0	0.0	55.2	55		52.8	53		4	
gamma-BHC (Lindane)	100.0	0.0	56.3	56		54.4	54		3	
delta-BHC	100.0	0.0	55.7	56		55.1	55		1	
Heptachlor	100.0	0.0	50.1	50		46.8	47		7	
Aldrin	100.0	0.0	54.4	54		53.9	54		1	
Heptachlor epoxide	100.0	0.0	73.5	74		72.9	73		1	
Endosulfan I	100.0	0.0	60.5	61		60.4	60		0	
4,4'-DDE	100.0	0.0	79.2	79		77.2	77		3	
Dieldrin	100.0	0.0	467.1	467	*$	438.1	438	*$	6	
Endrin	100.0	0.0	214.9	215	*$	207.0	207	*$	4	
Endosulfan II	100.0	0.0	80.7	81		81.3	81		1	
4,4'-DDD	100.0	0.0	107.7	108		112.5	113		4	
Endrin aldehyde	100.0	0.0	102.6	103		105.9	106		3	
Endosulfan sulfate	100.0	0.0	136.1	136		143.9	144		6	
4,4'-DDT	100.0	0.0	506.6	507	*$	556.6	557	*$	9	
Endrin ketone	100.0	0.0	105.5	106		116.7	117		10	
Methoxychlor	100.0	0.0	424.5	425	*$	430.5	431	*$	1	
alpha-Chlordane	100.0	0.0	63.0	63		63.3	63		0	
gamma-Chlordane	100.0	0.0	57.4	57		57.8	58		1	

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-05559-023
Date Received: 06/26/2015
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
MS Data file: V0980.D
MSD Data file: V0981.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.24g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.9
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
alpha-BHC	100.0	0.0	75.7	76		83.0	83		9	
beta-BHC	100.0	0.0	70.2	70		76.4	76		8	
gamma-BHC (Lindane)	100.0	0.0	79.3	79		83.8	84		6	
delta-BHC	100.0	0.0	77.0	77		85.8	86		11	
Heptachlor	100.0	0.0	80.1	80		84.5	85		5	
Aldrin	100.0	0.0	80.2	80		84.8	85		6	
Heptachlor epoxide	100.0	0.0	82.7	83		82.4	82		0	
Endosulfan I	100.0	0.0	82.8	83		88.2	88		6	
4,4'-DDE	100.0	0.0	81.7	82		86.3	86		5	
Dieldrin	100.0	0.0	72.6	73		76.5	77		5	
Endrin	100.0	0.0	94.3	94		96.7	97		3	
Endosulfan II	100.0	0.0	85.0	85		78.1	78		8	
4,4'-DDD	100.0	0.0	91.3	91		88.1	88		4	
Endrin aldehyde	100.0	0.0	86.0	86		92.6	93		7	
Endosulfan sulfate	100.0	0.0	82.3	82		87.7	88		6	
4,4'-DDT	100.0	0.0	69.9	70		64.8	65		8	
Endrin ketone	100.0	0.0	79.2	79		85.2	85		7	
Methoxychlor	100.0	0.0	87.5	88		91.3	91		4	
alpha-Chlordane	100.0	0.0	78.6	79		85.0	85		8	
gamma-Chlordane	100.0	0.0	81.4	81		86.8	87		6	

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O9870.D

Instrument ID: GC-O

Date Extracted: 06/29/2015

Matrix: AQUEOUS

Date Analyzed: 06/30/2015

Time Analyzed: 16:11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSA150629-16	06/30/2015	16:24
Pest	LCSDA150629-16	06/30/2015	16:36
FB	E15-05346-027	06/30/2015	16:49
FB-06221	E15-05367-040	06/30/2015	17:02
FB-06231	E15-05428-030	06/30/2015	17:14
FB062415	E15-05472-015	06/30/2015	17:27
FB-06241	E15-05428-032	06/30/2015	17:39
FB_06251	E15-05556-022	06/30/2015	17:52
FB	E15-05547-020	06/30/2015	18:04
FIELD_BL	E15-05470-016	06/30/2015	18:17

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O9953.D

Instrument ID: GC-O

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 10:02

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150701-07	07/06/2015	10:14
Pest	05367-003MS	07/06/2015	10:27
Pest	05367-003MSD	07/06/2015	10:40
AG-6/0.0	E15-05559-022	07/06/2015	10:52
E-3_(2.0	E15-05367-003	07/06/2015	11:05
E-3_(4.5	E15-05367-004	07/06/2015	11:18
E-4_(0.5	E15-05367-007	07/06/2015	11:30
E-4_(2.0	E15-05367-008	07/06/2015	11:43
E-4_(3.0	E15-05367-009	07/06/2015	11:56
E-4_(4.5	E15-05367-010	07/06/2015	12:08
X-1_(4.5	E15-05367-023	07/06/2015	12:21
E-6_(0.5	E15-05367-039	07/06/2015	12:34
E-6_(2.0	E15-05367-041	07/06/2015	12:46
E-6_(3.0	E15-05367-042	07/06/2015	12:59
E-6_(4.0	E15-05367-043	07/06/2015	13:12
X-3_(0.5	E15-05428-011	07/06/2015	13:38
E-1_(0.5	E15-05428-014	07/06/2015	13:51
E-1_(2.0	E15-05428-015	07/06/2015	14:03
E-1_(3.0	E15-05428-016	07/06/2015	14:16
E-1_(4.5	E15-05428-017	07/06/2015	14:29
E-2_(0.5	E15-05428-020	07/06/2015	14:41
E-2_(2.0	E15-05428-021	07/06/2015	14:54

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: V0978.D

Instrument ID: GC-V

Date Extracted: 06/30/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150630-12	07/06/2015	11:32
Pest	05559-023MS	07/06/2015	11:44
Pest	05559-023MSD	07/06/2015	11:55
DRAINAGE	E15-05559-023	07/06/2015	12:06
GYM-1/0.	E15-05559-024	07/06/2015	12:17
GYM-2/0.	E15-05559-025	07/06/2015	12:28
DSB-W/0.	E15-05559-029	07/06/2015	12:39
E-16_(0.	E15-05367-017	07/06/2015	13:33
E-16_(2.	E15-05367-018	07/06/2015	13:44
PZ-2_(0.	E15-05367-019	07/06/2015	13:55
PZ-2_(2.	E15-05367-020	07/06/2015	14:06
PZ-2_(4.	E15-05367-021	07/06/2015	14:17
PZ-2_(6.	E15-05367-022	07/06/2015	14:28
PZ-1_(0.	E15-05367-031	07/06/2015	14:39
PZ-1_(2.	E15-05367-032	07/06/2015	14:50
PZ-1_(2.	E15-05367-033	07/06/2015	15:01
PZ-1_(4.	E15-05367-034	07/06/2015	15:12
E-5_(0.5	E15-05367-035	07/06/2015	15:23
E-5_(3.0	E15-05367-036	07/06/2015	15:34
E-5_(2.0	E15-05367-037	07/06/2015	15:45
E-5_(4.5	E15-05367-038	07/06/2015	15:57
E-3_(3.0	E15-05367-001	07/06/2015	16:19
E-3_(0.5	E15-05367-002	07/07/2015	11:05

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.12	2.12	2.12	2.12	2.12	2.12	2.06	2.18
beta-BHC	2.37	2.37	2.37	2.37	2.37	2.37	2.31	2.43
gamma-BHC	2.32	2.32	2.32	2.32	2.32	2.32	2.26	2.38
delta-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
Heptachlor	2.65	2.65	2.65	2.65	2.65	2.65	2.57	2.73
Aldrin	2.88	2.88	2.88	2.88	2.88	2.88	2.80	2.96
Heptachlor epoxide	3.37	3.37	3.37	3.37	3.37	3.37	3.29	3.45
Endosulfan I	3.71	3.71	3.71	3.71	3.71	3.71	3.63	3.79
4,4'-DDE	3.65	3.65	3.65	3.65	3.66	3.65	3.55	3.75
Dieldrin	3.93	3.93	3.93	3.93	3.93	3.93	3.83	4.03
Endrin	4.14	4.14	4.14	4.14	4.14	4.14	4.04	4.24
Endosulfan II	4.35	4.35	4.35	4.35	4.35	4.35	4.25	4.45
4,4'-DDD	4.21	4.21	4.21	4.21	4.21	4.21	4.11	4.31
Endrin aldehyde	4.76	4.76	4.76	4.76	4.76	4.76	4.64	4.88
Endosulfan sulfate	5.19	5.19	5.20	5.19	5.20	5.19	5.07	5.31
4,4'-DDT	4.47	4.47	4.47	4.47	4.47	4.47	4.35	4.59
Endrin ketone	5.48	5.48	5.48	5.48	5.48	5.48	5.36	5.60
Methoxychlor	4.96	4.96	4.96	4.96	4.96	4.96	4.84	5.08
alpha-Chlordane	3.59	3.59	3.59	3.59	3.59	3.59	3.51	3.67
gamma-Chlordane	3.47	3.47	3.47	3.47	3.48	3.47	3.39	3.55
Chlordane 500 ppb			2.59				2.51	2.67
Chlordane {2}			2.98				2.90	3.06
Chlordane {3}			3.47				3.39	3.55
Chlordane {4}			3.58				3.50	3.66
Chlordane {5}			4.29				4.21	4.37
Toxaphene 500 ppb			4.46				4.38	4.54
Toxaphene {2}			4.74				4.66	4.82
Toxaphene {3}			5.09				5.01	5.17
Toxaphene {4}			5.46				5.38	5.54
Toxaphene {5}			5.62				5.54	5.70

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	206327	205097	222739	224748	186050	208992	7.51
beta-BHC	97562	77048	81279	82400	68545	81367	12.98
gamma-BHC	182487	181730	197051	197139	159797	183641	8.33
delta-BHC	174148	176223	195659	198161	161485	181135	8.55
Heptachlor	188526	169464	181586	181372	149409	174071	8.84
Aldrin	186485	174053	187152	186403	152536	177326	8.40
Heptachlor epoxide	174606	153583	163639	161686	131220	156947	10.33
Endosulfan I	175277	152097	162913	159362	129428	155815	10.89
4,4'-DDE	133111	131014	144691	147722	119696	135247	8.34
Dieldrin	165101	153489	167858	164777	133255	156896	9.13
Endrin	127237	123923	133232	136115	109917	126085	8.12
Endosulfan II	147291	128398	138493	136982	109889	132211	10.71
4,4'-DDD	129711	117173	129193	129471	105297	122169	8.86
Endrin aldehyde	118395	94498	103072	101187	81283	99687	13.55
Endosulfan sulfate	133861	113841	123483	122640	97899	118345	11.37
4,4'-DDT	87273	92178	109315	116176	93447	99678	12.43
Endrin ketone	171560	141806	156487	151786	121001	148528	12.63
Methoxychlor	38290	44486	50946	53061	42316	45820	13.34
alpha-Chlordane	169721	149626	160470	160282	130058	154032	9.85
gamma-Chlordane	169403	154924	167000	167383	136063	158954	8.81
Chlordane 500 ppb			4308				
Chlordane {2}			5184				
Chlordane {3}			14875				
Chlordane {4}			23443				
Chlordane {5}			3649				
Toxaphene 500 ppb			2365				
Toxaphene {2}			4156				
Toxaphene {3}			4406				
Toxaphene {4}			4145				
Toxaphene {5}			1923				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015

Instrument ID: GC-O

GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
beta-BHC	2.84	2.84	2.85	2.84	2.85	2.85	2.79	2.91
gamma-BHC	2.79	2.79	2.79	2.79	2.79	2.79	2.73	2.85
delta-BHC	3.10	3.10	3.11	3.11	3.11	3.11	3.05	3.17
Heptachlor	3.17	3.17	3.17	3.17	3.17	3.17	3.09	3.25
Aldrin	3.47	3.47	3.47	3.47	3.47	3.47	3.39	3.55
Heptachlor epoxide	4.00	4.00	4.00	4.00	4.00	4.00	3.92	4.08
Endosulfan I	4.39	4.39	4.39	4.40	4.40	4.39	4.31	4.47
4,4'-DDE	4.49	4.49	4.49	4.49	4.49	4.49	4.39	4.59
Dieldrin	4.67	4.67	4.67	4.67	4.67	4.67	4.57	4.77
Endrin	4.99	4.99	4.99	4.99	4.99	4.99	4.89	5.09
Endosulfan II	5.21	5.21	5.21	5.21	5.21	5.21	5.11	5.31
4,4'-DDD	5.09	5.09	5.09	5.09	5.09	5.09	4.99	5.19
Endrin aldehyde	5.57	5.57	5.57	5.57	5.57	5.57	5.45	5.69
Endosulfan sulfate	5.87	5.87	5.87	5.87	5.87	5.87	5.75	5.99
4,4'-DDT	5.43	5.43	5.43	5.43	5.43	5.43	5.31	5.55
Endrin ketone	6.47	6.47	6.47	6.47	6.47	6.47	6.35	6.59
Methoxychlor	6.18	6.18	6.18	6.18	6.18	6.18	6.06	6.30
alpha-Chlordane	4.33	4.33	4.33	4.33	4.33	4.33	4.25	4.41
gamma-Chlordane	4.19	4.18	4.19	4.19	4.19	4.19	4.11	4.27
Chlordane 500 ppb			3.04				2.96	3.12
Chlordane {2}			3.59				3.51	3.67
Chlordane {3}			4.18				4.10	4.26
Chlordane {4}			4.27				4.19	4.35
Chlordane {5}			4.33				4.25	4.41
Toxaphene 500 ppb			5.30				5.22	5.38
Toxaphene {2}			5.58				5.50	5.66
Toxaphene {3}			5.86				5.78	5.94
Toxaphene {4}			6.14				6.06	6.22
Toxaphene {5}			6.58				6.50	6.66

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	244758	271593	299889	307238	257349	276165	9.73
beta-BHC	118462	102387	110420	111130	91000	106680	9.80
gamma-BHC	222711	247243	274095	281683	230703	251287	10.34
delta-BHC	194643	225984	258112	266905	217965	232722	12.76
Heptachlor	205967	219902	246710	251981	207578	226428	9.58
Aldrin	214872	225860	249593	255492	209283	231020	8.93
Heptachlor epoxide	203504	198514	217591	220537	180374	204104	7.93
Endosulfan I	181874	180274	198289	201420	164399	185251	8.11
4,4'-DDE	173133	178548	201419	208019	170364	186297	9.25
Dieldrin	183133	194270	216929	222616	181785	199747	9.52
Endrin	133124	147966	164908	175366	143102	152893	11.14
Endosulfan II	178397	171897	189698	190453	153746	176838	8.53
4,4'-DDD	142146	140854	158920	165472	136362	148751	8.52
Endrin aldehyde	135821	118434	131424	131682	106716	124815	9.65
Endosulfan sulfate	145820	141006	156221	160163	128920	146426	8.51
4,4'-DDT	84059	101253	126051	136275	115620	112651	18.27
Endrin ketone	199566	191460	209044	207770	166595	194887	8.89
Methoxychlor	46490	54077	62461	66762	53605	56679	14.09
alpha-Chlordane	194515	191231	210152	214267	175385	197110	7.93
gamma-Chlordane	196178	196456	217815	223471	183151	203414	8.23
Chlordane 500 ppb			5890				
Chlordane {2}			5949				
Chlordane {3}			18148				
Chlordane {4}			14051				
Chlordane {5}			15044				
Toxaphene 500 ppb			4986				
Toxaphene {2}			4123				
Toxaphene {3}			2585				
Toxaphene {4}			5461				
Toxaphene {5}			3738				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9840.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	227058	8.64
beta-BHC	2.37	2.31	2.43	81367	75939	6.67
gamma-BHC	2.32	2.26	2.38	183641	206738	12.58
delta-BHC	2.50	2.44	2.56	181135	194573	7.42
Heptachlor	2.65	2.57	2.73	174071	168798	3.03
Aldrin	2.88	2.80	2.96	177326	191968	8.26
Heptachlor epoxide	3.37	3.29	3.45	156947	167453	6.69
Endosulfan I	3.71	3.63	3.79	155815	170951	9.71
4,4'-DDE	3.66	3.55	3.75	135247	146298	8.17
Dieldrin	3.93	3.83	4.03	156896	148657	5.25
Endrin	4.14	4.04	4.24	126085	115124	8.69
Endosulfan II	4.35	4.25	4.45	132211	146375	10.71
4,4'-DDD	4.21	4.11	4.31	122169	118659	2.87
Endrin aldehyde	4.76	4.64	4.88	99687	113813	14.17
Endosulfan sulfate	5.20	5.07	5.31	118345	124693	5.36
4,4'-DDT	4.47	4.35	4.59	99678	95789	3.90
Endrin ketone	5.48	5.36	5.60	148528	164195	10.55
Methoxychlor	4.97	4.84	5.08	45820	39435	13.93
alpha-Chlordane	3.59	3.51	3.67	154032	167047	8.45
gamma-Chlordane	3.48	3.39	3.55	158954	172975	8.82
Chlordane 500 ppb	2.59	2.51	2.67	4308	4625	7.36
Chlordane {2}	2.98	2.90	3.06	5184	5562	7.30
Chlordane {3}	3.47	3.39	3.55	14875	16020	7.70
Chlordane {4}	3.58	3.50	3.66	23443	25342	8.10
Chlordane {5}	4.29	4.21	4.37	3649	3892	6.64
Toxaphene 500 ppb	4.46	4.38	4.54	2365	2604	10.12
Toxaphene {2}	4.74	4.66	4.82	4156	4603	10.77
Toxaphene {3}	5.09	5.01	5.17	4406	4822	9.43
Toxaphene {4}	5.46	5.38	5.54	4145	4523	9.11
Toxaphene {5}	5.62	5.54	5.70	1923	1983	3.11

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9840.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	317072	14.81
beta-BHC	2.85	2.79	2.91	106680	107361	0.64
gamma-BHC	2.79	2.73	2.85	251287	295439	17.57
delta-BHC	3.11	3.05	3.17	232722	262443	12.77
Heptachlor	3.17	3.09	3.25	226428	239887	5.94
Aldrin	3.47	3.39	3.55	231020	268658	16.29
Heptachlor epoxide	4.00	3.92	4.08	204104	230959	13.16
Endosulfan I	4.39	4.31	4.47	185251	212149	14.52
4,4'-DDE	4.49	4.39	4.59	186297	220879	18.56
Dieldrin	4.67	4.57	4.77	199747	202687	1.47
Endrin	4.99	4.89	5.09	152893	155035	1.40
Endosulfan II	5.21	5.11	5.31	176838	206238	16.63
4,4'-DDD	5.10	4.99	5.19	148751	158809	6.76
Endrin aldehyde	5.57	5.45	5.69	124815	148510	18.98
Endosulfan sulfate	5.87	5.75	5.99	146426	163741	11.83
4,4'-DDT	5.43	5.31	5.55	112651	116632	3.53
Endrin ketone	6.47	6.35	6.59	194887	218249	11.99
Methoxychlor	6.19	6.06	6.30	56679	46723	17.57
alpha-Chlordane	4.33	4.25	4.41	197110	229451	16.41
gamma-Chlordane	4.19	4.11	4.27	203414	237136	16.58
Chlordane 500 ppb	3.04	2.96	3.12	5890	6540	11.02
Chlordane {2}	3.60	3.51	3.67	5949	6652	11.82
Chlordane {3}	4.19	4.10	4.26	18148	20734	14.25
Chlordane {4}	4.27	4.19	4.35	14051	15884	13.05
Chlordane {5}	4.33	4.25	4.41	15044	17518	16.44
Toxaphene 500 ppb	5.30	5.22	5.38	4986	5701	14.35
Toxaphene {2}	5.58	5.50	5.66	4123	4816	16.79
Toxaphene {3}	5.87	5.78	5.94	2585	3046	17.82
Toxaphene {4}	6.14	6.06	6.22	5461	6522	19.43
Toxaphene {5}	6.59	6.50	6.66	3738	4332	15.89

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9881.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	236366	13.10
beta-BHC	2.37	2.31	2.43	81367	78527	3.49
gamma-BHC	2.32	2.26	2.38	183641	212649	15.80
delta-BHC	2.50	2.44	2.56	181135	202284	11.68
Heptachlor	2.65	2.57	2.73	174071	164244	5.65
Aldrin	2.88	2.80	2.96	177326	188989	6.58
Heptachlor epoxide	3.37	3.29	3.45	156947	163484	4.17
Endosulfan I	3.71	3.63	3.79	155815	163493	4.93
4,4'-DDE	3.66	3.55	3.75	135247	138467	2.38
Dieldrin	3.93	3.83	4.03	156896	145818	7.06
Endrin	4.14	4.04	4.24	126085	110341	12.49
Endosulfan II	4.35	4.25	4.45	132211	142144	7.51
4,4'-DDD	4.21	4.11	4.31	122169	127508	4.37
Endrin aldehyde	4.76	4.64	4.88	99687	118246	18.62
Endosulfan sulfate	5.20	5.07	5.31	118345	123734	4.55
4,4'-DDT	4.47	4.35	4.59	99678	83587	16.14
Endrin ketone	5.48	5.36	5.60	148528	163716	10.23
Methoxychlor	4.97	4.84	5.08	45820	38128	16.79
alpha-Chlordane	3.59	3.51	3.67	154032	160235	4.03
gamma-Chlordane	3.48	3.39	3.55	158954	167007	5.07

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9881.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	318774	15.43
beta-BHC	2.84	2.79	2.91	106680	112091	5.07
gamma-BHC	2.79	2.73	2.85	251287	300523	19.59
delta-BHC	3.10	3.05	3.17	232722	276483	18.80
Heptachlor	3.17	3.09	3.25	226428	228013	0.70
Aldrin	3.47	3.39	3.55	231020	264197	14.36
Heptachlor epoxide	4.00	3.92	4.08	204104	225908	10.68
Endosulfan I	4.39	4.31	4.47	185251	205838	11.11
4,4'-DDE	4.49	4.39	4.59	186297	209563	12.49
Dieldrin	4.67	4.57	4.77	199747	200168	0.21
Endrin	4.99	4.89	5.09	152893	147879	3.28
Endosulfan II	5.21	5.11	5.31	176838	206643	16.85
4,4'-DDD	5.09	4.99	5.19	148751	168986	13.60
Endrin aldehyde	5.57	5.45	5.69	124815	148968	19.35
Endosulfan sulfate	5.87	5.75	5.99	146426	166113	13.44
4,4'-DDT	5.43	5.31	5.55	112651	95157	15.53
Endrin ketone	6.47	6.35	6.59	194887	231932	19.01
Methoxychlor	6.18	6.06	6.30	56679	47749	15.76
alpha-Chlordane	4.33	4.25	4.41	197110	219553	11.39
gamma-Chlordane	4.18	4.11	4.27	203414	228163	12.17

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9950.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	219675	5.11
beta-BHC	2.37	2.31	2.43	81367	73486	9.69
gamma-BHC	2.32	2.26	2.38	183641	199369	8.56
delta-BHC	2.50	2.44	2.56	181135	190806	5.34
Heptachlor	2.65	2.57	2.73	174071	161383	7.29
Aldrin	2.88	2.80	2.96	177326	184898	4.27
Heptachlor epoxide	3.37	3.29	3.45	156947	162055	3.25
Endosulfan I	3.71	3.63	3.79	155815	157866	1.32
4,4'-DDE	3.65	3.55	3.75	135247	144436	6.79
Dieldrin	3.93	3.83	4.03	156896	145172	7.47
Endrin	4.14	4.04	4.24	126085	126572	0.39
Endosulfan II	4.35	4.25	4.45	132211	136204	3.02
4,4'-DDD	4.21	4.11	4.31	122169	124367	1.80
Endrin aldehyde	4.76	4.64	4.88	99687	105404	5.74
Endosulfan sulfate	5.19	5.07	5.31	118345	118073	0.23
4,4'-DDT	4.47	4.35	4.59	99678	86423	13.30
Endrin ketone	5.48	5.36	5.60	148528	147499	0.69
Methoxychlor	4.96	4.84	5.08	45820	40599	11.39
alpha-Chlordane	3.59	3.51	3.67	154032	161140	4.61
gamma-Chlordane	3.47	3.39	3.55	158954	166611	4.82
Chlordane 500 ppb	2.59	2.51	2.67	4308	4780	10.95
Chlordane {2}	2.98	2.90	3.06	5184	5791	11.71
Chlordane {3}	3.47	3.39	3.55	14875	16795	12.91
Chlordane {4}	3.58	3.50	3.66	23443	26417	12.68
Chlordane {5}	4.29	4.21	4.37	3649	4022	10.23
Toxaphene 500 ppb	4.46	4.38	4.54	2365	2322	1.79
Toxaphene {2}	4.74	4.66	4.82	4156	3440	17.23
Toxaphene {3}	5.09	5.01	5.17	4406	3797	13.83
Toxaphene {4}	5.46	5.38	5.54	4145	3827	7.67
Toxaphene {5}	5.62	5.54	5.70	1923	1674	12.97

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9950.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	305278	10.54
beta-BHC	2.84	2.79	2.91	106680	106073	0.57
gamma-BHC	2.79	2.73	2.85	251287	292269	16.31
delta-BHC	3.10	3.05	3.17	232722	266348	14.45
Heptachlor	3.17	3.09	3.25	226428	227346	0.41
Aldrin	3.47	3.39	3.55	231020	263174	13.92
Heptachlor epoxide	4.00	3.92	4.08	204104	226655	11.05
Endosulfan I	4.39	4.31	4.47	185251	206909	11.69
4,4'-DDE	4.49	4.39	4.59	186297	215335	15.59
Dieldrin	4.67	4.57	4.77	199747	197181	1.28
Endrin	4.99	4.89	5.09	152893	170929	11.80
Endosulfan II	5.21	5.11	5.31	176838	194735	10.12
4,4'-DDD	5.09	4.99	5.19	148751	169073	13.66
Endrin aldehyde	5.57	5.45	5.69	124815	141012	12.98
Endosulfan sulfate	5.87	5.75	5.99	146426	160079	9.32
4,4'-DDT	5.42	5.31	5.55	112651	104135	7.56
Endrin ketone	6.46	6.35	6.59	194887	208001	6.73
Methoxychlor	6.18	6.06	6.30	56679	53643	5.36
alpha-Chlordane	4.33	4.25	4.41	197110	223175	13.22
gamma-Chlordane	4.18	4.11	4.27	203414	230501	13.32
Chlordane 500 ppb	3.04	2.96	3.12	5890	6970	18.33
Chlordane {2}	3.59	3.51	3.67	5949	7021	18.01
Chlordane {3}	4.18	4.10	4.26	18148	20681	13.96
Chlordane {4}	4.27	4.19	4.35	14051	16725	19.03
Chlordane {5}	4.33	4.25	4.41	15044	18001	19.66
Toxaphene 500 ppb	5.29	5.22	5.38	4986	4628	7.18
Toxaphene {2}	5.57	5.50	5.66	4123	3819	7.38
Toxaphene {3}	5.86	5.78	5.94	2585	2178	15.75
Toxaphene {4}	6.13	6.06	6.22	5461	4628	15.26
Toxaphene {5}	6.58	6.50	6.66	3738	3246	13.14

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9969.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	228778	9.47
beta-BHC	2.37	2.31	2.43	81367	76863	5.54
gamma-BHC	2.32	2.26	2.38	183641	206809	12.62
delta-BHC	2.50	2.44	2.56	181135	201502	11.24
Heptachlor	2.65	2.57	2.73	174071	168591	3.15
Aldrin	2.88	2.80	2.96	177326	188740	6.44
Heptachlor epoxide	3.37	3.29	3.45	156947	165697	5.58
Endosulfan I	3.71	3.63	3.79	155815	161211	3.46
4,4'-DDE	3.66	3.55	3.75	135247	148167	9.55
Dieldrin	3.93	3.83	4.03	156896	148998	5.03
Endrin	4.14	4.04	4.24	126085	113333	10.11
Endosulfan II	4.35	4.25	4.45	132211	142010	7.41
4,4'-DDD	4.21	4.11	4.31	122169	133944	9.64
Endrin aldehyde	4.76	4.64	4.88	99687	119339	19.71
Endosulfan sulfate	5.19	5.07	5.31	118345	124285	5.02
4,4'-DDT	4.47	4.35	4.59	99678	84929	14.80
Endrin ketone	5.48	5.36	5.60	148528	164381	10.67
Methoxychlor	4.96	4.84	5.08	45820	43452	5.17
alpha-Chlordane	3.59	3.51	3.67	154032	163265	5.99
gamma-Chlordane	3.47	3.39	3.55	158954	169478	6.62

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9969.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	320864	16.19
beta-BHC	2.84	2.79	2.91	106680	110930	3.98
gamma-BHC	2.79	2.73	2.85	251287	301390	19.94
delta-BHC	3.10	3.05	3.17	232722	279257	20.00
Heptachlor	3.17	3.09	3.25	226428	236904	4.63
Aldrin	3.47	3.39	3.55	231020	268928	16.41
Heptachlor epoxide	4.00	3.92	4.08	204104	232531	13.93
Endosulfan I	4.39	4.31	4.47	185251	211798	14.33
4,4'-DDE	4.49	4.39	4.59	186297	219956	18.07
Dieldrin	4.67	4.57	4.77	199747	204633	2.45
Endrin	4.99	4.89	5.09	152893	154358	0.96
Endosulfan II	5.21	5.11	5.31	176838	207005	17.06
4,4'-DDD	5.09	4.99	5.19	148751	176541	18.68
Endrin aldehyde	5.57	5.45	5.69	124815	155147	24.30
Endosulfan sulfate	5.86	5.75	5.99	146426	171449	17.09
4,4'-DDT	5.42	5.31	5.55	112651	101075	10.28
Endrin ketone	6.46	6.35	6.59	194887	224155	15.02
Methoxychlor	6.18	6.06	6.30	56679	58025	2.37
alpha-Chlordane	4.33	4.25	4.41	197110	226820	15.07
gamma-Chlordane	4.18	4.11	4.27	203414	234810	15.43

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9977.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	224176	7.27
beta-BHC	2.37	2.31	2.43	81367	80350	1.25
gamma-BHC	2.32	2.26	2.38	183641	196693	7.11
delta-BHC	2.50	2.44	2.56	181135	197471	9.02
Heptachlor	2.65	2.57	2.73	174071	171603	1.42
Aldrin	2.88	2.80	2.96	177326	183997	3.76
Heptachlor epoxide	3.37	3.29	3.45	156947	159819	1.83
Endosulfan I	3.71	3.63	3.79	155815	156416	0.39
4,4'-DDE	3.65	3.55	3.75	135247	142331	5.24
Dieldrin	3.93	3.83	4.03	156896	161385	2.86
Endrin	4.14	4.04	4.24	126085	113407	10.06
Endosulfan II	4.35	4.25	4.45	132211	135548	2.52
4,4'-DDD	4.21	4.11	4.31	122169	131326	7.50
Endrin aldehyde	4.76	4.64	4.88	99687	104478	4.81
Endosulfan sulfate	5.19	5.07	5.31	118345	122124	3.19
4,4'-DDT	4.47	4.35	4.59	99678	88744	10.97
Endrin ketone	5.48	5.36	5.60	148528	157733	6.20
Methoxychlor	4.96	4.84	5.08	45820	46107	0.63
alpha-Chlordane	3.59	3.51	3.67	154032	155768	1.13
gamma-Chlordane	3.47	3.39	3.55	158954	162014	1.92

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9977.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	316756	14.70
beta-BHC	2.84	2.79	2.91	106680	115222	8.01
gamma-BHC	2.79	2.73	2.85	251287	287391	14.37
delta-BHC	3.10	3.05	3.17	232722	276684	18.89
Heptachlor	3.17	3.09	3.25	226428	239933	5.96
Aldrin	3.47	3.39	3.55	231020	258121	11.73
Heptachlor epoxide	4.00	3.92	4.08	204104	223659	9.58
Endosulfan I	4.39	4.31	4.47	185251	203514	9.86
4,4'-DDE	4.49	4.39	4.59	186297	208364	11.84
Dieldrin	4.67	4.57	4.77	199747	223951	12.12
Endrin	4.99	4.89	5.09	152893	155706	1.84
Endosulfan II	5.21	5.11	5.31	176838	200757	13.53
4,4'-DDD	5.09	4.99	5.19	148751	173682	16.76
Endrin aldehyde	5.57	5.45	5.69	124815	136536	9.39
Endosulfan sulfate	5.86	5.75	5.99	146426	162924	11.27
4,4'-DDT	5.42	5.31	5.55	112651	117727	4.51
Endrin ketone	6.46	6.35	6.59	194887	219925	12.85
Methoxychlor	6.18	6.06	6.30	56679	56637	0.08
alpha-Chlordane	4.33	4.25	4.41	197110	215464	9.31
gamma-Chlordane	4.18	4.11	4.27	203414	223884	10.06

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/30/2015

Instrument ID: GC-V

GC Column (1st): RTX-CLP1

Data File: V0924.D V0923.D V0922.D V0921.D V0920.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.22	2.22	2.22	2.22	2.22	2.22	2.16	2.28
beta-BHC	2.48	2.48	2.48	2.48	2.48	2.48	2.42	2.54
gamma-BHC	2.42	2.42	2.42	2.42	2.42	2.42	2.36	2.48
delta-BHC	2.60	2.60	2.60	2.60	2.60	2.60	2.54	2.66
Heptachlor	2.75	2.75	2.75	2.75	2.75	2.75	2.67	2.83
Aldrin	2.96	2.96	2.96	2.96	2.96	2.96	2.88	3.04
Heptachlor epoxide	3.39	3.39	3.39	3.39	3.39	3.39	3.31	3.47
Endosulfan I	3.68	3.67	3.67	3.67	3.67	3.67	3.59	3.75
4,4'-DDE	3.63	3.63	3.63	3.63	3.63	3.63	3.53	3.73
Dieldrin	3.85	3.85	3.85	3.85	3.85	3.85	3.75	3.95
Endrin	4.02	4.02	4.02	4.02	4.02	4.02	3.92	4.12
Endosulfan II	4.19	4.19	4.19	4.19	4.19	4.19	4.09	4.29
4,4'-DDD	4.07	4.07	4.07	4.07	4.07	4.07	3.97	4.17
Endrin aldehyde	4.53	4.52	4.52	4.52	4.53	4.52	4.40	4.64
Endosulfan sulfate	4.89	4.89	4.89	4.88	4.89	4.89	4.77	5.01
4,4'-DDT	4.29	4.29	4.29	4.29	4.29	4.29	4.17	4.41
Endrin ketone	5.13	5.13	5.13	5.13	5.13	5.13	5.01	5.25
Methoxychlor	4.69	4.68	4.68	4.68	4.68	4.68	4.56	4.80
alpha-Chlordane	3.58	3.57	3.57	3.57	3.57	3.57	3.49	3.65
gamma-Chlordane	3.48	3.48	3.48	3.48	3.48	3.48	3.40	3.56
Chlordane 500 ppb			2.69				2.61	2.77
Chlordane {2}			3.05				2.97	3.13
Chlordane {3}			3.48				3.40	3.56
Chlordane {4}			3.57				3.49	3.65
Chlordane {5}			4.14				4.06	4.22
Toxaphene 500 ppb			4.25				4.17	4.33
Toxaphene {2}			4.62				4.54	4.70
Toxaphene {3}			4.81				4.73	4.89
Toxaphene {4}			5.12				5.04	5.20
Toxaphene {5}			5.26				5.18	5.34

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0924.D V0923.D V0922.D V0921.D V0920.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	1609679	1546842	1754148	1725893	1619019	1651116	5.23
beta-BHC	669433	567665	620901	605318	527016	598067	9.02
gamma-BHC	1453203	1370824	1549885	1517046	1405750	1459342	5.11
delta-BHC	1441265	1346123	1513973	1486214	1293006	1416116	6.62
Heptachlor	1346242	1210141	1345047	1274563	1161441	1267487	6.46
Aldrin	1430612	1279600	1425179	1363318	1246808	1349103	6.19
Heptachlor epoxide	1294053	1088605	1183903	1104009	993128	1132740	9.96
Endosulfan I	1230661	1066338	1168055	1098213	972791	1107212	8.89
4,4'-DDE	1156405	1018429	1138721	1100049	977671	1078255	7.17
Dieldrin	1382965	1076102	1189217	1122489	1011233	1156401	12.31
Endrin	838265	770281	821107	777178	704338	782234	6.67
Endosulfan II	1023902	888694	971498	907420	811363	920575	8.82
4,4'-DDD	875873	819938	908123	881473	780112	853104	6.08
Endrin aldehyde	822314	667409	740285	676725	616447	704636	11.23
Endosulfan sulfate	960476	796254	860234	772706	725632	823061	11.04
4,4'-DDT	908002	788963	898325	860370	793924	849917	6.62
Endrin ketone	1095756	880864	955661	867911	811674	922373	11.89
Methoxychlor	345518	315144	340029	315911	289150	321150	7.03
alpha-Chlordane	1230272	1070737	1197710	1155590	1051337	1141129	6.84
gamma-Chlordane	1269440	1133973	1265593	1221576	1118493	1201815	5.97
Chlordane 500 ppb			35773				
Chlordane {2}			40007				
Chlordane {3}			116732				
Chlordane {4}			180728				
Chlordane {5}			31179				
Toxaphene 500 ppb			25676				
Toxaphene {2}			27856				
Toxaphene {3}			36124				
Toxaphene {4}			33505				
Toxaphene {5}			19998				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0924.C V0923.C V0922.C V0921.C V0920.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.43	2.43	2.43	2.43	2.43	2.43	2.37	2.49
beta-BHC	2.74	2.74	2.74	2.74	2.74	2.74	2.68	2.80
gamma-BHC	2.68	2.69	2.69	2.69	2.69	2.69	2.63	2.75
delta-BHC	2.95	2.95	2.95	2.95	2.95	2.95	2.89	3.01
Heptachlor	3.02	3.02	3.02	3.02	3.02	3.02	2.94	3.10
Aldrin	3.26	3.26	3.26	3.26	3.26	3.26	3.18	3.34
Heptachlor epoxide	3.68	3.68	3.68	3.68	3.68	3.68	3.60	3.76
Endosulfan I	3.98	3.98	3.98	3.98	3.98	3.98	3.90	4.06
4,4'-DDE	4.06	4.06	4.06	4.06	4.06	4.06	3.96	4.16
Dieldrin	4.19	4.19	4.19	4.19	4.19	4.19	4.09	4.29
Endrin	4.44	4.44	4.44	4.44	4.44	4.44	4.34	4.54
Endosulfan II	4.61	4.61	4.61	4.61	4.61	4.61	4.51	4.71
4,4'-DDD	4.52	4.52	4.52	4.52	4.52	4.52	4.42	4.62
Endrin aldehyde	4.89	4.89	4.89	4.89	4.89	4.89	4.77	5.01
Endosulfan sulfate	5.14	5.14	5.14	5.14	5.14	5.14	5.02	5.26
4,4'-DDT	4.79	4.79	4.78	4.78	4.79	4.79	4.67	4.91
Endrin ketone	5.62	5.62	5.62	5.62	5.62	5.62	5.50	5.74
Methoxychlor	5.39	5.39	5.39	5.39	5.39	5.39	5.27	5.51
alpha-Chlordane	3.93	3.93	3.93	3.93	3.93	3.93	3.85	4.01
gamma-Chlordane	3.82	3.82	3.82	3.82	3.82	3.82	3.74	3.90
Chlordane 500 ppb			2.91				2.83	2.99
Chlordane {2}			3.36				3.28	3.44
Chlordane {3}			3.82				3.74	3.90
Chlordane {4}			3.90				3.82	3.98
Chlordane {5}			3.93				3.85	4.01
Toxaphene 500 ppb			4.68				4.60	4.76
Toxaphene {2}			4.90				4.82	4.98
Toxaphene {3}			5.14				5.06	5.22
Toxaphene {4}			5.36				5.28	5.44
Toxaphene {5}			5.73				5.65	5.81

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0924.C V0923.C V0922.C V0921.C V0920.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	432881	387911	446133	439114	421351	425478	5.38
beta-BHC	186986	140033	152428	149320	139322	153618	12.70
gamma-BHC	399894	338862	386341	382395	362855	374069	6.34
delta-BHC	391681	327275	371976	369923	345581	361287	6.94
Heptachlor	384003	312462	351813	347359	331927	345513	7.66
Aldrin	409107	318318	361001	356668	339876	356994	9.42
Heptachlor epoxide	357413	278043	312239	306684	290493	308974	9.79
Endosulfan I	341748	256264	286733	280481	265505	286146	11.65
4,4'-DDE	325485	255587	289609	287189	269126	285399	9.24
Dieldrin	331498	271866	309782	306031	290954	302026	7.36
Endrin	232991	200682	219725	217388	205995	215356	5.86
Endosulfan II	277086	226385	252106	249013	232817	247482	7.98
4,4'-DDD	237083	205386	229293	228524	210042	222066	6.13
Endrin aldehyde	219815	169090	189313	186444	171067	187146	10.88
Endosulfan sulfate	266997	206129	229113	225639	209865	227549	10.62
4,4'-DDT	229604	196219	224441	225611	212484	217672	6.24
Endrin ketone	303569	229118	257663	255146	236712	256442	11.30
Methoxychlor	118415	82039	90264	91962	82796	93095	15.92
alpha-Chlordane	342912	258327	291664	287944	272216	290613	11.05
gamma-Chlordane	347387	276580	313115	309542	293725	308070	8.54
Chlordane 500 ppb			9370				
Chlordane {2}			8978				
Chlordane {3}			27466				
Chlordane {4}			21787				
Chlordane {5}			23439				
Toxaphene 500 ppb			5824				
Toxaphene {2}			6198				
Toxaphene {3}			4642				
Toxaphene {4}			7111				
Toxaphene {5}			5307				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-V

Data File: V0975.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.22	2.16	2.28	1651116	1640633	0.63
beta-BHC	2.48	2.42	2.54	598067	562285	5.98
gamma-BHC	2.43	2.36	2.48	1459342	1439278	1.37
delta-BHC	2.61	2.54	2.66	1416116	1384720	2.22
Heptachlor	2.76	2.67	2.83	1267487	1293005	2.01
Aldrin	2.97	2.88	3.04	1349103	1312719	2.70
Heptachlor epoxide	3.40	3.31	3.47	1132740	1085062	4.21
Endosulfan I	3.68	3.59	3.75	1107212	1043621	5.74
4,4'-DDE	3.64	3.53	3.73	1078255	1002482	7.03
Dieldrin	3.86	3.75	3.95	1156401	1053975	8.86
Endrin	4.03	3.92	4.12	782234	867647	10.92
Endosulfan II	4.20	4.09	4.29	920575	833745	9.43
4,4'-DDD	4.08	3.97	4.17	853104	805656	5.56
Endrin aldehyde	4.53	4.40	4.64	704636	596942	15.28
Endosulfan sulfate	4.90	4.77	5.01	823061	751871	8.65
4,4'-DDT	4.30	4.17	4.41	849917	751046	11.63
Endrin ketone	5.14	5.01	5.25	922373	814853	11.66
Methoxychlor	4.69	4.56	4.80	321150	317848	1.03
alpha-Chlordane	3.58	3.49	3.65	1141129	1067976	6.41
gamma-Chlordane	3.49	3.40	3.56	1201815	1135129	5.55
Chlordane 500 ppb	2.69	2.61	2.77	35773	42370	18.44
Chlordane {2}	3.05	2.97	3.13	40007	44943	12.34
Chlordane {3}	3.48	3.40	3.56	116732	136211	16.69
Chlordane {4}	3.57	3.49	3.65	180728	212016	17.31
Chlordane {5}	4.14	4.06	4.22	31179	32945	5.66
Toxaphene 500 ppb	4.24	4.17	4.33	25676	24888	3.07
Toxaphene {2}	4.61	4.54	4.70	27856	26709	4.12
Toxaphene {3}	4.80	4.73	4.89	36124	32036	11.32
Toxaphene {4}	5.11	5.04	5.20	33505	29545	11.82
Toxaphene {5}	5.25	5.18	5.34	19998	16708	16.45

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-V

Data File: V0975.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.43	2.37	2.49	425478	421294	0.98
beta-BHC	2.73	2.68	2.80	153618	140743	8.38
gamma-BHC	2.68	2.63	2.75	374069	365697	2.24
delta-BHC	2.95	2.89	3.01	361287	340836	5.66
Heptachlor	3.02	2.94	3.10	345513	348854	0.97
Aldrin	3.26	3.18	3.34	356994	337880	5.35
Heptachlor epoxide	3.68	3.60	3.76	308974	286216	7.37
Endosulfan I	3.98	3.90	4.06	286146	259264	9.39
4,4'-DDE	4.05	3.96	4.16	285399	256856	10.00
Dieldrin	4.19	4.09	4.29	302026	276897	8.32
Endrin	4.44	4.34	4.54	215356	238294	10.65
Endosulfan II	4.61	4.51	4.71	247482	219839	11.17
4,4'-DDD	4.52	4.42	4.62	222066	203679	8.28
Endrin aldehyde	4.89	4.77	5.01	187146	153400	18.03
Endosulfan sulfate	5.14	5.02	5.26	227549	202613	10.96
4,4'-DDT	4.78	4.67	4.91	217672	188644	13.34
Endrin ketone	5.62	5.50	5.74	256442	218504	14.79
Methoxychlor	5.39	5.27	5.51	93095	86912	6.64
alpha-Chlordane	3.93	3.85	4.01	290613	260500	10.36
gamma-Chlordane	3.82	3.74	3.90	308070	277599	9.89
Chlordane 500 ppb	2.91	2.83	2.99	9370	10874	16.05
Chlordane {2}	3.36	3.28	3.44	8978	10221	13.84
Chlordane {3}	3.82	3.74	3.90	27466	31834	15.91
Chlordane {4}	3.89	3.82	3.98	21787	25293	16.10
Chlordane {5}	3.93	3.85	4.01	23439	27543	17.51
Toxaphene 500 ppb	4.68	4.60	4.76	5824	5320	8.66
Toxaphene {2}	4.90	4.82	4.98	6198	5509	11.11
Toxaphene {3}	5.13	5.06	5.22	4642	4059	12.57
Toxaphene {4}	5.36	5.28	5.44	7111	6905	2.90
Toxaphene {5}	5.73	5.65	5.81	5307	4253	19.87

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-V

Data File: V0986.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.22	2.16	2.28	1651116	1664827	0.83
beta-BHC	2.48	2.42	2.54	598067	574106	4.01
gamma-BHC	2.42	2.36	2.48	1459342	1462096	0.19
delta-BHC	2.60	2.54	2.66	1416116	1415439	0.05
Heptachlor	2.75	2.67	2.83	1267487	1264735	0.22
Aldrin	2.96	2.88	3.04	1349103	1364912	1.17
Heptachlor epoxide	3.39	3.31	3.47	1132740	1137891	0.45
Endosulfan I	3.67	3.59	3.75	1107212	1106378	0.08
4,4'-DDE	3.63	3.53	3.73	1078255	1094121	1.47
Dieldrin	3.85	3.75	3.95	1156401	1134413	1.90
Endrin	4.02	3.92	4.12	782234	933636	19.36
Endosulfan II	4.19	4.09	4.29	920575	916965	0.39
4,4'-DDD	4.07	3.97	4.17	853104	926183	8.57
Endrin aldehyde	4.52	4.40	4.64	704636	650919	7.62
Endosulfan sulfate	4.88	4.77	5.01	823061	824410	0.16
4,4'-DDT	4.29	4.17	4.41	849917	788691	7.20
Endrin ketone	5.13	5.01	5.25	922373	900057	2.42
Methoxychlor	4.68	4.56	4.80	321150	348024	8.37
alpha-Chlordane	3.57	3.49	3.65	1141129	1140290	0.07
gamma-Chlordane	3.48	3.40	3.56	1201815	1210145	0.69

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-V

Data File: V0986.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.43	2.37	2.49	425478	397468	6.58
beta-BHC	2.73	2.68	2.80	153618	135184	12.00
gamma-BHC	2.68	2.63	2.75	374069	344619	7.87
delta-BHC	2.95	2.89	3.01	361287	327872	9.25
Heptachlor	3.02	2.94	3.10	345513	316998	8.25
Aldrin	3.26	3.18	3.34	356994	329498	7.70
Heptachlor epoxide	3.68	3.60	3.76	308974	284357	7.97
Endosulfan I	3.98	3.90	4.06	286146	259247	9.40
4,4'-DDE	4.05	3.96	4.16	285399	260814	8.61
Dieldrin	4.19	4.09	4.29	302026	280537	7.12
Endrin	4.43	4.34	4.54	215356	244206	13.40
Endosulfan II	4.60	4.51	4.71	247482	229201	7.39
4,4'-DDD	4.52	4.42	4.62	222066	219524	1.14
Endrin aldehyde	4.89	4.77	5.01	187146	154920	17.22
Endosulfan sulfate	5.13	5.02	5.26	227549	208179	8.51
4,4'-DDT	4.78	4.67	4.91	217672	183697	15.61
Endrin ketone	5.62	5.50	5.74	256442	226808	11.56
Methoxychlor	5.38	5.27	5.51	93095	90564	2.72
alpha-Chlordane	3.93	3.85	4.01	290613	263708	9.26
gamma-Chlordane	3.82	3.74	3.90	308070	282577	8.27

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-V

Data File: V1006.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.24	2.16	2.28	1651116	1458968	11.64
beta-BHC	2.50	2.42	2.54	598067	542801	9.24
gamma-BHC	2.45	2.36	2.48	1459342	1279336	12.33
delta-BHC	2.62	2.54	2.66	1416116	1310855	7.43
Heptachlor	2.77	2.67	2.83	1267487	1179184	6.97
Aldrin	2.98	2.88	3.04	1349103	1199278	11.11
Heptachlor epoxide	3.40	3.31	3.47	1132740	1002669	11.48
Endosulfan I	3.69	3.59	3.75	1107212	1010765	8.71
4,4'-DDE	3.64	3.53	3.73	1078255	973273	9.74
Dieldrin	3.86	3.75	3.95	1156401	1021518	11.66
Endrin	4.04	3.92	4.12	782234	821342	5.00
Endosulfan II	4.21	4.09	4.29	920575	830684	9.76
4,4'-DDD	4.08	3.97	4.17	853104	846335	0.79
Endrin aldehyde	4.54	4.40	4.64	704636	645118	8.45
Endosulfan sulfate	4.90	4.77	5.01	823061	796977	3.17
4,4'-DDT	4.30	4.17	4.41	849917	763558	10.16
Endrin ketone	5.14	5.01	5.25	922373	858333	6.94
Methoxychlor	4.70	4.56	4.80	321150	360449	12.24
alpha-Chlordane	3.59	3.49	3.65	1141129	991503	13.11
gamma-Chlordane	3.49	3.40	3.56	1201815	1061702	11.66
Chlordane 500 ppb	2.70	2.61	2.77	35773	40963	14.51
Chlordane {2}	3.06	2.97	3.13	40007	46706	16.75
Chlordane {3}	3.48	3.40	3.56	116732	135084	15.72
Chlordane {4}	3.57	3.49	3.65	180728	210992	16.75
Chlordane {5}	4.14	4.06	4.22	31179	36664	17.59
Toxaphene 500 ppb	4.25	4.17	4.33	25676	29467	14.77
Toxaphene {2}	4.62	4.54	4.70	27856	31324	12.45
Toxaphene {3}	4.81	4.73	4.89	36124	38660	7.02
Toxaphene {4}	5.12	5.04	5.20	33505	37394	11.61
Toxaphene {5}	5.25	5.18	5.34	19998	20569	2.85

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-V

Data File: V1006.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.45	2.37	2.49	425478	370073	13.02
beta-BHC	2.75	2.68	2.80	153618	135474	11.81
gamma-BHC	2.70	2.63	2.75	374069	320337	14.36
delta-BHC	2.96	2.89	3.01	361287	313950	13.10
Heptachlor	3.03	2.94	3.10	345513	311672	9.79
Aldrin	3.27	3.18	3.34	356994	300241	15.90
Heptachlor epoxide	3.68	3.60	3.76	308974	256534	16.97
Endosulfan I	3.98	3.90	4.06	286146	238203	16.75
4,4'-DDE	4.06	3.96	4.16	285399	246493	13.63
Dieldrin	4.19	4.09	4.29	302026	255193	15.51
Endrin	4.44	4.34	4.54	215356	217901	1.18
Endosulfan II	4.61	4.51	4.71	247482	209607	15.30
4,4'-DDD	4.52	4.42	4.62	222066	203031	8.57
Endrin aldehyde	4.89	4.77	5.01	187146	151070	19.28
Endosulfan sulfate	5.14	5.02	5.26	227549	196078	13.83
4,4'-DDT	4.79	4.67	4.91	217672	179722	17.43
Endrin ketone	5.62	5.50	5.74	256442	211689	17.45
Methoxychlor	5.39	5.27	5.51	93095	84994	8.70
alpha-Chlordane	3.94	3.85	4.01	290613	238737	17.85
gamma-Chlordane	3.83	3.74	3.90	308070	254064	17.53
Chlordane 500 ppb	2.91	2.83	2.99	9370	10917	16.51
Chlordane {2}	3.36	3.28	3.44	8978	9648	7.46
Chlordane {3}	3.82	3.74	3.90	27466	30038	9.37
Chlordane {4}	3.89	3.82	3.98	21787	24133	10.77
Chlordane {5}	3.93	3.85	4.01	23439	25637	9.38
Toxaphene 500 ppb	4.68	4.60	4.76	5824	6008	3.15
Toxaphene {2}	4.90	4.82	4.98	6198	6345	2.37
Toxaphene {3}	5.13	5.06	5.22	4642	4474	3.62
Toxaphene {4}	5.36	5.28	5.44	7111	7019	1.30
Toxaphene {5}	5.73	5.65	5.81	5307	5321	0.26

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-V

Data File: V1010.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.22	2.16	2.28	1651116	1748759	5.91
beta-BHC	2.48	2.42	2.54	598067	649135	8.54
gamma-BHC	2.43	2.36	2.48	1459342	1536877	5.31
delta-BHC	2.60	2.54	2.66	1416116	1570551	10.91
Heptachlor	2.75	2.67	2.83	1267487	1402661	10.66
Aldrin	2.96	2.88	3.04	1349103	1423863	5.54
Heptachlor epoxide	3.39	3.31	3.47	1132740	1207703	6.62
Endosulfan I	3.68	3.59	3.75	1107212	1207369	9.05
4,4'-DDE	3.63	3.53	3.73	1078255	1198445	11.15
Dieldrin	3.85	3.75	3.95	1156401	1220488	5.54
Endrin	4.02	3.92	4.12	782234	997082	27.47
Endosulfan II	4.20	4.09	4.29	920575	1016832	10.46
4,4'-DDD	4.07	3.97	4.17	853104	1018994	19.45
Endrin aldehyde	4.53	4.40	4.64	704636	749701	6.40
Endosulfan sulfate	4.89	4.77	5.01	823061	923066	12.15
4,4'-DDT	4.29	4.17	4.41	849917	931766	9.63
Endrin ketone	5.13	5.01	5.25	922373	1013921	9.93
Methoxychlor	4.69	4.56	4.80	321150	380012	18.33
alpha-Chlordane	3.58	3.49	3.65	1141129	1223432	7.21
gamma-Chlordane	3.48	3.40	3.56	1201815	1282028	6.67

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-V

Data File: V1010.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.43	2.37	2.49	425478	429114	0.85
beta-BHC	2.73	2.68	2.80	153618	155072	0.95
gamma-BHC	2.68	2.63	2.75	374069	371059	0.80
delta-BHC	2.95	2.89	3.01	361287	367570	1.74
Heptachlor	3.02	2.94	3.10	345513	358888	3.87
Aldrin	3.26	3.18	3.34	356994	350543	1.81
Heptachlor epoxide	3.68	3.60	3.76	308974	304337	1.50
Endosulfan I	3.98	3.90	4.06	286146	281074	1.77
4,4'-DDE	4.05	3.96	4.16	285399	289428	1.41
Dieldrin	4.19	4.09	4.29	302026	302643	0.20
Endrin	4.43	4.34	4.54	215356	256804	19.25
Endosulfan II	4.60	4.51	4.71	247482	252790	2.14
4,4'-DDD	4.51	4.42	4.62	222066	243810	9.79
Endrin aldehyde	4.89	4.77	5.01	187146	177651	5.07
Endosulfan sulfate	5.13	5.02	5.26	227549	232279	2.08
4,4'-DDT	4.78	4.67	4.91	217672	213976	1.70
Endrin ketone	5.62	5.50	5.74	256442	254930	0.59
Methoxychlor	5.38	5.27	5.51	93095	103861	11.56
alpha-Chlordane	3.93	3.85	4.01	290613	283150	2.57
gamma-Chlordane	3.82	3.74	3.90	308070	305239	0.92

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.80 **DCB 1** 6.58 **TCMX 2** 2.07 **DCB 2** 8.13

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150629-16	06/30/2015	16:11	1.80		6.58		2.07		8.13	
Pest	LCSA150629-16	06/30/2015	16:24	1.80		6.58		2.07		8.12	
Pest	LCSDA150629-16	06/30/2015	16:36	1.80		6.58		2.07		8.12	
FB	E15-05346-027	06/30/2015	16:49	1.80		6.58		2.07		8.12	
FB-06221	E15-05367-040	06/30/2015	17:02	1.80		6.58		2.07		8.12	
FB-06231	E15-05428-030	06/30/2015	17:14	1.80		6.58		2.07		8.12	
FB062415	E15-05472-015	06/30/2015	17:27	1.80		6.58		2.07		8.12	
FB-06241	E15-05428-032	06/30/2015	17:39	1.80		6.58		2.07		8.12	
FB_06251	E15-05556-022	06/30/2015	17:52	1.80		6.58		2.07		8.12	
FB	E15-05547-020	06/30/2015	18:04	1.80		6.58		2.07		8.12	
FIELD_BL	E15-05470-016	06/30/2015	18:17	1.80		6.58		2.07		8.12	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.80 **DCB 1** 6.57 **TCMX 2** 2.07 **DCB 2** 8.13

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150701-07	07/06/2015	10:02	1.80		6.57		2.07		8.13	
Pest	LCSS150701-07	07/06/2015	10:14	1.80		6.57		2.07		8.12	
Pest	05367-003MS	07/06/2015	10:27	1.80		6.57		2.07		8.12	
Pest	05367-003MSD	07/06/2015	10:40	1.80		6.57		2.07		8.12	
AG-6/0.0	E15-05559-022	07/06/2015	10:52	1.80		6.57		2.07		8.12	
E-3_(2.0	E15-05367-003	07/06/2015	11:05	1.80		6.57		2.07		8.12	
E-3_(4.5	E15-05367-004	07/06/2015	11:18	1.80		6.57		2.07		8.11	
E-4_(0.5	E15-05367-007	07/06/2015	11:30	1.80		6.57		2.07		8.12	
E-4_(2.0	E15-05367-008	07/06/2015	11:43	1.80		6.57		2.07		8.12	
E-4_(3.0	E15-05367-009	07/06/2015	11:56	1.80		6.57		2.07		8.12	
E-4_(4.5	E15-05367-010	07/06/2015	12:08	1.80		6.57		2.07		8.12	
X-1_(4.5	E15-05367-023	07/06/2015	12:21	1.80		6.57		2.07		8.12	
E-6_(0.5	E15-05367-039	07/06/2015	12:34	1.80		6.57		2.07		8.12	
E-6_(2.0	E15-05367-041	07/06/2015	12:46	1.80		6.57		2.07		8.12	
E-6_(3.0	E15-05367-042	07/06/2015	12:59	1.80		6.57		2.07		8.12	
E-6_(4.0	E15-05367-043	07/06/2015	13:12	1.80		6.57		2.07		8.12	
X-3_(0.5	E15-05428-011	07/06/2015	13:38	1.80		6.57		2.07		8.12	
E-1_(0.5	E15-05428-014	07/06/2015	13:51	1.80		6.57		2.07		8.12	
E-1_(2.0	E15-05428-015	07/06/2015	14:03	1.80		6.57		2.07		8.12	
E-1_(3.0	E15-05428-016	07/06/2015	14:16	1.80		6.57		2.07		8.12	
E-1_(4.5	E15-05428-017	07/06/2015	14:29	1.80		6.57		2.07		8.12	
E-2_(0.5	E15-05428-020	07/06/2015	14:41	1.80		6.57		2.07		8.12	
E-2_(2.0	E15-05428-021	07/06/2015	14:54	1.80		6.57		2.07		8.12	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-V **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.88 **DCB 1** 6.04 **TCMX 2** 2.02 **DCB 2** 6.66

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150630-12	07/06/2015	11:21	1.88		6.04		2.02		6.66	
Pest	LCSS150630-12	07/06/2015	11:32	1.88		6.04		2.02		6.66	
Pest	05559-023MS	07/06/2015	11:44	1.88		6.04		2.02		6.66	
Pest	05559-023MSD	07/06/2015	11:55	1.88		6.04		2.02		6.66	
DRAINAGE	E15-05559-023	07/06/2015	12:06	1.87		6.04		2.02		6.66	
GYM-1/0.	E15-05559-024	07/06/2015	12:17	1.88		6.04		2.02		6.66	
GYM-2/0.	E15-05559-025	07/06/2015	12:28	1.88		6.04		2.02		6.66	
DSB-W/0.	E15-05559-029	07/06/2015	12:39	1.87		6.04		2.02		6.66	
E-16_(0.	E15-05367-017	07/06/2015	13:33	1.88		6.05		2.02		6.64	
E-16_(2.	E15-05367-018	07/06/2015	13:44	1.88		6.04		2.02		6.66	
PZ-2_(0.	E15-05367-019	07/06/2015	13:55	1.88		6.04		2.02		6.65	
PZ-2_(2.	E15-05367-020	07/06/2015	14:06	1.88		6.04		2.02		6.65	
PZ-2_(4.	E15-05367-021	07/06/2015	14:17	1.88		6.04		2.02		6.66	
PZ-2_(6.	E15-05367-022	07/06/2015	14:28	1.88		6.04		2.02		6.66	
PZ-1_(0.	E15-05367-031	07/06/2015	14:39	1.88		6.04		2.02		6.64	
PZ-1_(2.	E15-05367-032	07/06/2015	14:50	1.88		6.04		2.02		6.64	
PZ-1_(2.	E15-05367-033	07/06/2015	15:01	1.87		6.04		2.02		6.65	
PZ-1_(4.	E15-05367-034	07/06/2015	15:12	1.88		6.04		2.02		6.66	
E-5_(0.5	E15-05367-035	07/06/2015	15:23	1.87		6.04		2.02		6.65	
E-5_(3.0	E15-05367-036	07/06/2015	15:34	1.88		6.04		2.02		6.65	
E-5_(2.0	E15-05367-037	07/06/2015	15:45	1.87		6.04		2.02		6.65	
E-5_(4.5	E15-05367-038	07/06/2015	15:57	1.88		6.04		2.02		6.66	
E-3_(3.0	E15-05367-001	07/06/2015	16:19	1.88		6.04		2.02		6.66	
E-3_(0.5	E15-05367-002	07/07/2015	11:05	D		D		D		D	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 06/30/2015

Data file: O9838.D Tue Jun 30 09:41:11 2015

1st Column

DDT (1)	8357523	Endrin (1)	10230019
DDD	623504	Endrin ketone	712538
DDE	163510	Endrin aldehyde	252173

2nd Column

DDT (2)	10600280	Endrin (2)	13239743
DDD	742448	Endrin ketone	789325
DDE	205290	Endrin aldehyde	318637

% Breakdown

DDT (1)	Endrin (1)
8.61	8.62

DDT (2)	Endrin (2)
8.21	7.72

Date Analyzed: 07/06/2015

Data file: O9948.D Mon Jul 06 10:01:55 2015

1st Column

DDT (1)	8066321	Endrin (1)	10572621
DDD	632625	Endrin ketone	469033
DDE	142262	Endrin aldehyde	0

2nd Column

DDT (2)	9824109	Endrin (2)	13614736
DDD	770963	Endrin ketone	567404
DDE	205434	Endrin aldehyde	0

% Breakdown

DDT (1)	Endrin (1)
8.76	4.25

DDT (2)	Endrin (2)
9.04	4.00

Date Analyzed: 07/06/2015

Data file: V0973.D Mon Jul 06 09:50:38 2015

1st Column

DDT (1)	52271258	Endrin (1)	55896528
DDD	2978926	Endrin ketone	4206724
DDE	1258411	Endrin aldehyde	3964670

2nd Column

DDT (2)	15144733	Endrin (2)	16538641
DDD	841066	Endrin ketone	1228111
DDE	303873	Endrin aldehyde	1025687

% Breakdown

DDT (1)	Endrin (1)
7.50	12.75

DDT (2)	Endrin (2)
7.03	11.99

Date Analyzed: 07/07/2015

Data file: V1004.D Tue Jul 07 09:40:20 2015

1st Column

DDT (1)	49379473	Endrin (1)	63195886
DDD	4868073	Endrin ketone	2307696
DDE	1173897	Endrin aldehyde	743603

2nd Column

DDT (2)	12654231	Endrin (2)	17239983
DDD	1067534	Endrin ketone	627708
DDE	311354	Endrin aldehyde	218047

% Breakdown

DDT (1)	Endrin (1)
10.90	4.61

DDT (2)	Endrin (2)
9.83	4.68

PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V1001.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 16:19
Operator : IB
Sample : E-3_(3.0,E15-05367-001,S,30.42g,8.20,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 08:09:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	113.3E6	29149087	148.771	142.091
Spiked Amount 200.000			Recovery =		74.39%	71.05%
2) S DCB	6.04	6.66	40811924	14235807	148.119m	177.435
Spiked Amount 200.000			Recovery =		74.06%	88.72%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

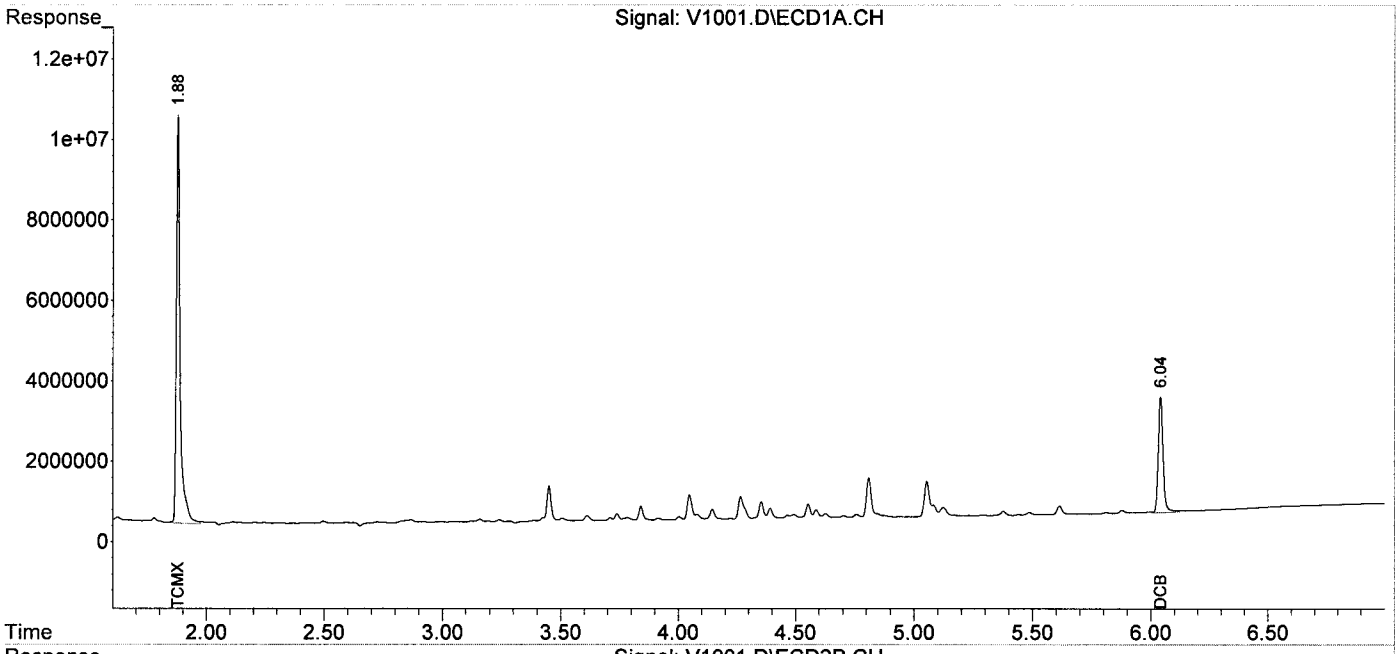
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

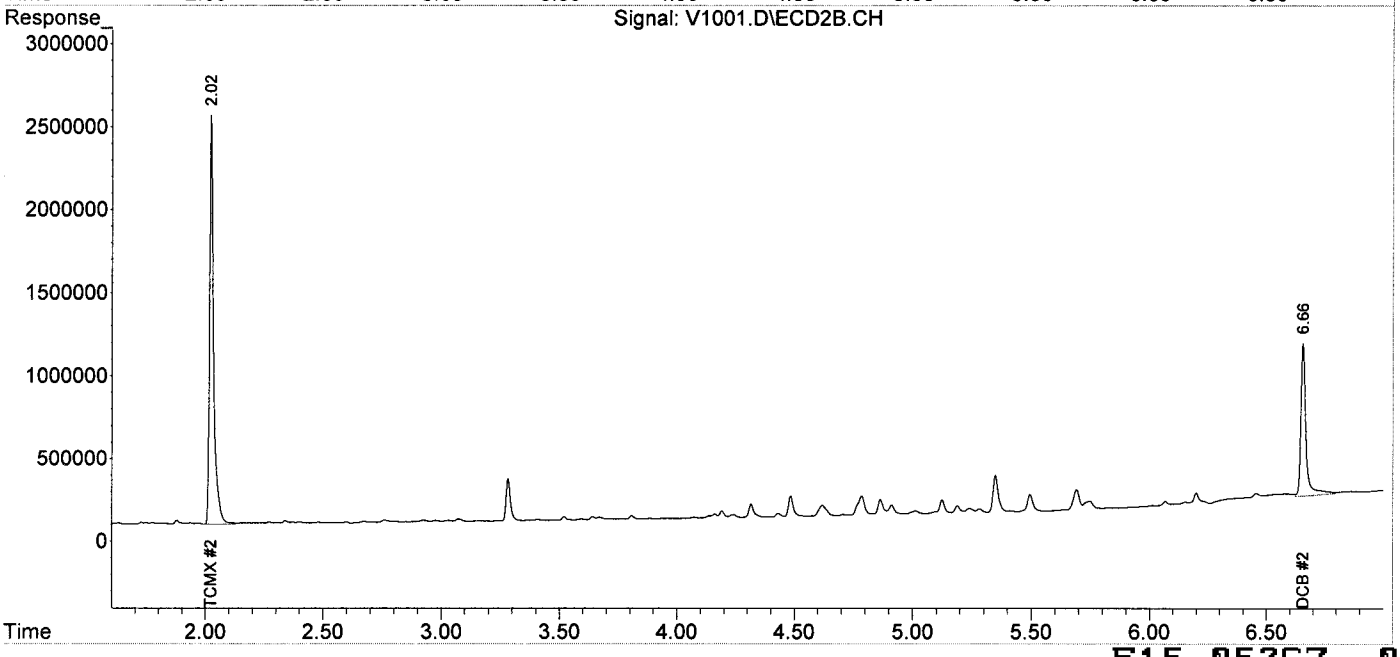
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V1001.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 16:19
Operator : IB
Sample : E-3_(3.0,E15-05367-001,S,30.42g,8.20,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 08:09:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : V1009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Jul 2015 11:05
Operator : IB
Sample : E-3_(0.5,E15-05367-002,S,30.25g,22.1,5
Misc : 150630-12,06/30/15,06/23/15,200
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:29:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Tue Jul 07 10:42:10 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

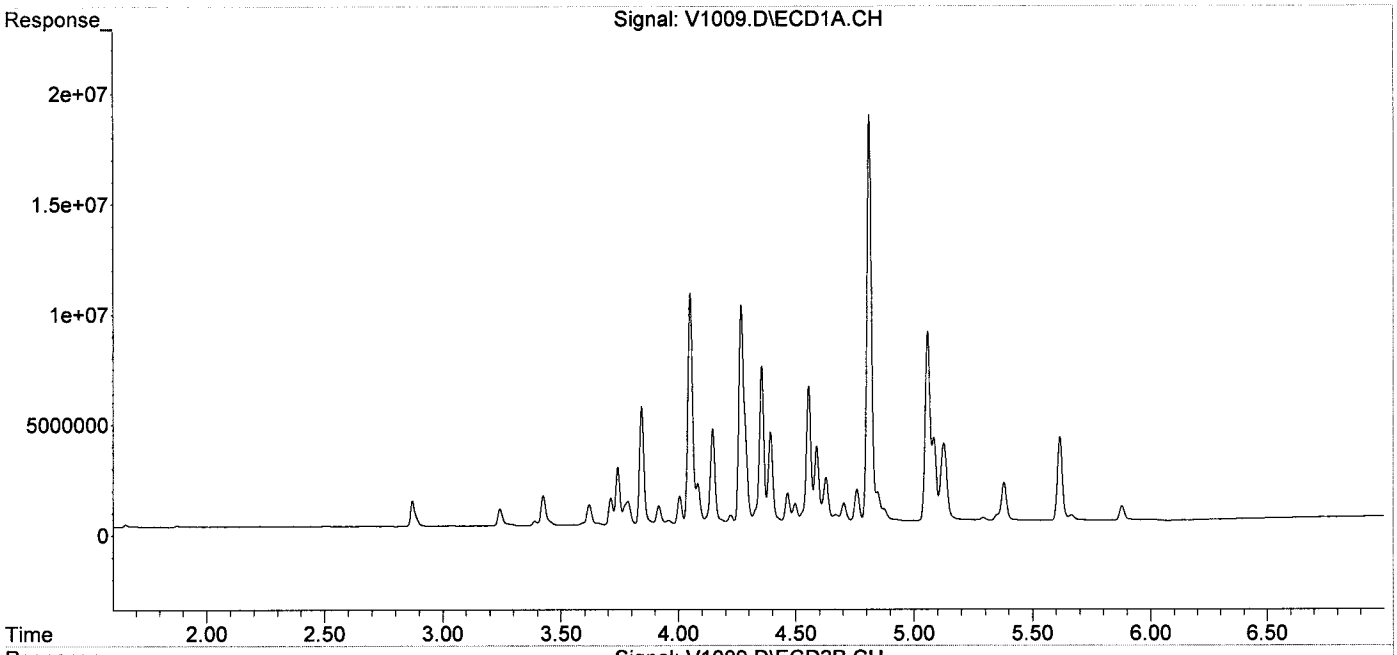
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

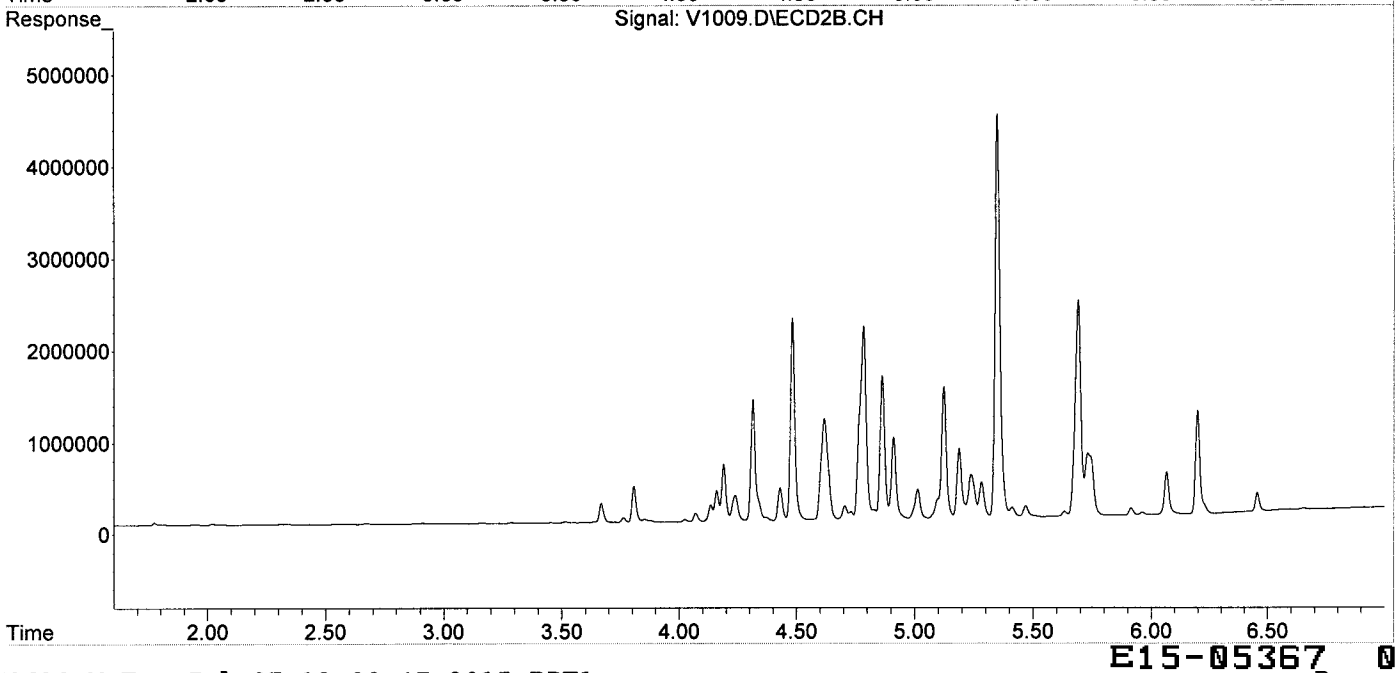
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : V1009.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 07 Jul 2015 11:05
Operator : IB
Sample : E-3_(0.5,E15-05367-002,S,30.25g,22.1,5
Misc : 150630-12,06/30/15,06/23/15,200
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:29:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Tue Jul 07 10:42:10 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : 09958.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:05
Operator : IB
Sample : E-3_(2.0,E15-05367-003,S,30.40g,12.7,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 11:17:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	11626880	18392480	117.889	129.987
Spiked Amount 200.000	Range 10 - 180		Recovery =		58.94%	64.99%
2) S DCB	6.57	8.12	8087887	11022821	173.424m	182.309
Spiked Amount 200.000	Range 10 - 180		Recovery =		86.71%	91.15%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

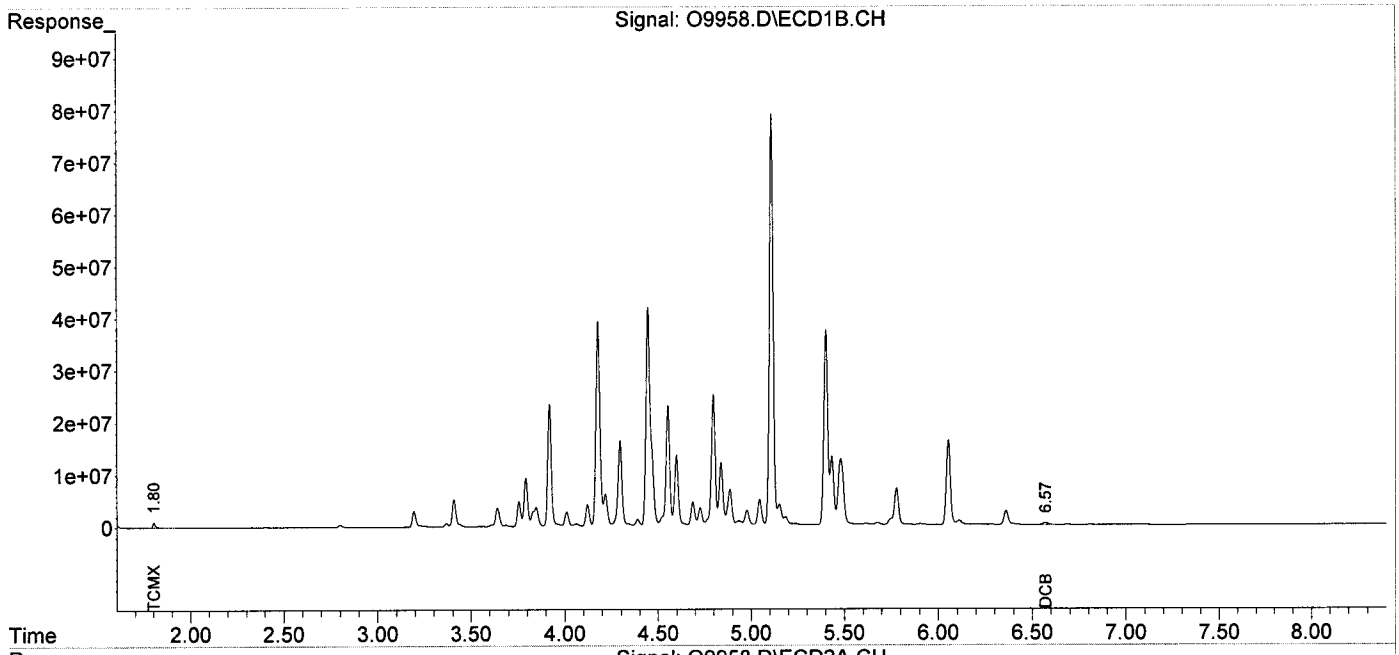
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

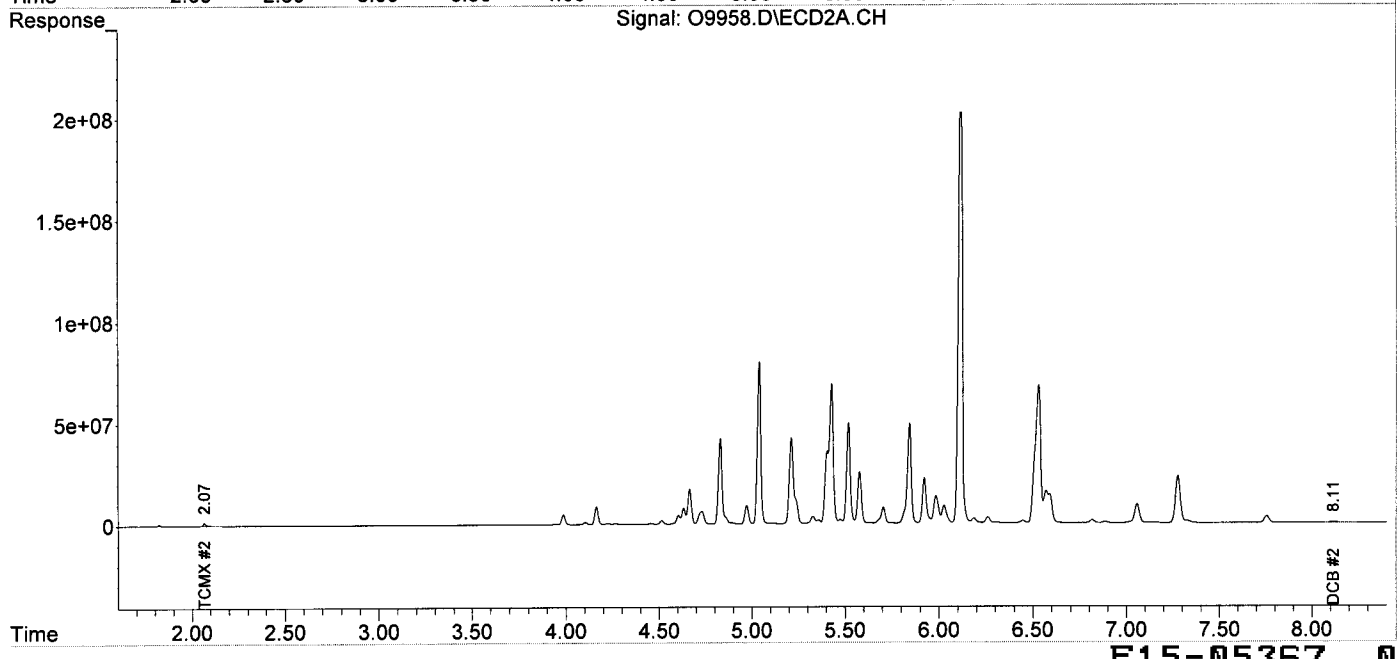
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9958.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:05
Operator : IB
Sample : E-3_(2.0,E15-05367-003,S,30.40g,12.7,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 11:17:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9959.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:18
Operator : IB
Sample : E-3_(4.5,E15-05367-004,S,30.95g,7.10,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:09:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	15942858	24064375	161.650	170.072
Spiked Amount 200.000	Range 10 - 180		Recovery =		80.83%	85.04%
2) S DCB	6.57	8.11	8855001	11782622	189.873	194.876m
Spiked Amount 200.000	Range 10 - 180		Recovery =		94.94%	97.44%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

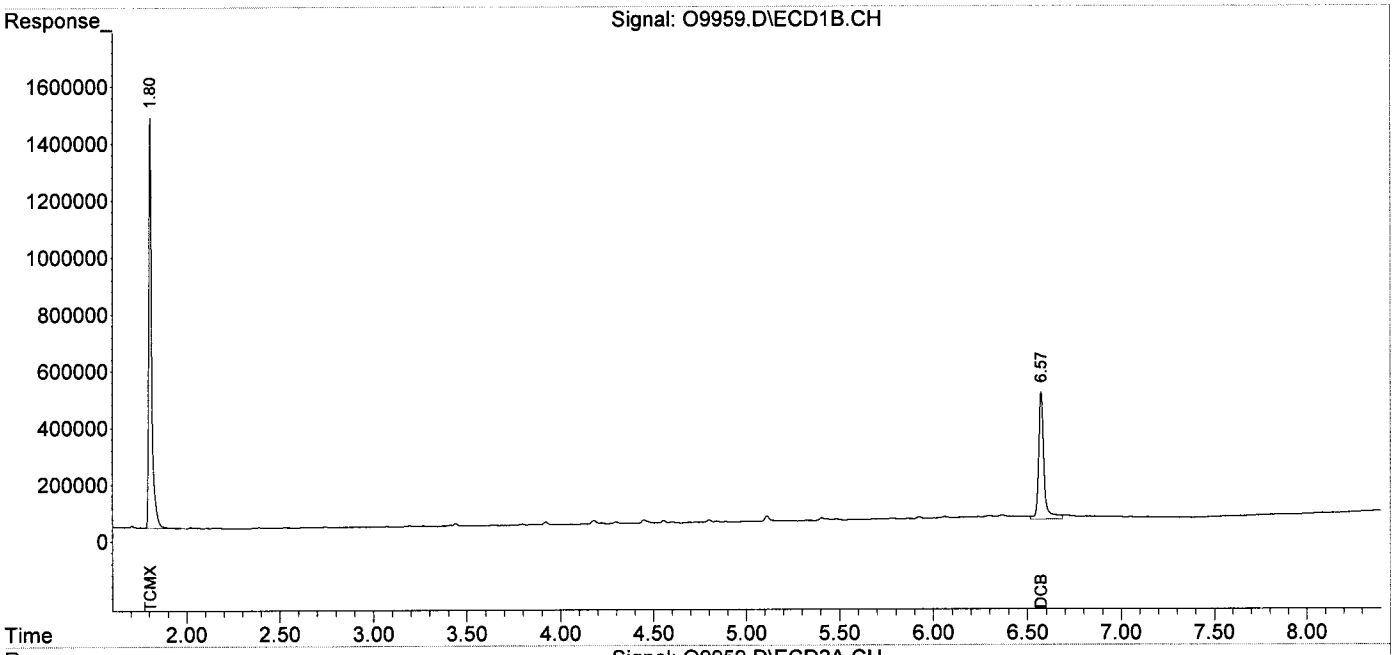
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

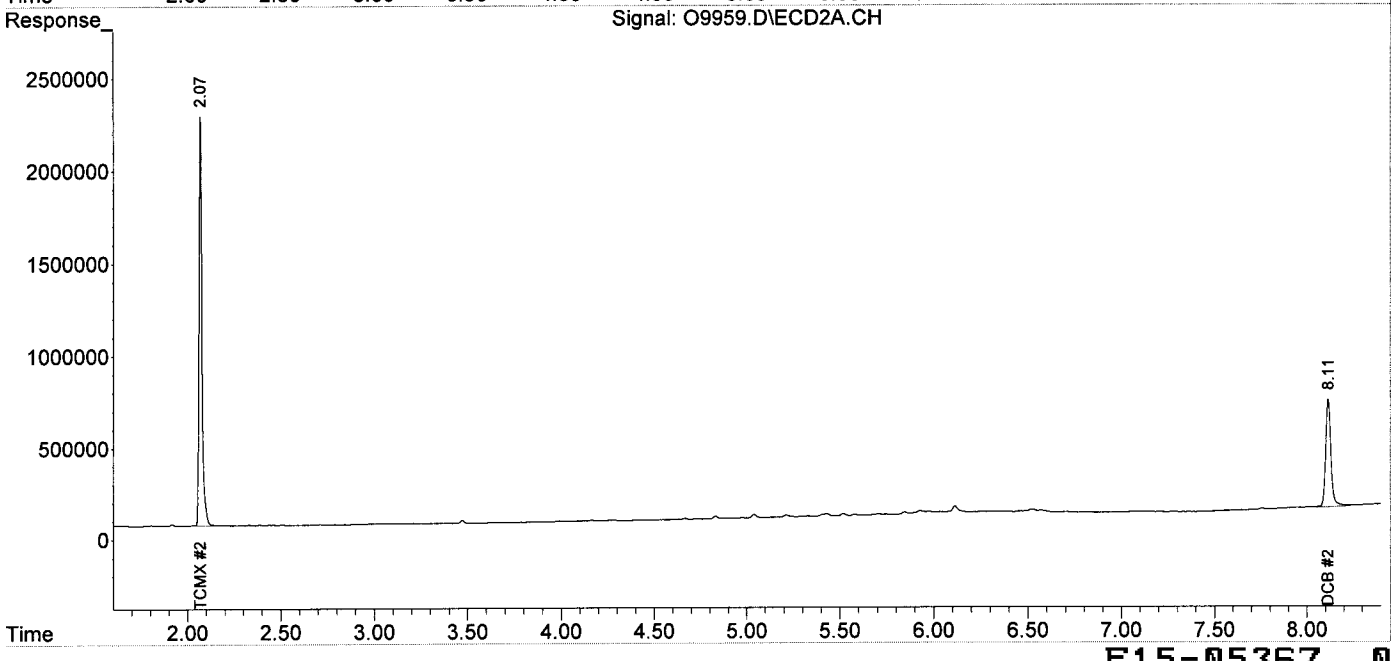
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9959.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:18
Operator : IB
Sample : E-3_(4.5,E15-05367-004,S,30.95g,7.10,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:09:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05367_0622

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9960.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:30
Operator : IB
Sample : E-4_(0.5,E15-05367-007,S,30.26g,13.1,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:10:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12852717	21615560	130.318	152.766
Spiked Amount 200.000	Range 10 - 180		Recovery =		65.16%	76.38%
2) S DCB	6.57	8.12	9262884	12668316	198.619m	209.525
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.31%	104.76%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

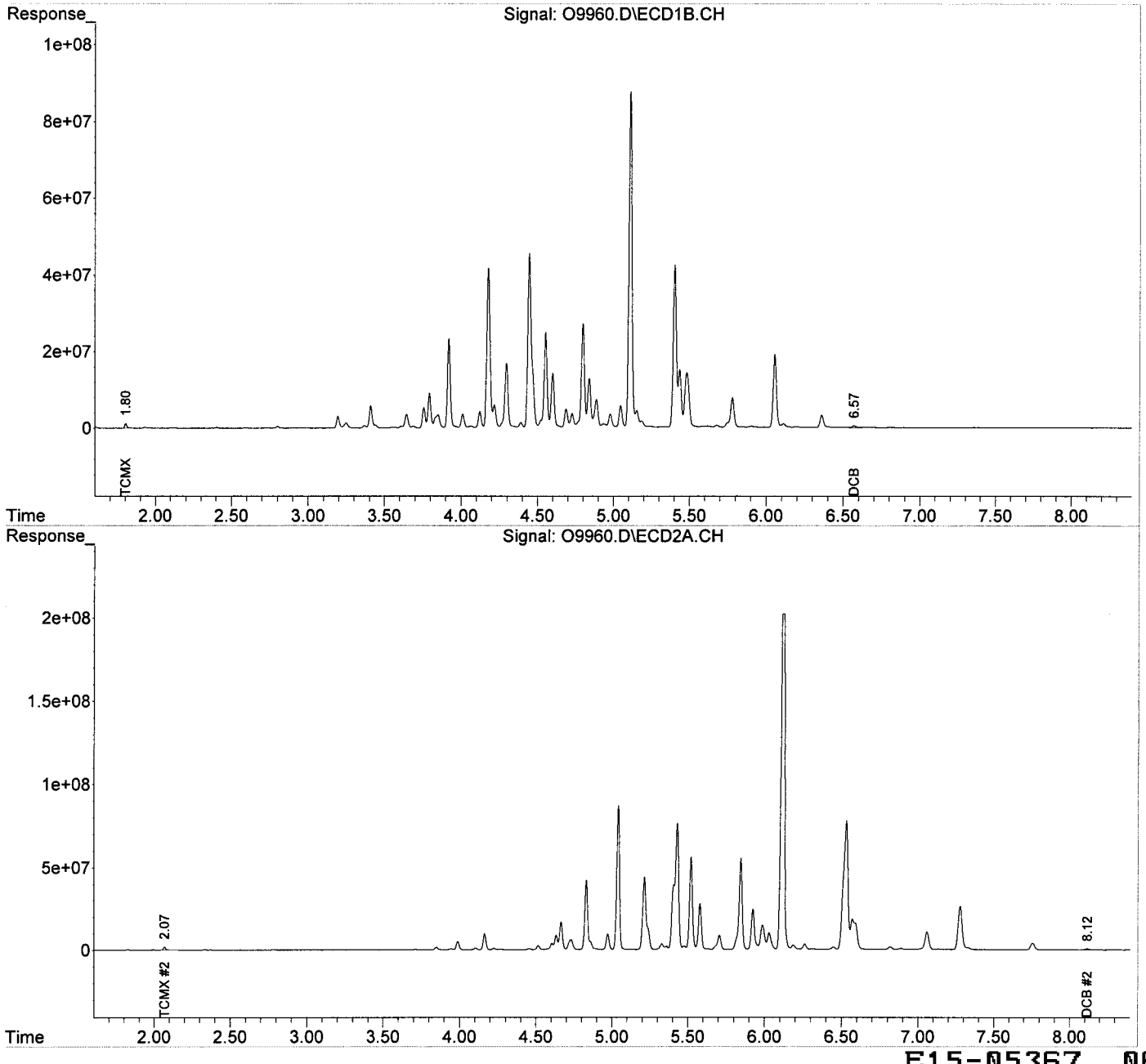
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9960.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:30
Operator : IB
Sample : E-4_(0.5,E15-05367-007,S,30.26g,13.1,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:10:02 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9961.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:43
Operator : IB
Sample : E-4_(2.0,E15-05367-008,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:10:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12307178	18892340	124.787	133.520
Spiked Amount 200.000	Range 10 - 180		Recovery =		62.39%	66.76%
2) S DCB	6.57	8.12	8130833	9996509	174.345	165.335
Spiked Amount 200.000	Range 10 - 180		Recovery =		87.17%	82.67%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

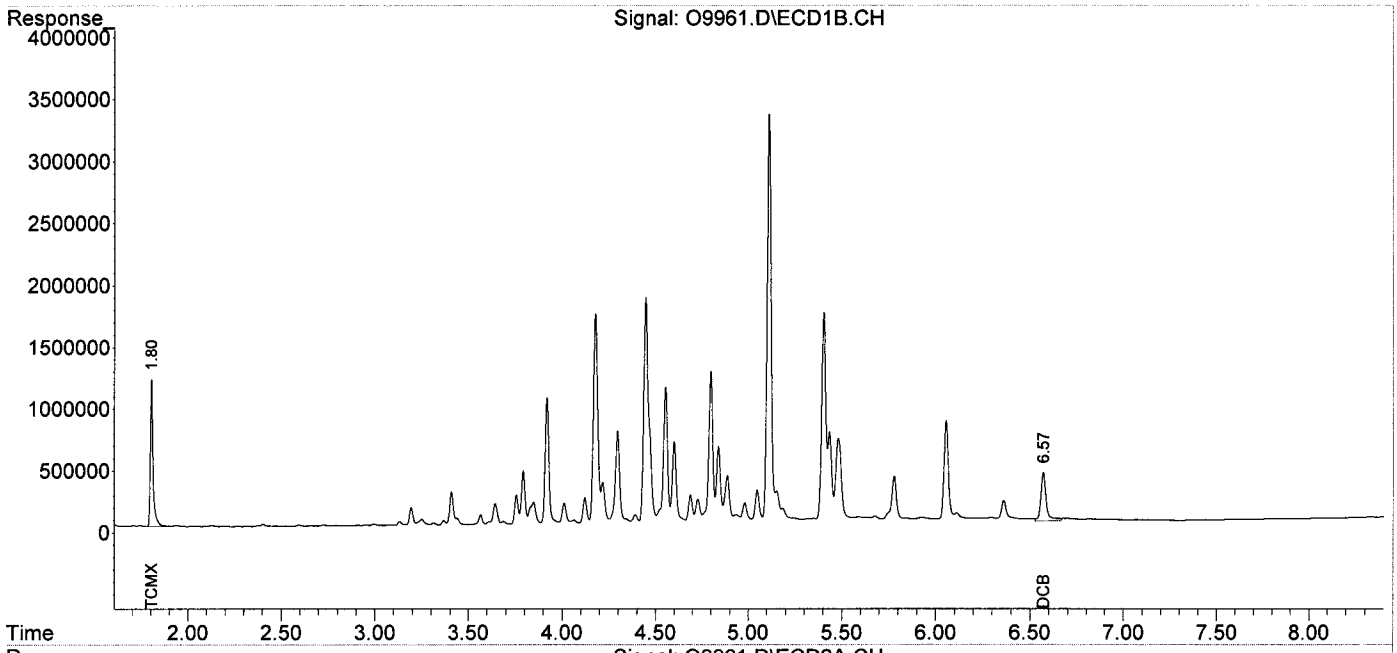
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

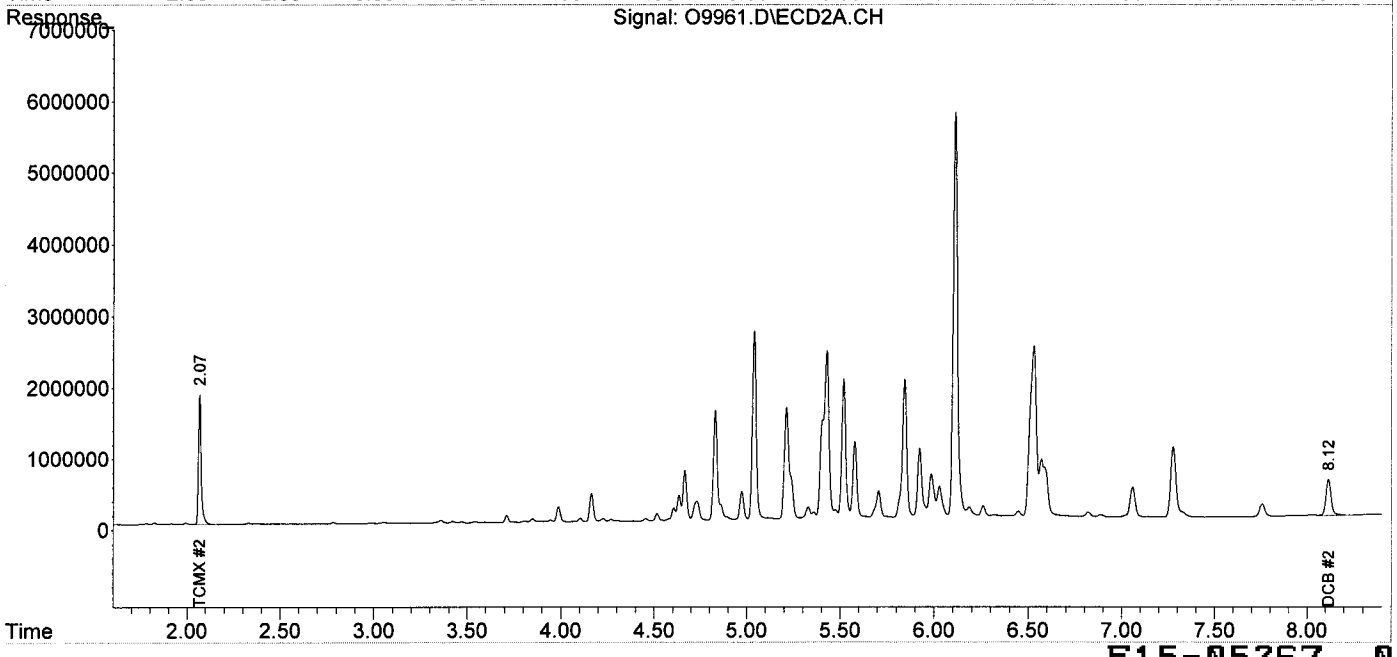
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9961.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:43
Operator : IB
Sample : E-4_(2.0,E15-05367-008,S,30.96g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:10:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9962.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:56
Operator : IB
Sample : E-4_(3.0,E15-05367-009,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:11:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13891989	21240507	140.856	150.115
Spiked Amount 200.000	Range 10 - 180		Recovery =		70.43%	75.06%
2) S DCB	6.57	8.12	7472324	9266348	160.225	153.259
Spiked Amount 200.000	Range 10 - 180		Recovery =		80.11%	76.63%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

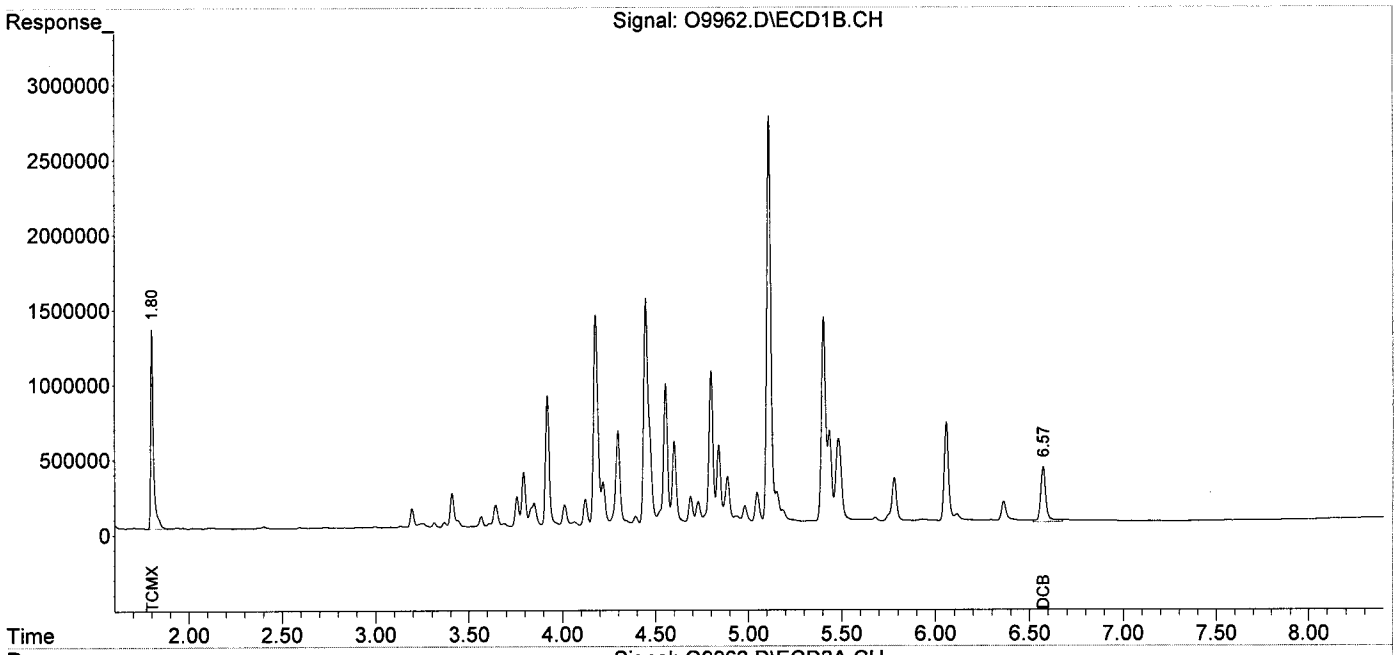
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

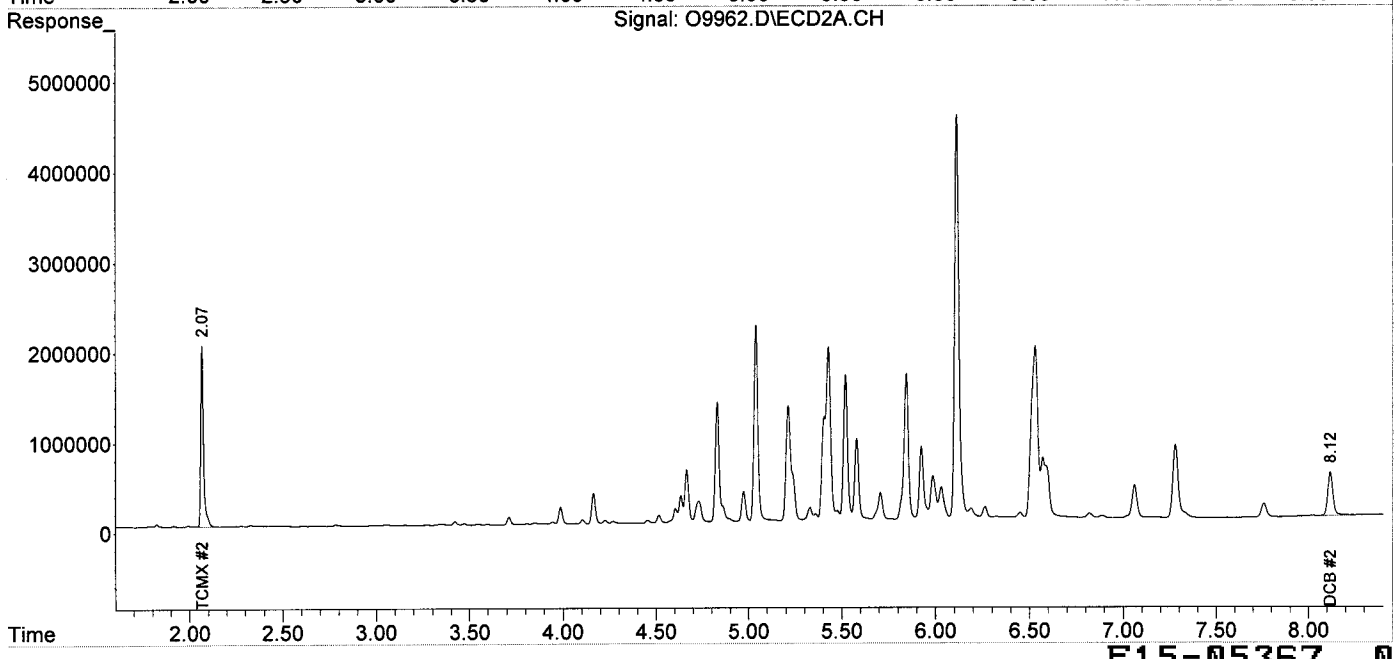
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9962.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:56
Operator : IB
Sample : E-4_(3.0,E15-05367-009,S,30.07g,8.00,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:11:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9963.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:08
Operator : IB
Sample : E-4_(4.5,E15-05367-010,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:41:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	14596789	22189398	148.002	156.821
Spiked Amount 200.000	Range 10 - 180		Recovery =		74.00%	78.41%
2) S DCB	6.57	8.12	8051471	9777194	172.643	161.708
Spiked Amount 200.000	Range 10 - 180		Recovery =		86.32%	80.85%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

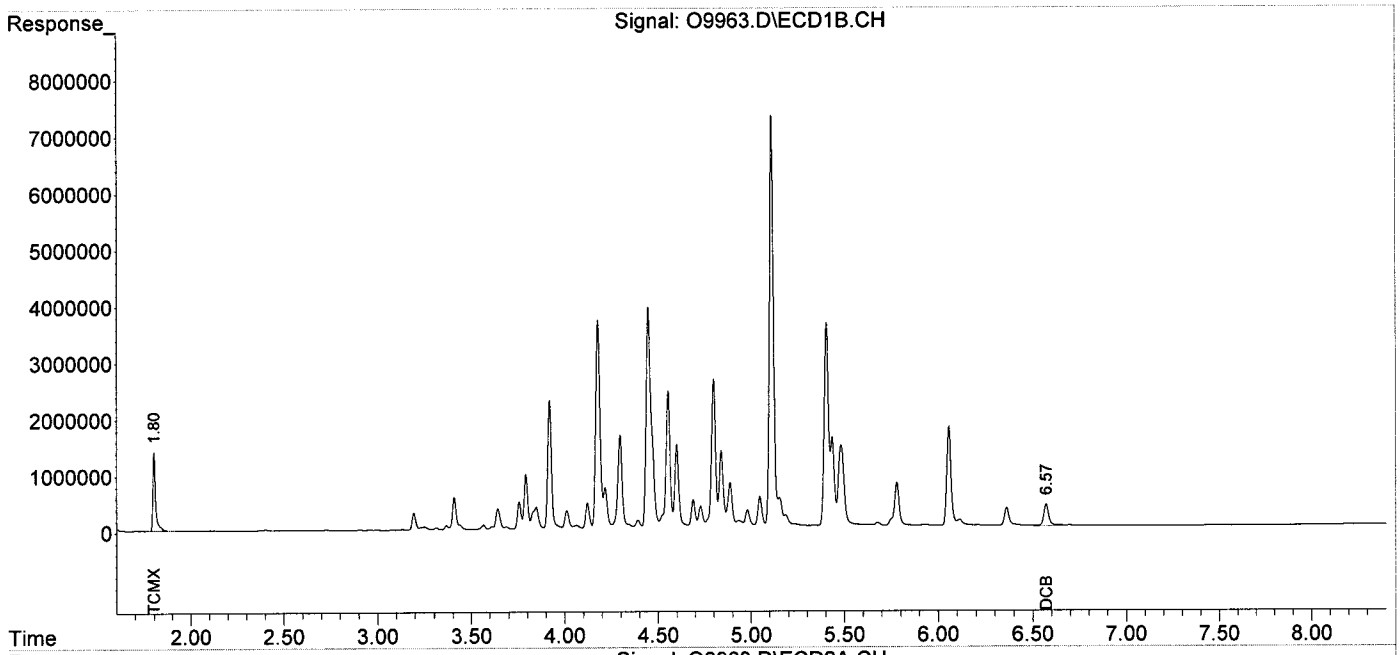
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

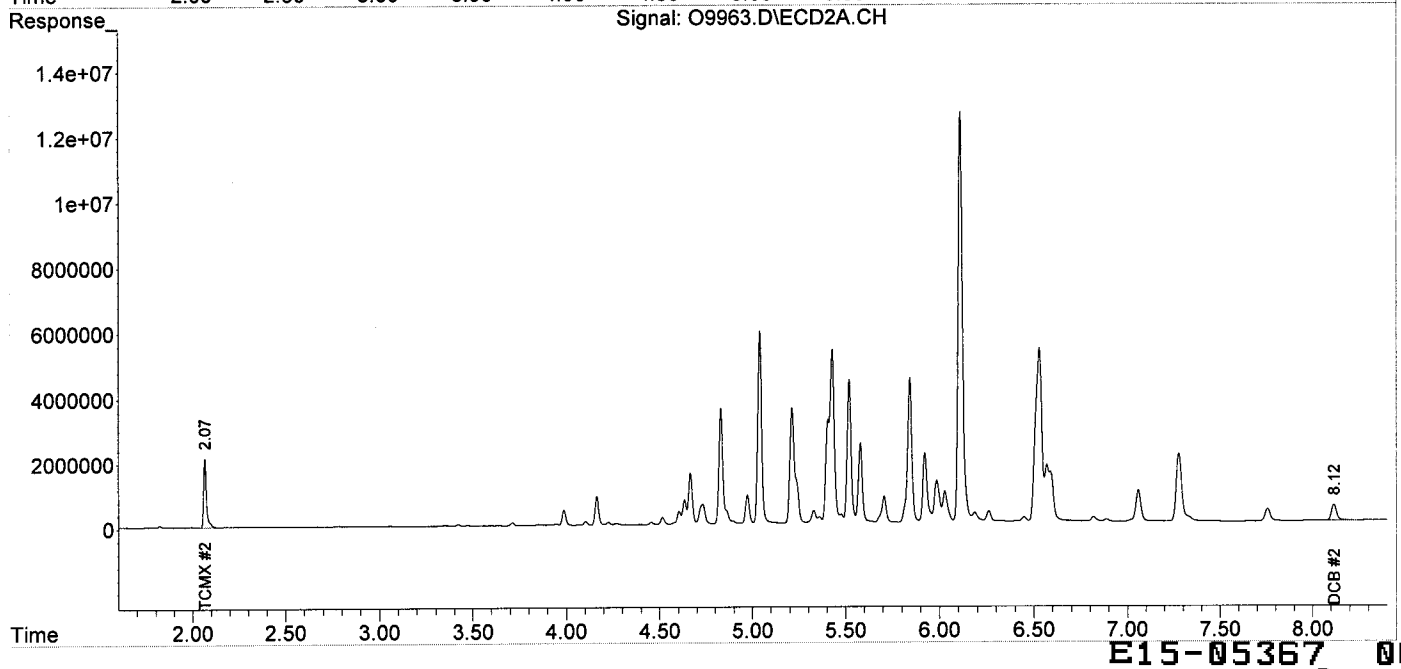
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9963.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:08
Operator : IB
Sample : E-4_(4.5,E15-05367-010,S,30.01g,9.30,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:41:19 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0987.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:33
Operator : IB
Sample : E-16_(0.,E15-05367-017,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:55:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	21896381	6433401	28.751	31.361
Spiked Amount 200.000			Recovery =		14.38%	15.68%
2) S DCB	6.05	6.64	8175618	7971359	29.672m	99.355m#
Spiked Amount 200.000			Recovery =		14.84%	49.68%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

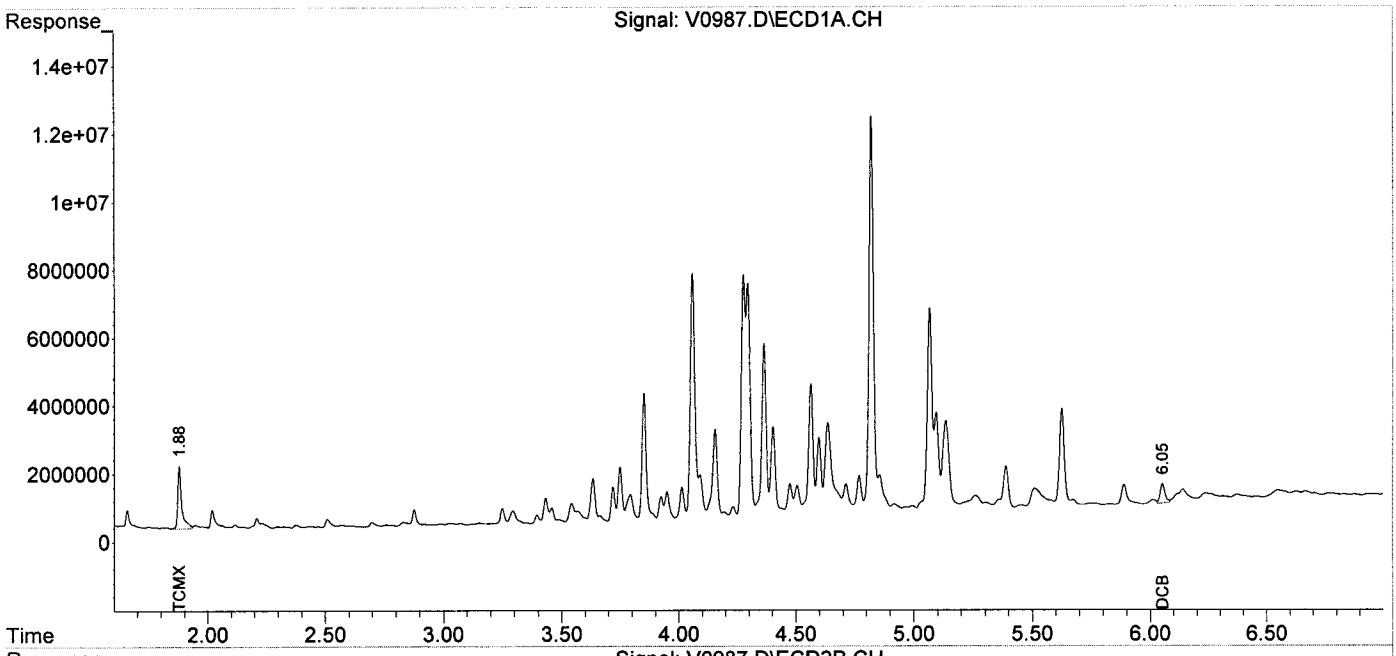
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

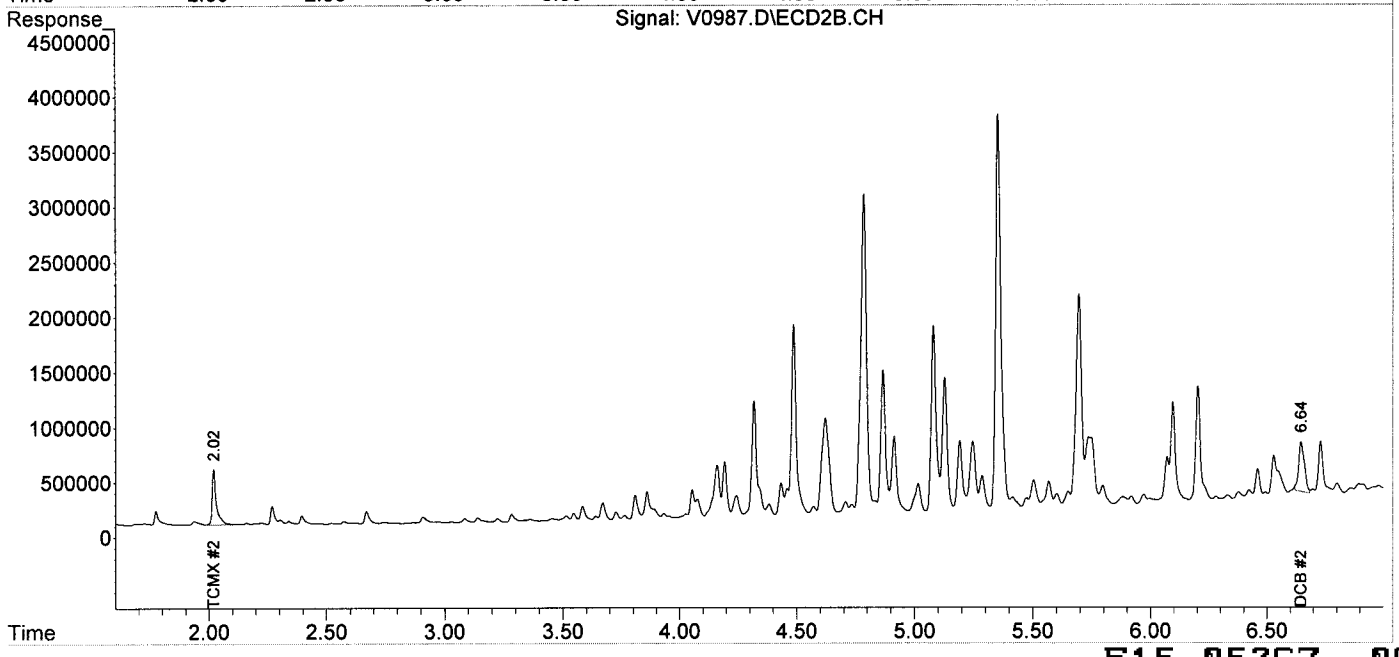
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0987.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:33
Operator : IB
Sample : E-16_(0.,E15-05367-017,S,30.29g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:55:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0988.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:44
Operator : IB
Sample : E-16_(2.,E15-05367-018,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:59:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	23543231	6701518	30.913	32.668
Spiked Amount 200.000			Recovery	=	15.46%	16.33%
2) S DCB	6.04	6.66	8604249	3320254	31.227	41.384m#
Spiked Amount 200.000			Recovery	=	15.61%	20.69%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

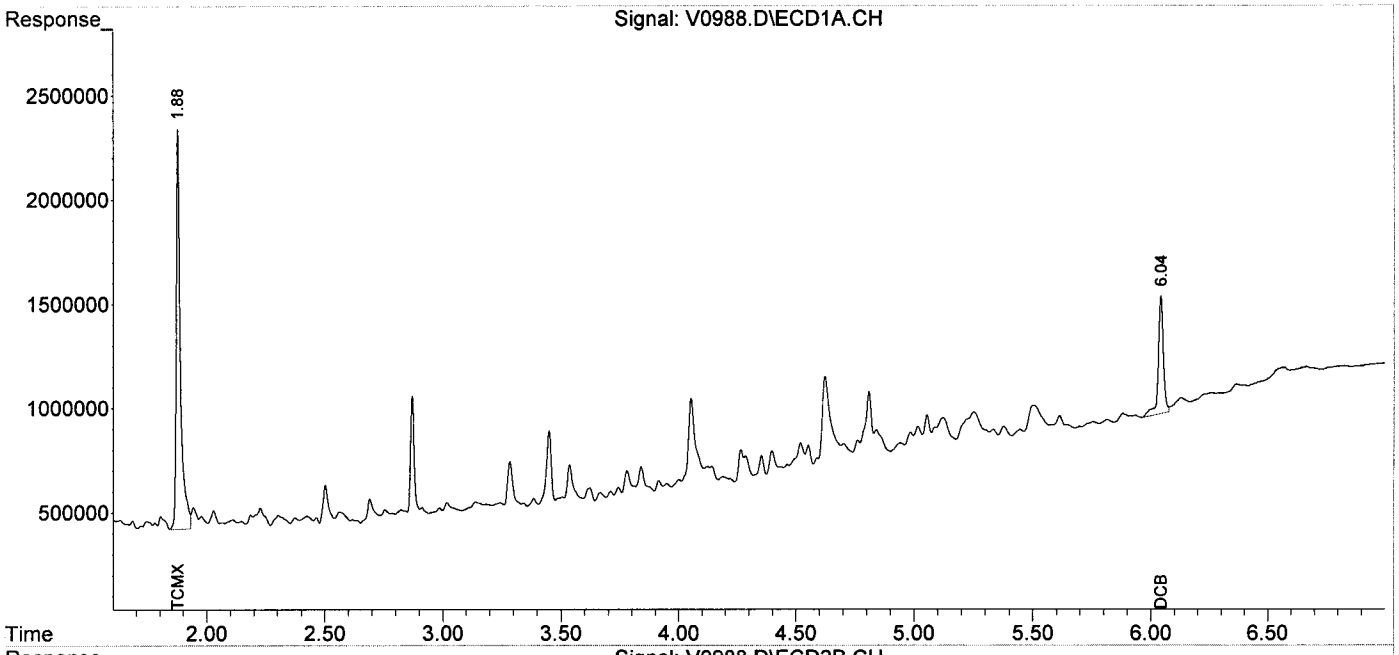
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

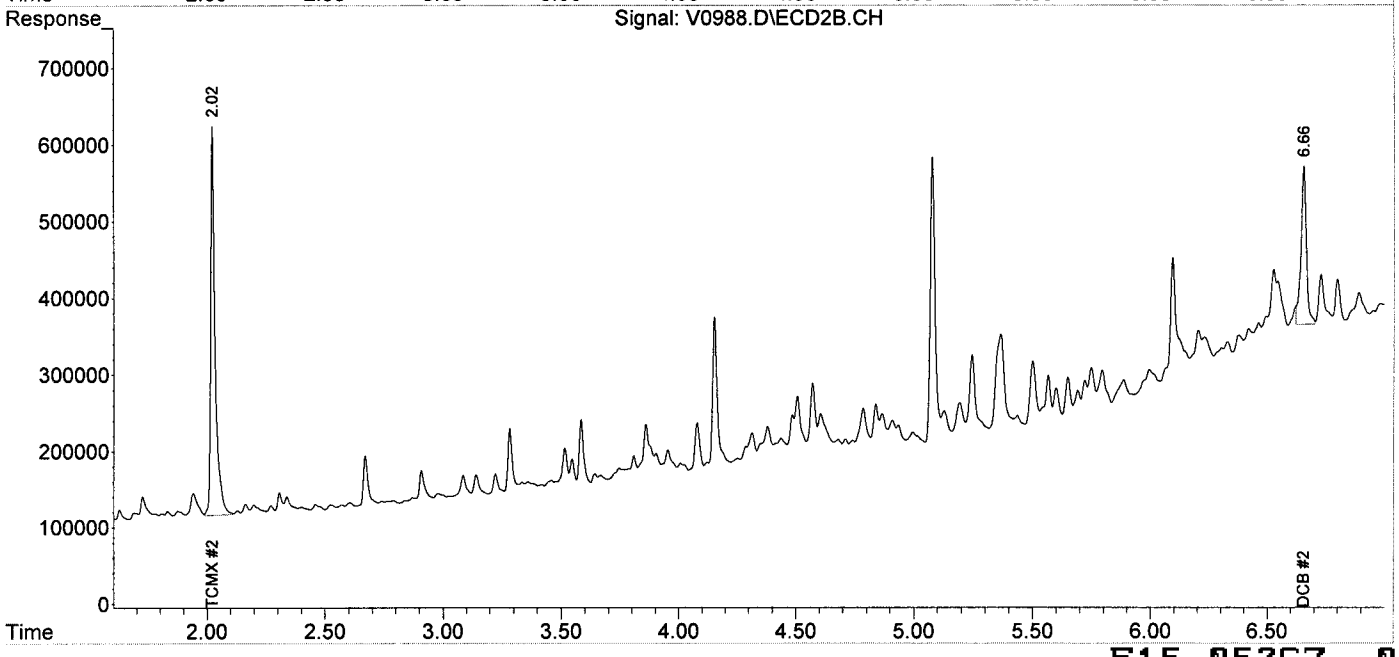
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0988.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:44
Operator : IB
Sample : E-16_(2.,E15-05367-018,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:59:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0989.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:55
Operator : IB
Sample : PZ-2_(0.,E15-05367-019,S,30.20g,20.8,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:05:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	18339249	5048989	24.080	24.612
Spiked Amount 200.000			Recovery	=	12.04%	12.31%
2) S DCB	6.04	6.65	5396819	2845072	19.587m	35.461m#
Spiked Amount 200.000			Recovery	=	9.79%	17.73%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

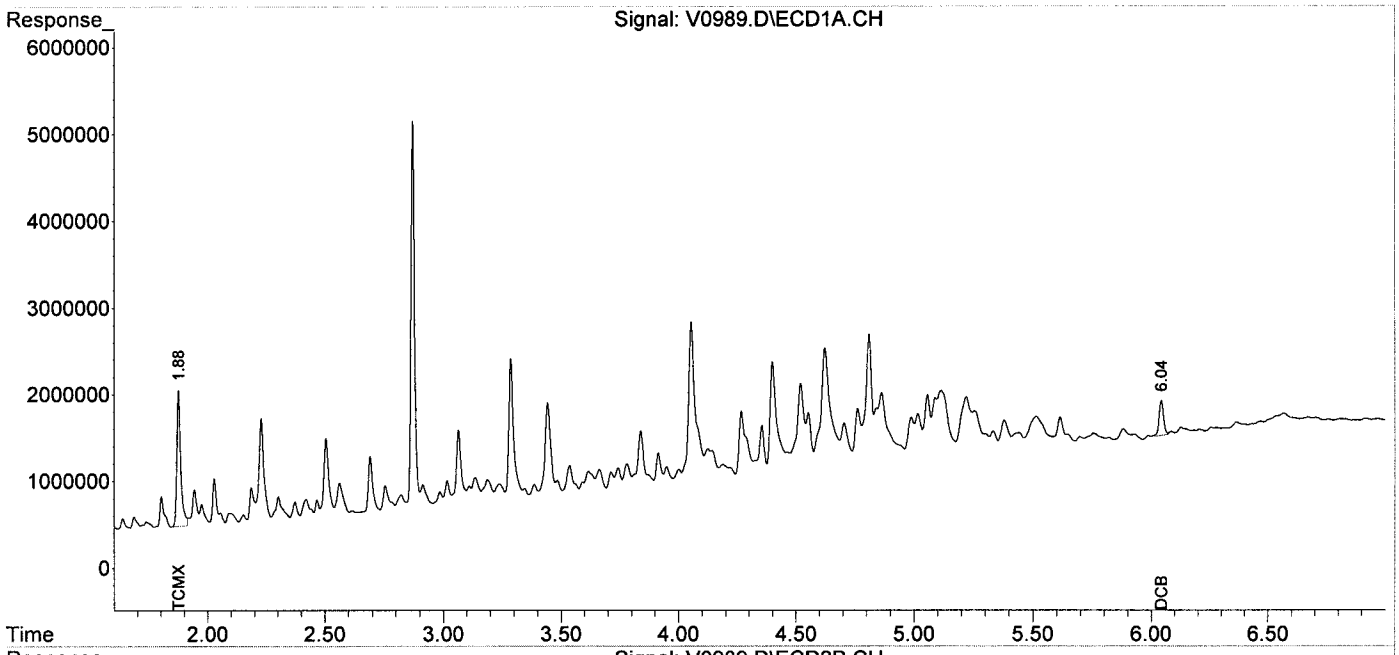
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

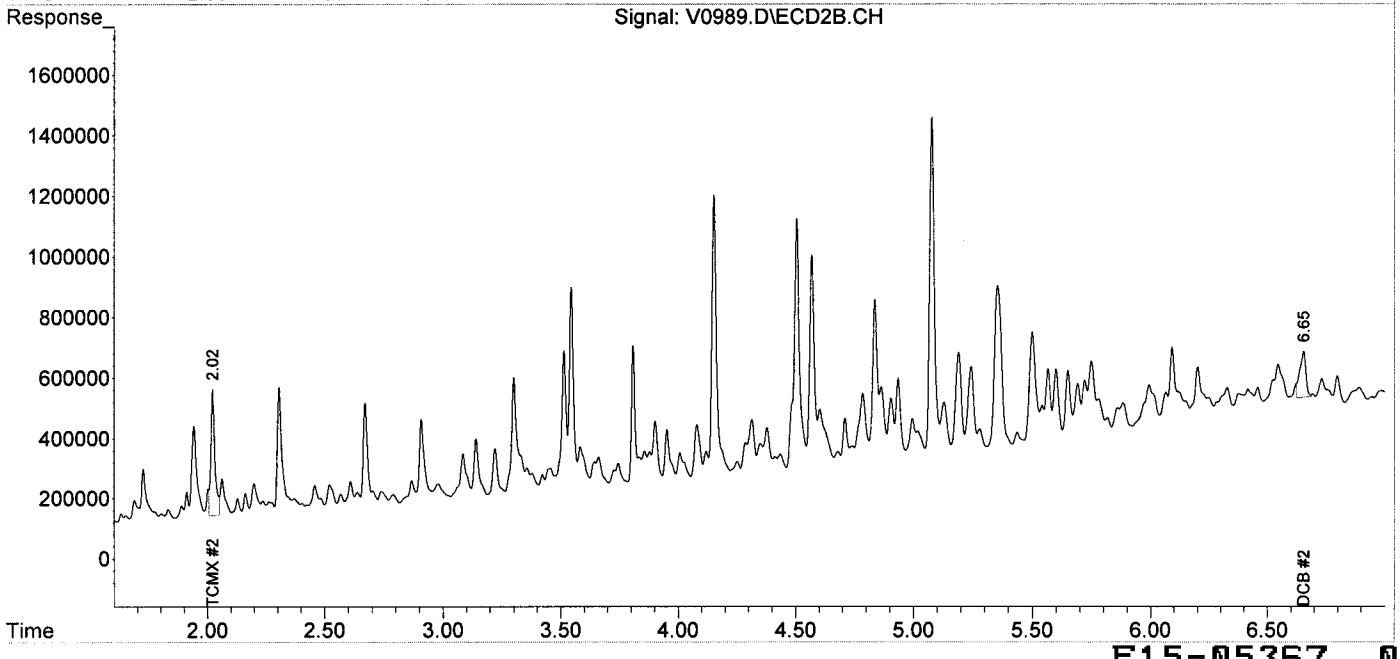
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0989.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 13:55
Operator : IB
Sample : PZ-2_(0.,E15-05367-019,S,30.20g,20.8,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:05:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0990.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:06
Operator : IB
Sample : PZ-2_(2.,E15-05367-020,S,30.22g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:16:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	19044236	5529476	25.006	26.954
Spiked Amount 200.000			Recovery =		12.50%	13.48%
2) S DCB	6.04	6.65	8229989	3652235	29.869	45.521m#
Spiked Amount 200.000			Recovery =		14.93%	22.76%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

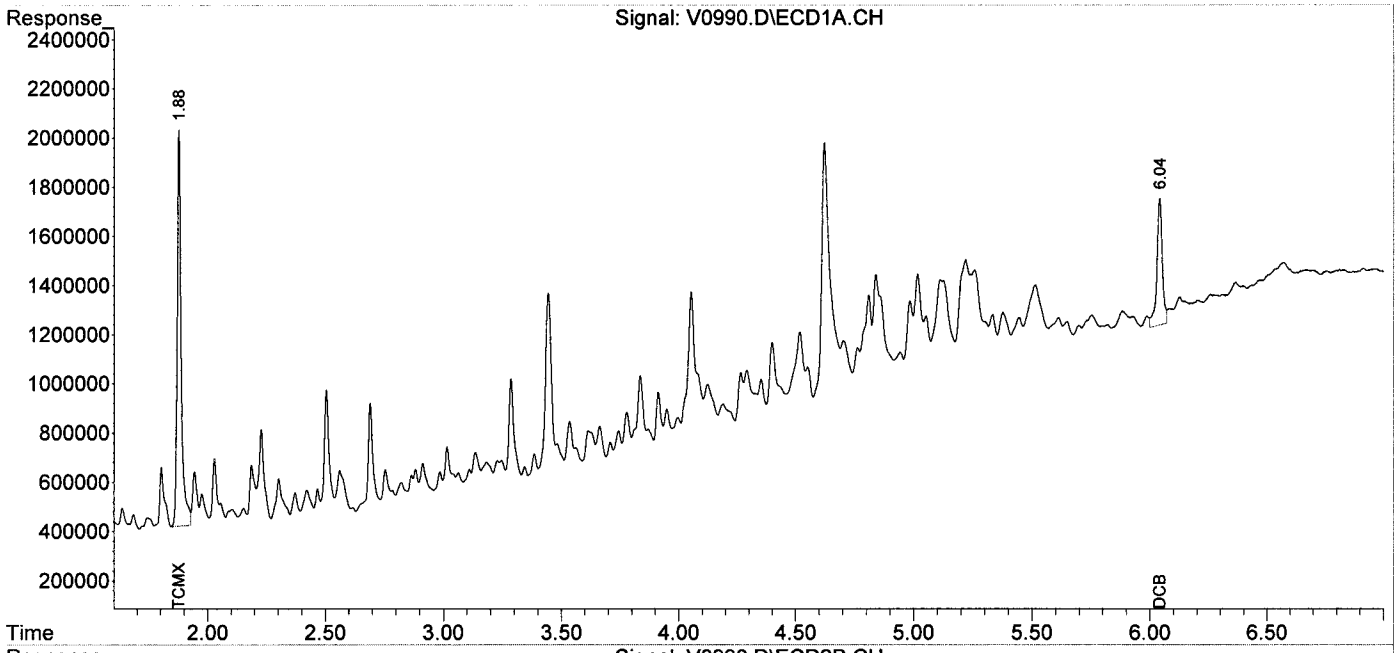
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

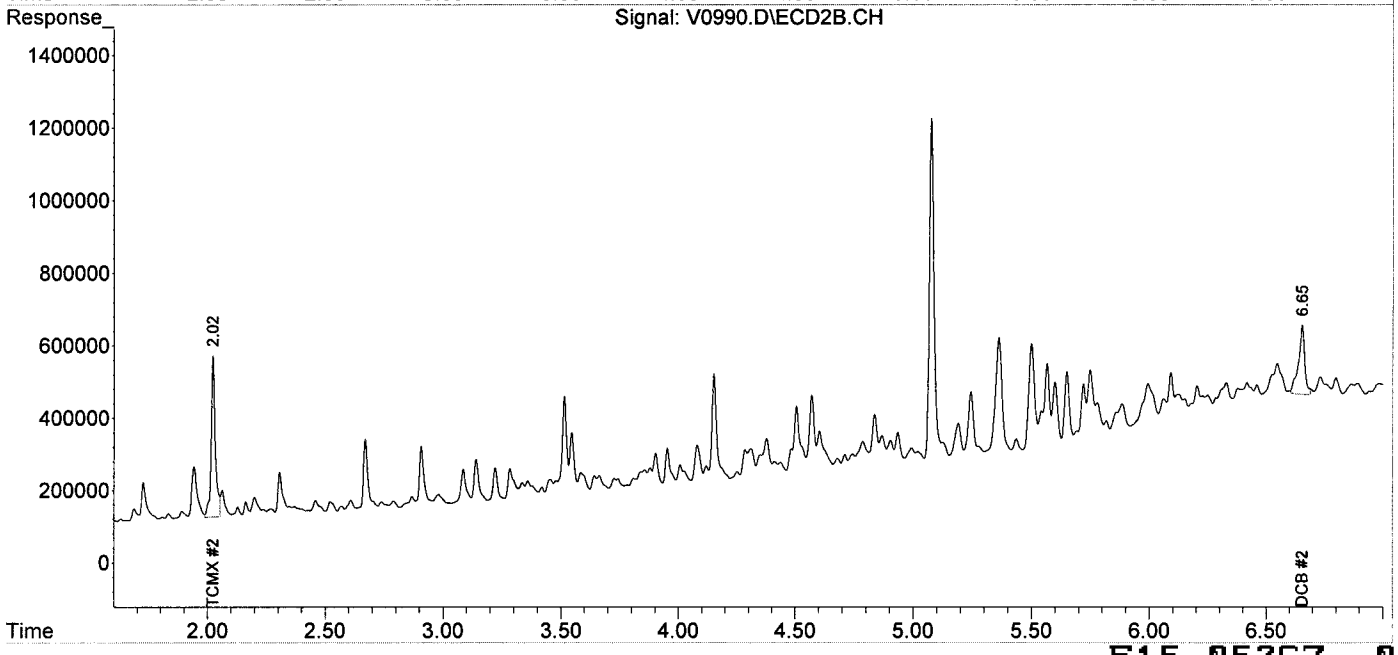
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0990.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:06
Operator : IB
Sample : PZ-2_(2.,E15-05367-020,S,30.22g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:16:48 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0991.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:17
Operator : IB
Sample : PZ-2_(4.,E15-05367-021,S,30.24g,7.70,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:29:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	114.6E6	30166381	150.453	147.050
Spiked Amount 200.000			Recovery =		75.23%	73.53%
2) S DCB	6.04	6.66	38862260	14107791	141.043	175.839
Spiked Amount 200.000			Recovery =		70.52%	87.92%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

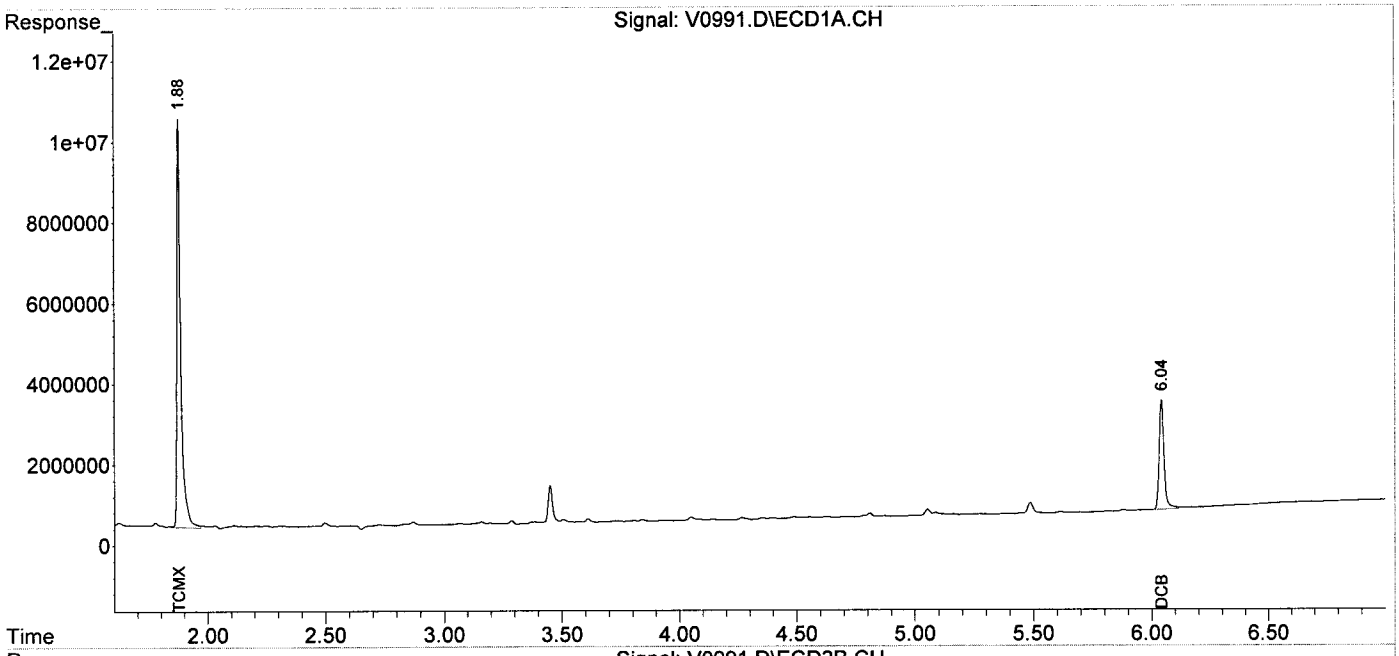
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

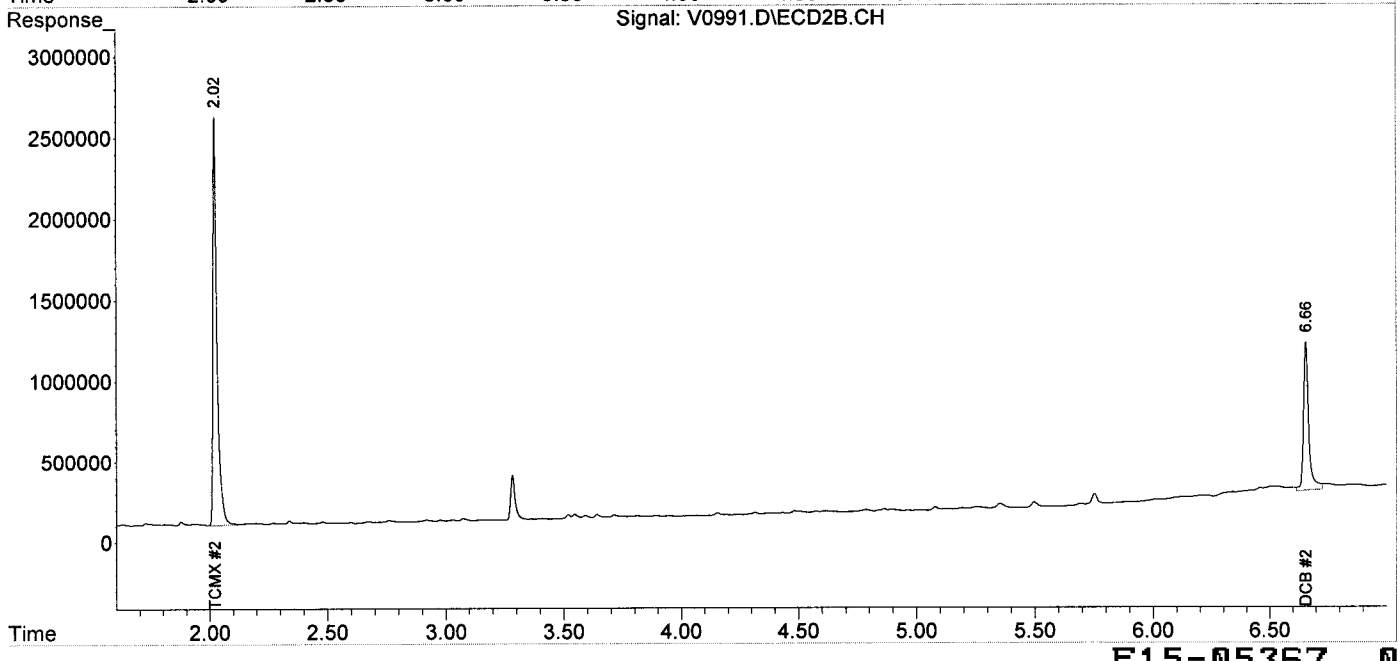
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0991.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:17
Operator : IB
Sample : PZ-2_(4.,E15-05367-021,S,30.24g,7.70,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:29:55 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05367_0640

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0992.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:28
Operator : IB
Sample : PZ-2_(6.,E15-05367-022,S,30.55g,14.1,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:03:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	127.1E6	33568998	166.916	163.637
Spiked Amount 200.000			Recovery =		83.46%	81.82%
2) S DCB	6.04	6.66	50871800	16264297	184.629	202.718
Spiked Amount 200.000			Recovery =		92.31%	101.36%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

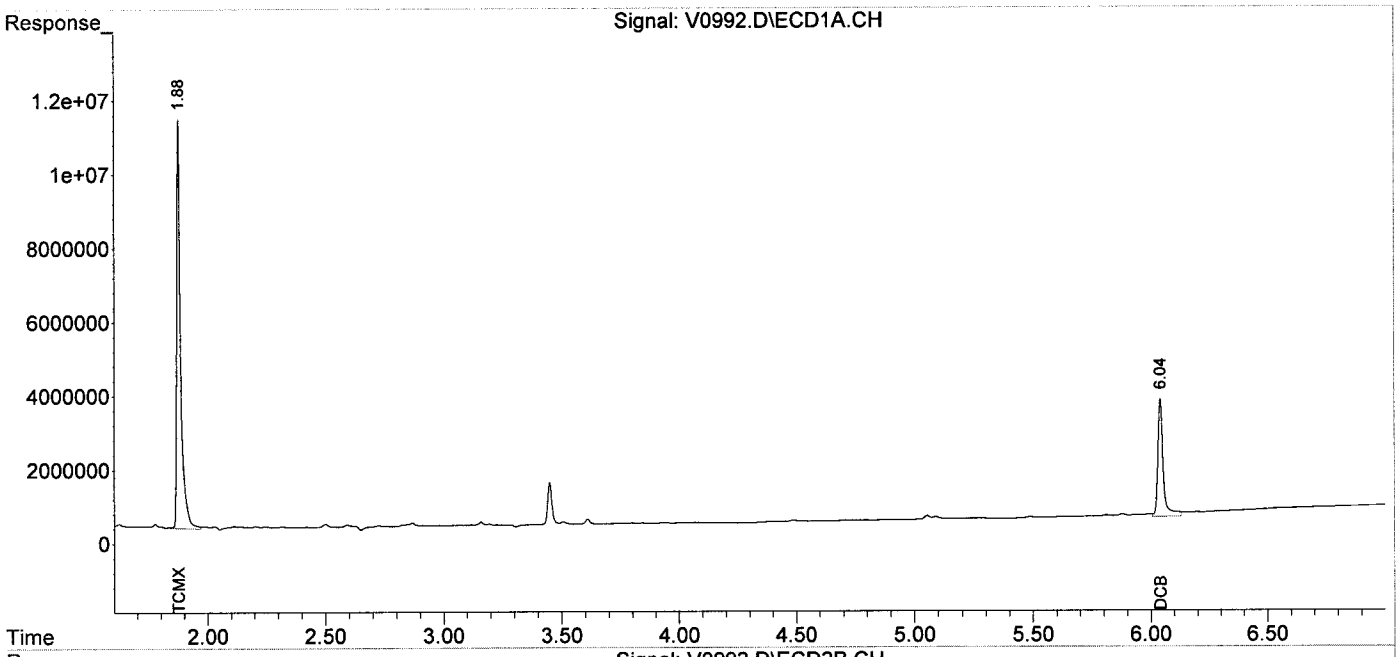
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

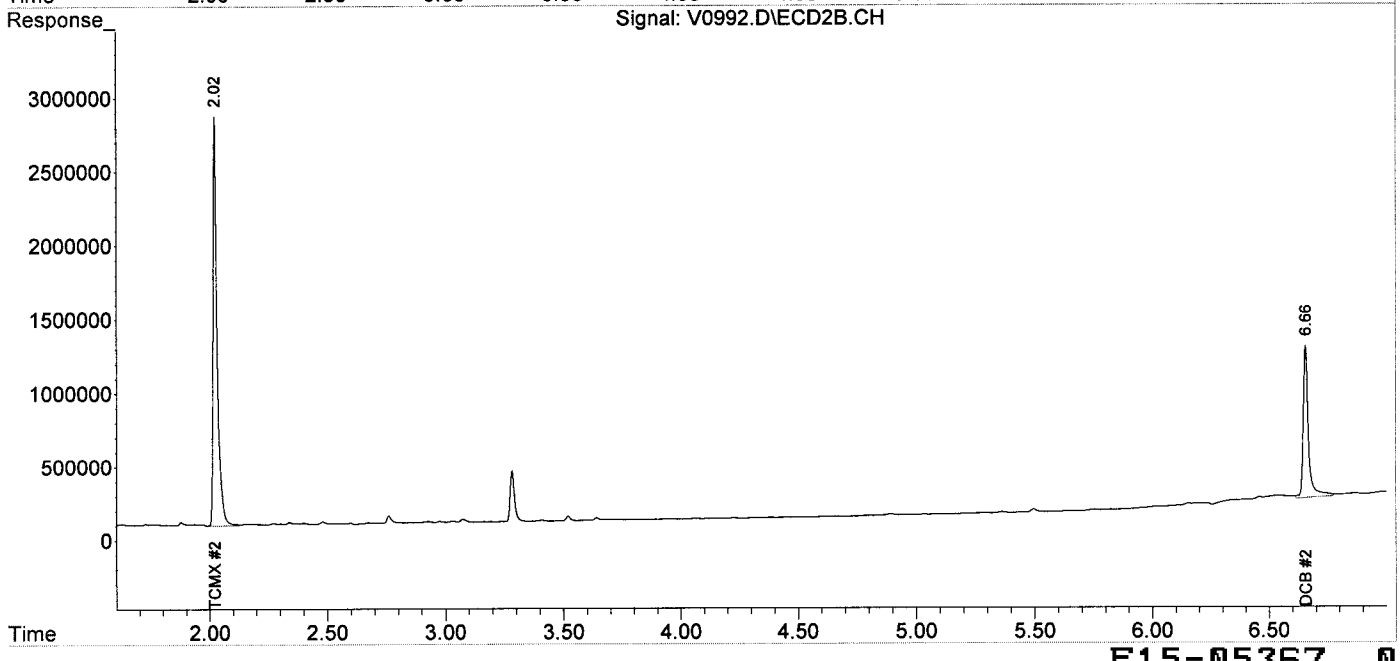
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0992.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:28
Operator : IB
Sample : PZ-2_(6.,E15-05367-022,S,30.55g,14.1,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:03:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9964.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:21
Operator : IB
Sample : X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:41:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12562858	19127481	127.379	135.181
Spiked Amount 200.000	Range 10 - 180		Recovery =		63.69%	67.59%
2) S DCB	6.57	8.12	7863295	8329711	168.608	137.767
Spiked Amount 200.000	Range 10 - 180		Recovery =		84.30%	68.88%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

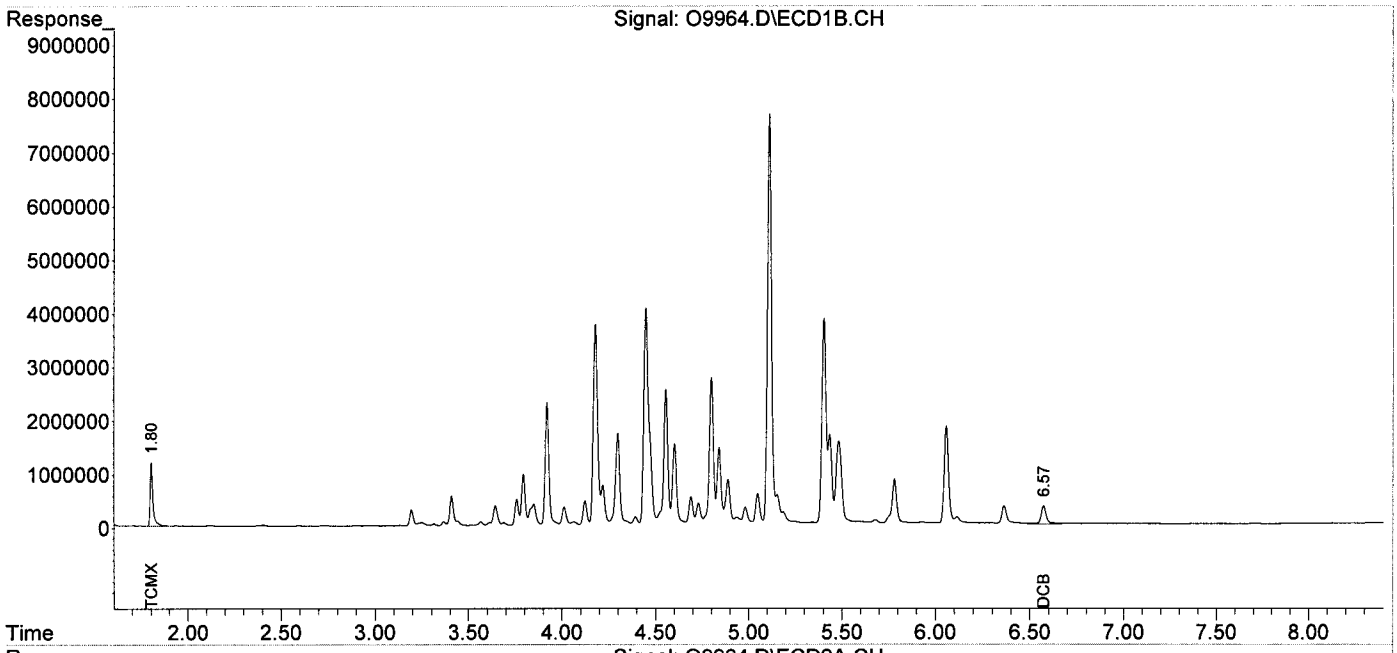
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

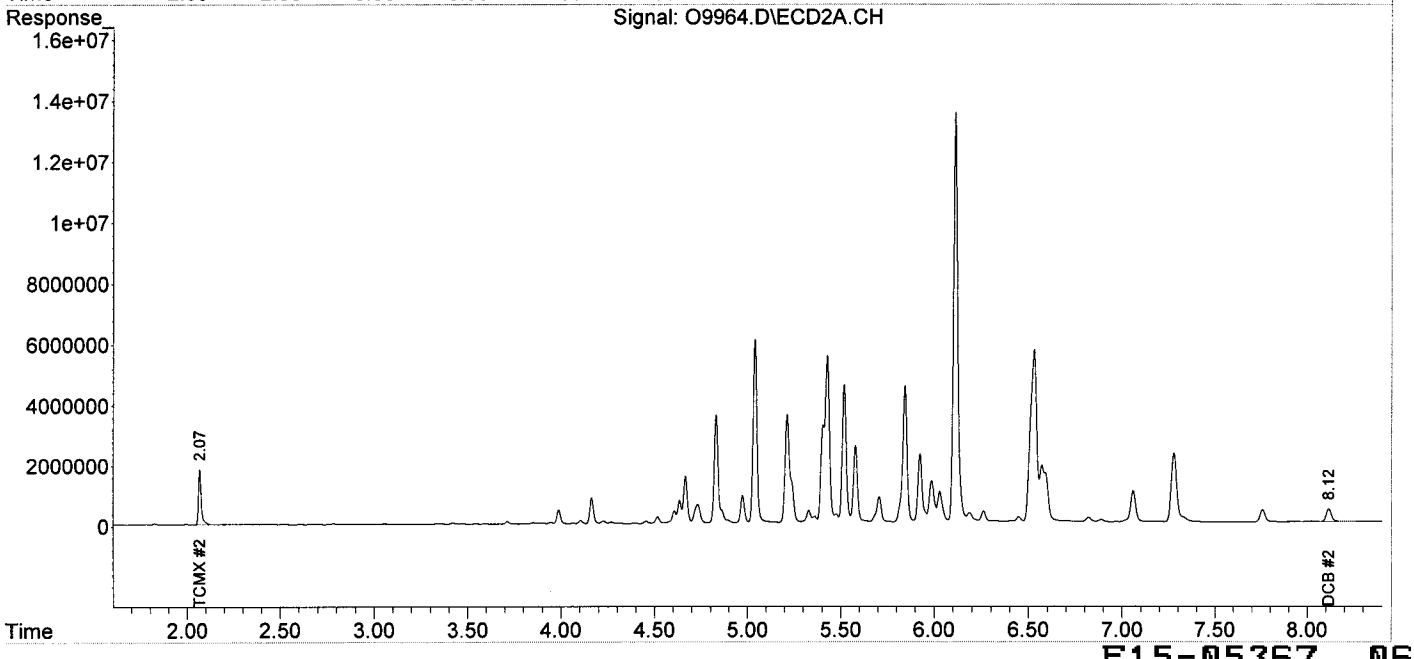
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9964.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:21
Operator : IB
Sample : X-1_(4.5,E15-05367-023,S,30.11g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:41:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0993.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:39
Operator : IB
Sample : PZ-1_(0.,E15-05367-031,S,30.13g,30.2,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:04:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	13167488	3651360	17.289	17.799
Spiked Amount 200.000			Recovery =		8.64%	8.90%
2) S DCB	6.04	6.64	5052214	6372814	18.336	79.431m#
Spiked Amount 200.000			Recovery =		9.17%	39.72%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

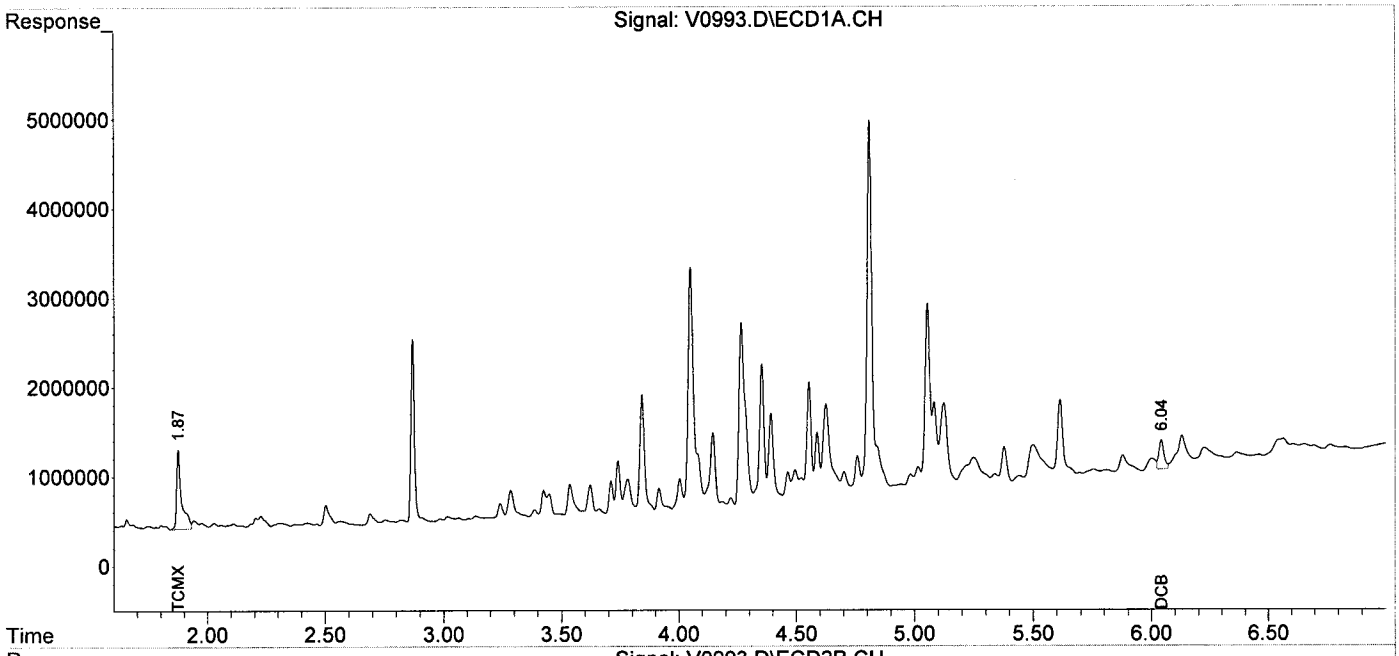
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

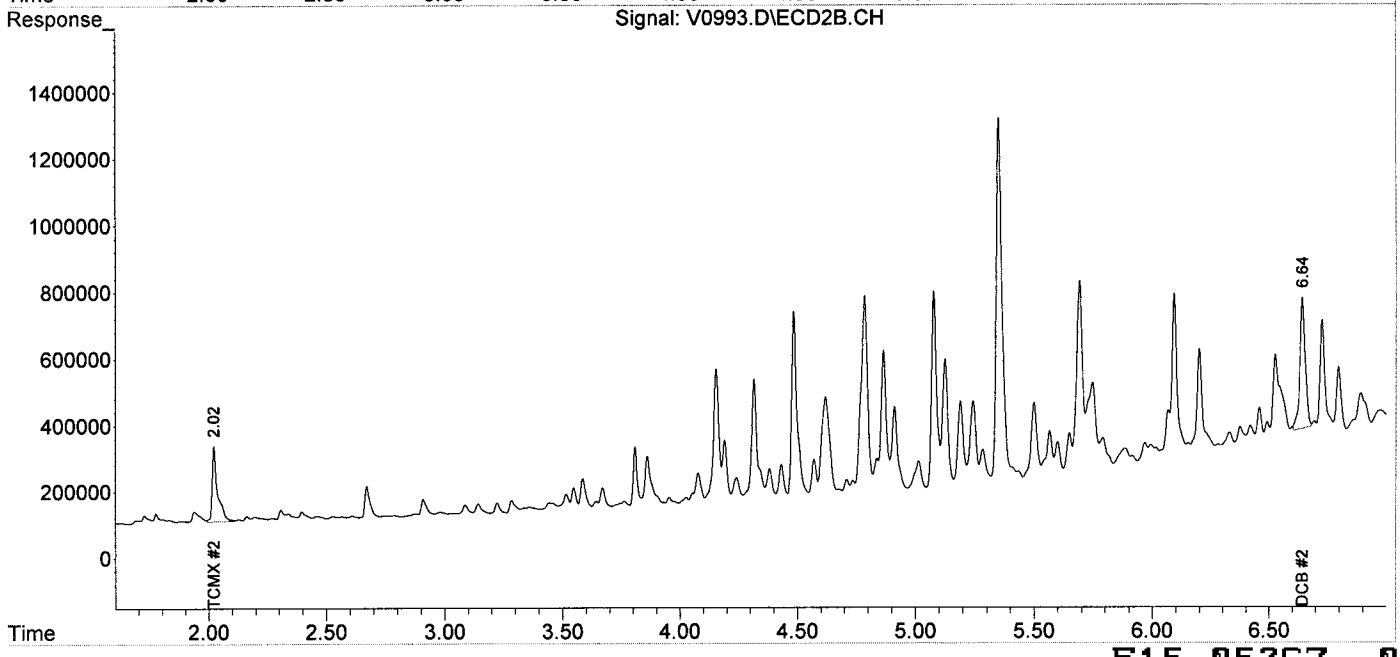
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0993.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:39
Operator : IB
Sample : PZ-1_(0.,E15-05367-031,S,30.13g,30.2,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:04:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0994.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:50
Operator : IB
Sample : PZ-1_(2.,E15-05367-032,S,30.23g,15.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:05:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	19308857	5986006	25.353	29.180
Spiked Amount 200.000			Recovery	=	12.68%	14.59%
2) S DCB	6.04	6.64	8868696	11069034	32.187	137.964m#
Spiked Amount 200.000			Recovery	=	16.09%	68.98%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

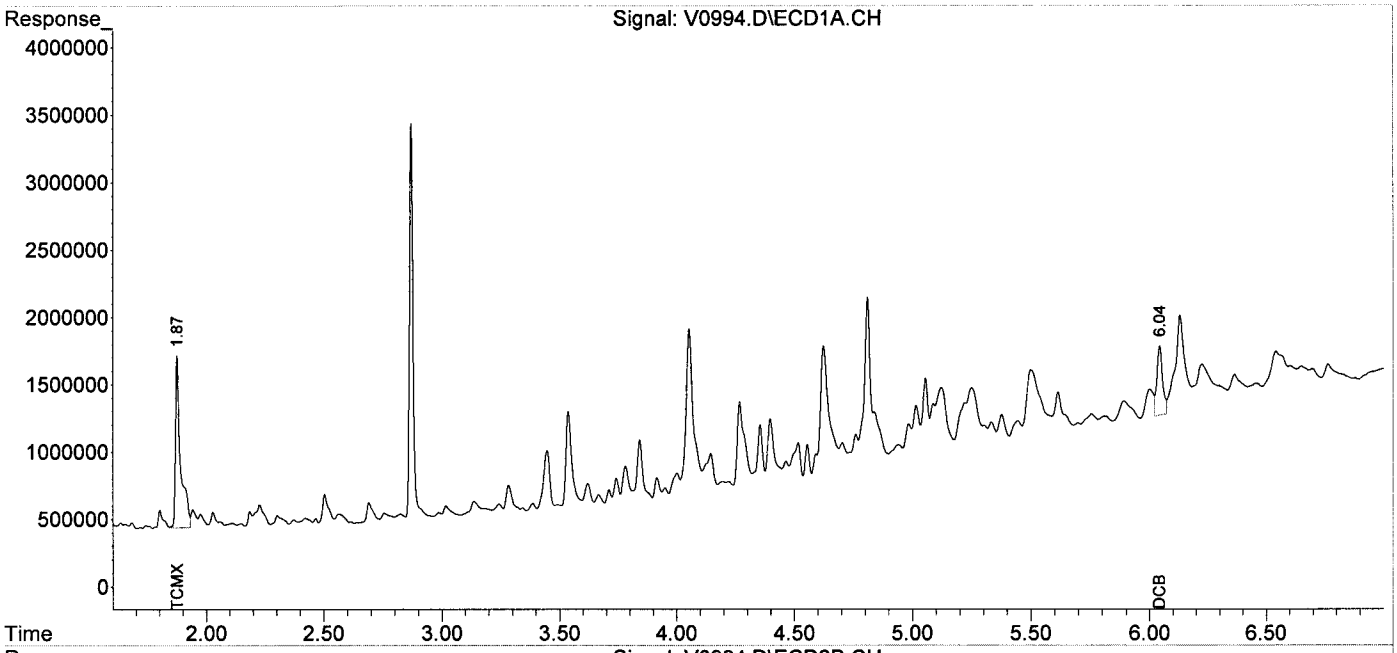
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

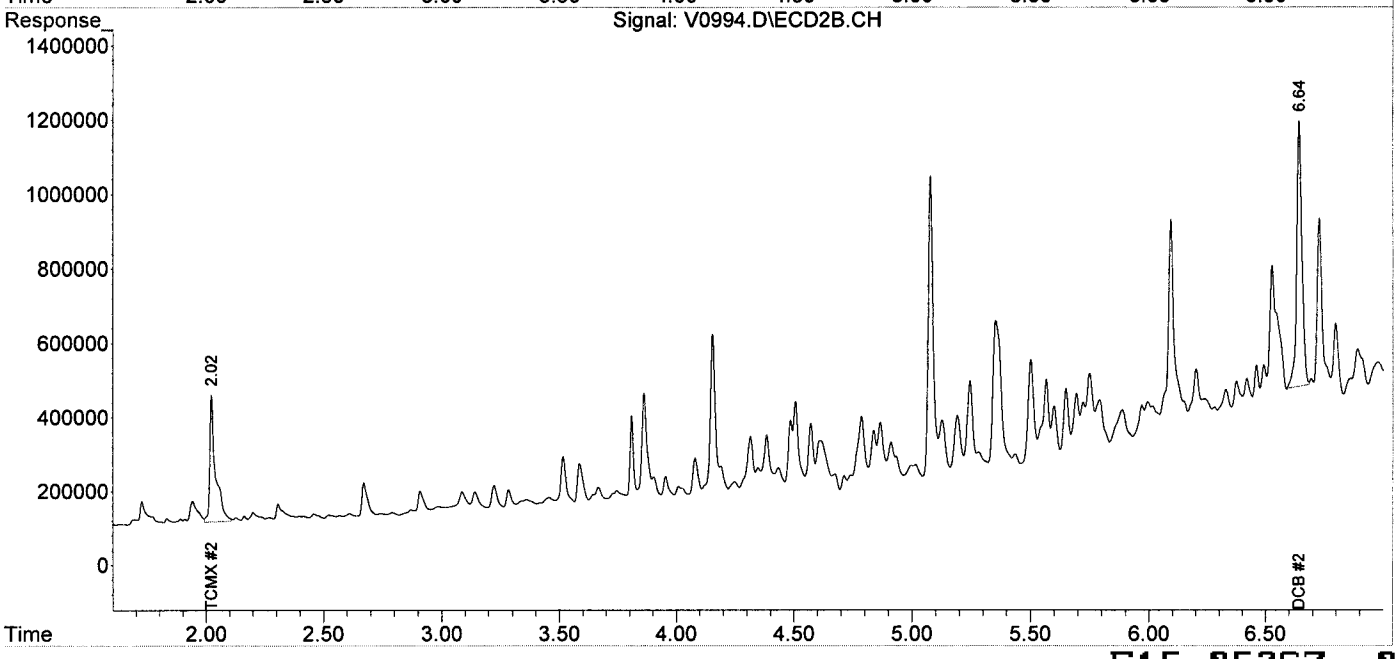
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0994.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 14:50
Operator : IB
Sample : PZ-1_(2.,E15-05367-032,S,30.23g,15.6,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:05:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0995.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:01
Operator : IB
Sample : PZ-1_(2.,E15-05367-033,S,30.66g,8.90,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:39:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.87	2.02	14878657	4055014	19.536	19.767
Spiked Amount 200.000			Recovery =		9.77%	9.88%
2) S DCB	6.04	6.65	4485796	3365927	16.280	41.953m#
Spiked Amount 200.000			Recovery =		8.14%	20.98%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

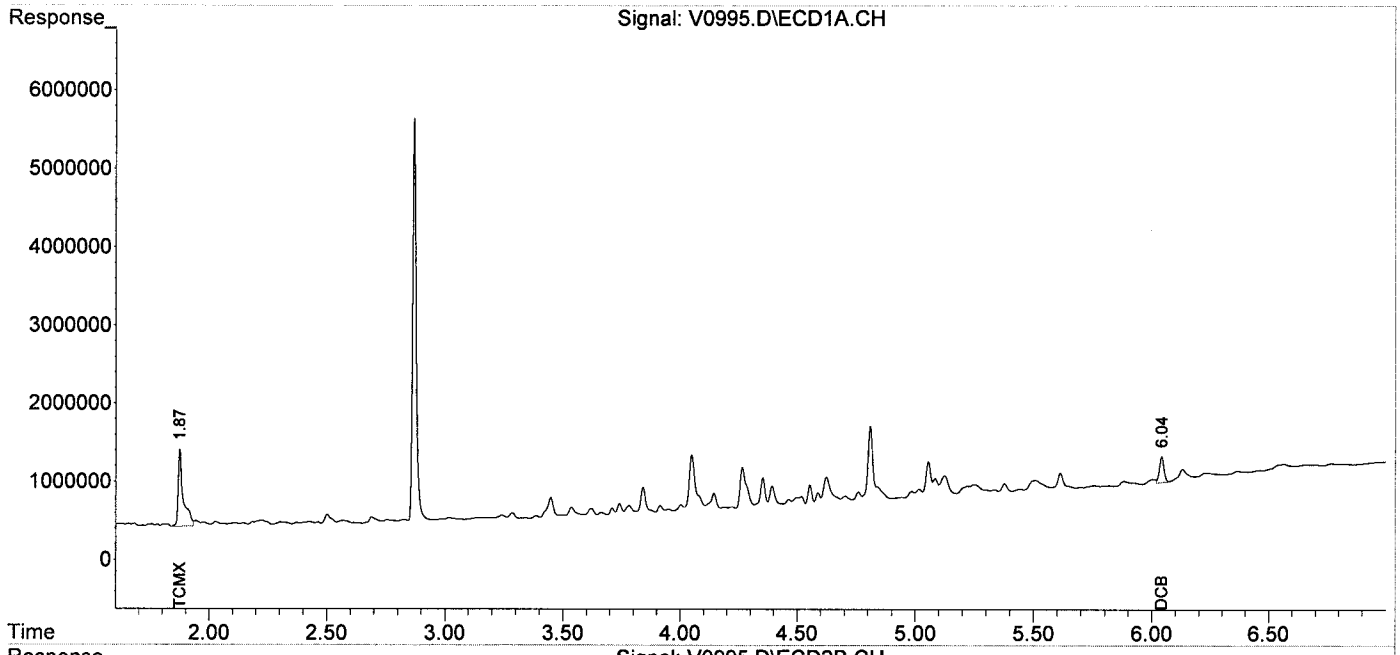
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

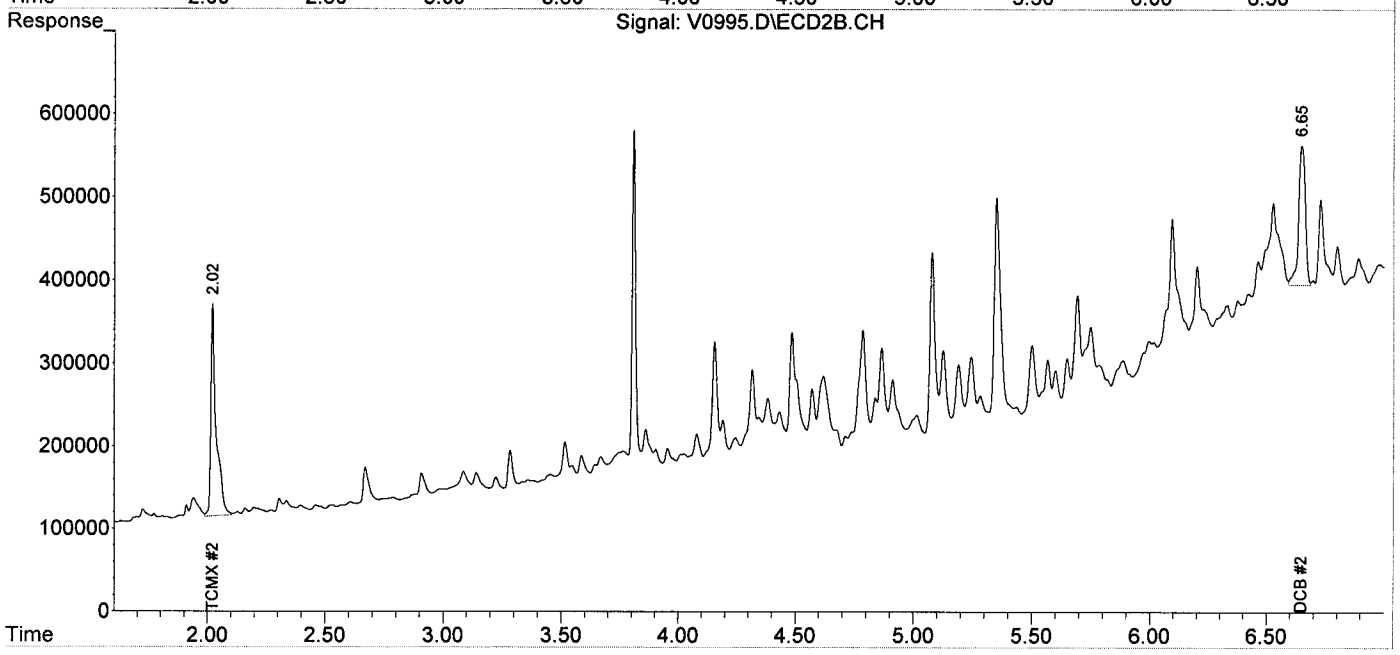
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0995.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:01
Operator : IB
Sample : PZ-1_(2.,E15-05367-033,S,30.66g,8.90,5
Misc : 150630-12,06/30/15,06/23/15,5
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:39:14 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0996.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:12
Operator : IB
Sample : PZ-1_(4.,E15-05367-034,S,30.65g,12.0,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:42:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	120.4E6	31309853	158.084	152.624
Spiked Amount 200.000			Recovery	=	79.04%	76.31%
2) S DCB	6.04	6.66	41343002	14693075	150.046	183.134
Spiked Amount 200.000			Recovery	=	75.02%	91.57%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

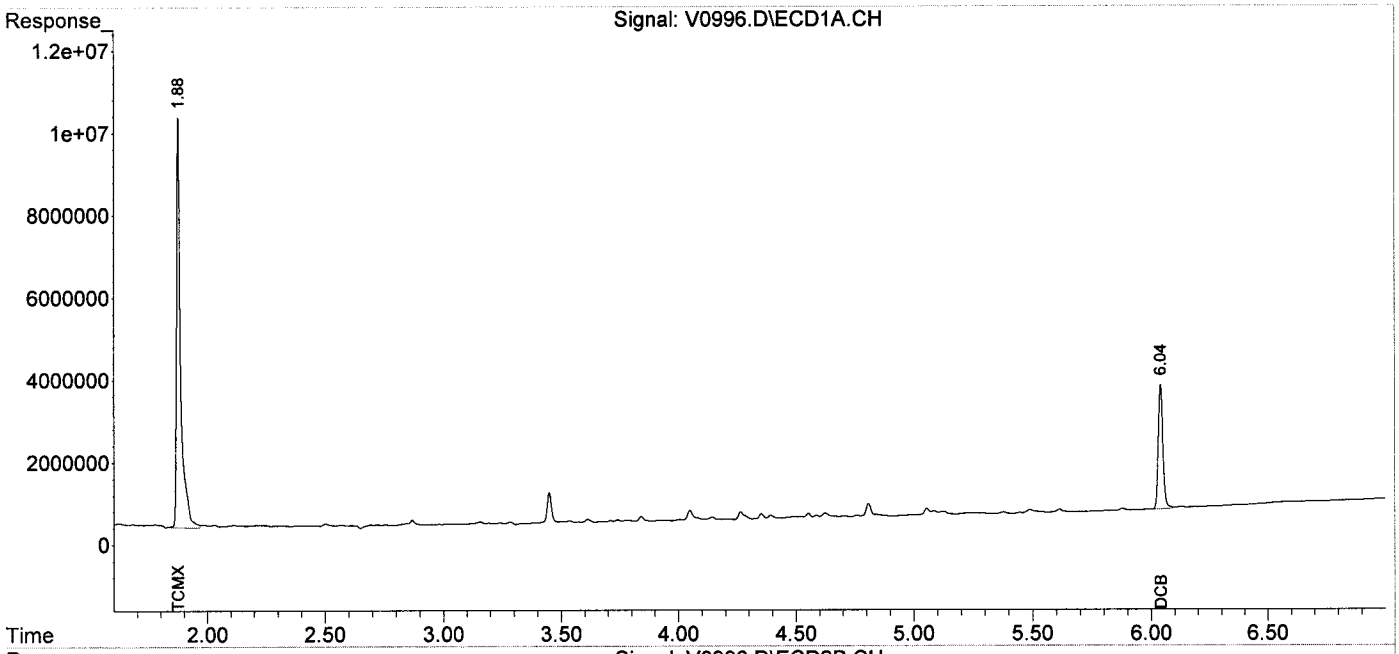
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

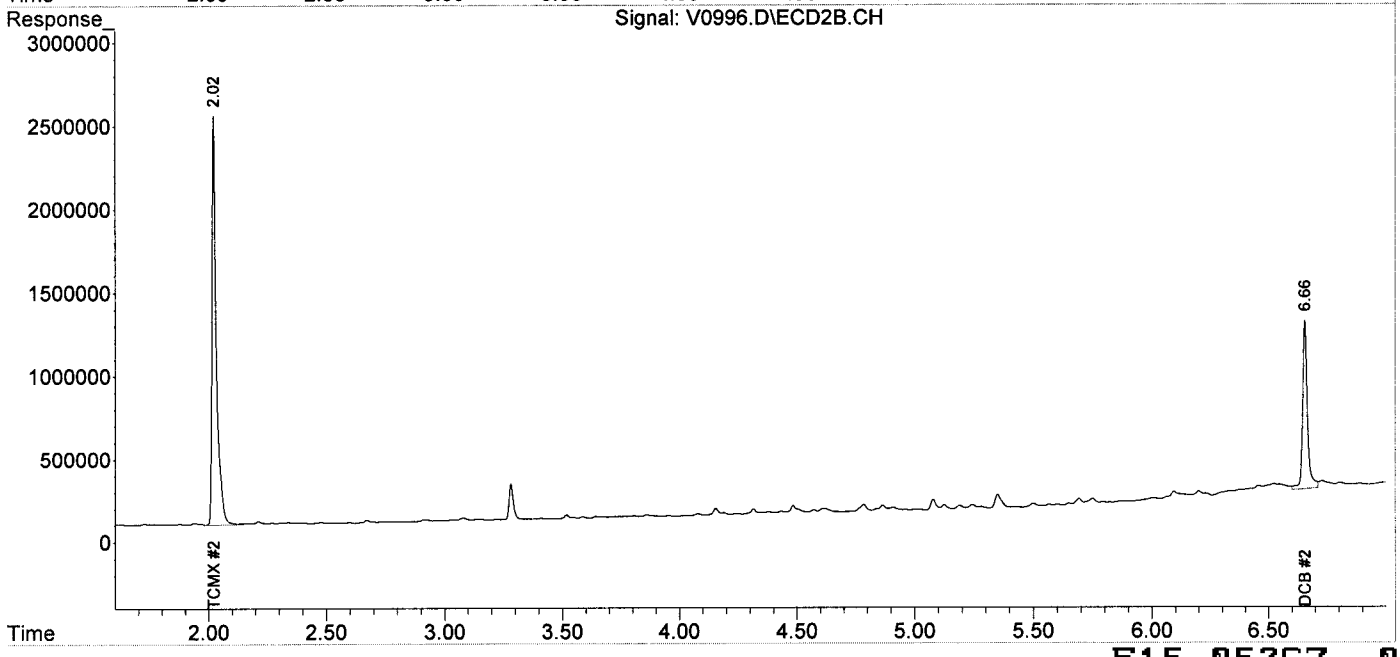
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0996.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:12
Operator : IB
Sample : PZ-1_(4.,E15-05367-034,S,30.65g,12.0,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:42:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0997.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:23
Operator : IB
Sample : E-5_(0.5,E15-05367-035,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:43:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.87	2.02	5799107	1484220	7.614	7.235
Spiked Amount 200.000			Recovery	=	3.81%	3.62%
2) S DCB	6.04	6.65	1646141	1182918	5.974	14.744m#
Spiked Amount 200.000			Recovery	=	2.99%	7.37%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

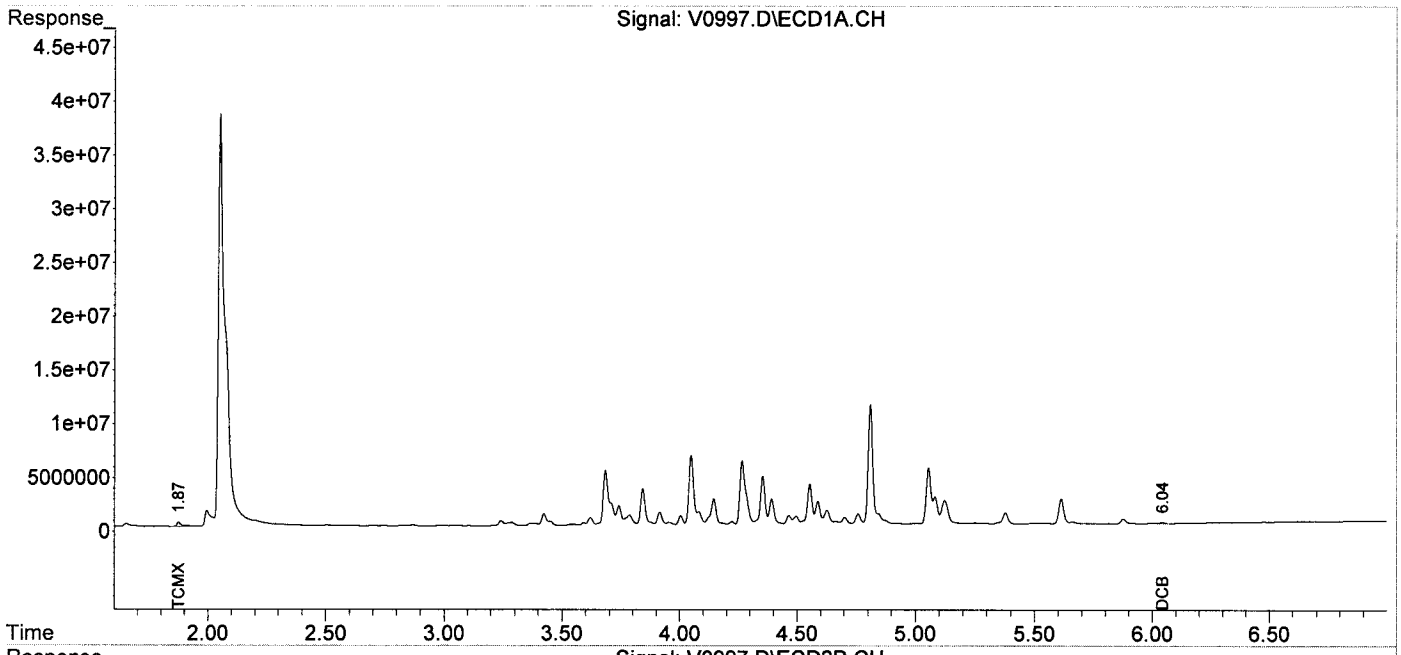
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

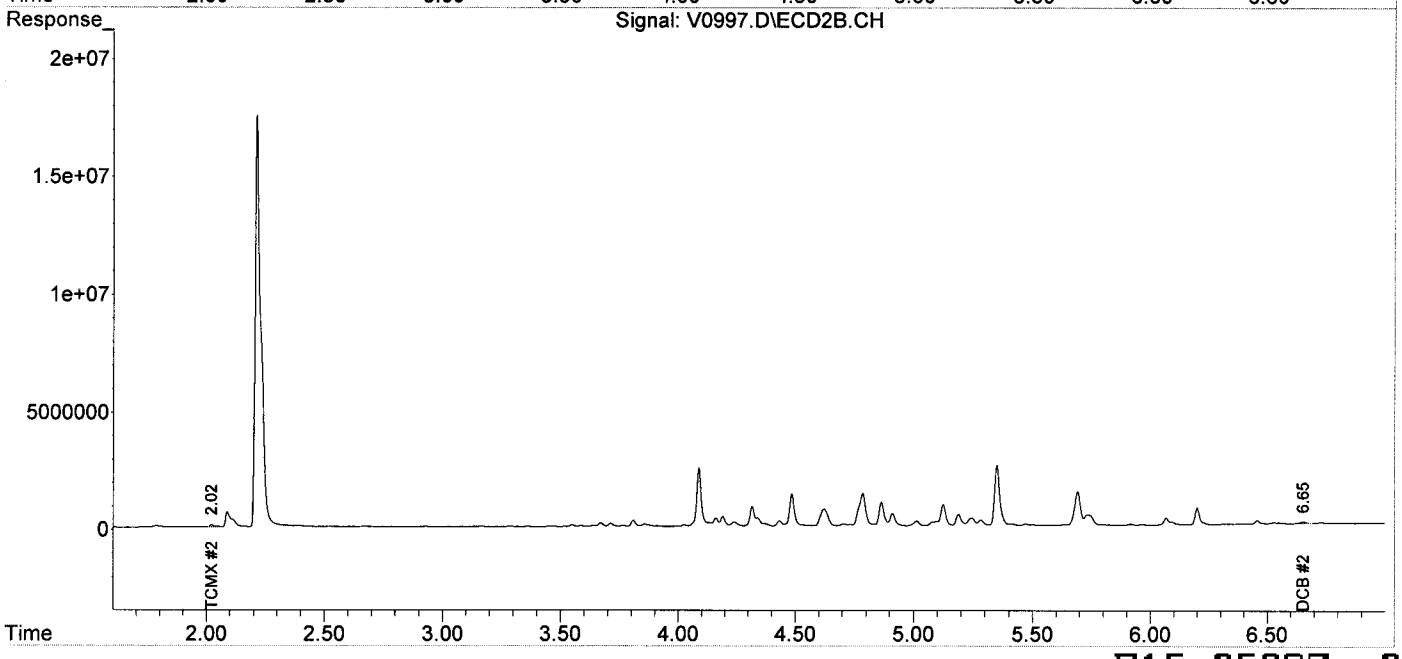
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0997.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:23
Operator : IB
Sample : E-5_(0.5,E15-05367-035,S,30.44g,19.6,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:43:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0998.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:34
Operator : IB
Sample : E-5_(3.0,E15-05367-036,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:46:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	6705039	2370408	8.804	11.555 #
Spiked Amount 200.000			Recovery =		4.40%	5.78%
2) S DCB	6.04	6.65	2404609	1171429	8.727	14.601m#
Spiked Amount 200.000			Recovery =		4.36%	7.30%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

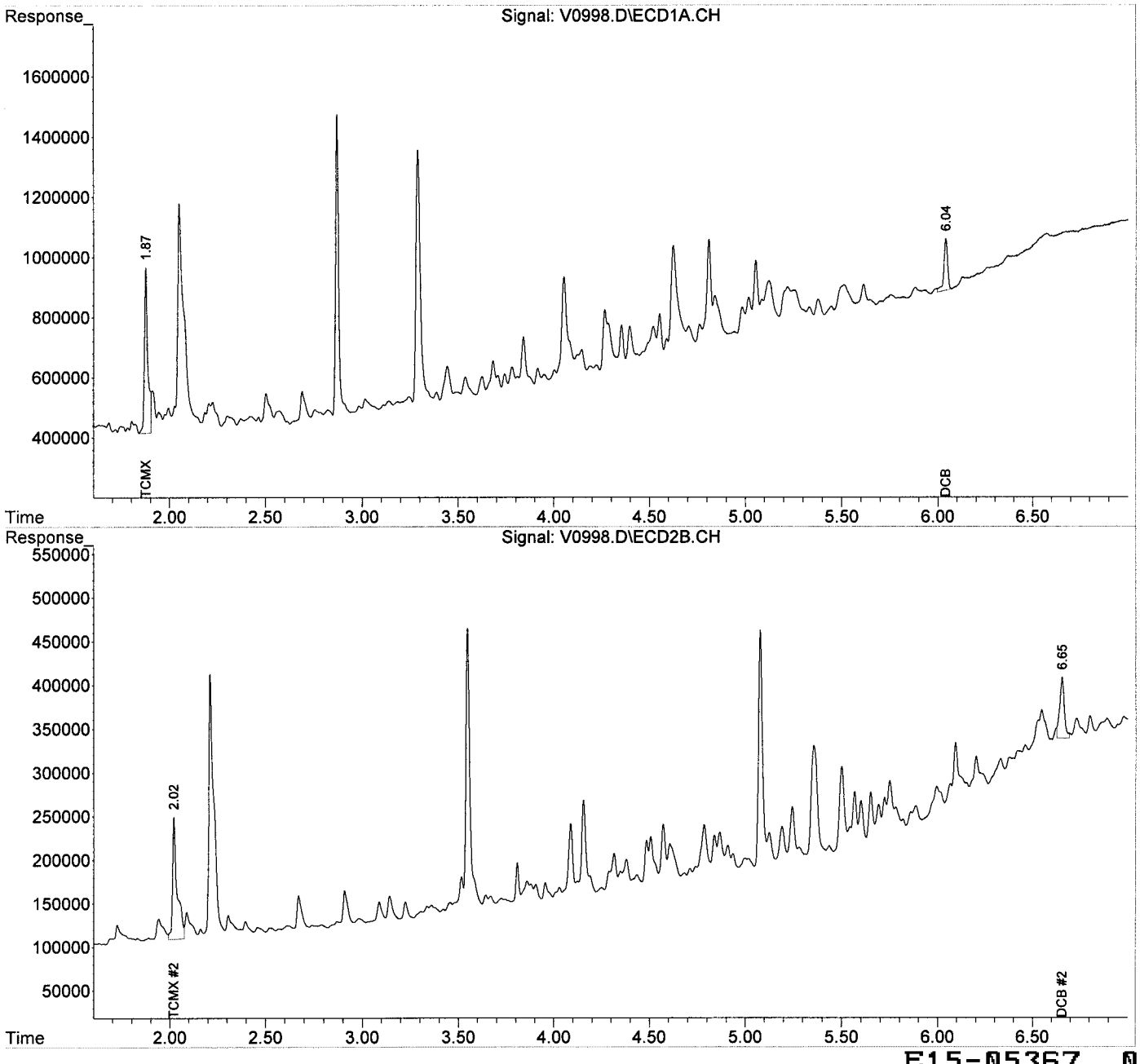
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0998.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:34
Operator : IB
Sample : E-5_(3.0,E15-05367-036,S,30.27g,18.4,5
Misc : 150630-12,06/30/15,06/23/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:46:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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



E15-05367_0656

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0999.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:45
Operator : IB
Sample : E-5_(2.0,E15-05367-037,S,30.09g,16.2,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:55:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.87	2.02	6218824	1463065	8.166m	7.132m
Spiked Amount 200.000			Recovery	=	4.08%	3.57%
2) S DCB	6.04	6.65	1501674	818427	5.450	10.201m#
Spiked Amount 200.000			Recovery	=	2.73%	5.10%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

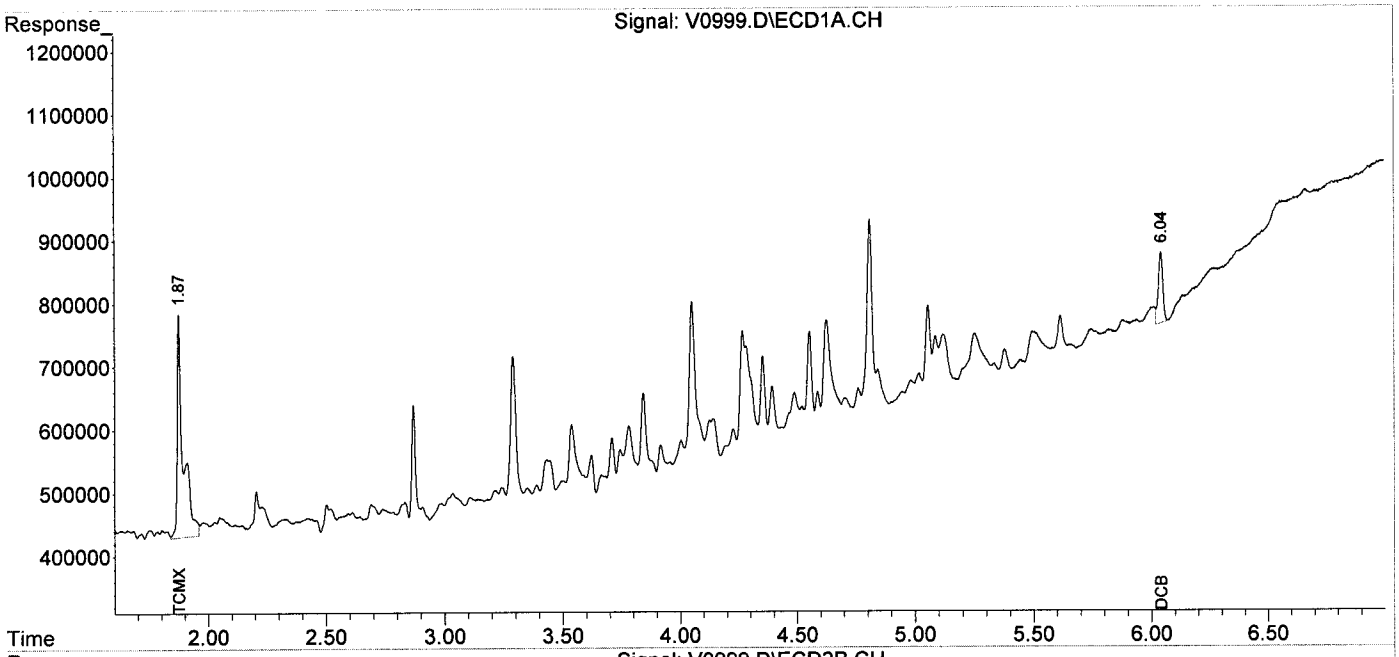
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

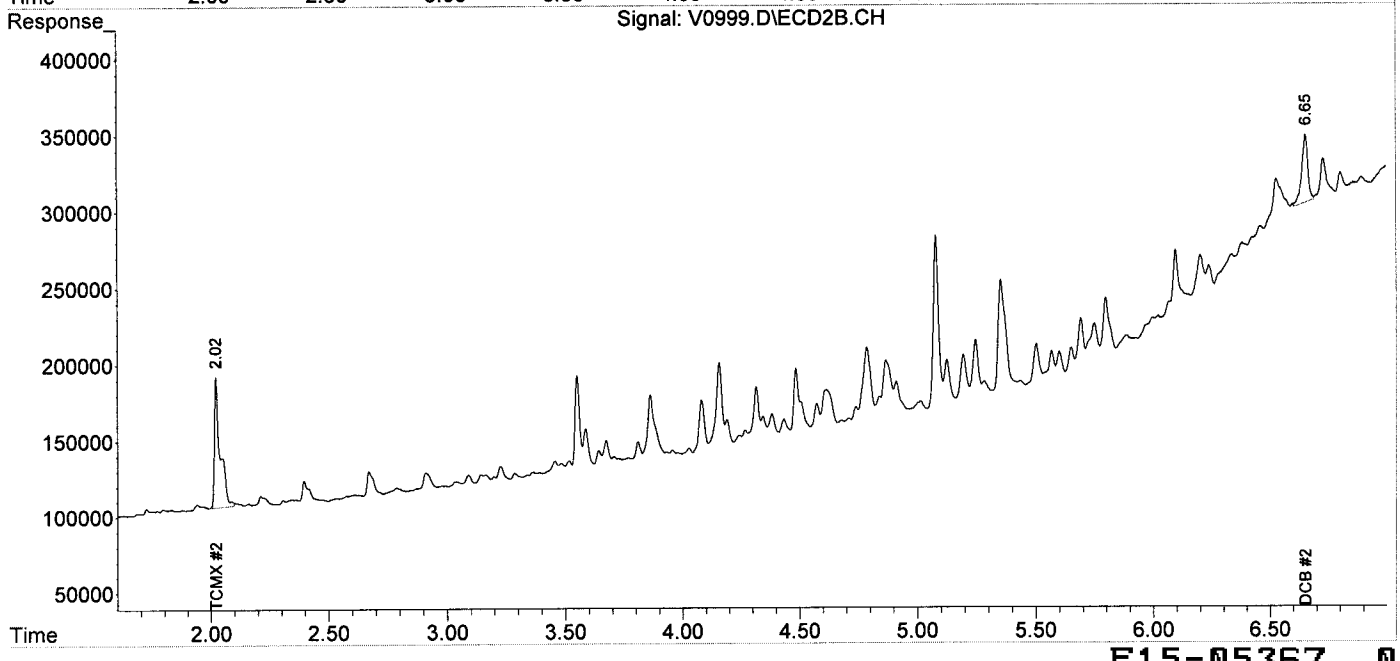
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0999.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:45
Operator : IB
Sample : E-5_(2.0,E15-05367-037,S,30.09g,16.2,5
Misc : 150630-12,06/30/15,06/23/15,20
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:55:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V1000.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:57
Operator : IB
Sample : E-5_(4.5,E15-05367-038,S,30.35g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 16:06:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	91688927	28616834	120.391	139.497
Spiked Amount 200.000			Recovery	=	60.20%	69.75%
2) S DCB	6.04	6.66	35207923	13393689	127.780m	166.939m#
Spiked Amount 200.000			Recovery	=	63.89%	83.47%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

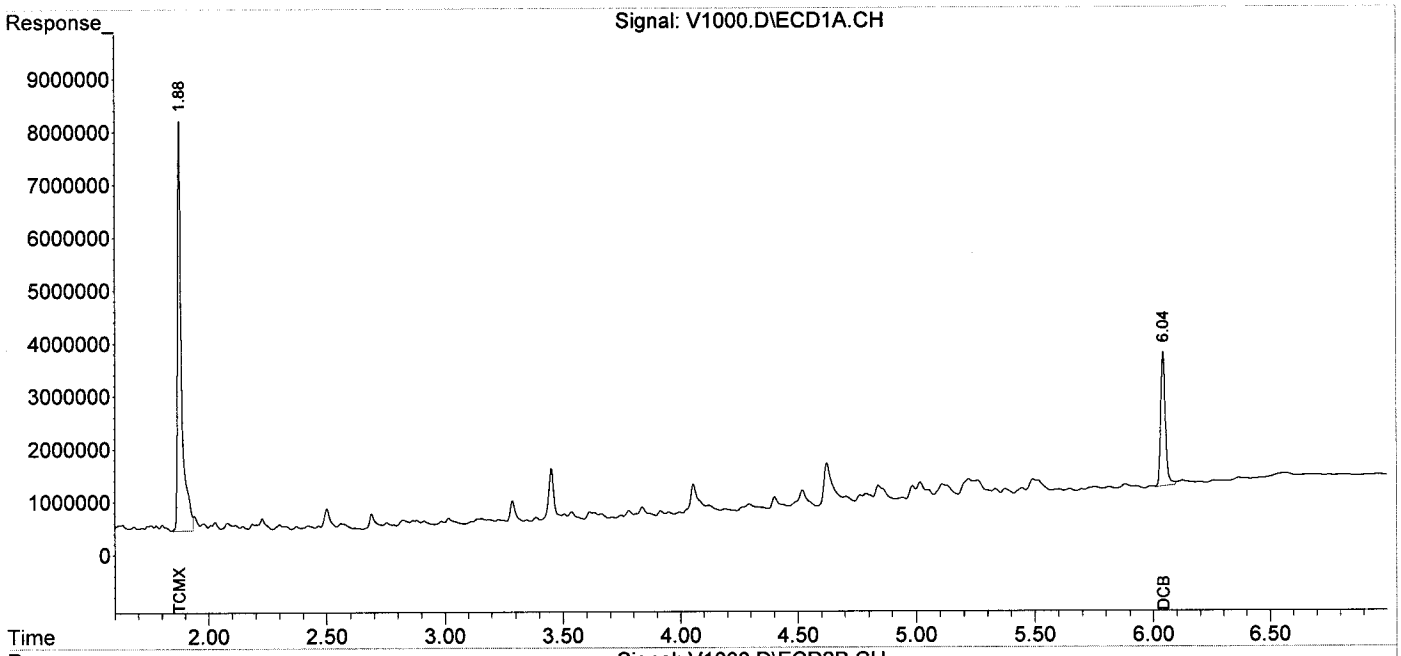
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

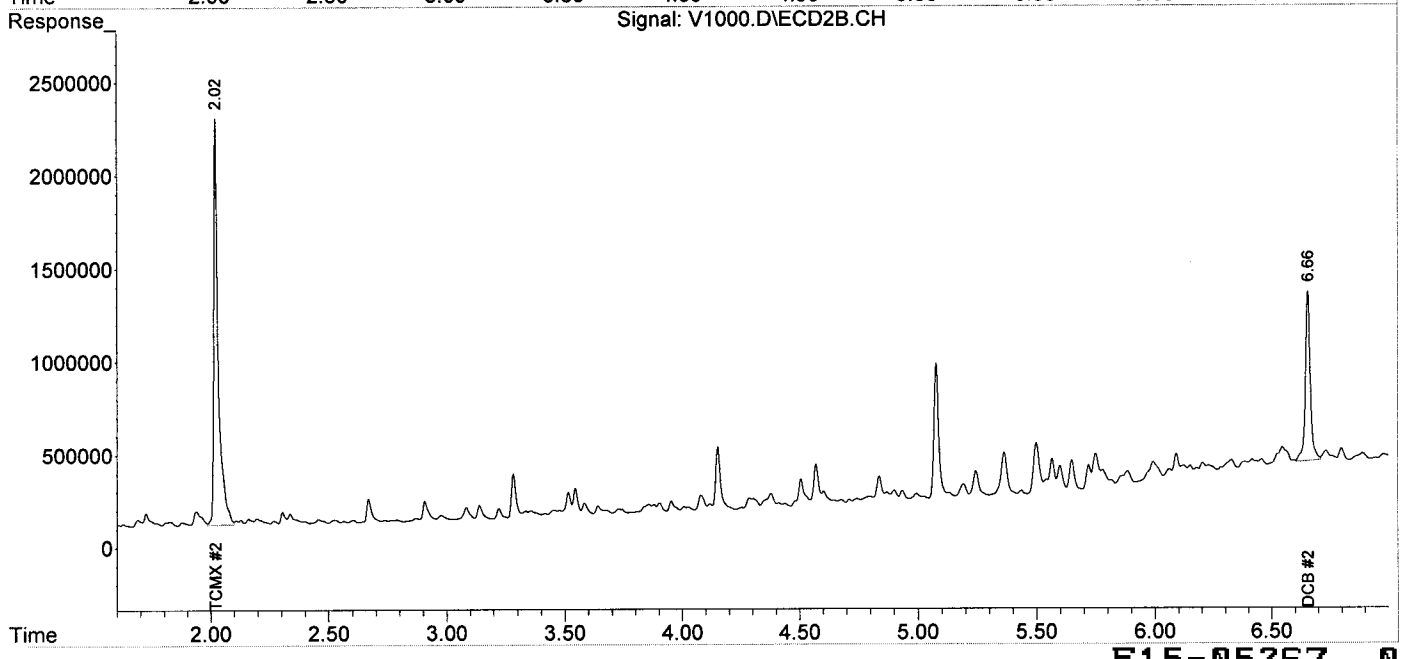
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V1000.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 15:57
Operator : IB
Sample : E-5_(4.5,E15-05367-038,S,30.35g,18.8,5
Misc : 150630-12,06/30/15,06/23/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 16:06:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9965.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:34
Operator : IB
Sample : E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:39:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	9542250	19722479	96.752	139.386 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		48.38%	69.69%
2) S DCB	6.57	8.12	6478225	12045758	138.909m	199.228 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		69.45%	99.61%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

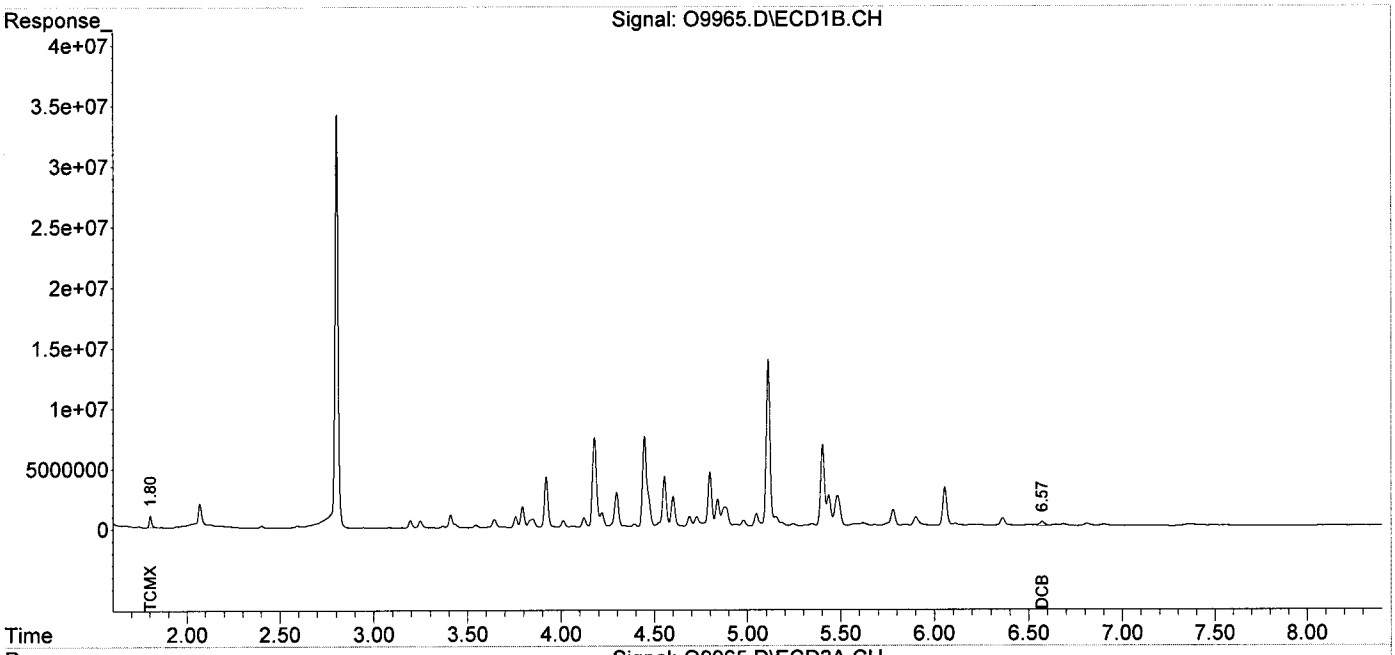
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

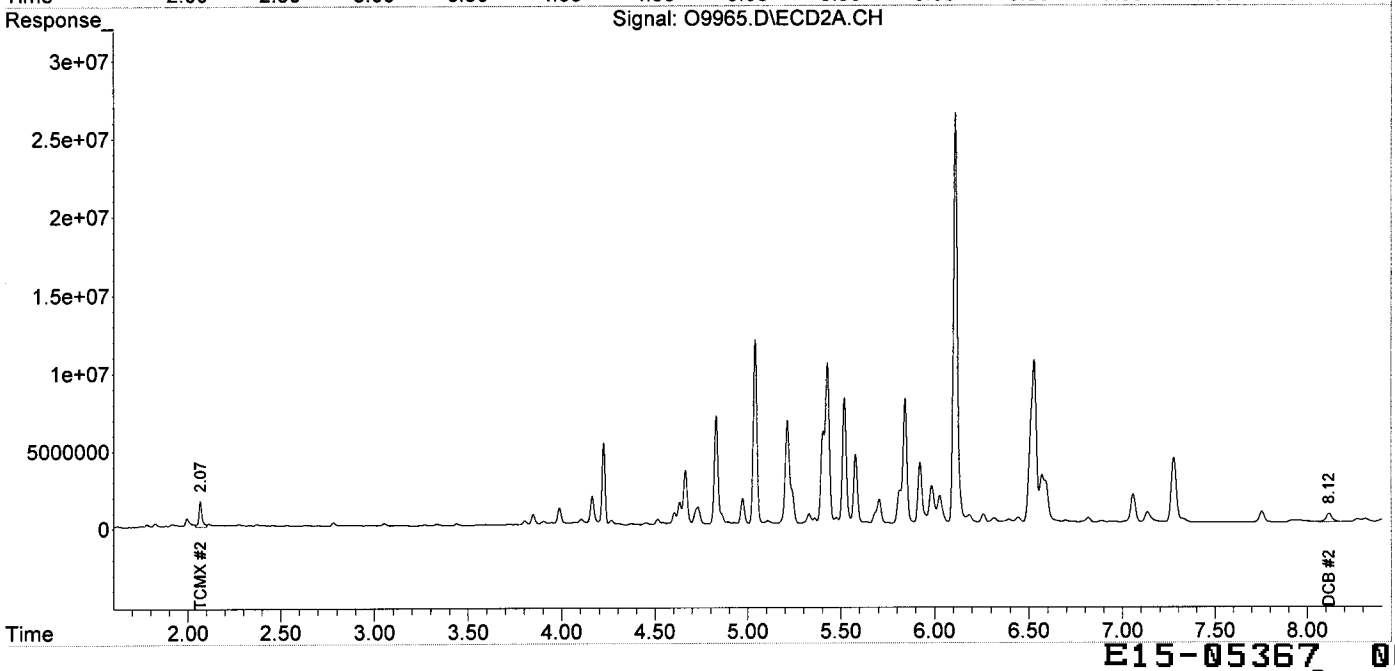
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9965.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:34
Operator : IB
Sample : E-6_(0.5,E15-05367-039,S,30.20g,20.5,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:39:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9874.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:02
Operator : IB
Sample : FB-06221,E15-05367-040,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:45:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	17381813	26058032	176.240	184.162
Spiked Amount 200.000	Range 10 - 180		Recovery =		88.12%	92.08%
2) S DCB	6.58	8.12	5351103	6298764	114.741	104.177
Spiked Amount 200.000	Range 10 - 180		Recovery =		57.37%	52.09%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

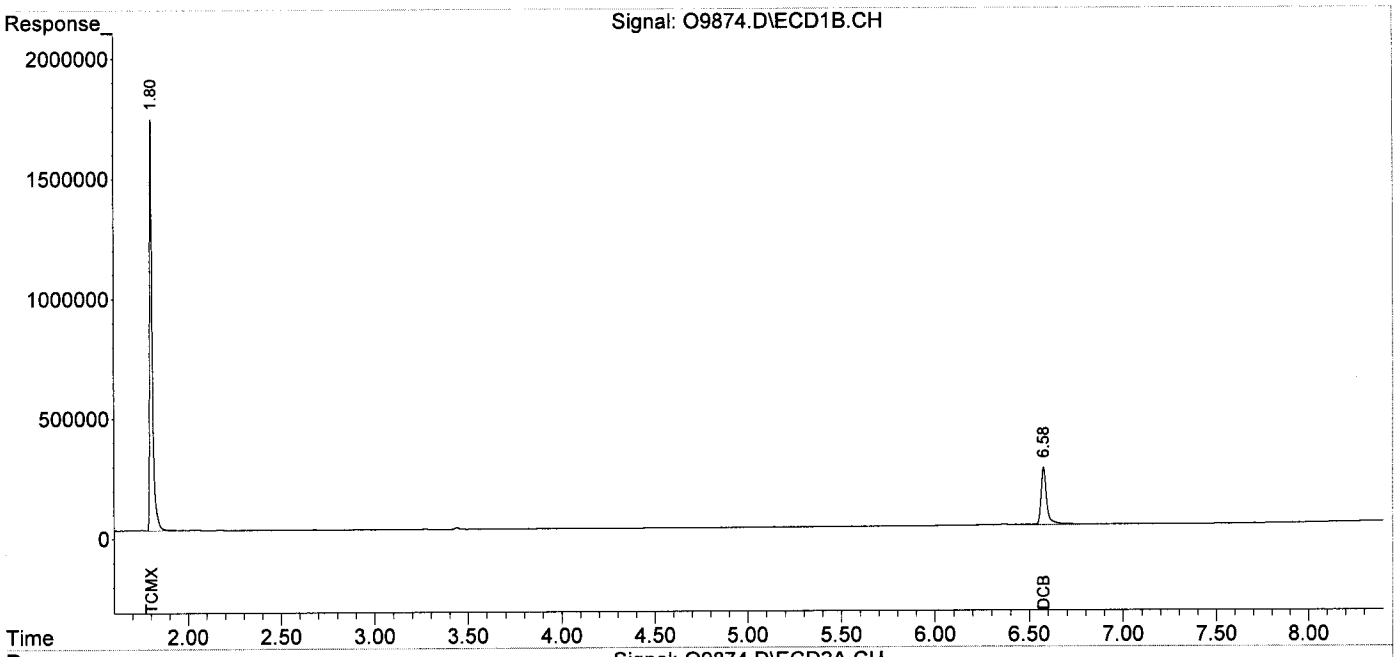
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

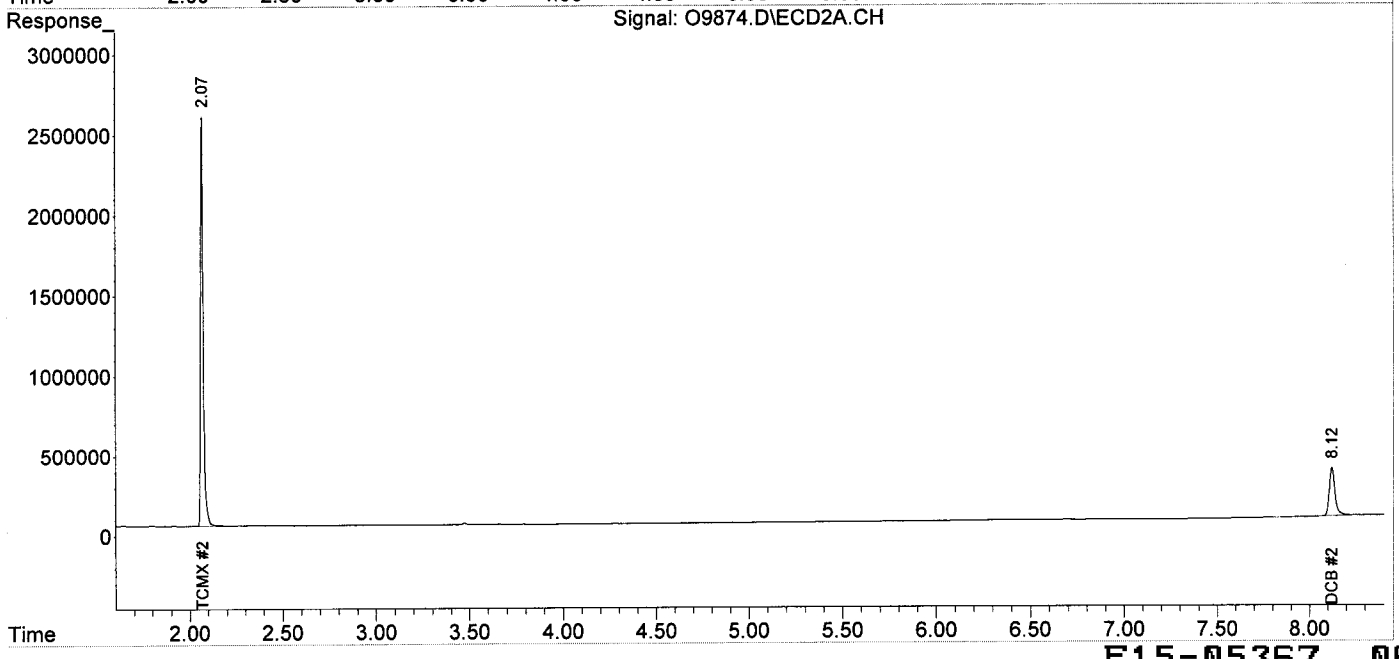
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9874.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:02
Operator : IB
Sample : FB-06221,E15-05367-040,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/23/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:45:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9966.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:46
Operator : IB
Sample : E-6_(2.0,E15-05367-041,S,30.47g,6.90,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:39:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12752549	19149394	129.303	135.336
Spiked Amount 200.000	Range 10 - 180		Recovery =		64.65%	67.67%
2) S DCB	6.57	8.12	7246319	9018055	155.379m	149.152
Spiked Amount 200.000	Range 10 - 180		Recovery =		77.69%	74.58%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

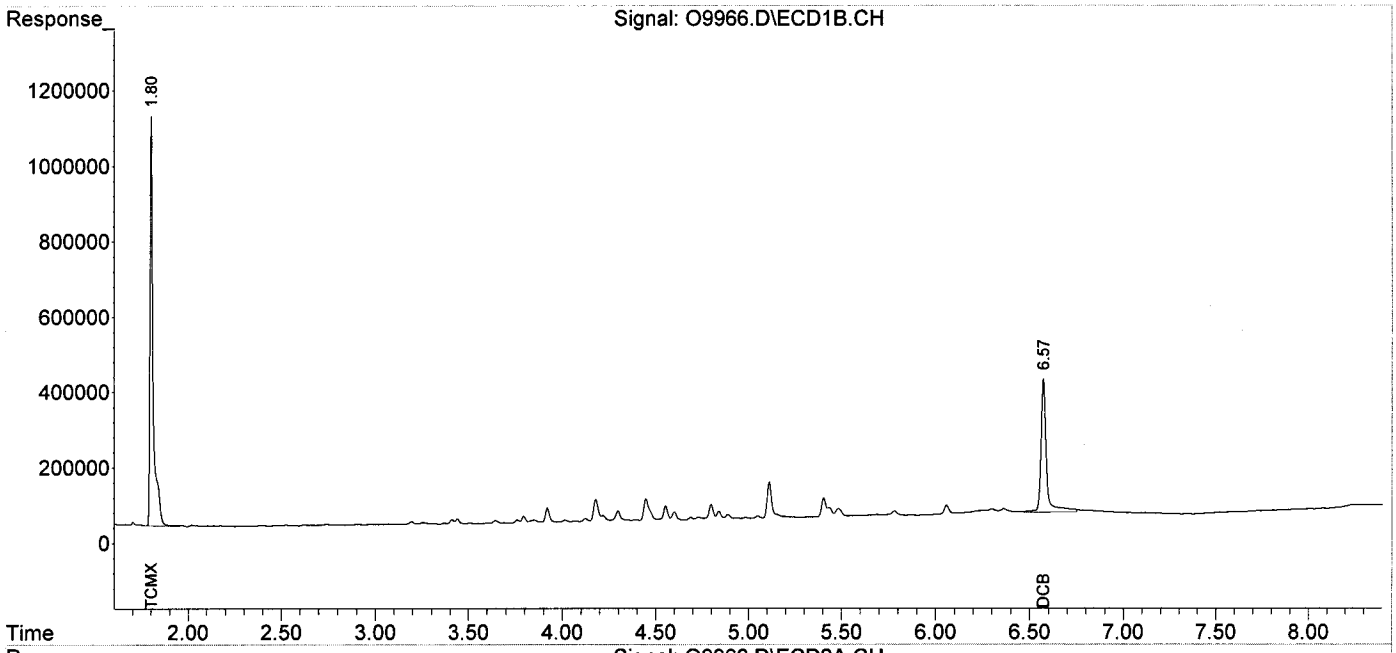
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

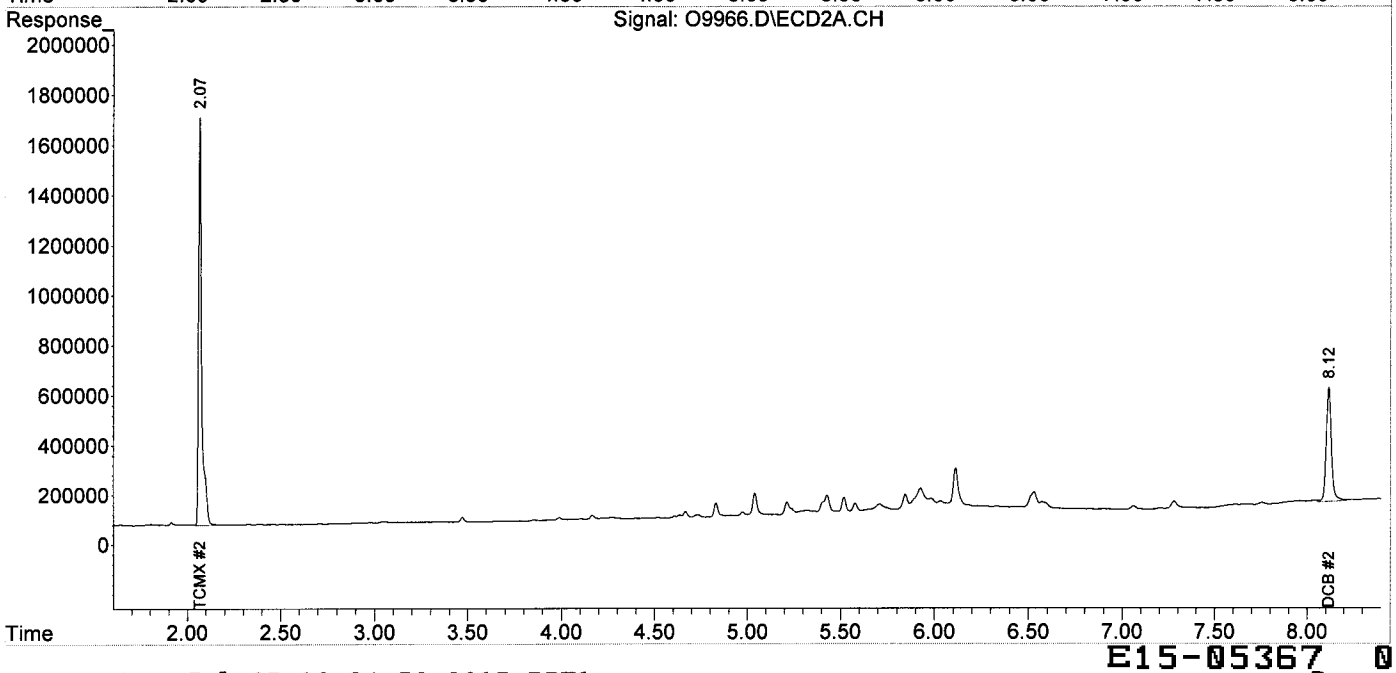
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9966.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:46
Operator : IB
Sample : E-6_(2.0,E15-05367-041,S,30.47g,6.90,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:39:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9967.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:59
Operator : IB
Sample : E-6_(3.0,E15-05367-042,S,30.56g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:40:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	11917972	17904935	120.841	126.541
Spiked Amount 200.000	Range 10 - 180		Recovery =		60.42%	63.27%
2) S DCB	6.57	8.12	6721990	8365133	144.136	138.353
Spiked Amount 200.000	Range 10 - 180		Recovery =		72.07%	69.18%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

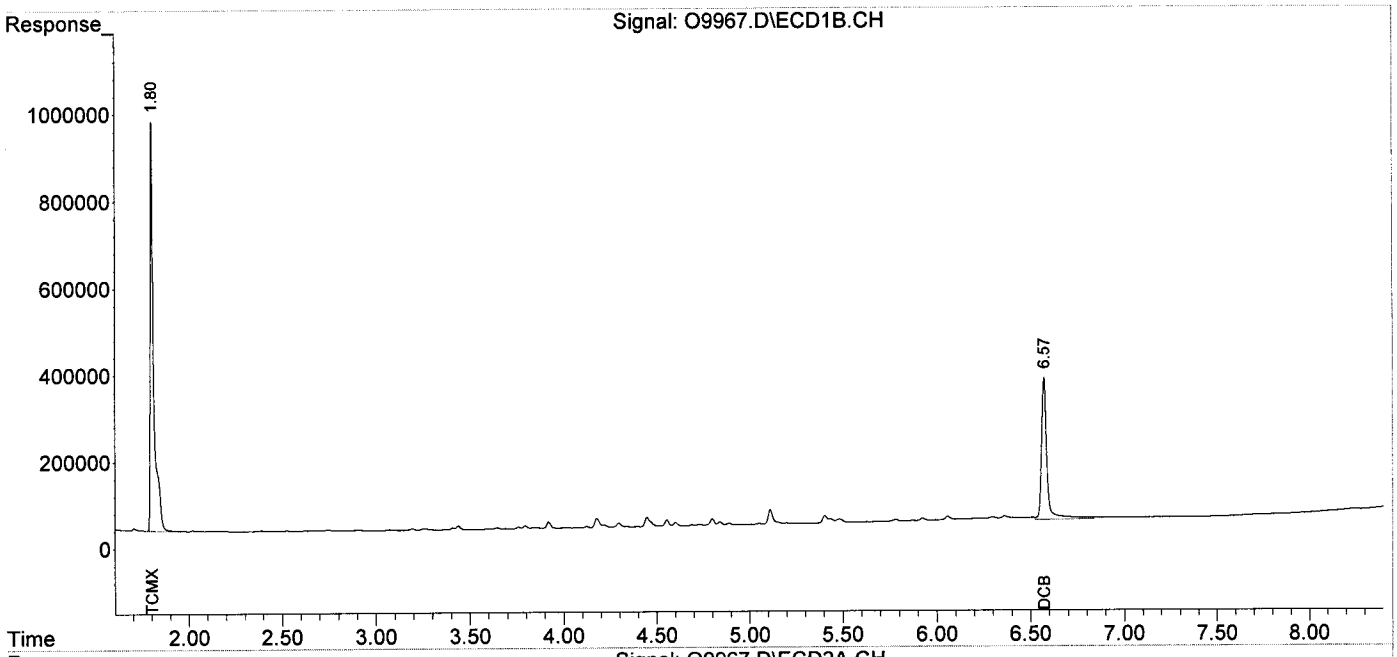
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

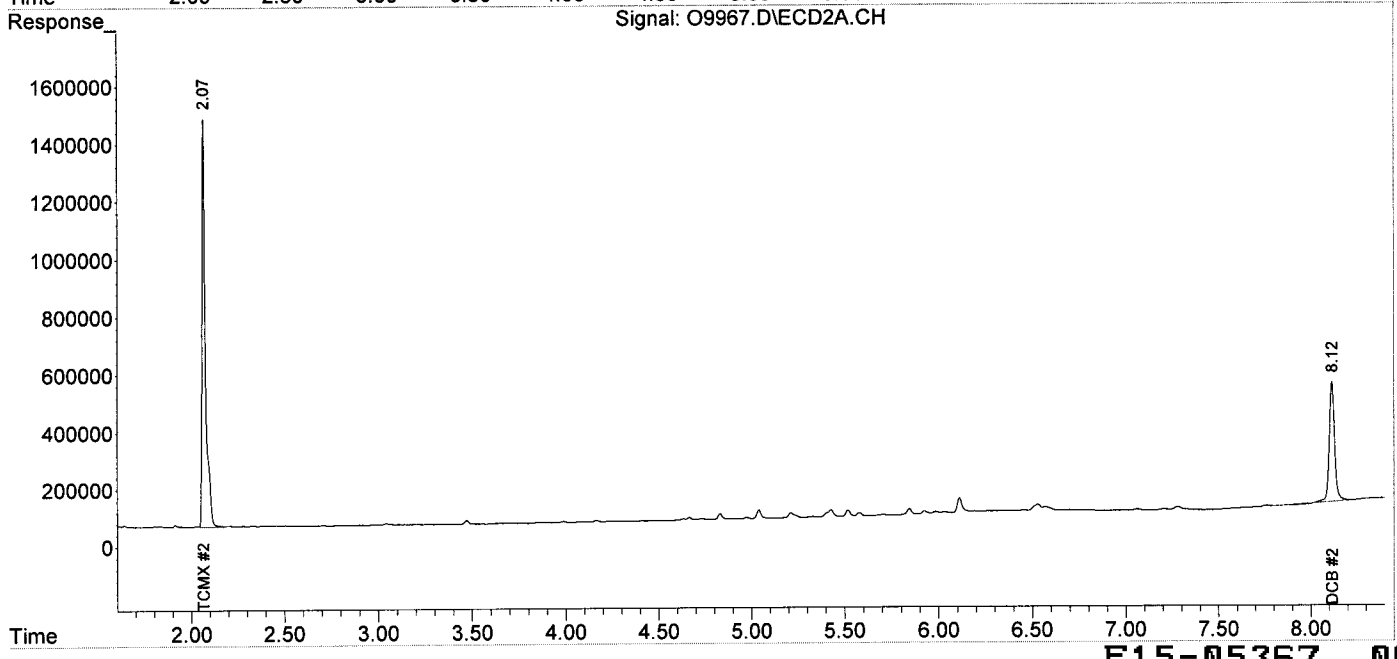
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9967.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:59
Operator : IB
Sample : E-6_(3.0,E15-05367-042,S,30.56g,6.50,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:40:34 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9968.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:12
Operator : IB
Sample : E-6_(4.0,E15-05367-043,S,30.57g,10.0,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:41:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	11923250	17892139	120.894	126.451
Spiked Amount 200.000	Range 10 - 180		Recovery =		60.45%	63.23%
2) S DCB	6.57	8.12	5812473	7225533	124.634	119.505
Spiked Amount 200.000	Range 10 - 180		Recovery =		62.32%	59.75%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

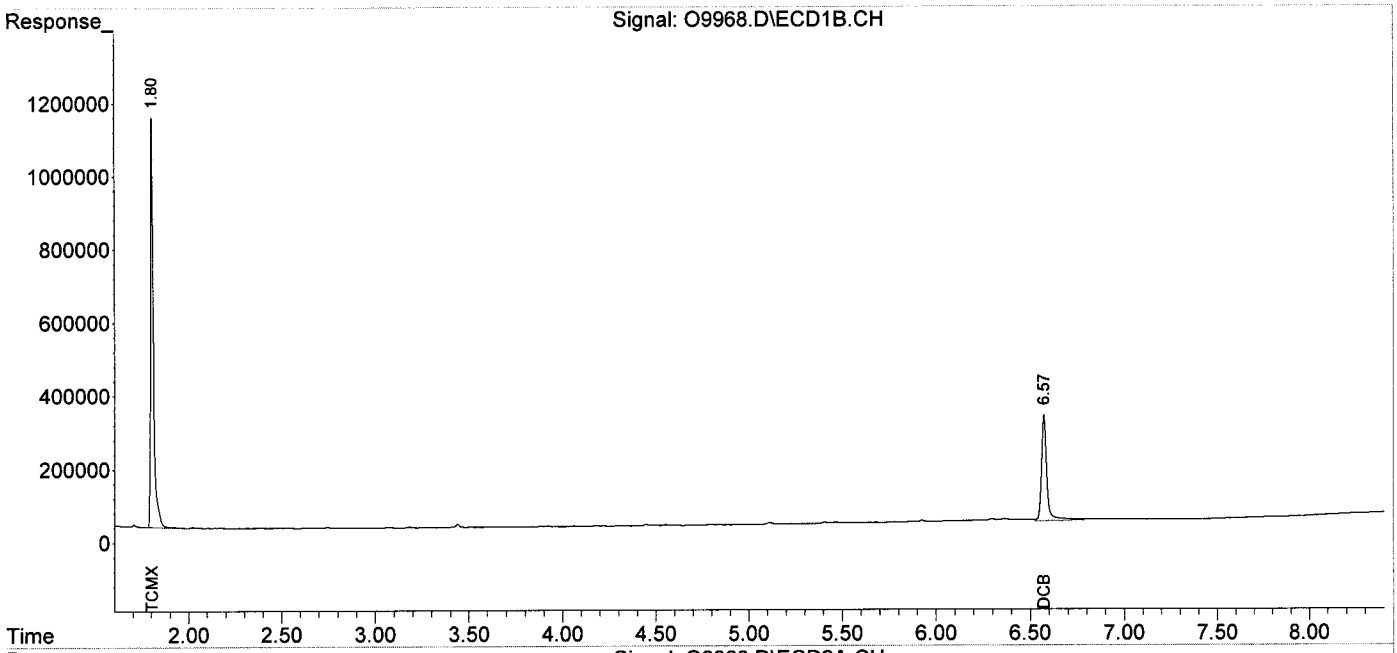
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

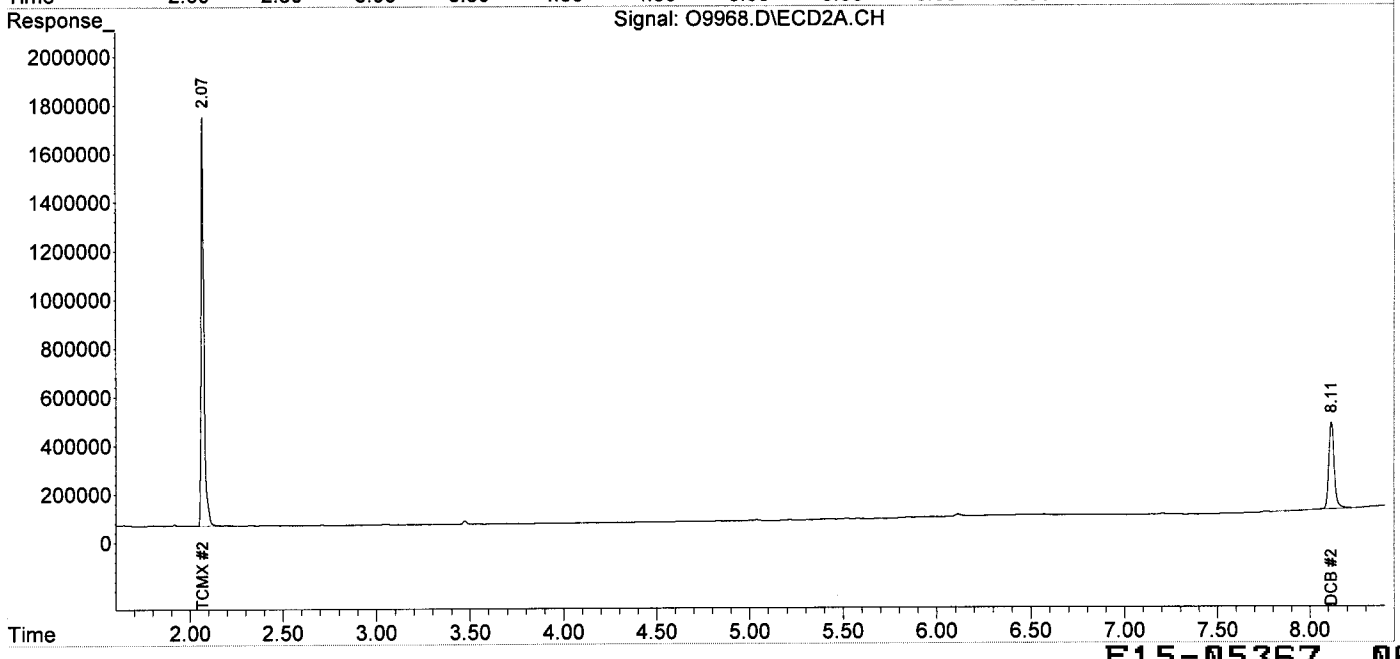
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9968.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:12
Operator : IB
Sample : E-6_(4.0,E15-05367-043,S,30.57g,10.0,5
Misc : 150701-07,07/01/15,06/23/15,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 13:41:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKA150629-16
Client ID: Pest
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: O9870.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0671

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 16:11
Operator : IB
Sample : Pest,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:19:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	15012918	22619082	152.221	159.858
Spiked Amount 200.000	Range 10 - 180		Recovery =		76.11%	79.93%
2) S DCB	6.58	8.13	4069406	4632021	87.258	76.610
Spiked Amount 200.000	Range 10 - 180		Recovery =		43.63%	38.31%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

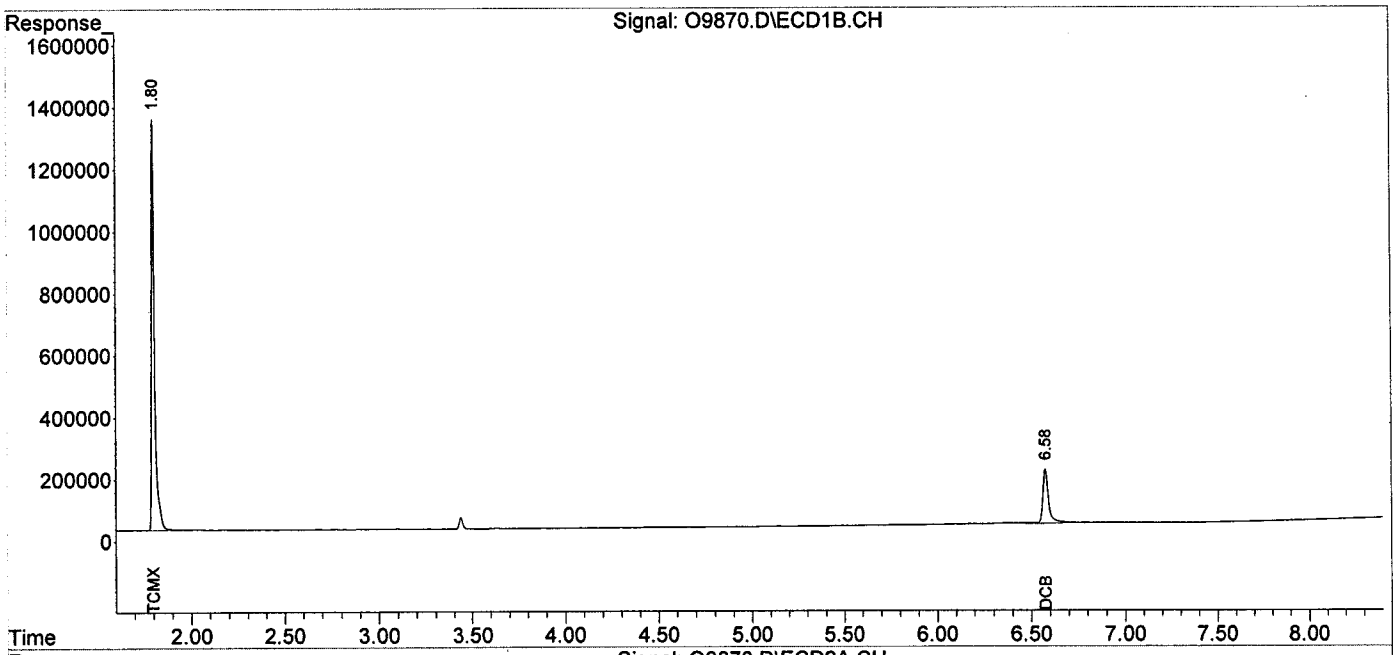
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

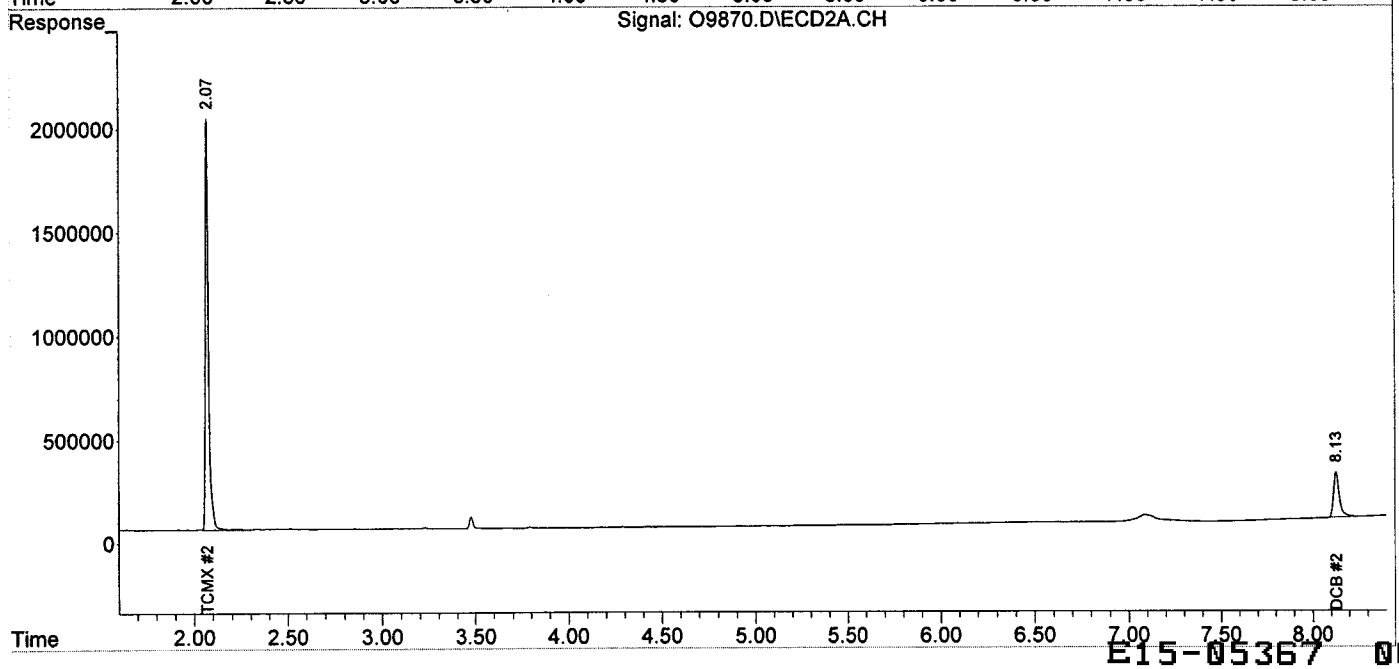
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 16:11
Operator : IB
Sample : Pest,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:19:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150701-07
Client ID: Pest
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9953.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : 09953.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:02
Operator : IB
Sample : Pest,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 10:53:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	14640098	22182062	148.441	156.769
Spiked Amount 200.000	Range 10 - 180		Recovery =		74.22%	78.38%
2) S DCB	6.57	8.13	7436809	9700727	159.463	160.443
Spiked Amount 200.000	Range 10 - 180		Recovery =		79.73%	80.22%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

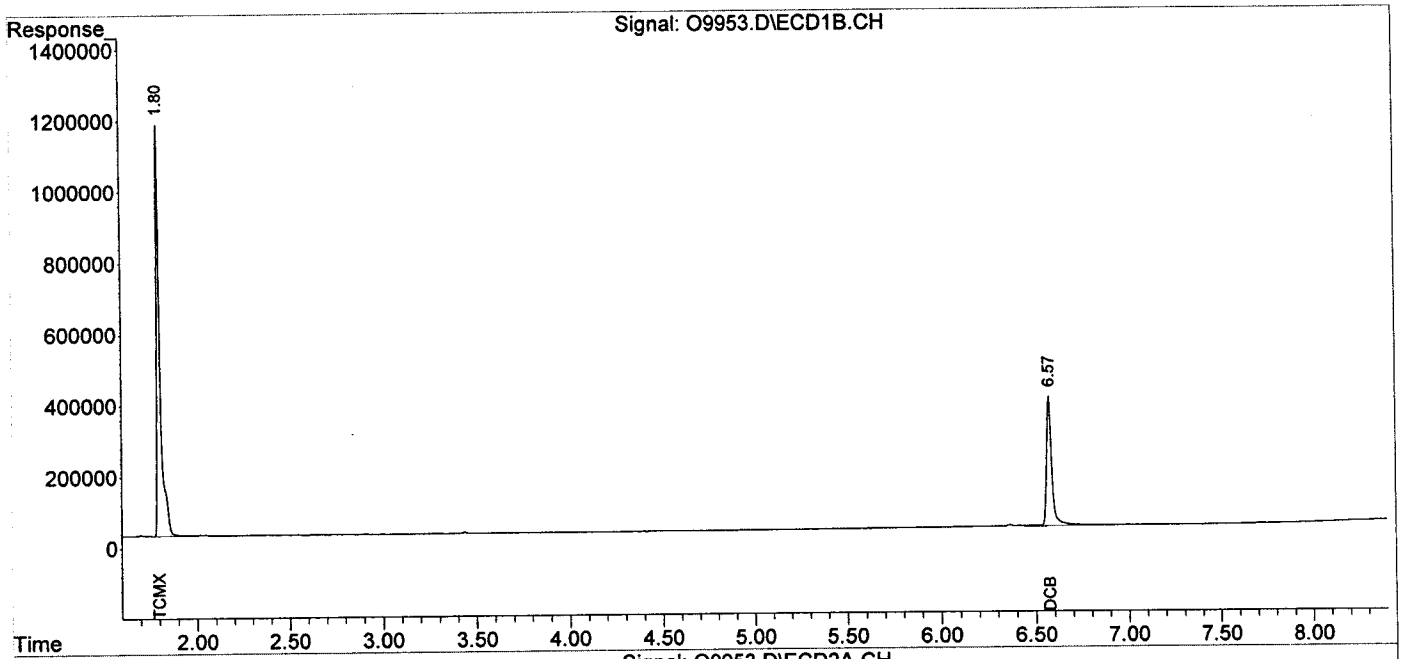
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

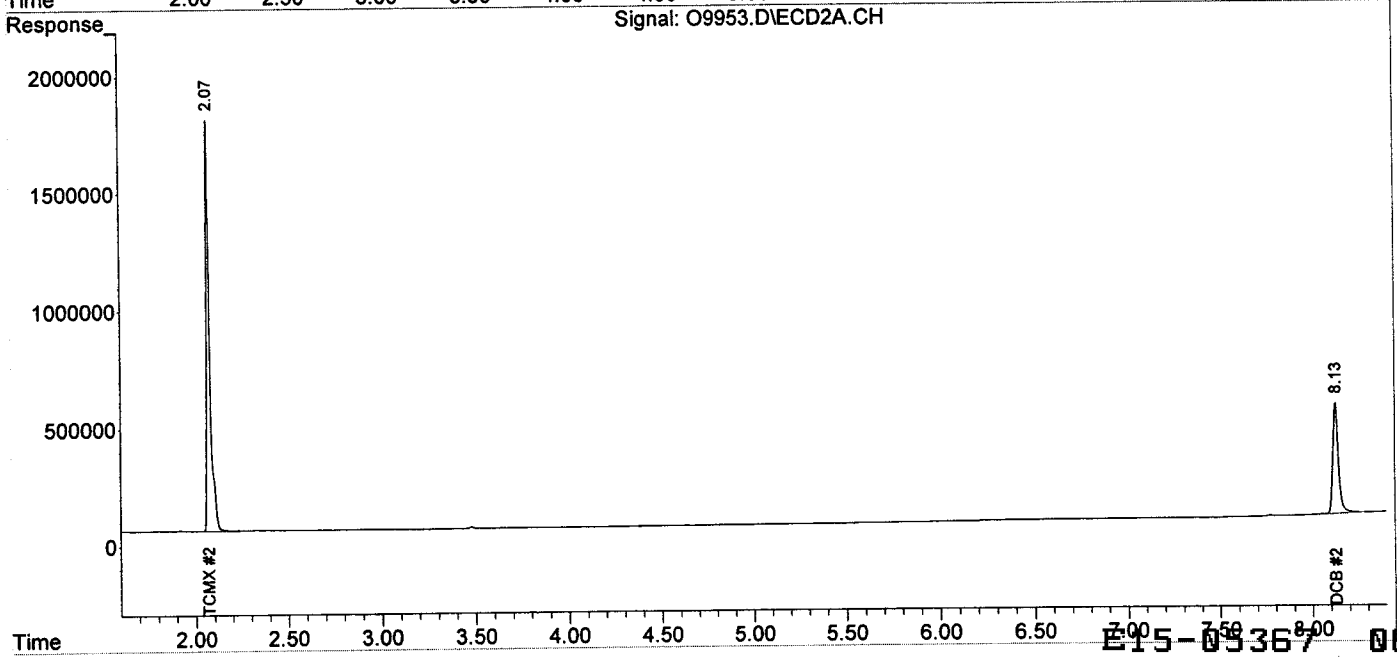
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9953.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:02
Operator : IB
Sample : Pest,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 10:53:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150630-12
Client ID: Pest
Date Received: NA
Date Extracted: 06/30/2015
Date Analyzed: 07/06/2015
Data file: V0978.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05367 0677

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0978.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 11:21
Operator : IB
Sample : Pest,BLKS150630-12,S,30g,0,5
Misc : NA,06/30/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 11:34:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0630.M
Quant Title :
QLast Update : Mon Jul 06 10:58:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.88	2.02	121.2E6	32036000	159.180	156.164
Spiked Amount 200.000			Recovery	=	79.59%	78.08%
2) S DCB	6.04	6.66	48693444	14012032	176.723	174.646
Spiked Amount 200.000			Recovery	=	88.36%	87.32%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

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

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0978.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 11:21
Operator : IB
Sample : Pest,BLKS150630-12,S,30g,0,5
Misc : NA,06/30/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

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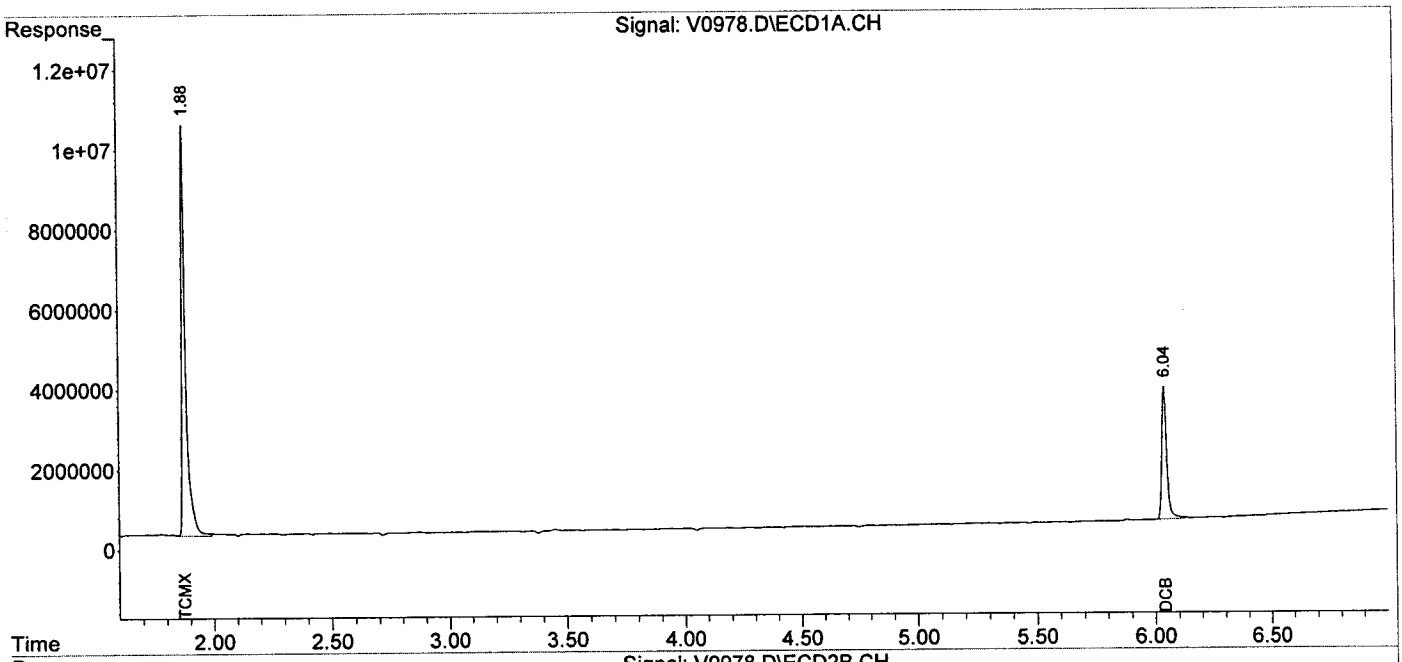
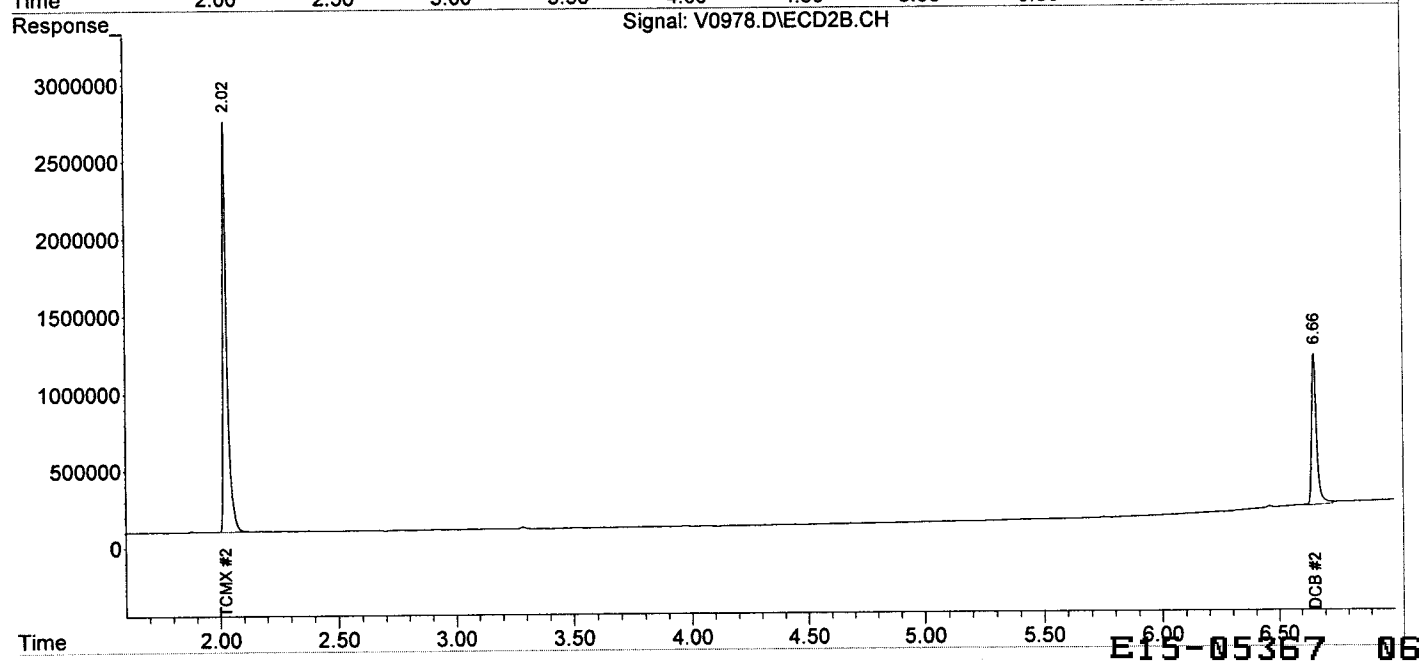
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0978.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06 Jul 2015 11:21
Operator : IB
Sample : Pest,BLKS150630-12,S,30g,0,5
Misc : NA,06/30/15,NA,1
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Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
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1) S TCMX	1.88	2.02	121.2E6	32036000	159.180	156.164
Spiked Amount 200.000			Recovery	=	79.59%	78.08%
2) S DCB	6.04	6.66	48693444	14012032	176.723	174.646
Spiked Amount 200.000			Recovery	=	88.36%	87.32%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

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Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : V0978.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
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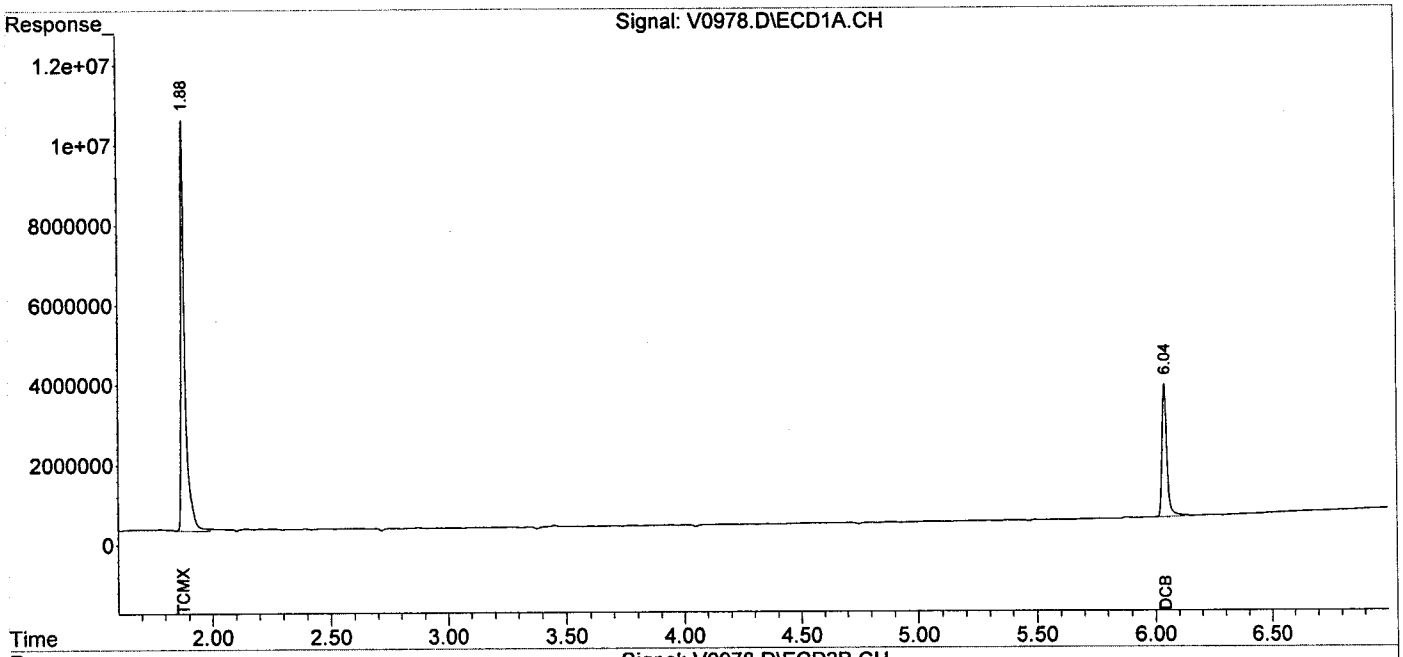

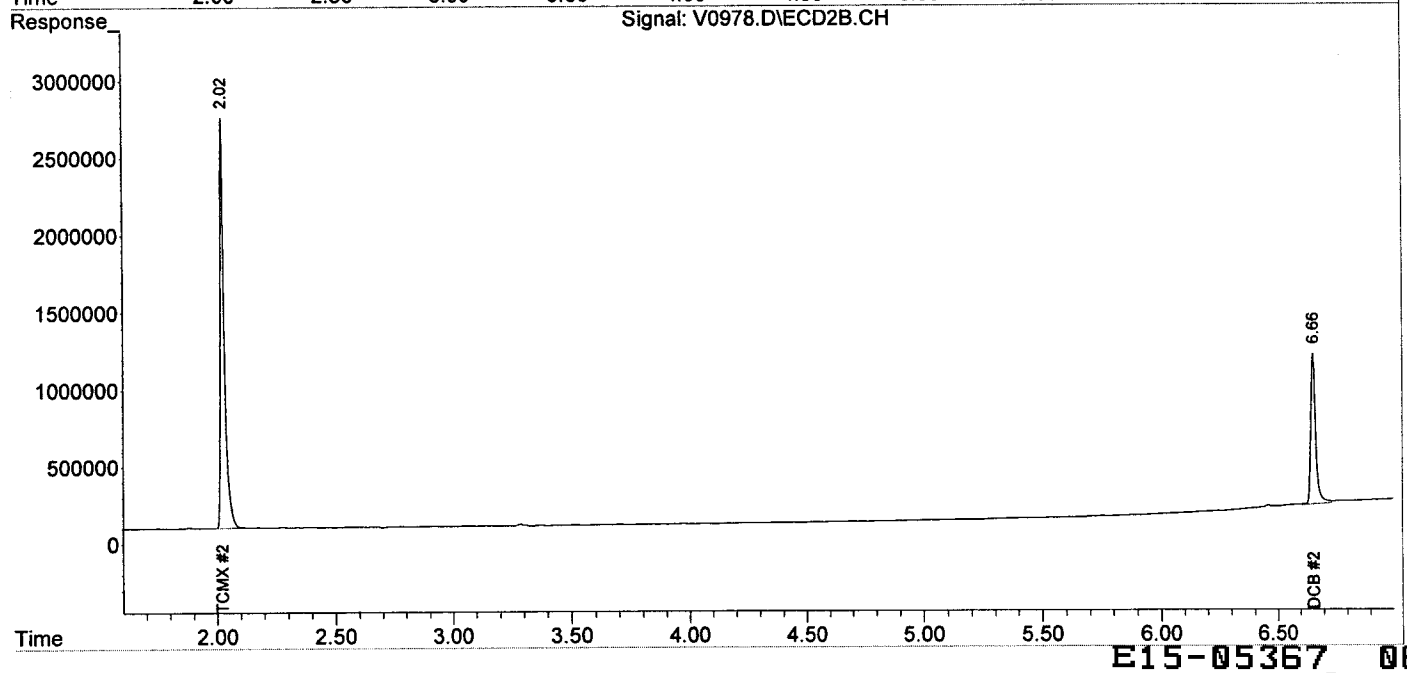

SAMPLE TRACKING

Chain of Custody Record

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMEC
Project Name: AMTRAK EAST BARRACKS
Project Location (State): TRENTON, NJ
Bottle Order #:
☑ "Report to"/"Invoice To" same as above
Sampled by: NDF / AA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*
NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL
☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
~~Rush/date needed~~ (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	8082A PCB	VOC +15 8260C	8081B PEST	Sample Specific Notes:
E-3-3.0-3.5	3.0-3.5	6/23/15	1125	S	5	1	X	X	X	
E-3-0.5-1.0	0.5-1.0	6/23/15	1108	S	5	2	X	X	X	
E-3-2.0-2.5	2.0-2.5	6/23/15	1115	S	5	3	X	X	X	
E-3-4.5-5.0	4.5-5.0	6/23/15	1135	S	5	4	X	X	X	
E-18-0.5-1.0	0.5-1.0	6/23/15	1219	S	1	5	X			
E-18-2.0-2.5	2.0-2.5	6/23/15	1225	S	1	6	X			
E-4-0.5-1.0	0.5-1.0	6/23/15	0930	S	5	7	X	X	X	
E-4-2.0-2.5	2.0-2.5	6/23/15	0945	S	5	8	X	X	X	

5367-01

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:
OBJECTIVE DKQ

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

FOR LAB USE ONLY
SDG #: 5396
Cooler Temp: 4 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Marlene Lindhardt	6-23-15	1437	Gary Mantelli	6/23/15	1437
Gary Mantelli	6/23/15	1832		6/24/15	0930

PAGE: of 6

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LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information
Company: AMEC FOSTER WHEELER	REPORT TO:
Address: 285 DAVIDSON AVE Suite 405 SOMERSET NJ 08873	Address:
Telephone #: 732-302-9500	Attn:
Fax #:	FAX #
Project Manager: MARLENE LINDHARDT	INVOICE TO:
EMAIL Address: MARLENE.LINDHARDT@AMEC.COM	Address:
Project Name: AMTRAK East Barracks	
Project Location (State): TRENTON, NJ	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by: NDF / AA	

Rush TAT Charge: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day - 10%

Deliverables: NJ, CT, PA — ☐ Results Only ☐ Reduced ☐ Regulatory/Full*; NY — ☐ ASP Category A ☐ ASP Category B*

EDDs: ☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low Med High

These samples have been previously analyzed by IAL: ☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)**

Hard Copy: Std 3 week — Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1 ☐ NJ EPH-C40 - Category 2 ☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Sample Matrix

DW - Drinking Water, WW - Waste Water, GW - Groundwater, SW - Surface Water, LIQ - Liquid (Specify), OI - Oil, S - Soil, SOL - Solid, SL - Sludge, W - Wipe, B - Biphasic

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082	VOC +15 8260C	Pest 8081B						Sample Specific Notes:
E-4-3.0-3.5	3.0-3.5	6/23/15	0952	S	5	9	X	X	X						
E-4-4.5-5.0	4.5-5.0	6/23/15	1010	S	5	10	X	X	X						
E-11-0.5-1.0	0.5-1.0	6/23/15	1025	S	1	11	X								
E-11-2.0-2.5	2.0-2.5	6/23/15	1032	S	1	12	X								
E-12-0.5-1.0	0.5-1.0	6/23/15	1046	S	1	13	X								
E-12-2.0-2.5	2.0-2.5	6/23/15	1053	S	1	14	X								
E-14-0.5-1.0	0.5-1.0	6/23/15	1155	S	1	15	X								
E-14-2.0-2.5	2.0-2.5	6/23/15	1200	S	1	16	X								

5367-746

Known Hazard: YES / NO

Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code)

Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY

SDG #: 5746

Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***

***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Gary Mastelli	6-23-15	1437	Gary Mastelli	6/23/15	1437
	6/23/15	1632		6/23/15	16:32

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Randolph, NJ 07869

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Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMEC.COM
Project Name: AMTRAK EAST BARRACKS
Project Location (State): TRENTON, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / AA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	☐ ASP Category B*
☐ Regulatory/ Full*	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
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☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082 A	VOC 8260 C	Pest 8081 B	Sample Specific Notes:
E-16-0.5-1.0	0.5-1.0	6/22/15	1140	S	5	17	X	X	X	
E-16-2.0-2.5	2.0-2.5	6/22/15	1150	S	5	18	X	X	X	
PZ-2-0.5-1.0	0.5-1.0	6/22/15	1227	S	5	19	X	X	X	
PZ-2-2.0-2.5	2.0-2.5	6/22/15	1247	S	5	20	X	X	X	
PZ-2-4.0-4.5	4.0-4.5	6/22/15	1253	S	5	21	X	X	X	
PZ-2-6.0-6.5	6.0-6.5	6/22/15	1300	S	5	22	X	X	X	
X-1-4.5-5.0	4.5-5.0	6/23/15		S	5	23	X	X	X	
X-2-2.0-2.5	2.0-2.5	6/23/15		S	1	24	X			

$367-19

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 5366

Cooler Temp: 4 °C

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
[signature]	6-23-15	1437	[signature]	6/23/15	1437
[signature]	6/23/15	1832	[signature]	6/24/15	0813

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.lalonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMEC.COM
Project Name: AMTRAK EAST BARRACKS
Project Location (State): TRENTON NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / AH

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

(Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082 A	VOC+15 8260 C	Pest 8081 B						Sample Specific Notes:
E-8-0.5-1.0	0.5-1.0	6/23/15	0905	S	1	25	X								
E-8-2.0-2.5	2.0-2.5	6/23/15	0907	S	1	26	X								
E-17-0.5-1.0	0.5-1.0	6/23/15	1315	S	1	27	X								
E-17-2.0-2.5	2.0-2.5	6/23/15	1320	S	1	28	X								
E-9-0.5-1.0	0.5-1.0	6/23/15	0800	S	1	29	X								
E-9-2.0-2.5	2.0-2.5	6/23/15	0805	S	1	30	X								
PZ-1-0.5-1.0	0.5-1.0	6/22/15	0930	S	5	31	X	X	X						
PZ-1-2.0-2.5	2.0-2.5	6/22/15	1000	S	5	32	X	X	X						

ANALYTICAL PARAMETERS (please note if contingent)

9307

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 539

Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Mark Gary Mastellone	6-23-15 6/23/15	1437 1830	Gary Mastellone	6/23/15	1437

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Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: Amec Foster Wheeler
Address: 285 Davidson Ave
Suite 405 Somerset NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: Marlene Lindhardt
EMAIL Address: marlene.lindhardt@amecfw.com
Project Name: Amtrak East Barracks
Project Location (State): Trenton, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NOF / AA

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*
NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected: Low / Med / High

These samples have been previously analyzed by IAL: ☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015
TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey: ☐ GWQS ☑ IGW ☐ SRS ☐ Ecological ☐ DW ☐ SPLP
New York: ☐ AWQS (TOGS Table 1) ☐ GWEL (TOGS Table 5) ☐ Part 375-6.8(a) - Unrestricted ☐ Part 375-6.8(b) - Restricted ☐ CP-51 Table 2 or 3 (selection required)
OTHER Reg. Req. (specify)

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082A	VOC 8260C 1/15	PAH 8081B							Sample Specific Notes:
P2-1-2.5-3.0	2.5-3.0	6/22/15	1030	S	5	33	X	X	X							
P2-1-4.5-5.0	4.5-5.0	6/22/15	1025	S	5	34	X	X	X							
E-5-0.5-1.0	0.5-1.0	6/22/15	1430	S	5	35	X	X	X							
E-5-3.0-3.5	3.0-3.5	6/22/15	1355	S	5	36	X	X	X							
E-5-2.0-2.5	2.0-2.5	6/22/15	1336	S	5	37	X	X	X							
E-5-4.5-5.0	4.5-5.0	6/22/15	1415	S	5	38	X	X	X							
E-6-0.5-1.0	0.5-1.0	6/23/15	0825	S	5	39	X	X	X							
FB-062215		6/22/15	1505	Water	~~2~~ 4	40	X	X	X							

$367.00

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other
Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore
Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 57061
Cooler Temp: 4 °C

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Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
Gary Martella	6-23-15	1437	Gary Martella	6/23/15	1437
Gary Martella	6/23/15	1832			

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Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
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Web: www.ialonline.com

Customer Information

Company: AMEC Foster Wheeler
Address: 285 Davidson Ave Suite 405
Somerset NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: marlene lindhardt
EMAIL Address: marlene.lindhardt@amec.com
Project Name: Antoca E. Barracks
Project Location (State): Trenton, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / AA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

(Standard (10 business days) Verbal
Rush/date needed
(only if pre-approved)**

Hard Copy: Std 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	RCP 8082 PCB	VOC + 15 8260C	Pest 8081B	Sample Specific Notes:
E-6-2.0-2.5	2.0-2.5	6/23/15	0827	S	5	41	X	X	X	
E-6-3.0-3.5	3.0-3.5	6/23/15	0848	S	5	42	X	X	X	
~~E-6-3.0-~~						-				
E-6-4.0-4.5	4.0-4.5	6/23/15	0843	S	5	43	X	X	X	
TB-062315		6/23/15		Water	2	44		X		

$367.00

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 5746
Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

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☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
[signature]	6-23-15	1437	[signature]	6/23/15	1437
Gary Martelli	6/23/15	1832	[signature]	6/23/15	1832

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Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 6 of 6

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PROJECT INFORMATION

E15-05367: AMTRAK EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: dena.gitto@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Jun 23, 2015 @ 18:32	NA	Jul 09, 2015	Jul 16, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT

**** QC Requirement (must meet):** NJ IGW

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05367-001	E-3 (3.0-3.5)	3.0/3.5	06/23/15@11:25	Soil	mg/Kg (ppm)	
05367-002	E-3 (0.5-1.0)	0.5/1.0	06/23/15@11:08	Soil	mg/Kg (ppm)	
05367-003	E-3 (2.0-2.5)	2.0/2.5	06/23/15@11:15	Soil	mg/Kg (ppm)	
05367-004	E-3 (4.5-5.0)	4.5/5.0	06/23/15@11:35	Soil	mg/Kg (ppm)	
05367-005	E-18 (0.5-1.0)	0.5/1.0	06/23/15@12:19	Soil	mg/Kg (ppm)	
05367-006	E-18 (2.0-2.5)	2.0/2.5	06/23/15@12:25	Soil	mg/Kg (ppm)	
05367-007	E-4 (0.5-1.0)	0.5/1.0	06/23/15@09:30	Soil	mg/Kg (ppm)	
05367-008	E-4 (2.0-2.5)	2.0/2.5	06/23/15@09:45	Soil	mg/Kg (ppm)	
05367-009	E-4 (3.0-3.5)	3.0/3.5	06/23/15@09:52	Soil	mg/Kg (ppm)	
05367-010	E-4 (4.5-5.0)	4.5/5.0	06/23/15@10:10	Soil	mg/Kg (ppm)	
05367-011	E-11 (0.5-1.0)	0.5/1.0	06/23/15@10:25	Soil	mg/Kg (ppm)	
05367-012	E-11 (2.0-2.5)	2.0/2.5	06/23/15@10:32	Soil	mg/Kg (ppm)	
05367-013	E-12 (0.5-1.0)	0.5/1.0	06/23/15@10:46	Soil	mg/Kg (ppm)	
05367-014	E-12 (2.0-2.5)	2.0/2.5	06/23/15@10:53	Soil	mg/Kg (ppm)	
05367-015	E-14 (0.5-1.0)	0.5/1.0	06/23/15@11:55	Soil	mg/Kg (ppm)	
05367-016	E-14 (2.0-2.5)	2.0/2.5	06/23/15@12:00	Soil	mg/Kg (ppm)	
05367-017	E-16 (0.5-1.0)	0.5/1.0	06/22/15@11:40	Soil	mg/Kg (ppm)	
05367-018	E-16 (2.0-2.5)	2.0/2.5	06/22/15@11:50	Soil	mg/Kg (ppm)	
05367-019	PZ-2 (0.5-1.0)	0.5/1.0	06/22/15@12:27	Soil	mg/Kg (ppm)	
05367-020	PZ-2 (2.0-2.5)	2.0/2.5	06/22/15@12:47	Soil	mg/Kg (ppm)	
05367-021	PZ-2 (4.0-4.5)	4.0/4.5	06/22/15@12:53	Soil	mg/Kg (ppm)	
05367-022	PZ-2 (6.0-6.5)	6.0/6.5	06/22/15@13:00	Soil	mg/Kg (ppm)	
05367-023	X-1 (4.5-5.0)	4.5/5.0	06/23/15	Soil	mg/Kg (ppm)	
05367-024	X-2 (2.0-2.5)	2.0/2.5	06/23/15	Soil	mg/Kg (ppm)	
05367-025	E-8 (0.5-1.0)	0.5/1.0	06/23/15@09:05	Soil	mg/Kg (ppm)	
05367-026	E-8 (2.0-2.5)	2.0/2.5	06/23/15@09:07	Soil	mg/Kg (ppm)	
05367-027	E-17 (0.5-1.0)	0.5/1.0	06/23/15@13:15	Soil	mg/Kg (ppm)	
05367-028	E-17 (2.0-2.5)	2.0/2.5	06/23/15@13:20	Soil	mg/Kg (ppm)	

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05367: AMTRAK EAST BARRACKS

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05367-029	E-9 (0.5-1.0)	0.5/1.0	06/23/15@08:00	Soil	mg/Kg (ppm)	
05367-030	E-9 (2.0-2.5)	2.0/2.5	06/23/15@08:05	Soil	mg/Kg (ppm)	
05367-031	PZ-1 (0.5-1.0)	0.5/1.0	06/22/15@09:30	Soil	mg/Kg (ppm)	
05367-032	PZ-1 (2.0-2.5)	2.0/2.5	06/22/15@10:00	Soil	mg/Kg (ppm)	
05367-033	PZ-1 (2.5-3.0)	2.5/3.0	06/22/15@10:30	Soil	mg/Kg (ppm)	
05367-034	PZ-1 (4.5-5.0)	4.5/5.0	06/22/15@10:25	Soil	mg/Kg (ppm)	
05367-035	E-5 (0.5-1.0)	0.5/1.0	06/22/15@14:30	Soil	mg/Kg (ppm)	
05367-036	E-5 (3.0-3.5)	3.0/3.5	06/22/15@13:55	Soil	mg/Kg (ppm)	
05367-037	E-5 (2.0-2.5)	2.0/2.5	06/22/15@13:36	Soil	mg/Kg (ppm)	
05367-038	E-5 (4.5-5.0)	4.5/5.0	06/22/15@14:15	Soil	mg/Kg (ppm)	
05367-039	E-6 (0.5-1.0)	0.5/1.0	06/23/15@08:25	Soil	mg/Kg (ppm)	
05367-040	FB-062215	NA	06/23/15@15:05	Aqueous	mg/L (ppm)	
05367-041	E-6 (2.0-2.5)	2.0/2.5	06/23/15@08:27	Soil	mg/Kg (ppm)	
05367-042	E-6 (3.0-3.5)	3.0/3.5	06/23/15@08:48	Soil	mg/Kg (ppm)	
05367-043	E-6 (4.0-4.5)	4.0/4.5	06/23/15@08:43	Soil	mg/Kg (ppm)	
05367-044	TB-062315	NA	06/23/15	Aqueous	mg/L (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
002	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
003	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
004	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
005	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
006	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
007	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
008	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
009	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
010	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
011	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
012	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

E15-05367 0890

Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05367: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
013	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
014	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
015	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
016	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
017	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
018	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
019	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
020	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
021	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
022	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
023	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
024	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
025	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
026	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
027	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
028	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
029	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
030	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
031	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
032	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
033	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
034	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015

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PROJECT INFORMATION

E15-05367: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
035	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
036	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
037	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
038	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/6/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/6/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/6/2015
039	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
040	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	6/30/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	6/30/2015
041	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
042	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
043	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/7/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/7/2015
044	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015

Project Notes:

NOTE 1 taken by Frank on 06/23/2015 09:24
3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **05367** CLIENT: AMEC Foster

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY
✓ = YES/NA
✗ = NO

VOA received: ☑ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [CH] DATE 6/2-11/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: NO ☐
PROJECT CONTACT:
SUBCONTRACTED LAB:
DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [MD] DATE 6/2/15

E15-05367 0693

REV 03/2013

Laboratory Custody Chronicle

IAL Case No. E15-05367

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/23/2015@18:32

Department: Volatiles			Prep. Date	Analyst	Analysis Date	Analyst
TCL VO + 15	05367-001	Soil	n/a	n/a	6/30/15	Xing
"	-002	"	n/a	n/a	6/30/15	Xing
"	-003	"	n/a	n/a	6/30/15	Xing
"	-004	"	n/a	n/a	6/30/15	Xing
"	-007	"	n/a	n/a	6/30/15	Xing
"	-008	"	n/a	n/a	6/30/15	Xing
"	-009	"	n/a	n/a	6/30/15	Xing
"	-010	"	n/a	n/a	7/ 1/15	Xing
"	-017	"	n/a	n/a	6/30/15	Xing
"	-018	"	n/a	n/a	6/30/15	Xing
"	-019	"	n/a	n/a	6/30/15	Xing
"	-020	"	n/a	n/a	6/30/15	Xing
"	-021	"	n/a	n/a	6/30/15	Xing
"	-022	"	n/a	n/a	6/30/15	Xing
"	-023	"	n/a	n/a	7/ 1/15	Xing
"	-031	"	n/a	n/a	7/ 1/15	Xing
"	-032	"	n/a	n/a	7/ 1/15	Xing
"	-033	"	n/a	n/a	7/ 1/15	Xing
"	-034	"	n/a	n/a	7/ 1/15	Xing
"	-035	"	n/a	n/a	7/ 1/15	Xing
"	-036	"	n/a	n/a	7/ 1/15	Xing
"	-037	"	n/a	n/a	7/ 1/15	Xing
"	-038	"	n/a	n/a	7/ 1/15	Xing
"	-039	"	n/a	n/a	7/ 1/15	Xing
"	-040	Aqueous	n/a	n/a	6/30/15	Sylvia
"	-041	Soil	n/a	n/a	6/30/15	Sylvia
"	-042	"	n/a	n/a	7/ 1/15	Xing
"	-043	"	n/a	n/a	7/ 1/15	Xing
"	-044	Aqueous	n/a	n/a	7/ 6/15	Sylvia

Department: GC			Prep. Date	Analyst	Analysis Date	Analyst
TCL PCB	-001	Soil	6/30/15	Archimede	7/ 7/15	Justyna
"	-002	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-003	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-004	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-005	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-006	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-007	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-008	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-009	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-010	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-011	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-012	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-013	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-014	"	7/ 1/15	Archimede	7/ 6/15	Justyna

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Laboratory Custody Chronicle

IAL Case No. E15-05367

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/23/2015@18:32

"	-015	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-016	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-017	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-018	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-019	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-020	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-021	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-022	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-023	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-024	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-025	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-026	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-027	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-028	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-029	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-030	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-031	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-032	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-033	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-034	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-035	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-036	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-037	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-038	"	6/30/15	Archimede	7/ 7/15	Justyna
"	-039	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-040	Aqueous	6/29/15	Archimede	6/30/15	Justyna
"	-041	Soil	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-042	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-043	"	7/ 1/15	Archimede	7/ 8/15	Justyna
TCL Pesticides	-001	Soil	6/30/15	Archimede	7/ 6/15	Iwona
"	-002	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-003	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-004	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-007	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-008	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-009	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-010	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-017	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-018	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-019	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-020	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-021	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-022	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-023	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-031	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-032	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-033	"	6/30/15	Archimede	7/ 6/15	Iwona

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Laboratory Custody Chronicle

IAL Case No.

E15-05367

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/23/2015@18:32

"	-034	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-035	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-036	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-037	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-038	"	6/30/15	Archimede	7/ 6/15	Iwona
"	-039	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-040	Aqueous	6/29/15	Archimede	6/30/15	Iwona
"	-041	Soil	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-042	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"	-043	"	7/ 1/15	Archimede	7/ 6/15	Iwona

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK EAST BARRACKS**
IAL Case Number: **E15-05428**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

* Methodology is included in the IAL Project Information Page

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

This report was finalized on July 14, 2015

* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E15-05428

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/24/2015@17:55

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
05428-001	E-20 (0.5-1.0)	0.5/1.0	6/24/2015@10:30	Soil	1
05428-002	E-20 (2.0-2.5)	2.0/2.5	6/24/2015@10:40	Soil	1
05428-003	E-22 (0.5-1.0)	0.5/1.0	6/24/2015@10:14	Soil	1
05428-004	E-22 (2.0-2.5)	2.0/2.5	6/24/2015@10:20	Soil	1
05428-005	E-29 (0.5-1.0)	0.5/1.0	6/24/2015@08:12	Soil	1
05428-006	E-29 (2.0-2.5)	2.0/2.5	6/24/2015@08:25	Soil	1
05428-007	E-19 (0.5-1.0)	0.5/1.0	6/24/2015@11:13	Soil	1
05428-008	E-19 (2.0-2.5)	2.0/2.5	6/24/2015@11:16	Soil	1
05428-009	E-27 (0.5-1.0)	0.5/1.0	6/24/2015@08:43	Soil	1
05428-010	E-27 (2.0-2.5)	2.0/2.5	6/24/2015@08:48	Soil	1
05428-011	X-3 (0.5-1.0)	0.5/1.0	6/24/2015	Soil	5
05428-012	E-28 (0.5-1.0)	0.5/1.0	6/24/2015@08:35	Soil	1
05428-013	E-28 (2.0-2.5)	2.0/2.5	6/24/2015@08:38	Soil	1
05428-014	E-1 (0.5-1.0)	0.5/1.0	6/24/2015@09:00	Soil	5
05428-015	E-1 (2.0-2.5)	2.0/2.5	6/24/2015@08:53	Soil	5
05428-016	E-1 (3.0-3.5)	3.0/3.5	6/24/2015@09:55	Soil	5
05428-017	E-1 (4.5-5.0)	4.5/5.0	6/24/2015@10:00	Soil	5
05428-018	E-15 (0.5-1.0)	0.5/1.0	6/24/2015@12:08	Soil	1
05428-019	E-15 (2.0-2.5)	2.0/2.5	6/24/2015@12:12	Soil	1
05428-020	E-2 (0.5-1.0)	0.5/1.0	6/24/2015@11:30	Soil	5
05428-021	E-2 (2.0-2.5)	2.0/2.5	6/24/2015@11:40	Soil	5
05428-022	E-2 (3.0-3.5)	3.0/3.5	6/24/2015@11:45	Soil	5
05428-023	E-2 (4.0-4.5)	4.0/4.5	6/24/2015@12:00	Soil	5
05428-024	E-10 (0.5-1.0)	0.5/1.0	6/24/2015@13:32	Soil	1
05428-025	E-10 (2.0-2.5)	2.0/2.5	6/24/2015@13:37	Soil	1
05428-026	E-7 (0.5-1.0)	0.5/1.0	6/24/2015@12:55	Soil	4
05428-027	E-7 (2.0-2.5)	2.0/2.5	6/24/2015@13:03	Soil	4
05428-028	E-7 (3.0-3.5)	3.0/3.5	6/24/2015@13:22	Soil	4
05428-029	E-7 (4.5-5.0)	4.5/5.0	6/24/2015@13:27	Soil	4
05428-030	FB-062315	n/a	6/23/2015@15:15	Aqueous	4
05428-031	TB-062415	n/a	6/24/2015	Aqueous	2
05428-032	FB-062415	n/a	6/24/2015@14:45	Aqueous	4

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

Integrated Analytical Laboratories, LLC. received thirty-two (32) samples** from AMEC-SMRST (IAL SDG# **E15-05428**, Project: AMTRAK EAST BARRACKS) on June 24, 2015 for the analysis of :

(16) TCL VO + 15
(31) TCL PCB
(15) TCL Pesticides

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 8260C **Batch: F150630-02, F150701-01 Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Internal standards recovery did not meet QC criteria due to matrix interference. Sample was rerun as a confirmation of this for 05428-011. NJDEP DKQP criteria not met.
- Surrogate percent recovery met QC criteria. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria for Trichloroethene and 1,1,2,2-Tetrachloroethane due to sample matrix . NJDEP DKQP criteria not met.

E15-05428

- All samples were analyzed within holding time.
- 05428-015, 016, 017, 021, 022, 023, 026-029 were flagged with a C qualifier, indicating laboratory contamination for Methylene chloride. Methylene chloride is used as a solvent in the laboratory, resulting in occasional laboratory contamination.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-011	1	NA
E15-05428-014	1	NA
E15-05428-015	1	NA
E15-05428-016	1	NA
E15-05428-017	1	NA
E15-05428-020	1	NA
E15-05428-021	1	NA
E15-05428-022	1	NA
E15-05428-023	1	NA
E15-05428-026	1	NA
E15-05428-027	1	NA
E15-05428-028	1	NA
E15-05428-029	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

Volatiles By 8260C | **Batch: J150702-02** | **Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E15-05428
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-030	1	NA
E15-05428-031	1	NA
E15-05428-032	1	NA

PCB By 8082A | **Batch: 150629-16** | **Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.
- The following samples were cleaned up using method 3660B to remove sulfur: 030, 032.

E15-05428
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-030	1	NA
E15-05428-032	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

PCB By 8082A | **Batch: 150701-05** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to coeluting with target compound. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-001	100	Target compound(s).
E15-05428-002	1	NA
E15-05428-003	5	Target compound(s).
E15-05428-004	1	NA
E15-05428-005	1	NA
E15-05428-006	1	NA

PCB By 8082A | **Batch: 150701-07** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to coeluting with target compound. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 011, 014, 015, 016, 017, 020, 021.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-011	500	Target compound(s).
E15-05428-014	20	Target compound(s).
E15-05428-015	1	NA
E15-05428-016	1	NA
E15-05428-017	1	NA
E15-05428-020	200	Target compound(s).
E15-05428-021	200	Target compound(s).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

PCB By 8082A | **Batch: 150701-08** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to coeluting with target compound. NJDEP DKQP criteria not met.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-007	5	Target compound(s).
E15-05428-008	1	NA
E15-05428-009	10	Target compound(s).
E15-05428-010	1	NA
E15-05428-012	10	Target compound(s).

PCB By 8082A | **Batch: 150701-11** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3665A: 022, 023, 026, 027, 028, 029.
- The following samples were cleaned up using method 3660B to remove sulfur: 022, 023, 026, 027, 028, 029.
- Sample 013 was double spiked with surrogate. % recoveries have been adjusted to reflect this.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-022	10	Target compound(s).
E15-05428-023	20	Target compound(s).
E15-05428-026	10	Target compound(s).
E15-05428-027	1	NA
E15-05428-028	1	NA
E15-05428-029	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

PCB By 8082A | **Batch: 150701-12** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 013, 018, 019, 024, 025.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-013	1	NA
E15-05428-018	1	NA
E15-05428-019	1	NA
E15-05428-024	1	NA
E15-05428-025	1	NA

Pesticide By 8081B | **Batch: 150629-16** | **Matrix: Aqueous**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-030	1	NA
E15-05428-032	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

Pesticide By 8081B | **Batch: 150701-07** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- The following samples were cleaned up using method 3660B to remove sulfur: 011, 014, 015, 016, 017, 020, 021.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-011	1	NA
E15-05428-014	1	NA
E15-05428-015	1	NA
E15-05428-016	1	NA
E15-05428-017	1	NA
E15-05428-020	1	NA
E15-05428-021	1	NA

Pesticide By 8081B | **Batch: 150701-11** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference for #009; #012 Surrogate was inadverently double spiked for #013. % recoveries have been adjusted to reflect this. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 022, 023, 026, 027, 028, 029.

E15-05428

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05428-022	1	NA
E15-05428-023	1	NA
E15-05428-026	1	NA
E15-05428-027	1	NA
E15-05428-028	1	NA
E15-05428-029	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05428

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

	7/14/2015
Reviewed by	Date

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK EAST BARRACKS
IAL Project #: E15-05428
IAL Sample ID(s): E15-05428-001 ~ -032
Sampling Date(s): 6/24/2015

List of DKQP Method Used:
TCL VO by 8260C
TCL PCB by 8082A
TCL Pesticides by 8081B

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		X	
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?	X		
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		X	

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-030			05428-031			05428-032		
Client ID:	FB-062315			TB-062415			FB-062415		
Matrix:	Aqueous			Aqueous			Aqueous		
Sampled Date	6/23/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/L)*			*(mg/L)*			*(mg/L)*		
TOTAL VO's:	ND			ND			ND		
TOTAL TIC's:	ND			ND			ND		
TOTAL VO's & TIC's:	ND			ND			ND		
PCB's (Units)	*(mg/L)*			*(mg/L)*			*(mg/L)*		
Aroclor-1016	ND		0.00002	~		~	ND		0.00002
Aroclor-1221	ND		0.00002	~		~	ND		0.00002
Aroclor-1232	ND		0.00002	~		~	ND		0.00002
Aroclor-1242	ND		0.00002	~		~	ND		0.00002
Aroclor-1248	ND		0.00002	~		~	ND		0.00002
Aroclor-1254	ND		0.00002	~		~	ND		0.00002
Aroclor-1260	ND		0.00002	~		~	ND		0.00002
Aroclor-1262	ND		0.00002	~		~	ND		0.00002
Aroclor-1268	ND		0.00002	~		~	ND		0.00002
PCBs	ND		0.00002	~		~	ND		0.00002
Pesticides (Units)	*(mg/L)*			*(mg/L)*			*(mg/L)*		
alpha-BHC	ND		0.000005	~		~	ND		0.000005
beta-BHC	ND		0.000005	~		~	ND		0.000005
gamma-BHC (Lindane)	ND		0.000005	~		~	ND		0.000005
delta-BHC	ND		0.000005	~		~	ND		0.000005
Heptachlor	ND		0.000005	~		~	ND		0.000005
Aldrin	ND		0.000005	~		~	ND		0.000005
Heptachlor epoxide	ND		0.000005	~		~	ND		0.000005
Endosulfan I	ND		0.000005	~		~	ND		0.000005
4,4'-DDE	ND		0.000005	~		~	ND		0.000005
Dieldrin	ND		0.000005	~		~	ND		0.000005
Endrin	ND		0.000005	~		~	ND		0.000005
Endosulfan II	ND		0.000005	~		~	ND		0.000005
4,4'-DDD	ND		0.000005	~		~	ND		0.000005
Endrin aldehyde	ND		0.000005	~		~	ND		0.000005
Endosulfan sulfate	ND		0.000005	~		~	ND		0.000005
4,4'-DDT	ND		0.000005	~		~	ND		0.000005
Endrin ketone	ND		0.000005	~		~	ND		0.000005
Methoxychlor	ND		0.000005	~		~	ND		0.000005
alpha-Chlordane	ND		0.000005	~		~	ND		0.000005
gamma-Chlordane	ND		0.000005	~		~	ND		0.000005
Toxaphene	ND		0.00006	~		~	ND		0.00006
Endosulfan (I and II)	ND		0.000005	~		~	ND		0.000005
Chlordane (alpha and gamma)	ND		0.000005	~		~	ND		0.000005

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-001			05428-002			05428-003			05428-004		
Client ID:	E-20 (0.5-1.0)			E-20 (2.0-2.5)			E-22 (0.5-1.0)			E-22 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1221	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1232	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1242	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1248	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1254	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1260	168	D	1.94	3.67		0.014	9.58	D	0.085	0.243		0.016
Aroclor-1262	ND		1.94	ND		0.014	ND		0.085	ND		0.016
Aroclor-1268	ND		1.94	ND		0.014	ND		0.085	ND		0.016
PCBs	168	D	1.94	3.67		0.014	9.58	D	0.085	0.243		0.016

Lab ID:	05428-005			05428-006			05428-007			05428-008		
Client ID:	E-29 (0.5-1.0)			E-29 (2.0-2.5)			E-19 (0.5-1.0)			E-19 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1221	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1232	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1242	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1248	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1254	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1260	4.39		0.021	0.326		0.016	11.2	D	0.086	4.37		0.016
Aroclor-1262	ND		0.021	ND		0.016	ND		0.017	ND		0.016
Aroclor-1268	ND		0.021	ND		0.016	ND		0.017	ND		0.016
PCBs	4.39		0.021	0.326		0.016	11.2	D	0.086	4.37		0.016

D = The compound was reported from the Diluted analysis
~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-009			05428-010			05428-011			05428-012		
Client ID:	E-27 (0.5-1.0)			E-27 (2.0-2.5)			X-3 (0.5-1.0)			E-28 (0.5-1.0)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			0.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Chloroform	~		~	~		~	0.0012	J	0.000685	~		~
Trichloroethene	~		~	~		~	0.00413		0.000525	~		~
TOTAL VO's:	~		~	~		~	0.00533	J		~		~
TOTAL TIC's:	~		~	~		~	ND			~		~
TOTAL VO's & TIC's:	~		~	~		~	0.00533	J		~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1221	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1232	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1242	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1248	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1254	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1260	28.1	D	0.184	4.18		0.017	29.5	D	0.426	14.6	D	0.165
Aroclor-1262	ND		0.018	ND		0.017	ND		0.426	ND		0.017
Aroclor-1268	ND		0.018	ND		0.017	ND		0.426	ND		0.017
PCBs	28.1	D	0.184	4.18		0.017	29.5	D	0.426	14.6	D	0.165
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	~		~	~		~	ND		0.000213	~		~
beta-BHC	~		~	~		~	ND		0.000213	~		~
gamma-BHC (Lindane)	~		~	~		~	ND		0.000213	~		~
delta-BHC	~		~	~		~	ND		0.000213	~		~
Heptachlor	~		~	~		~	ND		0.000213	~		~
Aldrin	~		~	~		~	ND		0.000213	~		~
Heptachlor epoxide	~		~	~		~	ND		0.000213	~		~
Endosulfan I	~		~	~		~	ND		0.000213	~		~
4,4'-DDE	~		~	~		~	ND		0.000213	~		~
Dieldrin	~		~	~		~	ND		0.000213	~		~
Endrin	~		~	~		~	ND		0.000213	~		~
Endosulfan II	~		~	~		~	ND		0.000213	~		~
4,4'-DDD	~		~	~		~	ND		0.000213	~		~
Endrin aldehyde	~		~	~		~	ND		0.000213	~		~
Endosulfan sulfate	~		~	~		~	ND		0.000213	~		~
4,4'-DDT	~		~	~		~	ND		0.000213	~		~
Endrin ketone	~		~	~		~	ND		0.000213	~		~
Methoxychlor	~		~	~		~	ND		0.000213	~		~
alpha-Chlordane	~		~	~		~	ND		0.000213	~		~
gamma-Chlordane	~		~	~		~	ND		0.000213	~		~
Toxaphene	~		~	~		~	ND		0.00256	~		~
Endosulfan (I and II)	~		~	~		~	ND		0.000213	~		~
Chlordane (alpha and gamma)	~		~	~		~	ND		0.000213	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
D = The compound was reported from the Diluted analysis

Rev 15-05428 0015

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-013			05428-014			05428-015			05428-016		
Client ID:	E-28 (2.0-2.5)			E-1 (0.5-1.0)			E-1 (2.0-2.5)			E-1 (3.0-3.5)		
Depth:	2.0/2.5			0.5/1.0			2.0/2.5			3.0/3.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	~		~	ND		0.00267	0.00283	C	0.00222	0.00335	C	0.00192
cis-1,2-Dichloroethene	~		~	ND		0.000431	ND		0.000357	0.00233		0.000309
Trichloroethene	~		~	ND		0.000435	ND		0.000361	0.0071		0.000312
Tetrachloroethene	~		~	ND		0.000668	0.000831	J	0.000554	0.028		0.00048
TOTAL VO's:	~		~	ND			0.00366	CJ		0.041	C	
TOTAL TIC's:	~		~	ND			ND			ND		
TOTAL VO's & TIC's:	~		~	ND			0.00366	CJ		0.041	C	
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1221	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1232	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1242	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1248	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1254	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1260	5.42		0.016	3.02	D	0.016	0.018		0.000716	ND		0.000768
Aroclor-1262	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
Aroclor-1268	ND		0.016	ND		0.0008	ND		0.000716	ND		0.000768
PCBs	5.42		0.016	3.02	D	0.016	0.018		0.000716	ND		0.000768
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	~		~	ND		0.0002	ND		0.000179	ND		0.000192
beta-BHC	~		~	ND		0.0002	ND		0.000179	ND		0.000192
gamma-BHC (Lindane)	~		~	ND		0.0002	ND		0.000179	ND		0.000192
delta-BHC	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Heptachlor	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Aldrin	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Heptachlor epoxide	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endosulfan I	~		~	ND		0.0002	ND		0.000179	ND		0.000192
4,4'-DDE	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Dieldrin	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endrin	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endosulfan II	~		~	ND		0.0002	ND		0.000179	ND		0.000192
4,4'-DDD	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endrin aldehyde	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endosulfan sulfate	~		~	ND		0.0002	ND		0.000179	ND		0.000192
4,4'-DDT	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Endrin ketone	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Methoxychlor	~		~	ND		0.0002	ND		0.000179	ND		0.000192
alpha-Chlordane	~		~	ND		0.0002	ND		0.000179	ND		0.000192
gamma-Chlordane	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Toxaphene	~		~	ND		0.0024	ND		0.00215	ND		0.0023
Endosulfan (I and II)	~		~	ND		0.0002	ND		0.000179	ND		0.000192
Chlordane (alpha and gamma)	~		~	ND		0.0002	ND		0.000179	ND		0.000192

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.

Rev E15-05428 0016

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-017			05428-018			05428-019			05428-020		
Client ID:	E-1 (4.5-5.0)			E-15 (0.5-1.0)			E-15 (2.0-2.5)			E-2 (0.5-1.0)		
Depth:	4.5/5.0			0.5/1.0			2.0/2.5			0.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00291	C	0.00226	~		~	~		~	ND		0.00313
Tetrachloroethene	0.00229		0.000564	~		~	~		~	ND		0.000782
TOTAL VO's:	0.0052	C		~		~	~		~	ND		
TOTAL TIC's:	ND			~		~	~		~	ND		
TOTAL VO's & TIC's:	0.0052	C		~		~	~		~	ND		
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1221	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1232	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1242	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1248	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1254	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1260	ND		0.000804	2.10		0.018	0.044		0.017	11.2	D	0.173
Aroclor-1262	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
Aroclor-1268	ND		0.000804	ND		0.018	ND		0.017	ND		0.173
PCBs	ND		0.000804	2.10		0.018	0.044		0.017	11.2	D	0.173
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000201	~		~	~		~	ND		0.000216
beta-BHC	ND		0.000201	~		~	~		~	ND		0.000216
gamma-BHC (Lindane)	ND		0.000201	~		~	~		~	ND		0.000216
delta-BHC	ND		0.000201	~		~	~		~	ND		0.000216
Heptachlor	ND		0.000201	~		~	~		~	ND		0.000216
Aldrin	ND		0.000201	~		~	~		~	ND		0.000216
Heptachlor epoxide	ND		0.000201	~		~	~		~	ND		0.000216
Endosulfan I	ND		0.000201	~		~	~		~	ND		0.000216
4,4'-DDE	ND		0.000201	~		~	~		~	ND		0.000216
Dieldrin	ND		0.000201	~		~	~		~	ND		0.000216
Endrin	ND		0.000201	~		~	~		~	ND		0.000216
Endosulfan II	ND		0.000201	~		~	~		~	ND		0.000216
4,4'-DDD	ND		0.000201	~		~	~		~	ND		0.000216
Endrin aldehyde	ND		0.000201	~		~	~		~	ND		0.000216
Endosulfan sulfate	ND		0.000201	~		~	~		~	ND		0.000216
4,4'-DDT	ND		0.000201	~		~	~		~	ND		0.000216
Endrin ketone	ND		0.000201	~		~	~		~	ND		0.000216
Methoxychlor	ND		0.000201	~		~	~		~	ND		0.000216
alpha-Chlordane	ND		0.000201	~		~	~		~	ND		0.000216
gamma-Chlordane	ND		0.000201	~		~	~		~	ND		0.000216
Toxaphene	ND		0.00241	~		~	~		~	ND		0.00259
Endosulfan (I and II)	ND		0.000201	~		~	~		~	ND		0.000216
Chlordane (alpha and gamma)	ND		0.000201	~		~	~		~	ND		0.000216

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis
C = Common Laboratory and/or Bottle Contaminant.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-021			05428-022			05428-023			05428-024		
Client ID:	E-2 (2.0-2.5)			E-2 (3.0-3.5)			E-2 (4.0-4.5)			E-10 (0.5-1.0)		
Depth:	2.0/2.5			3.0/3.5			4.0/4.5			0.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	0.00446	C	0.00236	0.00363	C	0.00244	0.00308	C	0.0023	~		~
Trichloroethene	0.00138		0.000383	0.000658	J	0.000396	0.000418	J	0.000374	~		~
Tetrachloroethene	0.000652	J	0.000589	0.000924	J	0.000609	0.009		0.000574	~		~
TOTAL VO's:	0.00649	CJ		0.00521	CJ		0.013	CJ		~		~
TOTAL TIC's:	ND			ND			ND			~		~
TOTAL VO's & TIC's:	0.00649	CJ		0.00521	CJ		0.013	CJ		~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1221	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1232	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1242	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1248	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1254	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1260	7.80	D	0.146	1.04	D	0.00072	1.99	D	0.014	0.418		0.016
Aroclor-1262	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
Aroclor-1268	ND		0.146	ND		0.00072	ND		0.000712	ND		0.016
PCBs	7.80	D	0.146	1.04	D	0.00721	1.99	D	0.014	0.418		0.016
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	ND		0.000183	ND		0.00018	ND		0.000178	~		~
beta-BHC	ND		0.000183	ND		0.00018	ND		0.000178	~		~
gamma-BHC (Lindane)	ND		0.000183	ND		0.00018	ND		0.000178	~		~
delta-BHC	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Heptachlor	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Aldrin	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Heptachlor epoxide	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endosulfan I	ND		0.000183	ND		0.00018	ND		0.000178	~		~
4,4'-DDE	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Dieldrin	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endrin	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endosulfan II	ND		0.000183	ND		0.00018	ND		0.000178	~		~
4,4'-DDD	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endrin aldehyde	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endosulfan sulfate	ND		0.000183	ND		0.00018	ND		0.000178	~		~
4,4'-DDT	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Endrin ketone	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Methoxychlor	ND		0.000183	ND		0.00018	ND		0.000178	~		~
alpha-Chlordane	ND		0.000183	ND		0.00018	ND		0.000178	~		~
gamma-Chlordane	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Toxaphene	ND		0.0022	ND		0.00216	ND		0.00214	~		~
Endosulfan (I and II)	ND		0.000183	ND		0.00018	ND		0.000178	~		~
Chlordane (alpha and gamma)	ND		0.000183	ND		0.00018	ND		0.000178	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	05428-025			05428-026			05428-027			05428-028		
Client ID:	E-10 (2.0-2.5)			E-7 (0.5-1.0)			E-7 (2.0-2.5)			E-7 (3.0-3.5)		
Depth:	2.0/2.5			0.5/1.0			2.0/2.5			3.0/3.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/24/15			6/24/15			6/24/15			6/24/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Methylene chloride	~		~	0.00381	C	0.00305	0.00427	C	0.00232	0.00391	C	0.00208
cis-1,2-Dichloroethene	~		~	0.000605	J	0.000491	ND		0.000373	ND		0.000335
Trichloroethene	~		~	0.00701		0.000496	ND		0.000377	0.000394	J	0.000338
Tetrachloroethene	~		~	0.00185		0.000762	0.00122		0.000579	0.00205		0.00052
TOTAL VO's:	~		~	0.013	CJ		0.00549	C		0.00635	CJ	
TOTAL TIC's:	~		~	ND			ND			ND		
TOTAL VO's & TIC's:	~		~	0.013	CJ		0.00549	C		0.00635	CJ	
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1221	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1232	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1242	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1248	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1254	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1260	0.047		0.017	1.11	D	0.00748	0.00157	J	0.000692	ND		0.000732
Aroclor-1262	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
Aroclor-1268	ND		0.017	ND		0.000748	ND		0.000692	ND		0.000732
PCBs	0.047		0.017	1.11	D	0.00748	0.00157	J	0.000692	ND		0.000732
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
alpha-BHC	~		~	ND		0.000187	ND		0.000173	ND		0.000183
beta-BHC	~		~	ND		0.000187	ND		0.000173	ND		0.000183
gamma-BHC (Lindane)	~		~	ND		0.000187	ND		0.000173	ND		0.000183
delta-BHC	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Heptachlor	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Aldrin	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Heptachlor epoxide	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endosulfan I	~		~	ND		0.000187	ND		0.000173	ND		0.000183
4,4'-DDE	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Dieldrin	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endrin	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endosulfan II	~		~	ND		0.000187	ND		0.000173	ND		0.000183
4,4'-DDD	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endrin aldehyde	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endosulfan sulfate	~		~	ND		0.000187	ND		0.000173	ND		0.000183
4,4'-DDT	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Endrin ketone	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Methoxychlor	~		~	ND		0.000187	ND		0.000173	ND		0.000183
alpha-Chlordane	~		~	ND		0.000187	ND		0.000173	ND		0.000183
gamma-Chlordane	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Toxaphene	~		~	ND		0.00224	ND		0.00208	ND		0.0022
Endosulfan (I and II)	~		~	ND		0.000187	ND		0.000173	ND		0.000183
Chlordane (alpha and gamma)	~		~	ND		0.000187	ND		0.000173	ND		0.000183

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.
All qualifiers on individual Volatiles & Semivolatiles are carried down through summation.
C = Common Laboratory and/or Bottle Contaminant.
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05428

Lab ID:	**05428-029**		
Client ID:	**E-7 (4.5-5.0)**		
Depth:	**4.5/5.0**		
Matrix:	**Soil**		
Sampled Date	**6/24/15**		
PARAMETER(Units)	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*		
Methylene chloride	0.00416	C	0.002
Trichloroethene	0.00462		0.000325
Tetrachloroethene	0.00227		0.0005
TOTAL VO's:	0.011	C	
TOTAL TIC's:	ND		
TOTAL VO's & TIC's:	0.011	C	
PCB's (Units)	*(mg/Kg)*		
Aroclor-1016	ND		0.00074
Aroclor-1221	ND		0.00074
Aroclor-1232	ND		0.00074
Aroclor-1242	ND		0.00074
Aroclor-1248	ND		0.00074
Aroclor-1254	ND		0.00074
Aroclor-1260	ND		0.00074
Aroclor-1262	ND		0.00074
Aroclor-1268	ND		0.00074
PCBs	ND		0.00074
Pesticides (Units)	*(mg/Kg)*		
alpha-BHC	ND		0.000185
beta-BHC	ND		0.000185
gamma-BHC (Lindane)	ND		0.000185
delta-BHC	ND		0.000185
Heptachlor	ND		0.000185
Aldrin	ND		0.000185
Heptachlor epoxide	ND		0.000185
Endosulfan I	ND		0.000185
4,4'-DDE	ND		0.000185
Dieldrin	ND		0.000185
Endrin	ND		0.000185
Endosulfan II	ND		0.000185
4,4'-DDD	ND		0.000185
Endrin aldehyde	ND		0.000185
Endosulfan sulfate	ND		0.000185
4,4'-DDT	ND		0.000185
Endrin ketone	ND		0.000185
Methoxychlor	ND		0.000185
alpha-Chlordane	ND		0.000185
gamma-Chlordane	ND		0.000185
Toxaphene	ND		0.00222
Endosulfan (I and II)	ND		0.000185
Chlordane (alpha and gamma)	ND		0.000185

ND = Analyzed for but Not Detected at the MDL
C = Common Laboratory and/or Bottle Contaminant.

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-011
Client ID: X-3_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1742.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00163	0.000717
Chloromethane	ND		0.00163	0.000732
Vinyl chloride	ND		0.00163	0.000694
Bromomethane	ND		0.00163	0.00104
Chloroethane	ND		0.00163	0.000826
Trichlorofluoromethane	ND		0.00163	0.00133
1,1-Dichloroethene	ND		0.00163	0.000795
Acetone	ND		0.00815	0.00114
Carbon disulfide	ND		0.00163	0.000932
Methylene chloride	ND		0.00326	0.00323
trans-1,2-Dichloroethene	ND		0.00163	0.00061
Methyl tert-butyl ether (MTBE)	ND		0.00163	0.000608
1,1-Dichloroethane	ND		0.00163	0.000438
cis-1,2-Dichloroethene	ND		0.00163	0.00052
2-Butanone (MEK)	ND		0.00163	0.00122
Bromochloromethane	ND		0.00163	0.000688
Chloroform	0.0012	J	0.00163	0.000685
1,1,1-Trichloroethane	ND		0.00163	0.000712
Carbon tetrachloride	ND		0.00163	0.00109
1,2-Dichloroethane (EDC)	ND		0.00163	0.000567
Benzene	ND		0.00163	0.000443
Trichloroethene	0.00413		0.00163	0.000525
1,2-Dichloropropane	ND		0.00163	0.000577
1,4-Dioxane	ND		0.326	0.032
Bromodichloromethane	ND		0.00163	0.000681
cis-1,3-Dichloropropene	ND		0.00163	0.000652
4-Methyl-2-pentanone (MIBK)	ND		0.00163	0.000817

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-011
Client ID: X-3_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1742.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00163	0.000474
trans-1,3-Dichloropropene	ND		0.00163	0.000497
1,1,2-Trichloroethane	ND		0.00163	0.000383
Tetrachloroethene	ND		0.00163	0.000807
2-Hexanone	ND		0.00163	0.000942
Dibromochloromethane	ND		0.00163	0.000481
1,2-Dibromoethane (EDB)	ND		0.00163	0.000575
Chlorobenzene	ND		0.00163	0.000548
Ethylbenzene	ND		0.00163	0.000557
Total Xylenes	ND		0.00326	0.00131
Styrene	ND		0.00163	0.000584
Bromoform	ND		0.00163	0.000751
Isopropylbenzene	ND		0.00163	0.000714
1,1,2,2-Tetrachloroethane	ND		0.00163	0.000639
1,3-Dichlorobenzene	ND		0.00163	0.000768
1,4-Dichlorobenzene	ND		0.00163	0.000864
1,2-Dichlorobenzene	ND		0.00163	0.000786
1,2-Dibromo-3-chloropropane	ND		0.00163	0.00104
1,2,4-Trichlorobenzene	ND		0.00163	0.000717
1,2,3-Trichlorobenzene	ND		0.00163	0.000934
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00163	0.00113
Methyl acetate	ND		0.00163	0.000879
Cyclohexane	ND		0.00815	0.000846
Methylcyclohexane	ND		0.00163	0.00091
1,3-Dichloropropene (cis- and trans-)	ND		0.00163	0.000652
Total Target Compounds (52):	0.00533	J		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0023

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-011
Client ID: X-3_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1742.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-014
Client ID: E-1_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1743.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00135	0.000594
Chloromethane	ND		0.00135	0.000606
Vinyl chloride	ND		0.00135	0.000575
Bromomethane	ND		0.00135	0.000864
Chloroethane	ND		0.00135	0.000684
Trichlorofluoromethane	ND		0.00135	0.0011
1,1-Dichloroethene	ND		0.00135	0.000659
Acetone	ND		0.00675	0.000941
Carbon disulfide	ND		0.00135	0.000772
Methylene chloride	ND		0.0027	0.00267
trans-1,2-Dichloroethene	ND		0.00135	0.000505
Methyl tert-butyl ether (MTBE)	ND		0.00135	0.000504
1,1-Dichloroethane	ND		0.00135	0.000363
cis-1,2-Dichloroethene	ND		0.00135	0.000431
2-Butanone (MEK)	ND		0.00135	0.00101
Bromochloromethane	ND		0.00135	0.00057
Chloroform	ND		0.00135	0.000567
1,1,1-Trichloroethane	ND		0.00135	0.00059
Carbon tetrachloride	ND		0.00135	0.000902
1,2-Dichloroethane (EDC)	ND		0.00135	0.00047
Benzene	ND		0.00135	0.000367
Trichloroethene	ND		0.00135	0.000435
1,2-Dichloropropane	ND		0.00135	0.000478
1,4-Dioxane	ND		0.270	0.026
Bromodichloromethane	ND		0.00135	0.000564
cis-1,3-Dichloropropene	ND		0.00135	0.00054
4-Methyl-2-pentanone (MIBK)	ND		0.00135	0.000676

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-014
Client ID: E-1_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1743.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00135	0.000393
trans-1,3-Dichloropropene	ND		0.00135	0.000412
1,1,2-Trichloroethane	ND		0.00135	0.000317
Tetrachloroethene	ND		0.00135	0.000668
2-Hexanone	ND		0.00135	0.00078
Dibromochloromethane	ND		0.00135	0.000398
1,2-Dibromoethane (EDB)	ND		0.00135	0.000477
Chlorobenzene	ND		0.00135	0.000454
Ethylbenzene	ND		0.00135	0.000462
Total Xylenes	ND		0.0027	0.00108
Styrene	ND		0.00135	0.000483
Bromoform	ND		0.00135	0.000622
Isopropylbenzene	ND		0.00135	0.000591
1,1,2,2-Tetrachloroethane	ND		0.00135	0.000529
1,3-Dichlorobenzene	ND		0.00135	0.000636
1,4-Dichlorobenzene	ND		0.00135	0.000716
1,2-Dichlorobenzene	ND		0.00135	0.000651
1,2-Dibromo-3-chloropropane	ND		0.00135	0.000863
1,2,4-Trichlorobenzene	ND		0.00135	0.000594
1,2,3-Trichlorobenzene	ND		0.00135	0.000774
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00135	0.000933
Methyl acetate	ND		0.00135	0.000728
Cyclohexane	ND		0.00675	0.000701
Methylcyclohexane	ND		0.00135	0.000753
1,3-Dichloropropene (cis- and trans-)	ND		0.00135	0.00054

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0026

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-014
Client ID: E-1_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1743.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-015
Client ID: E-1_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1744.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00112	0.000493
Chloromethane	ND		0.00112	0.000503
Vinyl chloride	ND		0.00112	0.000477
Bromomethane	ND		0.00112	0.000717
Chloroethane	ND		0.00112	0.000568
Trichlorofluoromethane	ND		0.00112	0.000911
1,1-Dichloroethene	ND		0.00112	0.000547
Acetone	ND		0.0056	0.000781
Carbon disulfide	ND		0.00112	0.000641
Methylene chloride	0.00283	C	0.00224	0.00222
trans-1,2-Dichloroethene	ND		0.00112	0.000419
Methyl tert-butyl ether (MTBE)	ND		0.00112	0.000418
1,1-Dichloroethane	ND		0.00112	0.000301
cis-1,2-Dichloroethene	ND		0.00112	0.000357
2-Butanone (MEK)	ND		0.00112	0.000838
Bromochloromethane	ND		0.00112	0.000473
Chloroform	ND		0.00112	0.00047
1,1,1-Trichloroethane	ND		0.00112	0.000489
Carbon tetrachloride	ND		0.00112	0.000748
1,2-Dichloroethane (EDC)	ND		0.00112	0.00039
Benzene	ND		0.00112	0.000305
Trichloroethene	ND		0.00112	0.000361
1,2-Dichloropropane	ND		0.00112	0.000396
1,4-Dioxane	ND		0.224	0.022
Bromodichloromethane	ND		0.00112	0.000468
cis-1,3-Dichloropropene	ND		0.00112	0.000448
4-Methyl-2-pentanone (MIBK)	ND		0.00112	0.000561

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-015
Client ID: E-1_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1744.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00112	0.000326
trans-1,3-Dichloropropene	ND		0.00112	0.000342
1,1,2-Trichloroethane	ND		0.00112	0.000263
Tetrachloroethene	0.000831	J	0.00112	0.000554
2-Hexanone	ND		0.00112	0.000647
Dibromochloromethane	ND		0.00112	0.00033
1,2-Dibromoethane (EDB)	ND		0.00112	0.000395
Chlorobenzene	ND		0.00112	0.000376
Ethylbenzene	ND		0.00112	0.000383
Total Xylenes	ND		0.00224	0.000899
Styrene	ND		0.00112	0.000401
Bromoform	ND		0.00112	0.000516
Isopropylbenzene	ND		0.00112	0.000491
1,1,2,2-Tetrachloroethane	ND		0.00112	0.000439
1,3-Dichlorobenzene	ND		0.00112	0.000528
1,4-Dichlorobenzene	ND		0.00112	0.000594
1,2-Dichlorobenzene	ND		0.00112	0.00054
1,2-Dibromo-3-chloropropane	ND		0.00112	0.000716
1,2,4-Trichlorobenzene	ND		0.00112	0.000493
1,2,3-Trichlorobenzene	ND		0.00112	0.000642
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00112	0.000774
Methyl acetate	ND		0.00112	0.000604
Cyclohexane	ND		0.0056	0.000581
Methylcyclohexane	ND		0.00112	0.000625
1,3-Dichloropropene (cis- and trans-)	ND		0.00112	0.000448
Total Target Compounds (52):	0.00366	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0029

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-015
Client ID: E-1_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1744.D

GC/MS Column: DB-624
Sample wt/vol: 4.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-016
Client ID: E-1_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1745.D

GC/MS Column: DB-624
Sample wt/vol: 6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00097	0.000427
Chloromethane	ND		0.00097	0.000436
Vinyl chloride	ND		0.00097	0.000413
Bromomethane	ND		0.00097	0.000621
Chloroethane	ND		0.00097	0.000492
Trichlorofluoromethane	ND		0.00097	0.000789
1,1-Dichloroethene	ND		0.00097	0.000473
Acetone	ND		0.00485	0.000676
Carbon disulfide	ND		0.00097	0.000555
Methylene chloride	0.00335	C	0.00194	0.00192
trans-1,2-Dichloroethene	ND		0.00097	0.000363
Methyl tert-butyl ether (MTBE)	ND		0.00097	0.000362
1,1-Dichloroethane	ND		0.00097	0.000261
cis-1,2-Dichloroethene	0.00233		0.00097	0.000309
2-Butanone (MEK)	ND		0.00097	0.000726
Bromochloromethane	ND		0.00097	0.000409
Chloroform	ND		0.00097	0.000407
1,1,1-Trichloroethane	ND		0.00097	0.000424
Carbon tetrachloride	ND		0.00097	0.000648
1,2-Dichloroethane (EDC)	ND		0.00097	0.000338
Benzene	ND		0.00097	0.000264
Trichloroethene	0.0071		0.00097	0.000312
1,2-Dichloropropane	ND		0.00097	0.000343
1,4-Dioxane	ND		0.194	0.019
Bromodichloromethane	ND		0.00097	0.000405
cis-1,3-Dichloropropene	ND		0.00097	0.000388
4-Methyl-2-pentanone (MIBK)	ND		0.00097	0.000486

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-016
Client ID: E-1_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1745.D

GC/MS Column: DB-624
Sample wt/vol: 6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00097	0.000282
trans-1,3-Dichloropropene	ND		0.00097	0.000296
1,1,2-Trichloroethane	ND		0.00097	0.000228
Tetrachloroethene	0.028		0.00097	0.00048
2-Hexanone	ND		0.00097	0.000561
Dibromochloromethane	ND		0.00097	0.000286
1,2-Dibromoethane (EDB)	ND		0.00097	0.000342
Chlorobenzene	ND		0.00097	0.000326
Ethylbenzene	ND		0.00097	0.000332
Total Xylenes	ND		0.00194	0.000779
Styrene	ND		0.00097	0.000347
Bromoform	ND		0.00097	0.000447
Isopropylbenzene	ND		0.00097	0.000425
1,1,2,2-Tetrachloroethane	ND		0.00097	0.00038
1,3-Dichlorobenzene	ND		0.00097	0.000457
1,4-Dichlorobenzene	ND		0.00097	0.000514
1,2-Dichlorobenzene	ND		0.00097	0.000468
1,2-Dibromo-3-chloropropane	ND		0.00097	0.00062
1,2,4-Trichlorobenzene	ND		0.00097	0.000427
1,2,3-Trichlorobenzene	ND		0.00097	0.000556
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00097	0.00067
Methyl acetate	ND		0.00097	0.000523
Cyclohexane	ND		0.00485	0.000503
Methylcyclohexane	ND		0.00097	0.000541
1,3-Dichloropropene (cis- and trans-)	ND		0.00097	0.000388
Total Target Compounds (52):	0.041	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0032

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-016
Client ID: E-1_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1745.D

GC/MS Column: DB-624
Sample wt/vol: 6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-017
Client ID: E-1_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1746.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00114	0.000502
Chloromethane	ND		0.00114	0.000512
Vinyl chloride	ND		0.00114	0.000486
Bromomethane	ND		0.00114	0.00073
Chloroethane	ND		0.00114	0.000578
Trichlorofluoromethane	ND		0.00114	0.000927
1,1-Dichloroethene	ND		0.00114	0.000556
Acetone	ND		0.0057	0.000795
Carbon disulfide	ND		0.00114	0.000652
Methylene chloride	0.00291	C	0.00228	0.00226
trans-1,2-Dichloroethene	ND		0.00114	0.000426
Methyl tert-butyl ether (MTBE)	ND		0.00114	0.000425
1,1-Dichloroethane	ND		0.00114	0.000307
cis-1,2-Dichloroethene	ND		0.00114	0.000364
2-Butanone (MEK)	ND		0.00114	0.000853
Bromochloromethane	ND		0.00114	0.000481
Chloroform	ND		0.00114	0.000479
1,1,1-Trichloroethane	ND		0.00114	0.000498
Carbon tetrachloride	ND		0.00114	0.000762
1,2-Dichloroethane (EDC)	ND		0.00114	0.000397
Benzene	ND		0.00114	0.00031
Trichloroethene	ND		0.00114	0.000367
1,2-Dichloropropane	ND		0.00114	0.000404
1,4-Dioxane	ND		0.228	0.022
Bromodichloromethane	ND		0.00114	0.000477
cis-1,3-Dichloropropene	ND		0.00114	0.000456
4-Methyl-2-pentanone (MIBK)	ND		0.00114	0.000571

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-017
Client ID: E-1_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1746.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00114	0.000332
trans-1,3-Dichloropropene	ND		0.00114	0.000348
1,1,2-Trichloroethane	ND		0.00114	0.000268
Tetrachloroethene	0.00229		0.00114	0.000564
2-Hexanone	ND		0.00114	0.000659
Dibromochloromethane	ND		0.00114	0.000336
1,2-Dibromoethane (EDB)	ND		0.00114	0.000402
Chlorobenzene	ND		0.00114	0.000383
Ethylbenzene	ND		0.00114	0.00039
Total Xylenes	ND		0.00228	0.000915
Styrene	ND		0.00114	0.000408
Bromoform	ND		0.00114	0.000526
Isopropylbenzene	ND		0.00114	0.000499
1,1,2,2-Tetrachloroethane	ND		0.00114	0.000447
1,3-Dichlorobenzene	ND		0.00114	0.000537
1,4-Dichlorobenzene	ND		0.00114	0.000604
1,2-Dichlorobenzene	ND		0.00114	0.000549
1,2-Dibromo-3-chloropropane	ND		0.00114	0.000728
1,2,4-Trichlorobenzene	ND		0.00114	0.000502
1,2,3-Trichlorobenzene	ND		0.00114	0.000653
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00114	0.000788
Methyl acetate	ND		0.00114	0.000614
Cyclohexane	ND		0.0057	0.000592
Methylcyclohexane	ND		0.00114	0.000636
1,3-Dichloropropene (cis- and trans-)	ND		0.00114	0.000456
Total Target Compounds (52):	0.0052	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0035

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-017
Client ID: E-1_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1746.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-020
Client ID: E-2_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1770.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.0

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00158	0.000695
Chloromethane	ND		0.00158	0.000709
Vinyl chloride	ND		0.00158	0.000673
Bromomethane	ND		0.00158	0.00101
Chloroethane	ND		0.00158	0.000801
Trichlorofluoromethane	ND		0.00158	0.00128
1,1-Dichloroethene	ND		0.00158	0.000771
Acetone	ND		0.0079	0.0011
Carbon disulfide	ND		0.00158	0.000904
Methylene chloride	ND		0.00316	0.00313
trans-1,2-Dichloroethene	ND		0.00158	0.000591
Methyl tert-butyl ether (MTBE)	ND		0.00158	0.000589
1,1-Dichloroethane	ND		0.00158	0.000425
cis-1,2-Dichloroethene	ND		0.00158	0.000504
2-Butanone (MEK)	ND		0.00158	0.00118
Bromochloromethane	ND		0.00158	0.000667
Chloroform	ND		0.00158	0.000664
1,1,1-Trichloroethane	ND		0.00158	0.00069
Carbon tetrachloride	ND		0.00158	0.00106
1,2-Dichloroethane (EDC)	ND		0.00158	0.00055
Benzene	ND		0.00158	0.00043
Trichloroethene	ND		0.00158	0.000509
1,2-Dichloropropane	ND		0.00158	0.000559
1,4-Dioxane	ND		0.316	0.031
Bromodichloromethane	ND		0.00158	0.00066
cis-1,3-Dichloropropene	ND		0.00158	0.000632
4-Methyl-2-pentanone (MIBK)	ND		0.00158	0.000792

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-020
Client ID: E-2_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1770.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.0

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00158	0.00046
trans-1,3-Dichloropropene	ND		0.00158	0.000482
1,1,2-Trichloroethane	ND		0.00158	0.000371
Tetrachloroethene	ND		0.00158	0.000782
2-Hexanone	ND		0.00158	0.000913
Dibromochloromethane	ND		0.00158	0.000466
1,2-Dibromoethane (EDB)	ND		0.00158	0.000558
Chlorobenzene	ND		0.00158	0.000531
Ethylbenzene	ND		0.00158	0.00054
Total Xylenes	ND		0.00316	0.00127
Styrene	ND		0.00158	0.000566
Bromoform	ND		0.00158	0.000728
Isopropylbenzene	ND		0.00158	0.000692
1,1,2,2-Tetrachloroethane	ND		0.00158	0.000619
1,3-Dichlorobenzene	ND		0.00158	0.000744
1,4-Dichlorobenzene	ND		0.00158	0.000837
1,2-Dichlorobenzene	ND		0.00158	0.000762
1,2-Dibromo-3-chloropropane	ND		0.00158	0.00101
1,2,4-Trichlorobenzene	ND		0.00158	0.000695
1,2,3-Trichlorobenzene	ND		0.00158	0.000905
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00158	0.00109
Methyl acetate	ND		0.00158	0.000852
Cyclohexane	ND		0.0079	0.00082
Methylcyclohexane	ND		0.00158	0.000882
1,3-Dichloropropene (cis- and trans-)	ND		0.00158	0.000632

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0038

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-020
Client ID: E-2_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1770.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.0

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-021
Client ID: E-2_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1748.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00119	0.000524
Chloromethane	ND		0.00119	0.000534
Vinyl chloride	ND		0.00119	0.000507
Bromomethane	ND		0.00119	0.000762
Chloroethane	ND		0.00119	0.000603
Trichlorofluoromethane	ND		0.00119	0.000967
1,1-Dichloroethene	ND		0.00119	0.000581
Acetone	ND		0.00595	0.000829
Carbon disulfide	ND		0.00119	0.000681
Methylene chloride	0.00446	C	0.00238	0.00236
trans-1,2-Dichloroethene	ND		0.00119	0.000445
Methyl tert-butyl ether (MTBE)	ND		0.00119	0.000444
1,1-Dichloroethane	ND		0.00119	0.00032
cis-1,2-Dichloroethene	ND		0.00119	0.00038
2-Butanone (MEK)	ND		0.00119	0.00089
Bromochloromethane	ND		0.00119	0.000502
Chloroform	ND		0.00119	0.0005
1,1,1-Trichloroethane	ND		0.00119	0.00052
Carbon tetrachloride	ND		0.00119	0.000795
1,2-Dichloroethane (EDC)	ND		0.00119	0.000414
Benzene	ND		0.00119	0.000324
Trichloroethene	0.00138		0.00119	0.000383
1,2-Dichloropropane	ND		0.00119	0.000421
1,4-Dioxane	ND		0.238	0.023
Bromodichloromethane	ND		0.00119	0.000497
cis-1,3-Dichloropropene	ND		0.00119	0.000476
4-Methyl-2-pentanone (MIBK)	ND		0.00119	0.000596

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-021
Client ID: E-2_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1748.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00119	0.000346
trans-1,3-Dichloropropene	ND		0.00119	0.000363
1,1,2-Trichloroethane	ND		0.00119	0.00028
Tetrachloroethene	0.000652	J	0.00119	0.000589
2-Hexanone	ND		0.00119	0.000688
Dibromochloromethane	ND		0.00119	0.000351
1,2-Dibromoethane (EDB)	ND		0.00119	0.00042
Chlorobenzene	ND		0.00119	0.0004
Ethylbenzene	ND		0.00119	0.000407
Total Xylenes	ND		0.00238	0.000956
Styrene	ND		0.00119	0.000426
Bromoform	ND		0.00119	0.000549
Isopropylbenzene	ND		0.00119	0.000521
1,1,2,2-Tetrachloroethane	ND		0.00119	0.000466
1,3-Dichlorobenzene	ND		0.00119	0.00056
1,4-Dichlorobenzene	ND		0.00119	0.000631
1,2-Dichlorobenzene	ND		0.00119	0.000574
1,2-Dibromo-3-chloropropane	ND		0.00119	0.00076
1,2,4-Trichlorobenzene	ND		0.00119	0.000524
1,2,3-Trichlorobenzene	ND		0.00119	0.000682
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00119	0.000822
Methyl acetate	ND		0.00119	0.000641
Cyclohexane	ND		0.00595	0.000618
Methylcyclohexane	ND		0.00119	0.000664
1,3-Dichloropropene (cis- and trans-)	ND		0.00119	0.000476
Total Target Compounds (52):	0.00649	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0041

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-021
Client ID: E-2_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1748.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-022
Client ID: E-2_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1749.D

GC/MS Column: DB-624
Sample wt/vol: 4.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00123	0.000541
Chloromethane	ND		0.00123	0.000552
Vinyl chloride	ND		0.00123	0.000524
Bromomethane	ND		0.00123	0.000787
Chloroethane	ND		0.00123	0.000624
Trichlorofluoromethane	ND		0.00123	0.001
1,1-Dichloroethene	ND		0.00123	0.0006
Acetone	ND		0.00615	0.000857
Carbon disulfide	ND		0.00123	0.000704
Methylene chloride	0.00363	C	0.00246	0.00244
trans-1,2-Dichloroethene	ND		0.00123	0.00046
Methyl tert-butyl ether (MTBE)	ND		0.00123	0.000459
1,1-Dichloroethane	ND		0.00123	0.000331
cis-1,2-Dichloroethene	ND		0.00123	0.000392
2-Butanone (MEK)	ND		0.00123	0.00092
Bromochloromethane	ND		0.00123	0.000519
Chloroform	ND		0.00123	0.000517
1,1,1-Trichloroethane	ND		0.00123	0.000538
Carbon tetrachloride	ND		0.00123	0.000822
1,2-Dichloroethane (EDC)	ND		0.00123	0.000428
Benzene	ND		0.00123	0.000335
Trichloroethene	0.000658	J	0.00123	0.000396
1,2-Dichloropropane	ND		0.00123	0.000435
1,4-Dioxane	ND		0.246	0.024
Bromodichloromethane	ND		0.00123	0.000514
cis-1,3-Dichloropropene	ND		0.00123	0.000492
4-Methyl-2-pentanone (MIBK)	ND		0.00123	0.000616

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-022
Client ID: E-2_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1749.D

GC/MS Column: DB-624
Sample wt/vol: 4.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00123	0.000358
trans-1,3-Dichloropropene	ND		0.00123	0.000375
1,1,2-Trichloroethane	ND		0.00123	0.000289
Tetrachloroethene	0.000924	J	0.00123	0.000609
2-Hexanone	ND		0.00123	0.000711
Dibromochloromethane	ND		0.00123	0.000363
1,2-Dibromoethane (EDB)	ND		0.00123	0.000434
Chlorobenzene	ND		0.00123	0.000413
Ethylbenzene	ND		0.00123	0.000421
Total Xylenes	ND		0.00246	0.000988
Styrene	ND		0.00123	0.00044
Bromoform	ND		0.00123	0.000567
Isopropylbenzene	ND		0.00123	0.000539
1,1,2,2-Tetrachloroethane	ND		0.00123	0.000482
1,3-Dichlorobenzene	ND		0.00123	0.000579
1,4-Dichlorobenzene	ND		0.00123	0.000652
1,2-Dichlorobenzene	ND		0.00123	0.000593
1,2-Dibromo-3-chloropropane	ND		0.00123	0.000786
1,2,4-Trichlorobenzene	ND		0.00123	0.000541
1,2,3-Trichlorobenzene	ND		0.00123	0.000705
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00123	0.00085
Methyl acetate	ND		0.00123	0.000663
Cyclohexane	ND		0.00615	0.000638
Methylcyclohexane	ND		0.00123	0.000686
1,3-Dichloropropene (cis- and trans-)	ND		0.00123	0.000492
Total Target Compounds (52):	0.00521	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0044

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-022
Client ID: E-2_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1749.D

GC/MS Column: DB-624
Sample wt/vol: 4.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-023
Client ID: E-2_(4.0-4.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1750.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00116	0.00051
Chloromethane	ND		0.00116	0.000521
Vinyl chloride	ND		0.00116	0.000494
Bromomethane	ND		0.00116	0.000742
Chloroethane	ND		0.00116	0.000588
Trichlorofluoromethane	ND		0.00116	0.000943
1,1-Dichloroethene	ND		0.00116	0.000566
Acetone	ND		0.0058	0.000809
Carbon disulfide	ND		0.00116	0.000664
Methylene chloride	0.00308	C	0.00232	0.0023
trans-1,2-Dichloroethene	ND		0.00116	0.000434
Methyl tert-butyl ether (MTBE)	ND		0.00116	0.000433
1,1-Dichloroethane	ND		0.00116	0.000312
cis-1,2-Dichloroethene	ND		0.00116	0.00037
2-Butanone (MEK)	ND		0.00116	0.000868
Bromochloromethane	ND		0.00116	0.00049
Chloroform	ND		0.00116	0.000487
1,1,1-Trichloroethane	ND		0.00116	0.000507
Carbon tetrachloride	ND		0.00116	0.000775
1,2-Dichloroethane (EDC)	ND		0.00116	0.000404
Benzene	ND		0.00116	0.000316
Trichloroethene	0.000418	J	0.00116	0.000374
1,2-Dichloropropane	ND		0.00116	0.000411
1,4-Dioxane	ND		0.232	0.023
Bromodichloromethane	ND		0.00116	0.000485
cis-1,3-Dichloropropene	ND		0.00116	0.000464
4-Methyl-2-pentanone (MIBK)	ND		0.00116	0.000581

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-023
Client ID: E-2_(4.0-4.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1750.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00116	0.000338
trans-1,3-Dichloropropene	ND		0.00116	0.000354
1,1,2-Trichloroethane	ND		0.00116	0.000273
Tetrachloroethene	0.009		0.00116	0.000574
2-Hexanone	ND		0.00116	0.00067
Dibromochloromethane	ND		0.00116	0.000342
1,2-Dibromoethane (EDB)	ND		0.00116	0.000409
Chlorobenzene	ND		0.00116	0.00039
Ethylbenzene	ND		0.00116	0.000397
Total Xylenes	ND		0.00232	0.000931
Styrene	ND		0.00116	0.000415
Bromoform	ND		0.00116	0.000535
Isopropylbenzene	ND		0.00116	0.000508
1,1,2,2-Tetrachloroethane	ND		0.00116	0.000455
1,3-Dichlorobenzene	ND		0.00116	0.000546
1,4-Dichlorobenzene	ND		0.00116	0.000615
1,2-Dichlorobenzene	ND		0.00116	0.000559
1,2-Dibromo-3-chloropropane	ND		0.00116	0.000741
1,2,4-Trichlorobenzene	ND		0.00116	0.00051
1,2,3-Trichlorobenzene	ND		0.00116	0.000665
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00116	0.000802
Methyl acetate	ND		0.00116	0.000625
Cyclohexane	ND		0.0058	0.000602
Methylcyclohexane	ND		0.00116	0.000647
1,3-Dichloropropene (cis- and trans-)	ND		0.00116	0.000464
Total Target Compounds (52):	0.013	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0047

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-023
Client ID: E-2_(4.0-4.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1750.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-026
Client ID: E-7_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1771.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.5

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00154	0.000678
Chloromethane	ND		0.00154	0.000691
Vinyl chloride	ND		0.00154	0.000656
Bromomethane	ND		0.00154	9.860001E-04
Chloroethane	ND		0.00154	0.000781
Trichlorofluoromethane	ND		0.00154	0.00125
1,1-Dichloroethene	ND		0.00154	0.000752
Acetone	ND		0.0077	0.00107
Carbon disulfide	ND		0.00154	0.000881
Methylene chloride	0.00381	C	0.00308	0.00305
trans-1,2-Dichloroethene	ND		0.00154	0.000576
Methyl tert-butyl ether (MTBE)	ND		0.00154	0.000574
1,1-Dichloroethane	ND		0.00154	0.000414
cis-1,2-Dichloroethene	0.000605	J	0.00154	0.000491
2-Butanone (MEK)	ND		0.00154	0.00115
Bromochloromethane	ND		0.00154	0.00065
Chloroform	ND		0.00154	0.000647
1,1,1-Trichloroethane	ND		0.00154	0.000673
Carbon tetrachloride	ND		0.00154	0.00103
1,2-Dichloroethane (EDC)	ND		0.00154	0.000536
Benzene	ND		0.00154	0.000419
Trichloroethene	0.00701		0.00154	0.000496
1,2-Dichloropropane	ND		0.00154	0.000545
1,4-Dioxane	ND		0.308	0.030
Bromodichloromethane	ND		0.00154	0.000644
cis-1,3-Dichloropropene	ND		0.00154	0.000616
4-Methyl-2-pentanone (MIBK)	ND		0.00154	0.000772

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-026
Client ID: E-7_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1771.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.5

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00154	0.000448
trans-1,3-Dichloropropene	ND		0.00154	0.00047
1,1,2-Trichloroethane	ND		0.00154	0.000362
Tetrachloroethene	0.00185		0.00154	0.000762
2-Hexanone	ND		0.00154	0.00089
Dibromochloromethane	ND		0.00154	0.000454
1,2-Dibromoethane (EDB)	ND		0.00154	0.000544
Chlorobenzene	ND		0.00154	0.000517
Ethylbenzene	ND		0.00154	0.000527
Total Xylenes	ND		0.00308	0.00124
Styrene	ND		0.00154	0.000551
Bromoform	ND		0.00154	0.00071
Isopropylbenzene	ND		0.00154	0.000675
1,1,2,2-Tetrachloroethane	ND		0.00154	0.000604
1,3-Dichlorobenzene	ND		0.00154	0.000725
1,4-Dichlorobenzene	ND		0.00154	0.000816
1,2-Dichlorobenzene	ND		0.00154	0.000742
1,2-Dibromo-3-chloropropane	ND		0.00154	0.000984
1,2,4-Trichlorobenzene	ND		0.00154	0.000678
1,2,3-Trichlorobenzene	ND		0.00154	0.000882
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00154	0.00106
Methyl acetate	ND		0.00154	0.00083
Cyclohexane	ND		0.0077	0.000799
Methylcyclohexane	ND		0.00154	0.000859
1,3-Dichloropropene (cis- and trans-)	ND		0.00154	0.000616
Total Target Compounds (52):	0.013	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0050

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-026
Client ID: E-7_(0.5-1.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1771.D

GC/MS Column: DB-624
Sample wt/vol: 3.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.5

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-027
Client ID: E-7_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1752.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00117	0.000515
Chloromethane	ND		0.00117	0.000525
Vinyl chloride	ND		0.00117	0.000498
Bromomethane	ND		0.00117	0.000749
Chloroethane	ND		0.00117	0.000593
Trichlorofluoromethane	ND		0.00117	0.000951
1,1-Dichloroethene	ND		0.00117	0.000571
Acetone	ND		0.00585	0.000815
Carbon disulfide	ND		0.00117	0.000669
Methylene chloride	0.00427	C	0.00234	0.00232
trans-1,2-Dichloroethene	ND		0.00117	0.000438
Methyl tert-butyl ether (MTBE)	ND		0.00117	0.000436
1,1-Dichloroethane	ND		0.00117	0.000315
cis-1,2-Dichloroethene	ND		0.00117	0.000373
2-Butanone (MEK)	ND		0.00117	0.000875
Bromochloromethane	ND		0.00117	0.000494
Chloroform	ND		0.00117	0.000491
1,1,1-Trichloroethane	ND		0.00117	0.000511
Carbon tetrachloride	ND		0.00117	0.000782
1,2-Dichloroethane (EDC)	ND		0.00117	0.000407
Benzene	ND		0.00117	0.000318
Trichloroethene	ND		0.00117	0.000377
1,2-Dichloropropane	ND		0.00117	0.000414
1,4-Dioxane	ND		0.234	0.023
Bromodichloromethane	ND		0.00117	0.000489
cis-1,3-Dichloropropene	ND		0.00117	0.000468
4-Methyl-2-pentanone (MIBK)	ND		0.00117	0.000586

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-027
Client ID: E-7_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1752.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00117	0.00034
trans-1,3-Dichloropropene	ND		0.00117	0.000357
1,1,2-Trichloroethane	ND		0.00117	0.000275
Tetrachloroethene	0.00122		0.00117	0.000579
2-Hexanone	ND		0.00117	0.000676
Dibromochloromethane	ND		0.00117	0.000345
1,2-Dibromoethane (EDB)	ND		0.00117	0.000413
Chlorobenzene	ND		0.00117	0.000393
Ethylbenzene	ND		0.00117	0.0004
Total Xylenes	ND		0.00234	0.00094
Styrene	ND		0.00117	0.000419
Bromoform	ND		0.00117	0.000539
Isopropylbenzene	ND		0.00117	0.000512
1,1,2,2-Tetrachloroethane	ND		0.00117	0.000459
1,3-Dichlorobenzene	ND		0.00117	0.000551
1,4-Dichlorobenzene	ND		0.00117	0.00062
1,2-Dichlorobenzene	ND		0.00117	0.000564
1,2-Dibromo-3-chloropropane	ND		0.00117	0.000748
1,2,4-Trichlorobenzene	ND		0.00117	0.000515
1,2,3-Trichlorobenzene	ND		0.00117	0.00067
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00117	0.000808
Methyl acetate	ND		0.00117	0.000631
Cyclohexane	ND		0.00585	0.000607
Methylcyclohexane	ND		0.00117	0.000653
1,3-Dichloropropene (cis- and trans-)	ND		0.00117	0.000468
Total Target Compounds (52):	0.00549	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0053

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-027
Client ID: E-7_(2.0-2.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1752.D

GC/MS Column: DB-624
Sample wt/vol: 4.5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-028
Client ID: E-7_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1753.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00105	0.000462
Chloromethane	ND		0.00105	0.000471
Vinyl chloride	ND		0.00105	0.000447
Bromomethane	ND		0.00105	0.000672
Chloroethane	ND		0.00105	0.000532
Trichlorofluoromethane	ND		0.00105	0.000854
1,1-Dichloroethene	ND		0.00105	0.000512
Acetone	ND		0.00525	0.000732
Carbon disulfide	ND		0.00105	0.000601
Methylene chloride	0.00391	C	0.0021	0.00208
trans-1,2-Dichloroethene	ND		0.00105	0.000393
Methyl tert-butyl ether (MTBE)	ND		0.00105	0.000392
1,1-Dichloroethane	ND		0.00105	0.000282
cis-1,2-Dichloroethene	ND		0.00105	0.000335
2-Butanone (MEK)	ND		0.00105	0.000785
Bromochloromethane	ND		0.00105	0.000443
Chloroform	ND		0.00105	0.000441
1,1,1-Trichloroethane	ND		0.00105	0.000459
Carbon tetrachloride	ND		0.00105	0.000701
1,2-Dichloroethane (EDC)	ND		0.00105	0.000365
Benzene	ND		0.00105	0.000286
Trichloroethene	0.000394	J	0.00105	0.000338
1,2-Dichloropropane	ND		0.00105	0.000372
1,4-Dioxane	ND		0.210	0.021
Bromodichloromethane	ND		0.00105	0.000439
cis-1,3-Dichloropropene	ND		0.00105	0.00042
4-Methyl-2-pentanone (MIBK)	ND		0.00105	0.000526

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-028
Client ID: E-7_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1753.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00105	0.000306
trans-1,3-Dichloropropene	ND		0.00105	0.00032
1,1,2-Trichloroethane	ND		0.00105	0.000247
Tetrachloroethene	0.00205		0.00105	0.00052
2-Hexanone	ND		0.00105	0.000607
Dibromochloromethane	ND		0.00105	0.00031
1,2-Dibromoethane (EDB)	ND		0.00105	0.000371
Chlorobenzene	ND		0.00105	0.000353
Ethylbenzene	ND		0.00105	0.000359
Total Xylenes	ND		0.0021	0.000843
Styrene	ND		0.00105	0.000376
Bromoform	ND		0.00105	0.000484
Isopropylbenzene	ND		0.00105	0.00046
1,1,2,2-Tetrachloroethane	ND		0.00105	0.000412
1,3-Dichlorobenzene	ND		0.00105	0.000495
1,4-Dichlorobenzene	ND		0.00105	0.000557
1,2-Dichlorobenzene	ND		0.00105	0.000506
1,2-Dibromo-3-chloropropane	ND		0.00105	0.000671
1,2,4-Trichlorobenzene	ND		0.00105	0.000462
1,2,3-Trichlorobenzene	ND		0.00105	0.000602
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00105	0.000726
Methyl acetate	ND		0.00105	0.000566
Cyclohexane	ND		0.00525	0.000545
Methylcyclohexane	ND		0.00105	0.000586
1,3-Dichloropropene (cis- and trans-)	ND		0.00105	0.00042
Total Target Compounds (52):	0.00635	CJ		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0056

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-028
Client ID: E-7_(3.0-3.5)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1753.D

GC/MS Column: DB-624
Sample wt/vol: 5.3g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-029
Client ID: E-7_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1754.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.00101	0.000444
Chloromethane	ND		0.00101	0.000453
Vinyl chloride	ND		0.00101	0.00043
Bromomethane	ND		0.00101	0.000646
Chloroethane	ND		0.00101	0.000512
Trichlorofluoromethane	ND		0.00101	0.000821
1,1-Dichloroethene	ND		0.00101	0.000493
Acetone	ND		0.00505	0.000704
Carbon disulfide	ND		0.00101	0.000578
Methylene chloride	0.00416	C	0.00202	0.002
trans-1,2-Dichloroethene	ND		0.00101	0.000378
Methyl tert-butyl ether (MTBE)	ND		0.00101	0.000377
1,1-Dichloroethane	ND		0.00101	0.000272
cis-1,2-Dichloroethene	ND		0.00101	0.000322
2-Butanone (MEK)	ND		0.00101	0.000755
Bromochloromethane	ND		0.00101	0.000426
Chloroform	ND		0.00101	0.000424
1,1,1-Trichloroethane	ND		0.00101	0.000441
Carbon tetrachloride	ND		0.00101	0.000675
1,2-Dichloroethane (EDC)	ND		0.00101	0.000351
Benzene	ND		0.00101	0.000275
Trichloroethene	0.00462		0.00101	0.000325
1,2-Dichloropropane	ND		0.00101	0.000358
1,4-Dioxane	ND		0.202	0.020
Bromodichloromethane	ND		0.00101	0.000422
cis-1,3-Dichloropropene	ND		0.00101	0.000404
4-Methyl-2-pentanone (MIBK)	ND		0.00101	0.000506

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-029
Client ID: E-7_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Data file: F1754.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.00101	0.000294
trans-1,3-Dichloropropene	ND		0.00101	0.000308
1,1,2-Trichloroethane	ND		0.00101	0.000237
Tetrachloroethene	0.00227		0.00101	0.0005
2-Hexanone	ND		0.00101	0.000584
Dibromochloromethane	ND		0.00101	0.000298
1,2-Dibromoethane (EDB)	ND		0.00101	0.000357
Chlorobenzene	ND		0.00101	0.000339
Ethylbenzene	ND		0.00101	0.000345
Total Xylenes	ND		0.00202	0.000811
Styrene	ND		0.00101	0.000362
Bromoform	ND		0.00101	0.000466
Isopropylbenzene	ND		0.00101	0.000442
1,1,2,2-Tetrachloroethane	ND		0.00101	0.000396
1,3-Dichlorobenzene	ND		0.00101	0.000476
1,4-Dichlorobenzene	ND		0.00101	0.000535
1,2-Dichlorobenzene	ND		0.00101	0.000487
1,2-Dibromo-3-chloropropane	ND		0.00101	0.000645
1,2,4-Trichlorobenzene	ND		0.00101	0.000444
1,2,3-Trichlorobenzene	ND		0.00101	0.000579
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.00101	0.000698
Methyl acetate	ND		0.00101	0.000544
Cyclohexane	ND		0.00505	0.000524
Methylcyclohexane	ND		0.00101	0.000564
1,3-Dichloropropene (cis- and trans-)	ND		0.00101	0.000404
Total Target Compounds (52):	0.011	C		

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0059

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-029
Client ID: E-7_(4.5-5.0)/
Date Received: 06/24/2015
Date Analyzed: 07/01/2015
Date File: F1754.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-030
Client ID: FB-062315
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8642.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000685
Chloromethane	ND		0.001	0.000493
Vinyl chloride	ND		0.001	0.000463
Bromomethane	ND		0.001	0.000684
Chloroethane	ND		0.001	0.000829
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000491
Acetone	ND		0.002	0.00143
Carbon disulfide	ND		0.001	0.000505
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.000544
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000491
1,1-Dichloroethane	ND		0.001	0.000358
cis-1,2-Dichloroethene	ND		0.001	0.000479
2-Butanone (MEK)	ND		0.001	0.000872
Bromochloromethane	ND		0.001	0.000636
Chloroform	ND		0.001	0.000511
1,1,1-Trichloroethane	ND		0.001	0.000485
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000573
Benzene	ND		0.001	0.000388
Trichloroethene	ND		0.001	0.000357
1,2-Dichloropropane	ND		0.001	0.000556
1,4-Dioxane	ND		0.200	0.083
Bromodichloromethane	ND		0.001	0.000526
cis-1,3-Dichloropropene	ND		0.001	0.000441
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-030
Client ID: FB-062315
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8642.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00037
trans-1,3-Dichloropropene	ND		0.001	0.000416
1,1,2-Trichloroethane	ND		0.001	0.000633
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000693
Dibromochloromethane	ND		0.001	0.000516
1,2-Dibromoethane (EDB)	ND		0.001	0.000677
Chlorobenzene	ND		0.001	0.000395
Ethylbenzene	ND		0.001	0.00042
Total Xylenes	ND		0.002	0.00104
Styrene	ND		0.001	0.00037
Bromoform	ND		0.001	0.000663
Isopropylbenzene	ND		0.001	0.000581
1,1,2,2-Tetrachloroethane	ND		0.001	0.000691
1,3-Dichlorobenzene	ND		0.001	0.000416
1,4-Dichlorobenzene	ND		0.001	0.000409
1,2-Dichlorobenzene	ND		0.001	0.000401
1,2-Dibromo-3-chloropropane	ND		0.001	0.00093
1,2,4-Trichlorobenzene	ND		0.001	0.000483
1,2,3-Trichlorobenzene	ND		0.001	0.000449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000972
Methyl acetate	ND		0.001	0.000897
Cyclohexane	ND		0.001	0.000818
Methylcyclohexane	ND		0.001	0.000773
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0062

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-030
Client ID: FB-062315
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Date File: J8642.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-031
Client ID: TB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8643.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000685
Chloromethane	ND		0.001	0.000493
Vinyl chloride	ND		0.001	0.000463
Bromomethane	ND		0.001	0.000684
Chloroethane	ND		0.001	0.000829
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000491
Acetone	ND		0.002	0.00143
Carbon disulfide	ND		0.001	0.000505
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.000544
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000491
1,1-Dichloroethane	ND		0.001	0.000358
cis-1,2-Dichloroethene	ND		0.001	0.000479
2-Butanone (MEK)	ND		0.001	0.000872
Bromochloromethane	ND		0.001	0.000636
Chloroform	ND		0.001	0.000511
1,1,1-Trichloroethane	ND		0.001	0.000485
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000573
Benzene	ND		0.001	0.000388
Trichloroethene	ND		0.001	0.000357
1,2-Dichloropropane	ND		0.001	0.000556
1,4-Dioxane	ND		0.200	0.083
Bromodichloromethane	ND		0.001	0.000526
cis-1,3-Dichloropropene	ND		0.001	0.000441
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-031
Client ID: TB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8643.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00037
trans-1,3-Dichloropropene	ND		0.001	0.000416
1,1,2-Trichloroethane	ND		0.001	0.000633
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000693
Dibromochloromethane	ND		0.001	0.000516
1,2-Dibromoethane (EDB)	ND		0.001	0.000677
Chlorobenzene	ND		0.001	0.000395
Ethylbenzene	ND		0.001	0.00042
Total Xylenes	ND		0.002	0.00104
Styrene	ND		0.001	0.00037
Bromoform	ND		0.001	0.000663
Isopropylbenzene	ND		0.001	0.000581
1,1,2,2-Tetrachloroethane	ND		0.001	0.000691
1,3-Dichlorobenzene	ND		0.001	0.000416
1,4-Dichlorobenzene	ND		0.001	0.000409
1,2-Dichlorobenzene	ND		0.001	0.000401
1,2-Dibromo-3-chloropropane	ND		0.001	0.00093
1,2,4-Trichlorobenzene	ND		0.001	0.000483
1,2,3-Trichlorobenzene	ND		0.001	0.000449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000972
Methyl acetate	ND		0.001	0.000897
Cyclohexane	ND		0.001	0.000818
Methylcyclohexane	ND		0.001	0.000773
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0065

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-031
Client ID: TB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Date File: J8643.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-032
Client ID: FB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8644.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.000685
Chloromethane	ND		0.001	0.000493
Vinyl chloride	ND		0.001	0.000463
Bromomethane	ND		0.001	0.000684
Chloroethane	ND		0.001	0.000829
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000491
Acetone	ND		0.002	0.00143
Carbon disulfide	ND		0.001	0.000505
Methylene chloride	ND		0.002	0.00199
trans-1,2-Dichloroethene	ND		0.001	0.000544
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000491
1,1-Dichloroethane	ND		0.001	0.000358
cis-1,2-Dichloroethene	ND		0.001	0.000479
2-Butanone (MEK)	ND		0.001	0.000872
Bromochloromethane	ND		0.001	0.000636
Chloroform	ND		0.001	0.000511
1,1,1-Trichloroethane	ND		0.001	0.000485
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000573
Benzene	ND		0.001	0.000388
Trichloroethene	ND		0.001	0.000357
1,2-Dichloropropane	ND		0.001	0.000556
1,4-Dioxane	ND		0.200	0.083
Bromodichloromethane	ND		0.001	0.000526
cis-1,3-Dichloropropene	ND		0.001	0.000441
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: 05428-032
Client ID: FB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Data file: J8644.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.00037
trans-1,3-Dichloropropene	ND		0.001	0.000416
1,1,2-Trichloroethane	ND		0.001	0.000633
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000693
Dibromochloromethane	ND		0.001	0.000516
1,2-Dibromoethane (EDB)	ND		0.001	0.000677
Chlorobenzene	ND		0.001	0.000395
Ethylbenzene	ND		0.001	0.00042
Total Xylenes	ND		0.002	0.00104
Styrene	ND		0.001	0.00037
Bromoform	ND		0.001	0.000663
Isopropylbenzene	ND		0.001	0.000581
1,1,2,2-Tetrachloroethane	ND		0.001	0.000691
1,3-Dichlorobenzene	ND		0.001	0.000416
1,4-Dichlorobenzene	ND		0.001	0.000409
1,2-Dichlorobenzene	ND		0.001	0.000401
1,2-Dibromo-3-chloropropane	ND		0.001	0.00093
1,2,4-Trichlorobenzene	ND		0.001	0.000483
1,2,3-Trichlorobenzene	ND		0.001	0.000449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000972
Methyl acetate	ND		0.001	0.000897
Cyclohexane	ND		0.001	0.000818
Methylcyclohexane	ND		0.001	0.000773
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.000441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0068

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: 05428-032
Client ID: FB-062415
Date Received: 06/24/2015
Date Analyzed: 07/03/2015
Date File: J8644.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-001
Client ID: E-20_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: R5517.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.02g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 100
% Moisture: 17.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		4.85	1.94
Aroclor-1221	ND		4.85	1.94
Aroclor-1232	ND		4.85	1.94
Aroclor-1242	ND		4.85	1.94
Aroclor-1248	ND		4.85	1.94
Aroclor-1254	ND		4.85	1.94
Aroclor-1260	168	D	4.85	1.94
Aroclor-1262	ND		4.85	1.94
Aroclor-1268	ND		4.85	1.94
PCBs	168	D	4.85	1.94

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0070

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-002
Client ID: E-20_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: R5509.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.94g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.036	0.014
Aroclor-1221	ND		0.036	0.014
Aroclor-1232	ND		0.036	0.014
Aroclor-1242	ND		0.036	0.014
Aroclor-1248	ND		0.036	0.014
Aroclor-1254	ND		0.036	0.014
Aroclor-1260	3.67		0.036	0.014
Aroclor-1262	ND		0.036	0.014
Aroclor-1268	ND		0.036	0.014
PCBs	3.67		0.036	0.014

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0071

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-003
Client ID: E-22_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: R5518.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.34g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.212	0.085
Aroclor-1221	ND		0.212	0.085
Aroclor-1232	ND		0.212	0.085
Aroclor-1242	ND		0.212	0.085
Aroclor-1248	ND		0.212	0.085
Aroclor-1254	ND		0.212	0.085
Aroclor-1260	9.58	D	0.212	0.085
Aroclor-1262	ND		0.212	0.085
Aroclor-1268	ND		0.212	0.085
PCBs	9.58	D	0.212	0.085

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0072

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-004
Client ID: E-22_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: R5511.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	0.243		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.243		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0073

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-005
Client ID: E-29_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: R5512.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.06g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.051	0.021
Aroclor-1221	ND		0.051	0.021
Aroclor-1232	ND		0.051	0.021
Aroclor-1242	ND		0.051	0.021
Aroclor-1248	ND		0.051	0.021
Aroclor-1254	ND		0.051	0.021
Aroclor-1260	4.39		0.051	0.021
Aroclor-1262	ND		0.051	0.021
Aroclor-1268	ND		0.051	0.021
PCBs	4.39		0.051	0.021

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0074

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-006
Client ID: E-29_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: R5513.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	0.326		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.326		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0075

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-007
Client ID: E-19_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3015.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.36g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	10.7	E	0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	10.7	E	0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0076

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-007DL
Client ID: E-19_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3059.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.36g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 12.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.214	0.086
Aroclor-1221	ND		0.214	0.086
Aroclor-1232	ND		0.214	0.086
Aroclor-1242	ND		0.214	0.086
Aroclor-1248	ND		0.214	0.086
Aroclor-1254	ND		0.214	0.086
Aroclor-1260	11.2	D	0.214	0.086
Aroclor-1262	ND		0.214	0.086
Aroclor-1268	ND		0.214	0.086
PCBs	11.2	D	0.214	0.086

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0077

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-008
Client ID: E-19_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3016.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	4.37		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	4.37		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0078

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-009
Client ID: E-27_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3017.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.28g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.046	0.018
Aroclor-1221	ND		0.046	0.018
Aroclor-1232	ND		0.046	0.018
Aroclor-1242	ND		0.046	0.018
Aroclor-1248	ND		0.046	0.018
Aroclor-1254	ND		0.046	0.018
Aroclor-1260	24.0	E	0.046	0.018
Aroclor-1262	ND		0.046	0.018
Aroclor-1268	ND		0.046	0.018
PCBs	24.0	E	0.046	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-009DL
Client ID: E-27_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3060.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.28g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 17.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.461	0.184
Aroclor-1221	ND		0.461	0.184
Aroclor-1232	ND		0.461	0.184
Aroclor-1242	ND		0.461	0.184
Aroclor-1248	ND		0.461	0.184
Aroclor-1254	ND		0.461	0.184
Aroclor-1260	28.1	D	0.461	0.184
Aroclor-1262	ND		0.461	0.184
Aroclor-1268	ND		0.461	0.184
PCBs	28.1	D	0.461	0.184

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0080

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-010
Client ID: E-27_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3018.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	4.18		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	4.18		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0081

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-011
Client ID: X-3_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3139.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.62g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 500
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		1.06	0.426
Aroclor-1221	ND		1.06	0.426
Aroclor-1232	ND		1.06	0.426
Aroclor-1242	ND		1.06	0.426
Aroclor-1248	ND		1.06	0.426
Aroclor-1254	ND		1.06	0.426
Aroclor-1260	29.5	D	1.06	0.426
Aroclor-1262	ND		1.06	0.426
Aroclor-1268	ND		1.06	0.426
PCBs	29.5	D	1.06	0.426

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0082

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-012
Client ID: E-28_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3019.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.017
Aroclor-1221	ND		0.041	0.017
Aroclor-1232	ND		0.041	0.017
Aroclor-1242	ND		0.041	0.017
Aroclor-1248	ND		0.041	0.017
Aroclor-1254	ND		0.041	0.017
Aroclor-1260	11.9	E	0.041	0.017
Aroclor-1262	ND		0.041	0.017
Aroclor-1268	ND		0.041	0.017
PCBs	11.9	E	0.041	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Rev 915-05428 0083

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-012DL
Client ID: E-28_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3061.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 11.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.413	0.165
Aroclor-1221	ND		0.413	0.165
Aroclor-1232	ND		0.413	0.165
Aroclor-1242	ND		0.413	0.165
Aroclor-1248	ND		0.413	0.165
Aroclor-1254	ND		0.413	0.165
Aroclor-1260	14.6	D	0.413	0.165
Aroclor-1262	ND		0.413	0.165
Aroclor-1268	ND		0.413	0.165
PCBs	14.6	D	0.413	0.165

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Rev E15-05428 0084

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-013
Client ID: E-28_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3026.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.77g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	5.42		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	5.42		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Rev E15-05428 0085

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-014
Client ID: E-1_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3092.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.002	0.0008
Aroclor-1221	ND		0.002	0.0008
Aroclor-1232	ND		0.002	0.0008
Aroclor-1242	ND		0.002	0.0008
Aroclor-1248	ND		0.002	0.0008
Aroclor-1254	ND		0.002	0.0008
Aroclor-1260	1.72	E	0.002	0.0008
Aroclor-1262	ND		0.002	0.0008
Aroclor-1268	ND		0.002	0.0008
PCBs	1.72	E	0.002	0.0008

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0086

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-014DL
Client ID: E-1_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3140.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	3.02	D	0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	3.02	D	0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0087

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-015
Client ID: E-1_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3093.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.74g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00179	0.000716
Aroclor-1221	ND		0.00179	0.000716
Aroclor-1232	ND		0.00179	0.000716
Aroclor-1242	ND		0.00179	0.000716
Aroclor-1248	ND		0.00179	0.000716
Aroclor-1254	ND		0.00179	0.000716
Aroclor-1260	0.018		0.00179	0.000716
Aroclor-1262	ND		0.00179	0.000716
Aroclor-1268	ND		0.00179	0.000716
PCBs	0.018		0.00179	0.000716

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0088

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-016
Client ID: E-1_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3094.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00192	0.000768
Aroclor-1221	ND		0.00192	0.000768
Aroclor-1232	ND		0.00192	0.000768
Aroclor-1242	ND		0.00192	0.000768
Aroclor-1248	ND		0.00192	0.000768
Aroclor-1254	ND		0.00192	0.000768
Aroclor-1260	ND		0.00192	0.000768
Aroclor-1262	ND		0.00192	0.000768
Aroclor-1268	ND		0.00192	0.000768
PCBs	ND		0.00192	0.000768

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0089

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-017
Client ID: E-1_(4.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3095.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00201	0.000804
Aroclor-1221	ND		0.00201	0.000804
Aroclor-1232	ND		0.00201	0.000804
Aroclor-1242	ND		0.00201	0.000804
Aroclor-1248	ND		0.00201	0.000804
Aroclor-1254	ND		0.00201	0.000804
Aroclor-1260	ND		0.00201	0.000804
Aroclor-1262	ND		0.00201	0.000804
Aroclor-1268	ND		0.00201	0.000804
PCBs	ND		0.00201	0.000804

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0090

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-018
Client ID: E-15_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3027.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	2.10		0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	2.10		0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0091

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-019
Client ID: E-15_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3028.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.21g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.017
Aroclor-1221	ND		0.044	0.017
Aroclor-1232	ND		0.044	0.017
Aroclor-1242	ND		0.044	0.017
Aroclor-1248	ND		0.044	0.017
Aroclor-1254	ND		0.044	0.017
Aroclor-1260	0.044		0.044	0.017
Aroclor-1262	ND		0.044	0.017
Aroclor-1268	ND		0.044	0.017
PCBs	0.044		0.044	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0092

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-020
Client ID: E-2_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3141.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.08g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 23.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.432	0.173
Aroclor-1221	ND		0.432	0.173
Aroclor-1232	ND		0.432	0.173
Aroclor-1242	ND		0.432	0.173
Aroclor-1248	ND		0.432	0.173
Aroclor-1254	ND		0.432	0.173
Aroclor-1260	11.2	D	0.432	0.173
Aroclor-1262	ND		0.432	0.173
Aroclor-1268	ND		0.432	0.173
PCBs	11.2	D	0.432	0.173

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0093

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-021
Client ID: E-2_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3142.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.366	0.146
Aroclor-1221	ND		0.366	0.146
Aroclor-1232	ND		0.366	0.146
Aroclor-1242	ND		0.366	0.146
Aroclor-1248	ND		0.366	0.146
Aroclor-1254	ND		0.366	0.146
Aroclor-1260	7.80	D	0.366	0.146
Aroclor-1262	ND		0.366	0.146
Aroclor-1268	ND		0.366	0.146
PCBs	7.80	D	0.366	0.146

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0094

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-022
Client ID: E-2_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3104.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.0018	0.00072
Aroclor-1221	ND		0.0018	0.00072
Aroclor-1232	ND		0.0018	0.00072
Aroclor-1242	ND		0.0018	0.00072
Aroclor-1248	ND		0.0018	0.00072
Aroclor-1254	ND		0.0018	0.00072
Aroclor-1260	1.02	E	0.0018	0.00072
Aroclor-1262	ND		0.0018	0.00072
Aroclor-1268	ND		0.0018	0.00072
PCBs	1.02	E	0.0018	0.00072

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0095

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-022DL
Client ID: E-2_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3143.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.018	0.00721
Aroclor-1221	ND		0.018	0.00721
Aroclor-1232	ND		0.018	0.00721
Aroclor-1242	ND		0.018	0.00721
Aroclor-1248	ND		0.018	0.00721
Aroclor-1254	ND		0.018	0.00721
Aroclor-1260	1.04	D	0.018	0.00721
Aroclor-1262	ND		0.018	0.00721
Aroclor-1268	ND		0.018	0.00721
PCBs	1.04	D	0.018	0.00721

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0096

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-023
Client ID: E-2_(4.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3105.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.70g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00178	0.000712
Aroclor-1221	ND		0.00178	0.000712
Aroclor-1232	ND		0.00178	0.000712
Aroclor-1242	ND		0.00178	0.000712
Aroclor-1248	ND		0.00178	0.000712
Aroclor-1254	ND		0.00178	0.000712
Aroclor-1260	1.85	E	0.00178	0.000712
Aroclor-1262	ND		0.00178	0.000712
Aroclor-1268	ND		0.00178	0.000712
PCBs	1.85	E	0.00178	0.000712

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0097

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-023DL
Client ID: E-2_(4.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3144.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.70g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.036	0.014
Aroclor-1221	ND		0.036	0.014
Aroclor-1232	ND		0.036	0.014
Aroclor-1242	ND		0.036	0.014
Aroclor-1248	ND		0.036	0.014
Aroclor-1254	ND		0.036	0.014
Aroclor-1260	1.99	D	0.036	0.014
Aroclor-1262	ND		0.036	0.014
Aroclor-1268	ND		0.036	0.014
PCBs	1.99	D	0.036	0.014

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0098

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-024
Client ID: E-10_(0.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3029.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.52g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	0.418		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.418		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0099

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-025
Client ID: E-10_(2.
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3030.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	0.047		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	0.047		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0100

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-026
Client ID: E-7_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3106.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00187	0.000748
Aroclor-1221	ND		0.00187	0.000748
Aroclor-1232	ND		0.00187	0.000748
Aroclor-1242	ND		0.00187	0.000748
Aroclor-1248	ND		0.00187	0.000748
Aroclor-1254	ND		0.00187	0.000748
Aroclor-1260	0.745	E	0.00187	0.000748
Aroclor-1262	ND		0.00187	0.000748
Aroclor-1268	ND		0.00187	0.000748
PCBs	0.745	E	0.00187	0.000748

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0101

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-026DL
Client ID: E-7_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3145.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 12.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.019	0.00748
Aroclor-1221	ND		0.019	0.00748
Aroclor-1232	ND		0.019	0.00748
Aroclor-1242	ND		0.019	0.00748
Aroclor-1248	ND		0.019	0.00748
Aroclor-1254	ND		0.019	0.00748
Aroclor-1260	1.11	D	0.019	0.00748
Aroclor-1262	ND		0.019	0.00748
Aroclor-1268	ND		0.019	0.00748
PCBs	1.11	D	0.019	0.00748

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0102

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-027
Client ID: E-7_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3107.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.39g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00173	0.000692
Aroclor-1221	ND		0.00173	0.000692
Aroclor-1232	ND		0.00173	0.000692
Aroclor-1242	ND		0.00173	0.000692
Aroclor-1248	ND		0.00173	0.000692
Aroclor-1254	ND		0.00173	0.000692
Aroclor-1260	0.00157	J	0.00173	0.000692
Aroclor-1262	ND		0.00173	0.000692
Aroclor-1268	ND		0.00173	0.000692
PCBs	0.00157	J	0.00173	0.000692

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0103

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-028
Client ID: E-7_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3108.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00183	0.000732
Aroclor-1221	ND		0.00183	0.000732
Aroclor-1232	ND		0.00183	0.000732
Aroclor-1242	ND		0.00183	0.000732
Aroclor-1248	ND		0.00183	0.000732
Aroclor-1254	ND		0.00183	0.000732
Aroclor-1260	ND		0.00183	0.000732
Aroclor-1262	ND		0.00183	0.000732
Aroclor-1268	ND		0.00183	0.000732
PCBs	ND		0.00183	0.000732

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0104

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-029
Client ID: E-7_(4.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3111.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30.63g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00185	0.00074
Aroclor-1221	ND		0.00185	0.00074
Aroclor-1232	ND		0.00185	0.00074
Aroclor-1242	ND		0.00185	0.00074
Aroclor-1248	ND		0.00185	0.00074
Aroclor-1254	ND		0.00185	0.00074
Aroclor-1260	ND		0.00185	0.00074
Aroclor-1262	ND		0.00185	0.00074
Aroclor-1268	ND		0.00185	0.00074
PCBs	ND		0.00185	0.00074

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0105

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-030
Client ID: FB-06231
Date Received: 06/24/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5420.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0106

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05428-032
Client ID: FB-06241
Date Received: 06/24/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5421.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0107

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-011
Client ID: X-3_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9970.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.62g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000426	0.000213
beta-BHC	ND		0.000426	0.000213
gamma-BHC (Lindane)	ND		0.000426	0.000213
delta-BHC	ND		0.000426	0.000213
Heptachlor	ND		0.000426	0.000213
Aldrin	ND		0.000426	0.000213
Heptachlor epoxide	ND		0.000426	0.000213
Endosulfan I	ND		0.000426	0.000213
4,4'-DDE	ND		0.000426	0.000213
Dieldrin	ND		0.000426	0.000213
Endrin	ND		0.000426	0.000213
Endosulfan II	ND		0.000426	0.000213
4,4'-DDD	ND		0.000426	0.000213
Endrin aldehyde	ND		0.000426	0.000213
Endosulfan sulfate	ND		0.000426	0.000213
4,4'-DDT	ND		0.000426	0.000213
Endrin ketone	ND		0.000426	0.000213
Methoxychlor	ND		0.000426	0.000213
alpha-Chlordane	ND		0.000426	0.000213
gamma-Chlordane	ND		0.000426	0.000213
Toxaphene	ND		0.00533	0.00256
Endosulfan (I and II)	ND		0.000426	0.000213
Chlordane (alpha and gamma)	ND		0.000426	0.000213

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-014
Client ID: E-1_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9971.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.0004	0.0002
beta-BHC	ND		0.0004	0.0002
gamma-BHC (Lindane)	ND		0.0004	0.0002
delta-BHC	ND		0.0004	0.0002
Heptachlor	ND		0.0004	0.0002
Aldrin	ND		0.0004	0.0002
Heptachlor epoxide	ND		0.0004	0.0002
Endosulfan I	ND		0.0004	0.0002
4,4'-DDE	ND		0.0004	0.0002
Dieldrin	ND		0.0004	0.0002
Endrin	ND		0.0004	0.0002
Endosulfan II	ND		0.0004	0.0002
4,4'-DDD	ND		0.0004	0.0002
Endrin aldehyde	ND		0.0004	0.0002
Endosulfan sulfate	ND		0.0004	0.0002
4,4'-DDT	ND		0.0004	0.0002
Endrin ketone	ND		0.0004	0.0002
Methoxychlor	ND		0.0004	0.0002
alpha-Chlordane	ND		0.0004	0.0002
gamma-Chlordane	ND		0.0004	0.0002
Toxaphene	ND		0.005	0.0024
Endosulfan (I and II)	ND		0.0004	0.0002
Chlordane (alpha and gamma)	ND		0.0004	0.0002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-015
Client ID: E-1_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9972.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.74g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.90

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000358	0.000179
beta-BHC	ND		0.000358	0.000179
gamma-BHC (Lindane)	ND		0.000358	0.000179
delta-BHC	ND		0.000358	0.000179
Heptachlor	ND		0.000358	0.000179
Aldrin	ND		0.000358	0.000179
Heptachlor epoxide	ND		0.000358	0.000179
Endosulfan I	ND		0.000358	0.000179
4,4'-DDE	ND		0.000358	0.000179
Dieldrin	ND		0.000358	0.000179
Endrin	ND		0.000358	0.000179
Endosulfan II	ND		0.000358	0.000179
4,4'-DDD	ND		0.000358	0.000179
Endrin aldehyde	ND		0.000358	0.000179
Endosulfan sulfate	ND		0.000358	0.000179
4,4'-DDT	ND		0.000358	0.000179
Endrin ketone	ND		0.000358	0.000179
Methoxychlor	ND		0.000358	0.000179
alpha-Chlordane	ND		0.000358	0.000179
gamma-Chlordane	ND		0.000358	0.000179
Toxaphene	ND		0.00448	0.00215
Endosulfan (I and II)	ND		0.000358	0.000179
Chlordane (alpha and gamma)	ND		0.000358	0.000179

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-016
Client ID: E-1_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9973.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.37g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000384	0.000192
beta-BHC	ND		0.000384	0.000192
gamma-BHC (Lindane)	ND		0.000384	0.000192
delta-BHC	ND		0.000384	0.000192
Heptachlor	ND		0.000384	0.000192
Aldrin	ND		0.000384	0.000192
Heptachlor epoxide	ND		0.000384	0.000192
Endosulfan I	ND		0.000384	0.000192
4,4'-DDE	ND		0.000384	0.000192
Dieldrin	ND		0.000384	0.000192
Endrin	ND		0.000384	0.000192
Endosulfan II	ND		0.000384	0.000192
4,4'-DDD	ND		0.000384	0.000192
Endrin aldehyde	ND		0.000384	0.000192
Endosulfan sulfate	ND		0.000384	0.000192
4,4'-DDT	ND		0.000384	0.000192
Endrin ketone	ND		0.000384	0.000192
Methoxychlor	ND		0.000384	0.000192
alpha-Chlordane	ND		0.000384	0.000192
gamma-Chlordane	ND		0.000384	0.000192
Toxaphene	ND		0.0048	0.0023
Endosulfan (I and II)	ND		0.000384	0.000192
Chlordane (alpha and gamma)	ND		0.000384	0.000192

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-017
Client ID: E-1_(4.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9974.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000402	0.000201
beta-BHC	ND		0.000402	0.000201
gamma-BHC (Lindane)	ND		0.000402	0.000201
delta-BHC	ND		0.000402	0.000201
Heptachlor	ND		0.000402	0.000201
Aldrin	ND		0.000402	0.000201
Heptachlor epoxide	ND		0.000402	0.000201
Endosulfan I	ND		0.000402	0.000201
4,4'-DDE	ND		0.000402	0.000201
Dieldrin	ND		0.000402	0.000201
Endrin	ND		0.000402	0.000201
Endosulfan II	ND		0.000402	0.000201
4,4'-DDD	ND		0.000402	0.000201
Endrin aldehyde	ND		0.000402	0.000201
Endosulfan sulfate	ND		0.000402	0.000201
4,4'-DDT	ND		0.000402	0.000201
Endrin ketone	ND		0.000402	0.000201
Methoxychlor	ND		0.000402	0.000201
alpha-Chlordane	ND		0.000402	0.000201
gamma-Chlordane	ND		0.000402	0.000201
Toxaphene	ND		0.00503	0.00241
Endosulfan (I and II)	ND		0.000402	0.000201
Chlordane (alpha and gamma)	ND		0.000402	0.000201

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-020
Client ID: E-2_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9975.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.08g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.0

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000432	0.000216
beta-BHC	ND		0.000432	0.000216
gamma-BHC (Lindane)	ND		0.000432	0.000216
delta-BHC	ND		0.000432	0.000216
Heptachlor	ND		0.000432	0.000216
Aldrin	ND		0.000432	0.000216
Heptachlor epoxide	ND		0.000432	0.000216
Endosulfan I	ND		0.000432	0.000216
4,4'-DDE	ND		0.000432	0.000216
Dieldrin	ND		0.000432	0.000216
Endrin	ND		0.000432	0.000216
Endosulfan II	ND		0.000432	0.000216
4,4'-DDD	ND		0.000432	0.000216
Endrin aldehyde	ND		0.000432	0.000216
Endosulfan sulfate	ND		0.000432	0.000216
4,4'-DDT	ND		0.000432	0.000216
Endrin ketone	ND		0.000432	0.000216
Methoxychlor	ND		0.000432	0.000216
alpha-Chlordane	ND		0.000432	0.000216
gamma-Chlordane	ND		0.000432	0.000216
Toxaphene	ND		0.0054	0.00259
Endosulfan (I and II)	ND		0.000432	0.000216
Chlordane (alpha and gamma)	ND		0.000432	0.000216

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-021
Client ID: E-2_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9976.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.66g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000366	0.000183
beta-BHC	ND		0.000366	0.000183
gamma-BHC (Lindane)	ND		0.000366	0.000183
delta-BHC	ND		0.000366	0.000183
Heptachlor	ND		0.000366	0.000183
Aldrin	ND		0.000366	0.000183
Heptachlor epoxide	ND		0.000366	0.000183
Endosulfan I	ND		0.000366	0.000183
4,4'-DDE	ND		0.000366	0.000183
Dieldrin	ND		0.000366	0.000183
Endrin	ND		0.000366	0.000183
Endosulfan II	ND		0.000366	0.000183
4,4'-DDD	ND		0.000366	0.000183
Endrin aldehyde	ND		0.000366	0.000183
Endosulfan sulfate	ND		0.000366	0.000183
4,4'-DDT	ND		0.000366	0.000183
Endrin ketone	ND		0.000366	0.000183
Methoxychlor	ND		0.000366	0.000183
alpha-Chlordane	ND		0.000366	0.000183
gamma-Chlordane	ND		0.000366	0.000183
Toxaphene	ND		0.00458	0.0022
Endosulfan (I and II)	ND		0.000366	0.000183
Chlordane (alpha and gamma)	ND		0.000366	0.000183

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-022
Client ID: E-2_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0002.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00036	0.00018
beta-BHC	ND		0.00036	0.00018
gamma-BHC (Lindane)	ND		0.00036	0.00018
delta-BHC	ND		0.00036	0.00018
Heptachlor	ND		0.00036	0.00018
Aldrin	ND		0.00036	0.00018
Heptachlor epoxide	ND		0.00036	0.00018
Endosulfan I	ND		0.00036	0.00018
4,4'-DDE	ND		0.00036	0.00018
Dieldrin	ND		0.00036	0.00018
Endrin	ND		0.00036	0.00018
Endosulfan II	ND		0.00036	0.00018
4,4'-DDD	ND		0.00036	0.00018
Endrin aldehyde	ND		0.00036	0.00018
Endosulfan sulfate	ND		0.00036	0.00018
4,4'-DDT	ND		0.00036	0.00018
Endrin ketone	ND		0.00036	0.00018
Methoxychlor	ND		0.00036	0.00018
alpha-Chlordane	ND		0.00036	0.00018
gamma-Chlordane	ND		0.00036	0.00018
Toxaphene	ND		0.0045	0.00216
Endosulfan (I and II)	ND		0.00036	0.00018
Chlordane (alpha and gamma)	ND		0.00036	0.00018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-023
Client ID: E-2_(4.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0003.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.70g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.40

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000356	0.000178
beta-BHC	ND		0.000356	0.000178
gamma-BHC (Lindane)	ND		0.000356	0.000178
delta-BHC	ND		0.000356	0.000178
Heptachlor	ND		0.000356	0.000178
Aldrin	ND		0.000356	0.000178
Heptachlor epoxide	ND		0.000356	0.000178
Endosulfan I	ND		0.000356	0.000178
4,4'-DDE	ND		0.000356	0.000178
Dieldrin	ND		0.000356	0.000178
Endrin	ND		0.000356	0.000178
Endosulfan II	ND		0.000356	0.000178
4,4'-DDD	ND		0.000356	0.000178
Endrin aldehyde	ND		0.000356	0.000178
Endosulfan sulfate	ND		0.000356	0.000178
4,4'-DDT	ND		0.000356	0.000178
Endrin ketone	ND		0.000356	0.000178
Methoxychlor	ND		0.000356	0.000178
alpha-Chlordane	ND		0.000356	0.000178
gamma-Chlordane	ND		0.000356	0.000178
Toxaphene	ND		0.00445	0.00214
Endosulfan (I and II)	ND		0.000356	0.000178
Chlordane (alpha and gamma)	ND		0.000356	0.000178

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-026
Client ID: E-7_(0.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0004.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.5

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000374	0.000187
beta-BHC	ND		0.000374	0.000187
gamma-BHC (Lindane)	ND		0.000374	0.000187
delta-BHC	ND		0.000374	0.000187
Heptachlor	ND		0.000374	0.000187
Aldrin	ND		0.000374	0.000187
Heptachlor epoxide	ND		0.000374	0.000187
Endosulfan I	ND		0.000374	0.000187
4,4'-DDE	ND		0.000374	0.000187
Dieldrin	ND		0.000374	0.000187
Endrin	ND		0.000374	0.000187
Endosulfan II	ND		0.000374	0.000187
4,4'-DDD	ND		0.000374	0.000187
Endrin aldehyde	ND		0.000374	0.000187
Endosulfan sulfate	ND		0.000374	0.000187
4,4'-DDT	ND		0.000374	0.000187
Endrin ketone	ND		0.000374	0.000187
Methoxychlor	ND		0.000374	0.000187
alpha-Chlordane	ND		0.000374	0.000187
gamma-Chlordane	ND		0.000374	0.000187
Toxaphene	ND		0.00468	0.00224
Endosulfan (I and II)	ND		0.000374	0.000187
Chlordane (alpha and gamma)	ND		0.000374	0.000187

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-027
Client ID: E-7_(2.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0005.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.39g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.90

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000346	0.000173
beta-BHC	ND		0.000346	0.000173
gamma-BHC (Lindane)	ND		0.000346	0.000173
delta-BHC	ND		0.000346	0.000173
Heptachlor	ND		0.000346	0.000173
Aldrin	ND		0.000346	0.000173
Heptachlor epoxide	ND		0.000346	0.000173
Endosulfan I	ND		0.000346	0.000173
4,4'-DDE	ND		0.000346	0.000173
Dieldrin	ND		0.000346	0.000173
Endrin	ND		0.000346	0.000173
Endosulfan II	ND		0.000346	0.000173
4,4'-DDD	ND		0.000346	0.000173
Endrin aldehyde	ND		0.000346	0.000173
Endosulfan sulfate	ND		0.000346	0.000173
4,4'-DDT	ND		0.000346	0.000173
Endrin ketone	ND		0.000346	0.000173
Methoxychlor	ND		0.000346	0.000173
alpha-Chlordane	ND		0.000346	0.000173
gamma-Chlordane	ND		0.000346	0.000173
Toxaphene	ND		0.00433	0.00208
Endosulfan (I and II)	ND		0.000346	0.000173
Chlordane (alpha and gamma)	ND		0.000346	0.000173

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-028
Client ID: E-7_(3.0
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0006.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000366	0.000183
beta-BHC	ND		0.000366	0.000183
gamma-BHC (Lindane)	ND		0.000366	0.000183
delta-BHC	ND		0.000366	0.000183
Heptachlor	ND		0.000366	0.000183
Aldrin	ND		0.000366	0.000183
Heptachlor epoxide	ND		0.000366	0.000183
Endosulfan I	ND		0.000366	0.000183
4,4'-DDE	ND		0.000366	0.000183
Dieldrin	ND		0.000366	0.000183
Endrin	ND		0.000366	0.000183
Endosulfan II	ND		0.000366	0.000183
4,4'-DDD	ND		0.000366	0.000183
Endrin aldehyde	ND		0.000366	0.000183
Endosulfan sulfate	ND		0.000366	0.000183
4,4'-DDT	ND		0.000366	0.000183
Endrin ketone	ND		0.000366	0.000183
Methoxychlor	ND		0.000366	0.000183
alpha-Chlordane	ND		0.000366	0.000183
gamma-Chlordane	ND		0.000366	0.000183
Toxaphene	ND		0.00458	0.0022
Endosulfan (I and II)	ND		0.000366	0.000183
Chlordane (alpha and gamma)	ND		0.000366	0.000183

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-029
Client ID: E-7_(4.5
Date Received: 06/24/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0007.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.63g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00037	0.000185
beta-BHC	ND		0.00037	0.000185
gamma-BHC (Lindane)	ND		0.00037	0.000185
delta-BHC	ND		0.00037	0.000185
Heptachlor	ND		0.00037	0.000185
Aldrin	ND		0.00037	0.000185
Heptachlor epoxide	ND		0.00037	0.000185
Endosulfan I	ND		0.00037	0.000185
4,4'-DDE	ND		0.00037	0.000185
Dieldrin	ND		0.00037	0.000185
Endrin	ND		0.00037	0.000185
Endosulfan II	ND		0.00037	0.000185
4,4'-DDD	ND		0.00037	0.000185
Endrin aldehyde	ND		0.00037	0.000185
Endosulfan sulfate	ND		0.00037	0.000185
4,4'-DDT	ND		0.00037	0.000185
Endrin ketone	ND		0.00037	0.000185
Methoxychlor	ND		0.00037	0.000185
alpha-Chlordane	ND		0.00037	0.000185
gamma-Chlordane	ND		0.00037	0.000185
Toxaphene	ND		0.00463	0.00222
Endosulfan (I and II)	ND		0.00037	0.000185
Chlordane (alpha and gamma)	ND		0.00037	0.000185

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-030
Client ID: FB-06231
Date Received: 06/24/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: O9875.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00001	0.000005
beta-BHC	ND		0.00001	0.000005
gamma-BHC (Lindane)	ND		0.00001	0.000005
delta-BHC	ND		0.00001	0.000005
Heptachlor	ND		0.00001	0.000005
Aldrin	ND		0.00001	0.000005
Heptachlor epoxide	ND		0.00001	0.000005
Endosulfan I	ND		0.00001	0.000005
4,4'-DDE	ND		0.00001	0.000005
Dieldrin	ND		0.00001	0.000005
Endrin	ND		0.00001	0.000005
Endosulfan II	ND		0.00001	0.000005
4,4'-DDD	ND		0.00001	0.000005
Endrin aldehyde	ND		0.00001	0.000005
Endosulfan sulfate	ND		0.00001	0.000005
4,4'-DDT	ND		0.00001	0.000005
Endrin ketone	ND		0.00001	0.000005
Methoxychlor	ND		0.00001	0.000005
alpha-Chlordane	ND		0.00001	0.000005
gamma-Chlordane	ND		0.00001	0.000005
Toxaphene	ND		0.000125	0.00006
Endosulfan (I and II)	ND		0.00001	0.000005
Chlordane (alpha and gamma)	ND		0.00001	0.000005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E15-05428-032
Client ID: FB-06241
Date Received: 06/24/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: O9877.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.00001	0.000005
beta-BHC	ND		0.00001	0.000005
gamma-BHC (Lindane)	ND		0.00001	0.000005
delta-BHC	ND		0.00001	0.000005
Heptachlor	ND		0.00001	0.000005
Aldrin	ND		0.00001	0.000005
Heptachlor epoxide	ND		0.00001	0.000005
Endosulfan I	ND		0.00001	0.000005
4,4'-DDE	ND		0.00001	0.000005
Dieldrin	ND		0.00001	0.000005
Endrin	ND		0.00001	0.000005
Endosulfan II	ND		0.00001	0.000005
4,4'-DDD	ND		0.00001	0.000005
Endrin aldehyde	ND		0.00001	0.000005
Endosulfan sulfate	ND		0.00001	0.000005
4,4'-DDT	ND		0.00001	0.000005
Endrin ketone	ND		0.00001	0.000005
Methoxychlor	ND		0.00001	0.000005
alpha-Chlordane	ND		0.00001	0.000005
gamma-Chlordane	ND		0.00001	0.000005
Toxaphene	ND		0.000125	0.00006
Endosulfan (I and II)	ND		0.00001	0.000005
Chlordane (alpha and gamma)	ND		0.00001	0.000005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/01/2015

Lab Sample ID	Matrix	File ID	SMC1	#	SMC2	#	SMC3	#
BLKS150630-02	SOIL	F1735.D	114		101		113	
05556-014	SOIL	F1736.D	122		98		101	
05556-015	SOIL	F1737.D	120		102		110	
05556-016	SOIL	F1738.D	121		100		111	
05556-017	SOIL	F1739.D	131	$	99		114	
LCSS150630-02	SOIL	F1740.D	126		102		114	
LCSDS150630-02	SOIL	F1741.D	123		102		112	
05428-011	SOIL	F1742.D	124		101		70	
05428-014	SOIL	F1743.D	114		101		109	
05428-015	SOIL	F1744.D	128		102		113	
05428-016	SOIL	F1745.D	117		100		112	
05428-017	SOIL	F1746.D	114		101		113	
05428-021	SOIL	F1748.D	126		100		87	
05428-022	SOIL	F1749.D	125		100		98	
05428-023	SOIL	F1750.D	117		101		112	
05428-027	SOIL	F1752.D	128		99		116	
05428-028	SOIL	F1753.D	126		100		115	
05428-029	SOIL	F1754.D	121		101		116	

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/01/2015

Lab Sample ID	Matrix	File ID	SMC1	#	SMC2	#	SMC3	#
BLKS150701-01	SOIL	F1759.D	128		101		116	
LCSS150701-01	SOIL	F1762.D	135	$	102		116	
05488-001	SOLID	F1763.D	119		101		115	
05488-003	SOLID	F1764.D	130		102		112	
05488-001MS	SOIL	F1765.D	131	$	102		117	
05488-001MSD	SOIL	F1766.D	131	$	102		114	
05555-005	SOIL	F1768.D	153	$	82		79	
05428-011DUP	SOIL	F1769.D	136	$	98		71	
05428-020	SOIL	F1770.D	121		101		112	
05428-026	SOIL	F1771.D	137	$	96		86	
05487-001	SOLID	F1772.D	132	$	99		113	
05487-003	SOLID	F1773.D	136	$	98		107	
05487-006	SOLID	F1774.D	130		97		108	
05487-008	SOLID	F1775.D	116		100		111	
05487-010	SOLID	F1776.D	116		100		110	
05346-022	SOIL	F1777.D	106		99		109	
05346-033	SOIL	F1778.D	124		100		110	
05346-034	SOIL	F1779.D	115		96		89	

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/03/2015

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA150702-02	AQUEOUS	J8641.D	108	99	96
05428-030	AQUEOUS	J8642.D	108	101	95
05428-031	AQUEOUS	J8643.D	109	98	95
05428-032	AQUEOUS	J8644.D	106	99	96
05623-001	LEACHATE	J8645.D	108	100	98
05623-001MS	AQUEOUS	J8646.D	106	100	100
05623-001MSD	AQUEOUS	J8647.D	105	101	100
LCSA150702-02	AQUEOUS	J8648.D	114	110	113

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	59-138	43-133
SMC2 = Toluene-d8	50 ppb	70-130	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	70-130	42-152	45-145

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1740.D
MSD Data file: F1741.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	45.8	92		46.4	93		1	
Chloromethane	50.0	0.0	48.2	96		48.9	98		1	
Vinyl chloride	50.0	0.0	52.7	105		54.1	108		3	
Bromomethane	50.0	0.0	60.2	120		61.5	123		2	
Chloroethane	50.0	0.0	56.3	113		57.4	115		2	
Trichlorofluoromethane	50.0	0.0	62.9	126		64.0	128		2	
Acrolein	150	0.0	141	94		171	114		19	
1,1-Dichloroethene	50.0	0.0	60.4	121		61.4	123		2	
Acetone	50.0	0.0	64.1	128		63.8	128		0	
Carbon disulfide	50.0	0.0	56.7	113		57.8	116		2	
Vinyl acetate	50.0	0.0	35.6	71		36.1	72		1	
Methylene chloride	50.0	0.0	63.4	127		63.3	127		0	
Acrylonitrile	150	0.0	131	87		137	91		4	
tert-Butyl alcohol (TBA)	100	0.0	126.5	127		126.4	126		0	
trans-1,2-Dichloroethene	50.0	0.0	44.1	88		45.2	90		2	
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.6	99		50.3	101		1	
1,1-Dichloroethane	50.0	0.0	44.6	89		45.8	92		3	
Diisopropyl ether (DIPE)	50.0	0.0	42.7	85		43.7	87		2	
cis-1,2-Dichloroethene	50.0	0.0	43.2	86		45.6	91		5	
2,2-Dichloropropane	50.0	0.0	37.5	75		38.7	77		3	
2-Butanone (MEK)	50.0	0.0	48.5	97		48.9	98		1	
Bromochloromethane	50.0	0.0	48.8	98		49.0	98		0	
Chloroform	50.0	0.0	54.8	110		55.1	110		1	
1,1,1-Trichloroethane	50.0	0.0	57.3	115		58.9	118		3	
Carbon tetrachloride	50.0	0.0	63.5	127		64.6	129		2	
1,1-Dichloropropene	50.0	0.0	45.6	91		46.6	93		2	
1,2-Dichloroethane (EDC)	50.0	0.0	63.1	126		63.7	127		1	
Benzene	50.0	0.0	43.2	86		44.4	89		3	
Trichloroethene	50.0	0.0	60.4	121		60.6	121		0	
1,2-Dichloropropane	50.0	0.0	43.8	88		45.0	90		3	
Dibromomethane	50.0	0.0	57.8	116		58.1	116		1	
1,4-Dioxane	1,500	0.0	1171	78		1344	90		14	
Bromodichloromethane	50.0	0.0	62.2	124		63.3	127		2	
2-Chloroethyl vinyl ether	50.0	0.0	49.6	99		50.7	101		2	
cis-1,3-Dichloropropene	50.0	0.0	46.6	93		48.6	97		4	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	49.1	98		49.7	99		1	
Toluene	50.0	0.0	45.8	92		46.7	93		2	
trans-1,3-Dichloropropene	50.0	0.0	50.9	102		51.6	103		1	
1,1,2-Trichloroethane	50.0	0.0	49.7	99		50.7	101		2	
Tetrachloroethene	50.0	0.0	50.2	100		51.7	103		3	
1,3-Dichloropropane	50.0	0.0	50.9	102		52.4	105		3	

E15-05428 0128

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1740.D
MSD Data file: F1741.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	52.3	105		53.3	107		2	
Dibromochloromethane	50.0	0.0	62.3	125		63.9	128		3	
1,2-Dibromoethane (EDB)	50.0	0.0	54.6	109		55.2	110		1	
Chlorobenzene	50.0	0.0	45.0	90		45.9	92		2	
1,1,1,2-Tetrachloroethane	50.0	0.0	59.2	118		62.4	125		5	
Ethylbenzene	50.0	0.0	46.2	92		47.6	95		3	
m,p-Xylene	100	0.0	87.7	88		90.3	90		3	
o-Xylene	50.0	0.0	44.5	89		46.2	92		4	
Styrene	50.0	0.0	46.1	92		47.5	95		3	
Bromoform	50.0	0.0	63.8	128		63.9	128		0	
Isopropylbenzene	50.0	0.0	47.9	96		48.9	98		2	
1,1,2,2-Tetrachloroethane	50.0	0.0	38.1	76		37.9	76		1	
Bromobenzene	50.0	0.0	53.3	107		53.9	108		1	
1,2,3-Trichloropropane	50.0	0.0	51.3	103		52.2	104		2	
n-Propylbenzene	50.0	0.0	46.2	92		47.3	95		2	
2-Chlorotoluene	50.0	0.0	49.5	99		50.1	100		1	
1,3,5-Trimethylbenzene	50.0	0.0	50.0	100		50.9	102		2	
4-Chlorotoluene	50.0	0.0	50.2	100		50.8	102		1	
tert-Butylbenzene	50.0	0.0	50.0	100		50.7	101		1	
1,2,4-Trimethylbenzene	50.0	0.0	50.0	100		50.5	101		1	
sec-Butylbenzene	50.0	0.0	48.2	96		49.0	98		2	
1,3-Dichlorobenzene	50.0	0.0	49.1	98		49.1	98		0	
4-Isopropyltoluene	50.0	0.0	48.8	98		49.7	99		2	
1,4-Dichlorobenzene	50.0	0.0	48.8	98		49.2	98		1	
n-Butylbenzene	50.0	0.0	46.4	93		47.1	94		1	
1,2-Dichlorobenzene	50.0	0.0	52.5	105		53.3	107		2	
1,2-Dibromo-3-chloropropane	50.0	0.0	63.5	127		64.0	128		1	
1,2,4-Trichlorobenzene	50.0	0.0	48.4	97		48.6	97		0	
Hexachlorobutadiene	50.0	0.0	57.7	115		58.9	118		2	
Naphthalene	50.0	0.0	53.4	107		54.4	109		2	
1,2,3-Trichlorobenzene	50.0	0.0	52.0	104		53.6	107		3	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	61.3	123		61.7	123		1	
Methyl acetate	50.0	0.0	64.0	128		63.5	127		1	
Cyclohexane	50.0	0.0	37.0	74		38.3	77		3	
Methylcyclohexane	50.0	0.0	41.1	82		41.6	83		1	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0129

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD SPIKE REPORT

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1740.D
MSD Data file: F1741.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0130

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSS150701-01
Date Received:
Date Analyzed: 07/01/2015
LCS Data file: F1762.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	51.5	103	
Chloromethane	50.0	0.0	51.6	103	
Vinyl chloride	50.0	0.0	58.4	117	
Bromomethane	50.0	0.0	62.3	125	
Chloroethane	50.0	0.0	62.7	125	
Trichlorofluoromethane	50.0	0.0	64.3	129	
Acrolein	150	0.0	113.4	76	
1,1-Dichloroethene	50.0	0.0	61.6	123	
Acetone	50.0	0.0	64.1	128	
Carbon disulfide	50.0	0.0	63.1	126	
Vinyl acetate	50.0	0.0	48.2	96	
Methylene chloride	50.0	0.0	63.0	126	
Acrylonitrile	150.0	0.0	151.0	101	
tert-Butyl alcohol (TBA)	100.0	0.0	128.6	129	
trans-1,2-Dichloroethene	50.0	0.0	47.3	95	
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.4	99	
1,1-Dichloroethane	50.0	0.0	47.3	95	
Diisopropyl ether (DIPE)	50.0	0.0	43.5	87	
cis-1,2-Dichloroethene	50.0	0.0	45.6	91	
2,2-Dichloropropane	50.0	0.0	53.4	107	
2-Butanone (MEK)	50.0	0.0	50.9	102	
Bromochloromethane	50.0	0.0	49.0	98	
Chloroform	50.0	0.0	59.3	119	
1,1,1-Trichloroethane	50.0	0.0	63.2	126	
Carbon tetrachloride	50.0	0.0	64.4	129	
1,1-Dichloropropene	50.0	0.0	50.9	102	
1,2-Dichloroethane (EDC)	50.0	0.0	63.8	128	
Benzene	50.0	0.0	45.8	92	
Trichloroethene	50.0	0.0	55.3	111	
1,2-Dichloropropane	50.0	0.0	43.7	87	
Dibromomethane	50.0	0.0	59.4	119	
1,4-Dioxane	1500	0.0	1307	87	
Bromodichloromethane	50.0	0.0	64.5	129	
2-Chloroethyl vinyl ether	50.0	0.0	42.5	85	
cis-1,3-Dichloropropene	50.0	0.0	50.1	100	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	48.1	96	
Toluene	50.0	0.0	48.3	97	
trans-1,3-Dichloropropene	50.0	0.0	55.0	110	
1,1,2-Trichloroethane	50.0	0.0	47.9	96	
Tetrachloroethene	50.0	0.0	56.2	112	
1,3-Dichloropropane	50.0	0.0	51.1	102	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150701-01
Date Received:
Date Analyzed: 07/01/2015
LCS Data file: F1762.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	51.1	102	
Dibromochloromethane	50.0	0.0	63.8	128	
1,2-Dibromoethane (EDB)	50.0	0.0	52.8	106	
Chlorobenzene	50.0	0.0	47.0	94	
1,1,1,2-Tetrachloroethane	50.0	0.0	63.8	128	
Ethylbenzene	50.0	0.0	50.4	101	
m,p-Xylene	100.0	0.0	95.4	95	
o-Xylene	50.0	0.0	48.7	97	
Styrene	50.0	0.0	48.2	96	
Bromoform	50.0	0.0	63.2	126	
Isopropylbenzene	50.0	0.0	54.3	109	
1,1,2,2-Tetrachloroethane	50.0	0.0	47.6	95	
Bromobenzene	50.0	0.0	54.2	108	
1,2,3-Trichloropropane	50.0	0.0	51.5	103	
n-Propylbenzene	50.0	0.0	52.3	105	
2-Chlorotoluene	50.0	0.0	54.1	108	
1,3,5-Trimethylbenzene	50.0	0.0	56.9	114	
4-Chlorotoluene	50.0	0.0	55.5	111	
tert-Butylbenzene	50.0	0.0	57.0	114	
1,2,4-Trimethylbenzene	50.0	0.0	55.4	111	
sec-Butylbenzene	50.0	0.0	54.6	109	
1,3-Dichlorobenzene	50.0	0.0	53.6	107	
4-Isopropyltoluene	50.0	0.0	56.1	112	
1,4-Dichlorobenzene	50.0	0.0	54.4	109	
n-Butylbenzene	50.0	0.0	54.7	109	
1,2-Dichlorobenzene	50.0	0.0	56.2	112	
1,2-Dibromo-3-chloropropane	50.0	0.0	60.9	122	
1,2,4-Trichlorobenzene	50.0	0.0	56.5	113	
Hexachlorobutadiene	50.0	0.0	64.0	128	
Naphthalene	50.0	0.0	54.4	109	
1,2,3-Trichlorobenzene	50.0	0.0	57.0	114	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	64.0	128	
Methyl acetate	50.0	0.0	62.6	125	
Cyclohexane	50.0	0.0	40.4	81	
Methylcyclohexane	50.0	0.0	45.8	92	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

E15-05428 0132

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150701-01
Date Received:
Date Analyzed: 07/01/2015
LCS Data file: F1762.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0133

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 05488-001
Client ID: CSO-6/0-0.5
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1765.D
MSD Data file: F1766.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	50.3	101		49.0	98		3	
Chloromethane	50.0	0.0	51.2	102		54.0	108		5	
Vinyl chloride	50.0	0.0	58.5	117		60.8	122		4	
Bromomethane	50.0	0.0	61.4	123		63.9	128		4	
Chloroethane	50.0	0.0	62.8	126		63.0	126		0	
Trichlorofluoromethane	50.0	0.0	63.6	127		63.3	127		0	
Acrolein	150	0.0	175	117		184	123		5	
1,1-Dichloroethene	50.0	0.0	62.8	126		63.5	127		1	
Acetone	50.0	18.8	73.6	110		72.5	107		2	
Carbon disulfide	50.0	0.0	64.4	129		64.1	128		0	
Vinyl acetate	50.0	0.0	36.1	72		35.0	70		3	
Methylene chloride	50.0	0.0	62.3	125		62.4	125		0	
Acrylonitrile	150	0.0	193	129		191	127		1	
tert-Butyl alcohol (TBA)	100	0.0	119.1	119		115.9	116		3	
trans-1,2-Dichloroethene	50.0	0.0	47.4	95		49.9	100		5	
Methyl tert-butyl ether (MTBE)	50.0	0.0	49.1	98		50.4	101		3	
1,1-Dichloroethane	50.0	0.0	48.3	97		49.3	99		2	
Diisopropyl ether (DIPE)	50.0	0.0	43.8	88		45.8	92		4	
cis-1,2-Dichloroethene	50.0	0.0	46.4	93		47.7	95		3	
2,2-Dichloropropane	50.0	0.0	50.2	100		52.0	104		4	
2-Butanone (MEK)	50.0	2.8	48.0	90		49.3	93		3	
Bromochloromethane	50.0	0.0	48.2	96		50.1	100		4	
Chloroform	50.0	0.0	58.6	117		59.9	120		2	
1,1,1-Trichloroethane	50.0	0.0	60.3	121		62.4	125		3	
Carbon tetrachloride	50.0	0.0	61.7	123		63.5	127		3	
1,1-Dichloropropene	50.0	0.0	50.5	101		51.7	103		2	
1,2-Dichloroethane (EDC)	50.0	0.0	62.5	125		64.3	129		3	
Benzene	50.0	0.0	45.7	91		46.7	93		2	
Trichloroethene	50.0	0.0	76.4	153	*$	87.3	175	*$	13	
1,2-Dichloropropane	50.0	0.0	45.0	90		45.3	91		1	
Dibromomethane	50.0	0.0	57.9	116		57.1	114		1	
1,4-Dioxane	1,500	0.0	1521	101		1367	91		11	
Bromodichloromethane	50.0	0.0	60.1	120		63.8	128		6	
2-Chloroethyl vinyl ether	50.0	0.0	42.6	85		43.8	88		3	
cis-1,3-Dichloropropene	50.0	0.0	50.4	101		51.0	102		1	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	45.1	90		45.9	92		2	
Toluene	50.0	0.0	48.0	96		48.1	96		0	
trans-1,3-Dichloropropene	50.0	0.0	53.8	108		54.6	109		1	
1,1,2-Trichloroethane	50.0	0.0	48.3	97		48.6	97		1	
Tetrachloroethene	50.0	0.8	55.2	109		55.8	110		1	
1,3-Dichloropropane	50.0	0.0	50.5	101		50.8	102			

E15-05428 0134

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05488-001
Client ID: CSO-6/0-0.5
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1765.D
MSD Data file: F1766.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	46.7	93		48.4	97		4	
Dibromochloromethane	50.0	0.0	63.5	127		63.5	127		0	
1,2-Dibromoethane (EDB)	50.0	0.0	52.4	105		53.1	106		1	
Chlorobenzene	50.0	0.0	46.3	93		46.7	93		1	
1,1,1,2-Tetrachloroethane	50.0	0.0	63.4	127		63.7	127		0	
Ethylbenzene	50.0	0.0	50.0	100		50.2	100		0	
m,p-Xylene	100	0.7	94.6	94		95.8	95		1	
o-Xylene	50.0	0.3	47.8	95		47.6	95		0	
Styrene	50.0	0.0	48.1	96		48.5	97		1	
Bromoform	50.0	0.0	64.9	130		64.5	129		1	
Isopropylbenzene	50.0	0.0	52.0	104		52.2	104		0	
1,1,2,2-Tetrachloroethane	50.0	0.0	27.4	55	*$	21.1	42	*$	26	
Bromobenzene	50.0	0.0	54.9	110		54.3	109		1	
1,2,3-Trichloropropane	50.0	0.0	50.1	100		49.4	99		1	
n-Propylbenzene	50.0	0.0	50.8	102		50.3	101		1	
2-Chlorotoluene	50.0	0.0	53.8	108		53.2	106		1	
1,3,5-Trimethylbenzene	50.0	0.0	55.2	110		55.0	110		0	
4-Chlorotoluene	50.0	0.0	55.1	110		54.7	109		1	
tert-Butylbenzene	50.0	0.0	53.8	108		54.1	108		1	
1,2,4-Trimethylbenzene	50.0	0.0	56.1	112		54.3	109		3	
sec-Butylbenzene	50.0	0.0	52.0	104		52.0	104		0	
1,3-Dichlorobenzene	50.0	0.0	52.3	105		52.0	104		1	
4-Isopropyltoluene	50.0	0.0	53.5	107		53.2	106		1	
1,4-Dichlorobenzene	50.0	0.0	52.1	104		52.9	106		2	
n-Butylbenzene	50.0	0.0	52.2	104		51.9	104		1	
1,2-Dichlorobenzene	50.0	0.0	54.4	109		54.3	109		0	
1,2-Dibromo-3-chloropropane	50.0	0.0	64.5	129		64.6	129		0	
1,2,4-Trichlorobenzene	50.0	0.0	50.9	102		53.0	106		4	
Hexachlorobutadiene	50.0	0.0	59.1	118		59.2	118		0	
Naphthalene	50.0	1.6	50.5	98		52.8	102		4	
1,2,3-Trichlorobenzene	50.0	0.0	52.4	105		54.5	109		4	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	59.9	120		63.5	127		6	
Methyl acetate	50.0	0.0	57.8	116		52.0	104		11	
Cyclohexane	50.0	0.0	39.9	80		40.1	80		1	
Methylcyclohexane	50.0	0.0	43.2	86		43.5	87		1	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0135

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05488-001
Client ID: CSO-6/0-0.5
Date Received:
Date Analyzed: 07/01/2015
MS Data file: F1765.D
MSD Data file: F1766.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0136

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: 05623-001
Client ID: NCBC_DRUM_SAMP
Date Received:
Date Analyzed: 07/03/2015
MS Data file: J8646.D
MSD Data file: J8647.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
Dichlorodifluoromethane	50.0	0.0	58.8	118		59.7	119		2	
Chloromethane	50.0	0.0	55.0	110		52.4	105		5	
Vinyl chloride	50.0	0.0	62.1	124		59.6	119		4	
Bromomethane	50.0	0.0	62.0	124		59.6	119		4	
Chloroethane	50.0	0.0	62.1	124		59.9	120		4	
Trichlorofluoromethane	50.0	0.0	64.1	128		64.5	129		1	
Acrolein	150	0.0	177	118		180	120		2	
1,1-Dichloroethene	50.0	0.0	63.7	127		62.1	124		3	
Acetone	50.0	0.0	61.1	122		61.7	123		1	
Carbon disulfide	50.0	0.0	60.9	122		58.8	118		4	
Vinyl acetate	50.0	0.0	43.2	86		41.0	82		5	
Methylene chloride	50.0	0.0	60.2	120		57.4	115		5	
Acrylonitrile	150	0.0	182	121		174	116		4	
tert-Butyl alcohol (TBA)	100	0.0	100.6	101		98.9	99		2	
trans-1,2-Dichloroethene	50.0	0.0	62.4	125		59.1	118		5	
Methyl tert-butyl ether (MTBE)	50.0	0.0	61.8	124		59.1	118		4	
1,1-Dichloroethane	50.0	0.0	62.0	124		59.5	119		4	
Diisopropyl ether (DIPE)	50.0	0.0	59.7	119		57.0	114		5	
cis-1,2-Dichloroethene	50.0	0.0	63.2	126		60.0	120		5	
2,2-Dichloropropane	50.0	0.0	48.8	98		45.9	92		6	
2-Butanone (MEK)	50.0	0.0	61.8	124		61.2	122		1	
Bromochloromethane	50.0	0.0	64.3	129		61.0	122		5	
Chloroform	50.0	0.0	64.2	128		62.3	125		3	
1,1,1-Trichloroethane	50.0	0.0	63.5	127		63.8	128		0	
Carbon tetrachloride	50.0	0.0	63.3	127		62.8	126		1	
1,1-Dichloropropene	50.0	0.0	65.1	130		63.7	127		2	
1,2-Dichloroethane (EDC)	50.0	0.0	62.8	126		63.2	126		1	
Benzene	50.0	0.0	59.6	119		56.7	113		5	
Trichloroethene	50.0	7.4	63.3	112		68.2	122		7	
1,2-Dichloropropane	50.0	0.0	58.4	117		55.9	112		4	
Dibromomethane	50.0	0.0	62.4	125		60.7	121		3	
1,4-Dioxane	1,500	0.0	1773	118		1746	116		2	
Bromodichloromethane	50.0	0.0	59.7	119		58.1	116		3	
2-Chloroethyl vinyl ether	50.0	0.0	57.6	115		55.0	110		5	
cis-1,3-Dichloropropene	50.0	0.0	55.4	111		53.5	107		3	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	54.1	108		52.1	104		4	
Toluene	50.0	0.0	59.2	118		57.1	114		4	
trans-1,3-Dichloropropene	50.0	0.0	55.7	111		53.6	107		4	
1,1,2-Trichloroethane	50.0	0.0	60.0	120		57.4	115		4	
Tetrachloroethene	50.0	0.0	56.7	113		55.2	110		3	
1,3-Dichloropropane	50.0	0.0	60.8	122		58.1	116		5	

E15-05428 0137

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05623-001
Client ID: NCBC_DRUM_SAMP
Date Received:
Date Analyzed: 07/03/2015
MS Data file: J8646.D
MSD Data file: J8647.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
2-Hexanone	50.0	0.0	57.1	114		55.4	111		3	
Dibromochloromethane	50.0	0.0	59.9	120		58.2	116		3	
1,2-Dibromoethane (EDB)	50.0	0.0	60.9	122		58.0	116		5	
Chlorobenzene	50.0	0.0	55.4	111		53.6	107		3	
1,1,1,2-Tetrachloroethane	50.0	0.0	56.6	113		55.2	110		3	
Ethylbenzene	50.0	0.0	53.4	107		51.7	103		3	
m,p-Xylene	100	0.0	105.5	106		102.7	103		3	
o-Xylene	50.0	0.0	52.8	106		51.7	103		2	
Styrene	50.0	0.0	54.2	108		52.6	105		3	
Bromoform	50.0	0.0	54.4	109		53.6	107		1	
Isopropylbenzene	50.0	0.0	52.6	105		52.0	104		1	
1,1,2,2-Tetrachloroethane	50.0	0.0	40.0	80		38.2	76		5	
Bromobenzene	50.0	0.0	55.1	110		52.7	105		4	
1,2,3-Trichloropropane	50.0	0.0	55.8	112		53.8	108		4	
n-Propylbenzene	50.0	0.0	51.1	102		50.7	101		1	
2-Chlorotoluene	50.0	0.0	51.2	102		50.0	100		2	
1,3,5-Trimethylbenzene	50.0	0.0	51.9	104		51.3	103		1	
4-Chlorotoluene	50.0	0.0	51.1	102		50.0	100		2	
tert-Butylbenzene	50.0	0.0	52.7	105		53.5	107		2	
1,2,4-Trimethylbenzene	50.0	0.0	50.8	102		50.0	100		2	
sec-Butylbenzene	50.0	0.0	52.9	106		54.4	109		3	
1,3-Dichlorobenzene	50.0	0.0	49.9	100		49.0	98		2	
4-Isopropyltoluene	50.0	0.0	52.1	104		52.7	105		1	
1,4-Dichlorobenzene	50.0	0.0	50.2	100		48.4	97		4	
n-Butylbenzene	50.0	0.0	50.0	100		50.7	101		1	
1,2-Dichlorobenzene	50.0	0.0	51.2	102		50.0	100		2	
1,2-Dibromo-3-chloropropane	50.0	0.0	51.1	102		50.3	101		2	
1,2,4-Trichlorobenzene	50.0	0.0	49.6	99		52.9	106		6	
Hexachlorobutadiene	50.0	0.0	55.4	111		56.9	114		3	
Naphthalene	50.0	0.0	39.0	78		40.4	81		4	
1,2,3-Trichlorobenzene	50.0	0.0	51.1	102		56.4	113		10	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	48.7	97		48.4	97		1	
Methyl acetate	50.0	0.0	48.9	98		48.2	96		1	
Cyclohexane	50.0	0.0	48.6	97		48.1	96		1	
Methylcyclohexane	50.0	0.0	45.6	91		45.6	91		0	

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0138

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: 05623-001
Client ID: NCBC_DRUM_SAMP
Date Received:
Date Analyzed: 07/03/2015
MS Data file: J8646.D
MSD Data file: J8647.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0139

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA150702-02
Date Received:
Date Analyzed: 07/03/2015
LCS Data file: J8648.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	LCS Conc.	%Rec.	#
Dichlorodifluoromethane	50.0	0.0	59.0	118	
Chloromethane	50.0	0.0	59.7	119	
Vinyl chloride	50.0	0.0	64.9	130	
Bromomethane	50.0	0.0	48.5	97	
Chloroethane	50.0	0.0	62.4	125	
Trichlorofluoromethane	50.0	0.0	61.8	124	
Acrolein	150	0.0	192.9	129	
1,1-Dichloroethene	50.0	0.0	62.8	126	
Acetone	50.0	0.0	63.3	127	
Carbon disulfide	50.0	0.0	64.8	130	
Vinyl acetate	50.0	0.0	44.6	89	
Methylene chloride	50.0	0.0	64.7	129	
Acrylonitrile	150.0	0.0	174.1	116	
tert-Butyl alcohol (TBA)	100.0	0.0	119.8	120	
trans-1,2-Dichloroethene	50.0	0.0	63.6	127	
Methyl tert-butyl ether (MTBE)	50.0	0.0	63.6	127	
1,1-Dichloroethane	50.0	0.0	63.6	127	
Diisopropyl ether (DIPE)	50.0	0.0	63.5	127	
cis-1,2-Dichloroethene	50.0	0.0	63.8	128	
2,2-Dichloropropane	50.0	0.0	61.2	122	
2-Butanone (MEK)	50.0	0.0	57.9	116	
Bromochloromethane	50.0	0.0	61.1	122	
Chloroform	50.0	0.0	62.1	124	
1,1,1-Trichloroethane	50.0	0.0	62.8	126	
Carbon tetrachloride	50.0	0.0	60.3	121	
1,1-Dichloropropene	50.0	0.0	59.4	119	
1,2-Dichloroethane (EDC)	50.0	0.0	62.6	125	
Benzene	50.0	0.0	58.4	117	
Trichloroethene	50.0	0.0	62.3	125	
1,2-Dichloropropane	50.0	0.0	58.0	116	
Dibromomethane	50.0	0.0	62.7	125	
1,4-Dioxane	1500	0.0	1699	113	
Bromodichloromethane	50.0	0.0	60.8	122	
2-Chloroethyl vinyl ether	50.0	0.0	49.3	99	
cis-1,3-Dichloropropene	50.0	0.0	55.8	112	
4-Methyl-2-pentanone (MIBK)	50.0	0.0	56.7	113	
Toluene	50.0	0.0	60.6	121	
trans-1,3-Dichloropropene	50.0	0.0	57.8	116	
1,1,2-Trichloroethane	50.0	0.0	63.2	126	
Tetrachloroethene	50.0	0.0	58.0	116	
1,3-Dichloropropane	50.0	0.0	64.5	129	

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150702-02
Date Received:
Date Analyzed: 07/03/2015
LCS Data file: J8648.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#
2-Hexanone	50.0	0.0	64.2	128	
Dibromochloromethane	50.0	0.0	60.9	122	
1,2-Dibromoethane (EDB)	50.0	0.0	62.8	126	
Chlorobenzene	50.0	0.0	50.8	102	
1,1,1,2-Tetrachloroethane	50.0	0.0	51.2	102	
Ethylbenzene	50.0	0.0	50.1	100	
m,p-Xylene	100.0	0.0	98.4	98	
o-Xylene	50.0	0.0	50.1	100	
Styrene	50.0	0.0	53.8	108	
Bromoform	50.0	0.0	63.6	127	
Isopropylbenzene	50.0	0.0	51.8	104	
1,1,2,2-Tetrachloroethane	50.0	0.0	41.3	83	
Bromobenzene	50.0	0.0	57.4	115	
1,2,3-Trichloropropane	50.0	0.0	60.4	121	
n-Propylbenzene	50.0	0.0	53.3	107	
2-Chlorotoluene	50.0	0.0	53.7	107	
1,3,5-Trimethylbenzene	50.0	0.0	54.1	108	
4-Chlorotoluene	50.0	0.0	54.8	110	
tert-Butylbenzene	50.0	0.0	54.7	109	
1,2,4-Trimethylbenzene	50.0	0.0	55.5	111	
sec-Butylbenzene	50.0	0.0	59.4	119	
1,3-Dichlorobenzene	50.0	0.0	57.4	115	
4-Isopropyltoluene	50.0	0.0	59.4	119	
1,4-Dichlorobenzene	50.0	0.0	57.2	114	
n-Butylbenzene	50.0	0.0	57.9	116	
1,2-Dichlorobenzene	50.0	0.0	61.3	123	
1,2-Dibromo-3-chloropropane	50.0	0.0	59.2	118	
1,2,4-Trichlorobenzene	50.0	0.0	61.9	124	
Hexachlorobutadiene	50.0	0.0	63.7	127	
Naphthalene	50.0	0.0	50.6	101	
1,2,3-Trichlorobenzene	50.0	0.0	61.3	123	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	50.4	101	
Methyl acetate	50.0	0.0	41.5	83	
Cyclohexane	50.0	0.0	47.9	96	
Methylcyclohexane	50.0	0.0	42.7	85	

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

E15-05428 0141

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA150702-02
Date Received:
Date Analyzed: 07/03/2015
LCS Data file: J8648.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Blank	MS Conc.	%Rec.	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

E15-05428 0142

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F1735.D

Instrument ID: MSD_F

Date Analyzed: 07/01/2015

Time Analyzed: 00:49

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
DEMILLE_3A/5.0	05556-014	07/01/2015	1:19
DEMILLE_3B/7.0	05556-015	07/01/2015	1:50
DEMILLE_3C/9.5	05556-016	07/01/2015	2:20
REP062515-VOCS	05556-017	07/01/2015	2:50
LCS-50PPB	LCSS150630-02	07/01/2015	3:21
LCSD-50PPB	LCSDS150630-02	07/01/2015	3:51
X-3_(0.5-1.0)/	05428-011	07/01/2015	4:21
E-1_(0.5-1.0)/	05428-014	07/01/2015	4:52
E-1_(2.0-2.5)/	05428-015	07/01/2015	5:22
E-1_(3.0-3.5)/	05428-016	07/01/2015	5:52
E-1_(4.5-5.0)/	05428-017	07/01/2015	6:23
E-2_(2.0-2.5)/	05428-021	07/01/2015	7:23
E-2_(3.0-3.5)/	05428-022	07/01/2015	7:54
E-2_(4.0-4.5)/	05428-023	07/01/2015	8:24
E-7_(2.0-2.5)/	05428-027	07/01/2015	9:25
E-7_(3.0-3.5)/	05428-028	07/01/2015	9:55
E-7_(4.5-5.0)/	05428-029	07/01/2015	10:25

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F1759.D

Instrument ID: MSD_F

Date Analyzed: 07/01/2015

Time Analyzed: 13:30

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCS-50PPB	LCSS150701-01	07/01/2015	15:07
CSO-6/0-0.5	05488-001	07/01/2015	15:40
CSO-8/0-0.5	05488-003	07/01/2015	16:10
MS	05488-001MS	07/01/2015	16:41
MSD	05488-001MSD	07/01/2015	17:14
6003-VOC-2	05555-005	07/01/2015	18:15
X-3_(0.5-1.0)/	05428-011DUP	07/01/2015	18:45
E-2_(0.5-1.0)/	05428-020	07/01/2015	19:16
E-7_(0.5-1.0)/	05428-026	07/01/2015	19:46
CSV-1/0-0.5	05487-001	07/01/2015	20:16
CSV-3/0-0.5	05487-003	07/01/2015	20:46
CSO-1/0-0.5	05487-006	07/01/2015	21:17
CSO-3/0-0.5	05487-008	07/01/2015	21:47
CSO-5/0-0.5	05487-010	07/01/2015	22:18
TP-5/2.5-3	05346-022	07/01/2015	22:48
TP-8/2.5-3	05346-033	07/01/2015	23:18
TP-3_(4.5-5)/4	05346-034	07/01/2015	23:49

VOLATILE METHOD BLANK SUMMARY

Lab File ID: J8641.D

Instrument ID: MSD_J

Date Analyzed: 07/03/2015

Time Analyzed: 01:12

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
FB-062315	05428-030	07/03/2015	1:39
TB-062415	05428-031	07/03/2015	2:05
FB-062415	05428-032	07/03/2015	2:32
NCBC_DRUM_SAMP	05623-001	07/03/2015	2:58
MS	05623-001MS	07/03/2015	3:25
MSD	05623-001MSD	07/03/2015	3:52
LCS-50PPB	LCSA150702-02	07/03/2015	4:19

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1386.D

Inst ID: MSD_F

BFB Injection Date: 06/16/2015

BFB Injection Time: 12:35

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.1			
75	30.0 - 60.0% of mass 95	53.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.4			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	72.9			
175	5.0 - 9.0% of mass 174	5.6	(	7.7	)1
176	95.0 - 101.0% of mass 174	70.8	(	97.1	)1
177	5.0 - 9.0% of mass 176	4.5	(	6.4	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC2	ICC2	F1388.D	06/16/2015	13:36
ICC20	ICC20	F1389.D	06/16/2015	14:08
ICC1	ICC1	F1391.D	06/16/2015	15:08
ICC5	ICC5	F1393.D	06/16/2015	16:09
ICC100	ICC100	F1394.D	06/16/2015	16:40
ICC200	ICC200	F1395.D	06/16/2015	17:10
ICC150	ICC150	F1396.D	06/16/2015	17:41
ICV100	ICV100	F1398.D	06/16/2015	18:41

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1731.D

Inst ID: MSD_F

BFB Injection Date: 06/30/2015

BFB Injection Time: 22:47

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.4			
75	30.0 - 60.0% of mass 95	59.2			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	88.3			
175	5.0 - 9.0% of mass 174	6.6	(	7.5	)1
176	95.0 - 101.0% of mass 174	86.2	(	97.6	)1
177	5.0 - 9.0% of mass 176	5.4	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	F1732.D	06/30/2015	23:18
BLKS150630-02	BLKS150630-02	F1735.D	07/01/2015	0:49
DEMILLE_3A/5.0	05556-014	F1736.D	07/01/2015	1:19
DEMILLE_3B/7.0	05556-015	F1737.D	07/01/2015	1:50
DEMILLE_3C/9.5	05556-016	F1738.D	07/01/2015	2:20
REP062515-VOCS	05556-017	F1739.D	07/01/2015	2:50
LCS-50PPB	LCSS150630-02	F1740.D	07/01/2015	3:21
LCSD-50PPB	LCSDS150630-02	F1741.D	07/01/2015	3:51
X-3_(0.5-1.0)/	05428-011	F1742.D	07/01/2015	4:21
E-1_(0.5-1.0)/	05428-014	F1743.D	07/01/2015	4:52
E-1_(2.0-2.5)/	05428-015	F1744.D	07/01/2015	5:22
E-1_(3.0-3.5)/	05428-016	F1745.D	07/01/2015	5:52
E-1_(4.5-5.0)/	05428-017	F1746.D	07/01/2015	6:23
E-2_(2.0-2.5)/	05428-021	F1748.D	07/01/2015	7:23
E-2_(3.0-3.5)/	05428-022	F1749.D	07/01/2015	7:54
E-2_(4.0-4.5)/	05428-023	F1750.D	07/01/2015	8:24
E-7_(2.0-2.5)/	05428-027	F1752.D	07/01/2015	9:25
E-7_(3.0-3.5)/	05428-028	F1753.D	07/01/2015	9:55
E-7_(4.5-5.0)/	05428-029	F1754.D	07/01/2015	10:25

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F1756.D

Inst ID: MSD_F

BFB Injection Date: 07/01/2015

BFB Injection Time: 12:00

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	22.5			
75	30.0 - 60.0% of mass 95	59.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	1.7	(	1.8	)1
174	Great than 50.0% of mass 95	91.8			
175	5.0 - 9.0% of mass 174	7.2	(	7.8	)1
176	95.0 - 101.0% of mass 174	91.2	(	99.4	)1
177	5.0 - 9.0% of mass 176	5.1	(	5.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	F1757.D	07/01/2015	12:30
BLKS150701-01	BLKS150701-01	F1759.D	07/01/2015	13:30
LCS-50PPB	LCSS150701-01	F1762.D	07/01/2015	15:07
CSO-6/0-0.5	05488-001	F1763.D	07/01/2015	15:40
CSO-8/0-0.5	05488-003	F1764.D	07/01/2015	16:10
MS	05488-001MS	F1765.D	07/01/2015	16:41
MSD	05488-001MSD	F1766.D	07/01/2015	17:14
6003-VOC-2	05555-005	F1768.D	07/01/2015	18:15
X-3_(0.5-1.0)/	05428-011DUP	F1769.D	07/01/2015	18:45
E-2_(0.5-1.0)/	05428-020	F1770.D	07/01/2015	19:16
E-7_(0.5-1.0)/	05428-026	F1771.D	07/01/2015	19:46
CSV-1/0-0.5	05487-001	F1772.D	07/01/2015	20:16
CSV-3/0-0.5	05487-003	F1773.D	07/01/2015	20:46
CSO-1/0-0.5	05487-006	F1774.D	07/01/2015	21:17
CSO-3/0-0.5	05487-008	F1775.D	07/01/2015	21:47
CSO-5/0-0.5	05487-010	F1776.D	07/01/2015	22:18
TP-5/2.5-3	05346-022	F1777.D	07/01/2015	22:48
TP-8/2.5-3	05346-033	F1778.D	07/01/2015	23:18
TP-3_(4.5-5)/4	05346-034	F1779.D	07/01/2015	23:49

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8191.D

BFB Injection Date: 06/12/2015

Inst ID: MSD_J

BFB Injection Time: 9:36

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	20.5			
75	30.0 - 60.0% of mass 95	51.5			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	77.5			
175	5.0 - 9.0% of mass 174	5.8	(	7.5	)1
176	95.0 - 101.0% of mass 174	75.4	(	97.3	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC5	ICC5	J8194.D	06/12/2015	10:59
ICC1	ICC1	J8195.D	06/12/2015	11:28
ICC2	ICC2	J8196.D	06/12/2015	11:55
ICC20	ICC20	J8197.D	06/12/2015	12:21
ICC100	ICC100	J8198.D	06/12/2015	12:48
ICC150	ICC150	J8199.D	06/12/2015	13:21
ICC200	ICC200	J8200.D	06/12/2015	13:48
ICV100	ICV100	J8204.D	06/12/2015	15:52

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: J8636.D

BFB Injection Date: 07/02/2015

Inst ID: MSD_J

BFB Injection Time: 23:00

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.9			
75	30.0 - 60.0% of mass 95	52.0			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.6			
173	Less than 2.0% of mass 174	0.0	(	0.0	)1
174	Great than 50.0% of mass 95	78.3			
175	5.0 - 9.0% of mass 174	6.0	(	7.7	)1
176	95.0 - 101.0% of mass 174	76.7	(	97.9	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV100	J8637.D	07/02/2015	23:26
BLKA150702-02	BLKA150702-02	J8641.D	07/03/2015	1:12
FB-062315	05428-030	J8642.D	07/03/2015	1:39
TB-062415	05428-031	J8643.D	07/03/2015	2:05
FB-062415	05428-032	J8644.D	07/03/2015	2:32
NCBC_DRUM_SA	05623-001	J8645.D	07/03/2015	2:58
MS	05623-001MS	J8646.D	07/03/2015	3:25
MSD	05623-001MSD	J8647.D	07/03/2015	3:52
LCS-50PPB	LCSA150702-02	J8648.D	07/03/2015	4:19

Response Factor Report MSD_F

Method Path : C:\MSDCHEM\1\METHODS\
Method File : FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Wed Jun 17 14:31:24 2015
Response Via : Initial Calibration

WTF 6/17/15
CO 6/17/15

Calibration Files
1 =F1391.D 2 =F1388.D 5 =F1393.D
20 =F1389.D 100 =F1394.D 150 =F1396.D 200 =F1395.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD								
2)	T	Dichlorodifluorom	0.750	0.899	0.666	0.807	0.711	0.653	0.686	0.739	11.95
3)	P	Chloromethane	0.521	0.686	0.501	0.557	0.510	0.494	0.481	0.536	13.17
4)	C	Vinyl chloride	0.601	0.730	0.551	0.635	0.576	0.538	0.557	0.598	11.15
5)	T	Bromomethane	0.394	0.433	0.321	0.370	0.327	0.273	0.304	0.346	16.02
6)	T	Chloroethane	0.336	0.427	0.334	0.363	0.333	0.297	0.312	0.343	12.34
7)	T	Trichlorofluorome	0.731	0.826	0.637	0.803	0.729	0.686	0.692	0.729	9.15
8)	T	Acrolein	0.023	0.019	0.018	0.020	0.017	0.016	0.016	0.019	14.13
9)	MC	1,1-Dichloroethen	0.500	0.563	0.457	0.496	0.471	0.444	0.457	0.484	8.43
10)	T	Acetone			0.258	0.236	0.206	0.194	0.185	0.216	14.09
11)	T	Carbon disulfide	1.502	1.819	1.432	1.693	1.549	1.467	1.483	1.564	9.02
12)	T	Vinyl acetate	1.630	1.912	1.657	1.829	1.670	1.607	1.595	1.700	7.16
13)	T	Methylene chlorid		0.605	0.595	0.532	0.474	0.448	0.448	0.517	13.80
14)	T	Acrylonitrile	0.191	0.165	0.171	0.184	0.153	0.155	0.148	0.167	9.74
15)	T	tert-Butyl alcoho		0.086	0.082	0.076	0.067	0.064	0.061	0.072	13.92
16)	T	trans-1,2-Dichlor	0.577	0.693	0.545	0.608	0.549	0.520	0.514	0.572	10.88
17)	T	Methyl tert-butyl	1.892	2.227	1.916	2.097	1.860	1.785	1.766	1.935	8.72
18)	P	1,1-Dichloroethan	1.146	1.418	1.164	1.274	1.179	1.130	1.133	1.206	8.75
19)	T	Diisopropyl ether	2.003	2.398	2.126	2.285	2.082	1.984	1.978	2.122	7.66
20)	T	cis-1,2-Dichloroe	0.615	0.725	0.609	0.665	0.602	0.575	0.571	0.623	8.73
21)	T	2,2-Dichloropropa	0.887	0.828	0.737	0.874	0.693	0.671	0.639	0.761	13.28
22)	T	2-Butanone (MEK)	0.336	0.407	0.352	0.368	0.320	0.305	0.292	0.340	11.62
23)	T	Bromochloromethan	0.264	0.304	0.262	0.285	0.264	0.252	0.251	0.269	7.06
25)	C	Chloroform	1.087	1.306	1.135	1.227	1.142	1.096	1.104	1.157	6.99
26)	T	1,1,1-Trichloroet	0.978	1.090	0.887	1.059	1.003	0.978	0.982	0.997	6.54
27)	T	Carbon tetrachlor	0.674	0.708	0.572	0.668	0.783	0.832	0.845	0.726	13.62
28)	T	1,1-Dichloroprope	1.032	1.143	0.943	1.015	0.936	0.893	0.899	0.980	9.12
29)	T	1,2-Dichloroethan	1.021	1.139	0.986	1.050	0.969	0.933	0.927	1.004	7.42
30)	S	1,2-Dichloroethan	0.652	0.661	0.658	0.670	0.668	0.663	0.665	0.662	0.93
31)	I	1,4-Difluorobenzene	ISTD								
32)	M	Benzene	1.588	1.868	1.606	1.728	1.561	1.485	1.500	1.619	8.38
33)	M	Trichloroethene	0.454	0.515	0.438	0.480	0.446	0.422	0.430	0.455	7.13
34)	C	1,2-Dichloropropa	0.397	0.461	0.400	0.432	0.397	0.376	0.383	0.407	7.32
35)	T	Dibromomethane	0.231	0.246	0.219	0.240	0.222	0.214	0.213	0.226	5.82
36)	T	1,4-Dioxane	0.005	0.004	0.004	0.004	0.003	0.003	0.003	0.004	15.09
37)	T	Bromodichlorometh	0.466	0.441	0.431	0.487	0.540	0.546	0.559	0.496	10.62
38)	T	2-Chloroethyl vin	0.206	0.240	0.217	0.225	0.208	0.205	0.202	0.215	6.36
39)	T	cis-1,3-Dichlorop	0.573	0.648	0.584	0.671	0.649	0.631	0.637	0.627	5.69
40)	T	4-Methyl-2-pentan	0.464	0.560	0.479	0.473	0.419	0.399	0.386	0.454	13.06
41)	S	Toluene-d8	1.175	1.162	1.171	1.160	1.151	1.167	1.167	1.165	0.68
42)	MC	Toluene	1.009	1.131	0.978	1.033	0.949	0.905	0.928	0.990	7.69
43)	T	trans-1,3-Dichlor	0.533	0.617	0.541	0.617	0.603	0.600	0.604	0.588	6.03
44)	T	1,1,2-Trichloroet	0.236	0.281	0.257	0.260	0.246	0.237	0.237	0.250	6.63
45)	T	Tetrachloroethene	0.509	0.512	0.446	0.482	0.441	0.416	0.421	0.461	8.72
46)	T	1,3-Dichloropropa	0.560	0.628	0.572	0.597	0.553	0.533	0.537	0.569	5.92
47)	T	2-Hexanone	0.381	0.402	0.370	0.366	0.322	0.307	0.294	0.349	11.75
48)	T	Dibromochlorometh	0.261	0.250	0.236	0.273	0.323	0.346	0.352	0.291	16.34
49)	T	1,2-Dibromoethane	0.317	0.342	0.301	0.323	0.299	0.289	0.289	0.309	6.27
50)	I	Chlorobenzene-d5	ISTD								
51)	MP	Chlorobenzene	1.410	1.507	1.312	1.392	1.281	1.219	1.237	1.337	7.77
52)	T	1,1,1,2-Tetrachlo	0.393	0.329	0.414	0.417	0.473	0.469	0.470	0.423	12.43

53)	C	Ethylbenzene	2.494	2.713	2.416	2.596	2.409	2.303	2.334	2.466	5.93
54)	T	m,p-Xylene	0.963	1.028	0.902	0.946	0.869	0.823	0.837	0.910	8.09
55)	T	o-Xylene	0.895	1.021	0.872	0.947	0.852	0.796	0.802	0.884	9.07
56)	T	Styrene	1.449	1.645	1.456	1.520	1.374	1.305	1.318	1.438	8.32
57)	P	Bromoform	0.233	0.243	0.130	0.221	0.226	0.251	0.254	0.222	19.13
58)	T	Isopropylbenzene	2.558	2.746	2.460	2.691	2.500	2.349	2.382	2.527	5.91
59)	S	Bromofluorobenzen	0.648	0.656	0.657	0.644	0.635	0.626	0.625	0.642	2.08
60)	P	1,1,2,2-Tetrachlo	0.487	0.543	0.508	0.529	0.484	0.457	0.445	0.493	7.25
61)	T	Bromobenzene	0.562	0.617	0.554	0.582	0.527	0.495	0.492	0.547	8.38
62)	T	1,2,3-Trichloropr	0.545	0.623	0.542	0.559	0.500	0.473	0.462	0.529	10.52
63)	T	n-Propylbenzene	3.191	3.353	2.939	3.131	2.838	2.674	2.738	2.981	8.44
64)	T	2-Chlorotoluene	1.887	2.062	1.822	1.903	1.760	1.661	1.670	1.823	7.79
65)	T	1,3,5-Trimethylbe	2.303	2.560	2.210	2.368	2.198	2.053	2.068	2.251	7.89
66)	T	4-Chlorotoluene	2.359	2.557	2.173	2.232	2.051	1.933	1.951	2.179	10.38
67)	T	tert-Butylbenzene	1.828	2.038	1.807	1.971	1.886	1.749	1.740	1.860	6.02
68)	T	1,2,4-Trimethylbe	2.387	2.593	2.258	2.393	2.176	2.048	2.056	2.273	8.75
69)	T	sec-Butylbenzene	2.896	3.098	2.701	2.919	2.706	2.517	2.549	2.769	7.62
70)	T	1,3-Dichlorobenze	1.280	1.353	1.159	1.205	1.082	1.003	1.004	1.155	11.64
71)	T	4-Isopropyltoluen	2.550	2.801	2.423	2.577	2.369	2.202	2.224	2.450	8.64
72)	T	1,4-Dichlorobenze	1.280	1.285	1.178	1.184	1.064	0.994	0.997	1.140	10.83
73)	T	n-Butylbenzene	1.398	1.407	1.225	1.327	1.201	1.119	1.124	1.257	9.64
74)	T	1,2-Dichlorobenze	1.151	1.239	1.049	1.116	0.970	0.897	0.885	1.044	12.80
75)	T	1,2-Dibromo-3-chl	0.126	0.076	0.085	0.106	0.116	0.114	0.111	0.105	17.14
76)	T	1,2,4-Trichlorobe	0.988	0.959	0.828	0.924	0.846	0.788	0.771	0.872	9.76
77)	T	Hexachlorobutadie	0.655	0.617	0.516	0.608	0.556	0.508	0.514	0.568	10.42
78)	T	Naphthalene	1.912	1.918	1.719	1.942	1.748	1.657	1.595	1.784	7.81
79)	T	1,2,3-Trichlorobe	0.881	0.812	0.729	0.824	0.758	0.715	0.689	0.773	8.91
80)	T	1,1,2-Trichloro-1	0.358	0.496	0.376	0.414	0.382	0.348	0.354	0.389	13.35
81)	T	Methyl acetate	0.360	0.407	0.376	0.410	0.356	0.339	0.323	0.367	8.90
82)	T	Cyclohexane			1.050	1.056	0.952	0.877	0.884	0.964	8.99
83)	T	Methylcyclohexane	0.935	1.004	0.810	0.942	0.885	0.819	0.821	0.888	8.47

(#) = Out of Range ### Number of calibration levels exceeded format ###

FS061615.M Wed Jun 17 14:31:31 2015 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\06-16-15\
Data File : F1398.D
Acq On : 16 Jun 2015 18:41
Operator : XING
Sample : ICV100,ICV100,S,5g,0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 17 14:32:27 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	102	0.00
2	T	Dichlorodifluoromethane	0.739	0.682	7.7	98	0.00
3	P	Chloromethane	0.536	0.485	9.5	97	0.00
4	C	Vinyl chloride	0.598	0.540	9.7	96	0.00
5	T	Bromomethane	0.346	0.315	9.0	98	0.01
6	T	Chloroethane	0.343	0.312	9.0	96	0.00
7	T	Trichlorofluoromethane	0.729	0.671	8.0	94	0.00
8	T	Acrolein	0.019	0.017	10.5	102	0.00
9	MC	1,1-Dichloroethene	0.484	0.437	9.7	95	0.00
10	T	Acetone	0.216	0.200	7.4	99	0.01
11	T	Carbon disulfide	1.564	1.444	7.7	95	0.01
12	T	Vinyl acetate	1.700	1.585	6.8	97	0.00
13	T	Methylene chloride	0.517	0.451	12.8	97	0.00
14	T	Acrylonitrile	0.167	0.155	7.2	103	0.00
15	T	tert-Butyl alcohol (TBA)	0.072	0.068	5.6	103	0.00
16	T	trans-1,2-Dichloroethene	0.572	0.522	8.7	97	0.00
17	T	Methyl tert-butyl ether (MT	1.935	1.843	4.8	101	0.00
18	P	1,1-Dichloroethane	1.206	1.132	6.1	98	0.00
19	T	Diisopropyl ether (DIPE)	2.122	2.044	3.7	100	0.00
20	T	cis-1,2-Dichloroethene	0.623	0.587	5.8	100	0.00
21	T	2,2-Dichloropropane	0.761	0.671	11.8	99	0.00
22	T	2-Butanone (MEK)	0.340	0.325	4.4	104	0.00
23	T	Bromochloromethane	0.269	0.259	3.7	100	0.00
25	C	Chloroform	1.157	1.108	4.2	99	0.00
26	T	1,1,1-Trichloroethane	0.997	0.975	2.2	99	0.00
27	T	Carbon tetrachloride	0.726	0.799	-10.1	104	0.00
28	T	1,1-Dichloropropene	0.980	0.889	9.3	97	0.00
29	T	1,2-Dichloroethane (EDC)	1.004	0.952	5.2	100	0.00
30	S	1,2-Dichloroethane-d4	0.662	0.650	1.8	99	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	102	0.00
32	M	Benzene	1.619	1.512	6.6	98	0.00
33	M	Trichloroethene	0.455	0.439	3.5	100	0.00
34	C	1,2-Dichloropropane	0.407	0.392	3.7	100	0.00
35	T	Dibromomethane	0.226	0.224	0.9	102	0.00
36	T	1,4-Dioxane	0.004	0.004	0.0	116	0.00
37	T	Bromodichloromethane	0.496	0.554	-11.7	104	0.00
38	T	2-Chloroethyl vinyl ether	0.215	0.220	-2.3	107	0.00
39	T	cis-1,3-Dichloropropene	0.627	0.647	-3.2	101	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.454	0.425	6.4	103	0.00
41	S	Toluene-d8	1.165	1.168	-0.3	103	0.00
42	MC	Toluene	0.990	0.933	5.8	100	0.00
43	T	trans-1,3-Dichloropropene	0.588	0.618	-5.1	104	0.00
44	T	1,1,2-Trichloroethane	0.250	0.250	0.0	104	0.00
45	T	Tetrachloroethene	0.461	0.428	7.2	99	0.00
46	T	1,3-Dichloropropane	0.569	0.559	1.8	103	0.00

47	T	2-Hexanone	0.349	0.324	7.2	102	0.00
48	T	Dibromochloromethane	0.291	0.346	-18.9	109	0.00
49	T	1,2-Dibromoethane (EDB)	0.309	0.304	1.6	103	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	104	0.00
51	MP	Chlorobenzene	1.337	1.253	6.3	102	0.00
52	T	1,1,1,2-Tetrachloroethane	0.423	0.466	-10.2	103	0.01
53	C	Ethylbenzene	2.466	2.325	5.7	100	0.00
54	T	m,p-Xylene	0.910	0.837	8.0	100	0.00
55	T	o-Xylene	0.884	0.813	8.0	99	0.00
56	T	Styrene	1.438	1.335	7.2	101	0.00
57	P	Bromoform	0.222	0.249	-12.2	115	0.00
58	T	Isopropylbenzene	2.527	2.370	6.2	99	0.00
59	S	Bromofluorobenzene	0.642	0.635	1.1	104	0.00
60	P	1,1,2,2-Tetrachloroethane	0.493	0.471	4.5	101	0.00
61	T	Bromobenzene	0.547	0.521	4.8	103	0.00
62	T	1,2,3-Trichloropropane	0.529	0.501	5.3	104	0.00
63	T	n-Propylbenzene	2.981	2.728	8.5	100	0.00
64	T	2-Chlorotoluene	1.823	1.697	6.9	100	0.00
65	T	1,3,5-Trimethylbenzene	2.251	2.076	7.8	98	0.00
66	T	4-Chlorotoluene	2.179	1.986	8.9	101	0.00
67	T	tert-Butylbenzene	1.860	1.733	6.8	95	0.00
68	T	1,2,4-Trimethylbenzene	2.273	2.087	8.2	100	-0.01
69	T	sec-Butylbenzene	2.769	2.556	7.7	98	0.00
70	T	1,3-Dichlorobenzene	1.155	1.047	9.4	101	0.00
71	T	4-Isopropyltoluene	2.450	2.228	9.1	98	0.00
72	T	1,4-Dichlorobenzene	1.140	1.034	9.3	101	0.00
73	T	n-Butylbenzene	1.257	1.130	10.1	98	0.00
74	T	1,2-Dichlorobenzene	1.044	0.940	10.0	101	0.00
75	T	1,2-Dibromo-3-chloropropane	0.105	0.118	-12.4	105	0.00
76	T	1,2,4-Trichlorobenzene	0.872	0.802	8.0	98	0.00
77	T	Hexachlorobutadiene	0.568	0.520	8.5	97	0.00
78	T	Naphthalene	1.784	1.743	2.3	104	0.00
79	T	1,2,3-Trichlorobenzene	0.773	0.733	5.2	101	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.389	0.351	9.8	96	0.00
81	T	Methyl acetate	0.367	0.346	5.7	101	0.00
82	T	Cyclohexane	0.964	0.884	8.3	97	0.00
83	T	Methylcyclohexane	0.888	0.825	7.1	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS061615.M Wed Jun 17 14:32:34 2015 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1732.D
Acq On : 30 Jun 2015 23:18
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Jul 01 09:53:59 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	72	0.00
2	T	Dichlorodifluoromethane	0.739	0.660	10.7	67	0.00
3	P	Chloromethane	0.536	0.478	10.8	67	0.00
4	C	Vinyl chloride	0.598	0.607	-1.5	76	0.00
5	T	Bromomethane	0.346	0.401	-15.9	88	0.01
6	T	Chloroethane	0.343	0.374	-9.0	81	0.01
7	T	Trichlorofluoromethane	0.729	0.850	-16.6	84	0.00
8	T	Acrolein	0.019	0.018	5.3	75	0.00
9	MC	1,1-Dichloroethene	0.484	0.564	-16.5	86	0.00
10	T	Acetone	0.216	0.254	-17.6	88	0.00
11	T	Carbon disulfide	1.564	1.779	-13.7	82	0.00
12	T	Vinyl acetate	1.700	1.603	5.7	69	0.00
13	T	Methylene chloride	0.517	0.602	-16.4	91	0.00
14	T	Acrylonitrile	0.167	0.166	0.6	78	0.00
15	T	tert-Butyl alcohol (TBA)	0.072	0.086	-19.4	92	0.00
16	T	trans-1,2-Dichloroethene	0.572	0.488	14.7	64	0.00
17	T	Methyl tert-butyl ether (MT	1.935	1.876	3.0	72	0.00
18	P	1,1-Dichloroethane	1.206	1.063	11.9	65	0.00
19	T	Diisopropyl ether (DIPE)	2.122	1.763	16.9	61	0.00
20	T	cis-1,2-Dichloroethene	0.623	0.541	13.2	65	0.00
21	T	2,2-Dichloropropane	0.761	0.622	18.3	64	0.00
22	T	2-Butanone (MEK)	0.340	0.328	3.5	74	0.00
23	T	Bromochloromethane	0.269	0.258	4.1	70	0.00
25	C	Chloroform	1.157	1.261	-9.0	79	0.00
26	T	1,1,1-Trichloroethane	0.997	1.154	-15.7	83	0.00
27	T	Carbon tetrachloride	0.726	0.857	-18.0	79	0.00
28	T	1,1-Dichloropropene	0.980	0.894	8.8	69	0.00
29	T	1,2-Dichloroethane (EDC)	1.004	1.167	-16.2	86	0.00
30	S	1,2-Dichloroethane-d4	0.662	0.867	-31.0	93	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	68	-0.01
32	M	Benzene	1.619	1.397	13.7	61	0.00
33	M	Trichloroethene	0.455	0.518	-13.8	79	0.00
34	C	1,2-Dichloropropane	0.407	0.352	13.5	60	0.00
35	T	Dibromomethane	0.226	0.261	-15.5	80	0.00
36	T	1,4-Dioxane	0.004	0.004	0.0	78	0.00
37	T	Bromodichloromethane	0.496	0.579	-16.7	73	0.00
38	T	2-Chloroethyl vinyl ether	0.215	0.200	7.0	65	0.00
39	T	cis-1,3-Dichloropropene	0.627	0.622	0.8	65	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.454	0.429	5.5	70	0.00
41	S	Toluene-d8	1.165	1.202	-3.2	71	0.00
42	MC	Toluene	0.990	0.906	8.5	65	0.00
43	T	trans-1,3-Dichloropropene	0.588	0.638	-8.5	72	0.00
44	T	1,1,2-Trichloroethane	0.250	0.249	0.4	69	0.00
45	T	Tetrachloroethene	0.461	0.473	-2.6	73	0.00
46	T	1,3-Dichloropropane	0.569	0.588	-3.3	72	0.00

47	T	2-Hexanone	0.349	0.346	0.9	73	0.00
48	T	Dibromochloromethane	0.291	0.321	-10.3	67	0.00
49	T	1,2-Dibromoethane (EDB)	0.309	0.334	-8.1	76	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	76	0.00
51	MP	Chlorobenzene	1.337	1.178	11.9	70	0.00
52	T	1,1,1,2-Tetrachloroethane	0.423	0.495	-17.0	80	0.00
53	C	Ethylbenzene	2.466	2.275	7.7	72	0.00
54	T	m,p-Xylene	0.910	0.806	11.4	71	0.00
55	T	o-Xylene	0.884	0.794	10.2	71	0.00
56	T	Styrene	1.438	1.326	7.8	73	0.00
57	P	Bromoform	0.222	0.261	-17.6	88	0.00
58	T	Isopropylbenzene	2.527	2.442	3.4	74	0.00
59	S	Bromofluorobenzene	0.642	0.723	-12.6	87	0.00
60	P	1,1,2,2-Tetrachloroethane	0.493	0.399	19.1	63	0.00
61	T	Bromobenzene	0.547	0.564	-3.1	82	0.00
62	T	1,2,3-Trichloropropane	0.529	0.530	-0.2	81	0.00
63	T	n-Propylbenzene	2.981	2.732	8.4	73	0.00
64	T	2-Chlorotoluene	1.823	1.799	1.3	78	0.00
65	T	1,3,5-Trimethylbenzene	2.251	2.293	-1.9	79	0.00
66	T	4-Chlorotoluene	2.179	2.197	-0.8	81	0.00
67	T	tert-Butylbenzene	1.860	1.872	-0.6	76	0.00
68	T	1,2,4-Trimethylbenzene	2.273	2.263	0.4	79	-0.01
69	T	sec-Butylbenzene	2.769	2.656	4.1	75	0.00
70	T	1,3-Dichlorobenzene	1.155	1.122	2.9	79	0.00
71	T	4-Isopropyltoluene	2.450	2.408	1.7	77	0.00
72	T	1,4-Dichlorobenzene	1.140	1.111	2.5	79	0.00
73	T	n-Butylbenzene	1.257	1.186	5.6	75	0.00
74	T	1,2-Dichlorobenzene	1.044	1.083	-3.7	85	0.00
75	T	1,2-Dibromo-3-chloropropane	0.105	0.123	-17.1	81	0.00
76	T	1,2,4-Trichlorobenzene	0.872	0.866	0.7	78	0.00
77	T	Hexachlorobutadiene	0.568	0.656	-15.5	90	0.00
78	T	Naphthalene	1.784	1.950	-9.3	85	0.00
79	T	1,2,3-Trichlorobenzene	0.773	0.826	-6.9	83	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.389	0.465	-19.5	93	0.01
81	T	Methyl acetate	0.367	0.431	-17.4	92	0.00
82	T	Cyclohexane	0.964	0.775	19.6	62	0.00
83	T	Methylcyclohexane	0.888	0.716	19.4	62	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS061615.M Wed Jul 01 09:54:06 2015 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1757.D
Acq On : 1 Jul 2015 12:30
Operator : XING
Sample : CCV100,CCV100,S,5g,0
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 01 16:39:38 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	66	0.00
2	T	Dichlorodifluoromethane	0.739	0.739	0.0	69	0.00
3	P	Chloromethane	0.536	0.527	1.7	69	0.00
4	C	Vinyl chloride	0.598	0.686	-14.7	79	0.00
5	T	Bromomethane	0.346	0.391	-13.0	79	0.00
6	T	Chloroethane	0.343	0.392	-14.3	78	0.00
7	T	Trichlorofluoromethane	0.729	0.861	-18.1	78	0.00
8	T	Acrolein	0.019	0.017	10.5	65	0.00
9	MC	1,1-Dichloroethene	0.484	0.558	-15.3	79	0.00
10	T	Acetone	0.216	0.252	-16.7	81	0.00
11	T	Carbon disulfide	1.564	1.788	-14.3	77	0.00
12	T	Vinyl acetate	1.700	1.637	3.7	65	0.00
13	T	Methylene chloride	0.517	0.591	-14.3	83	0.00
14	T	Acrylonitrile	0.167	0.171	-2.4	74	0.00
15	T	tert-Butyl alcohol (TBA)	0.072	0.085	-18.1	84	0.00
16	T	trans-1,2-Dichloroethene	0.572	0.524	8.4	63	0.00
17	T	Methyl tert-butyl ether (MT	1.935	1.909	1.3	68	0.00
18	P	1,1-Dichloroethane	1.206	1.150	4.6	65	0.00
19	T	Diisopropyl ether (DIPE)	2.122	1.839	13.3	59	0.00
20	T	cis-1,2-Dichloroethene	0.623	0.567	9.0	62	0.00
21	T	2,2-Dichloropropane	0.761	0.776	-2.0	74	0.00
22	T	2-Butanone (MEK)	0.340	0.332	2.4	69	0.00
23	T	Bromochloromethane	0.269	0.260	3.3	65	0.00
25	C	Chloroform	1.157	1.364	-17.9	79	0.00
26	T	1,1,1-Trichloroethane	0.997	1.081	-8.4	72	-0.01
27	T	Carbon tetrachloride	0.726	0.775	-6.7	66	0.00
28	T	1,1-Dichloropropene	0.980	0.995	-1.5	71	0.00
29	T	1,2-Dichloroethane (EDC)	1.004	1.184	-17.9	81	0.00
30	S	1,2-Dichloroethane-d4	0.662	0.851	-28.5	85	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	64	-0.01
32	M	Benzene	1.619	1.458	9.9	60	0.00
33	M	Trichloroethene	0.455	0.501	-10.1	72	0.00
34	C	1,2-Dichloropropane	0.407	0.361	11.3	58	0.00
35	T	Dibromomethane	0.226	0.265	-17.3	77	0.00
36	T	1,4-Dioxane	0.004	0.004	0.0	69	0.00
37	T	Bromodichloromethane	0.496	0.584	-17.7	69	0.00
38	T	2-Chloroethyl vinyl ether	0.215	0.190	11.6	58	0.00
39	T	cis-1,3-Dichloropropene	0.627	0.662	-5.6	66	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.454	0.422	7.0	65	0.00
41	S	Toluene-d8	1.165	1.199	-2.9	67	0.00
42	MC	Toluene	0.990	0.962	2.8	65	0.00
43	T	trans-1,3-Dichloropropene	0.588	0.687	-16.8	73	0.00
44	T	1,1,2-Trichloroethane	0.250	0.249	0.4	65	0.00
45	T	Tetrachloroethene	0.461	0.519	-12.6	76	0.00
46	T	1,3-Dichloropropane	0.569	0.597	-4.9	69	0.00

47 T	2-Hexanone	0.349	0.339	2.9	68	0.00
48 T	Dibromochloromethane	0.291	0.328	-12.7	65	0.00
49 T	1,2-Dibromoethane (EDB)	0.309	0.334	-8.1	71	0.00
50 I	Chlorobenzene-d5	1.000	1.000	0.0	71	0.00
51 MP	Chlorobenzene	1.337	1.252	6.4	69	0.00
52 T	1,1,1,2-Tetrachloroethane	0.423	0.466	-10.2	70	0.00
53 C	Ethylbenzene	2.466	2.518	-2.1	74	0.00
54 T	m,p-Xylene	0.910	0.891	2.1	73	0.00
55 T	o-Xylene	0.884	0.858	2.9	72	0.00
56 T	Styrene	1.438	1.411	1.9	73	0.00
57 P	Bromoform	0.222	0.262	-18.0	82	0.00
58 T	Isopropylbenzene	2.527	2.718	-7.6	77	0.00
59 S	Bromofluorobenzene	0.642	0.745	-16.0	83	0.00
60 P	1,1,2,2-Tetrachloroethane	0.493	0.469	4.9	69	0.00
61 T	Bromobenzene	0.547	0.605	-10.6	82	0.00
62 T	1,2,3-Trichloropropane	0.529	0.553	-4.5	79	0.00
63 T	n-Propylbenzene	2.981	3.082	-3.4	77	0.00
64 T	2-Chlorotoluene	1.823	1.970	-8.1	80	0.00
65 T	1,3,5-Trimethylbenzene	2.251	2.573	-14.3	83	0.00
66 T	4-Chlorotoluene	2.179	2.446	-12.3	85	0.00
67 T	tert-Butylbenzene	1.860	2.089	-12.3	79	0.00
68 T	1,2,4-Trimethylbenzene	2.273	2.520	-10.9	82	-0.01
69 T	sec-Butylbenzene	2.769	3.023	-9.2	79	0.00
70 T	1,3-Dichlorobenzene	1.155	1.219	-5.5	80	0.00
71 T	4-Isopropyltoluene	2.450	2.722	-11.1	82	0.00
72 T	1,4-Dichlorobenzene	1.140	1.203	-5.5	80	0.00
73 T	n-Butylbenzene	1.257	1.354	-7.7	80	0.00
74 T	1,2-Dichlorobenzene	1.044	1.164	-11.5	85	0.00
75 T	1,2-Dibromo-3-chloropropane	0.105	0.123	-17.1	75	0.00
76 T	1,2,4-Trichlorobenzene	0.872	0.980	-12.4	82	0.00
77 T	Hexachlorobutadiene	0.568	0.635	-11.8	81	0.00
78 T	Naphthalene	1.784	1.962	-10.0	80	0.00
79 T	1,2,3-Trichlorobenzene	0.773	0.898	-16.2	84	0.00
80 T	1,1,2-Trichloro-1,2,2-trifl	0.389	0.441	-13.4	82	0.00
81 T	Methyl acetate	0.367	0.387	-5.4	77	0.00
82 T	Cyclohexane	0.964	0.809	16.1	60	0.00
83 T	Methylcyclohexane	0.888	0.788	11.3	63	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS061615.M Wed Jul 01 16:39:45 2015 RP1

Response Factor Report MSD_J

Method Path : C:\MSDCHEM\1\METHODS\
Method File : JM061215.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Mon Jun 15 12:23:12 2015
Response Via : Initial Calibration

CTG 6/15/15
WXF 6/15/15

Calibration Files
1 =J8195.D 2 =J8196.D 5 =J8194.D
20 =J8197.D 100 =J8198.D 150 =J8199.D 200 =J8200.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.301	0.274	0.240	0.320	0.340	0.305	0.339	0.303	11.88
3)	P	Chloromethane	0.527	0.527	0.479	0.464	0.491	0.443	0.483	0.488	6.34
4)	C	Vinyl chloride	0.451	0.429	0.403	0.495	0.535	0.463	0.506	0.469	9.83
5)	T	Bromomethane	0.417	0.407	0.331	0.316	0.338	0.302	0.325	0.348	12.99
6)	T	Chloroethane	0.312	0.331	0.298	0.305	0.337	0.298	0.322	0.315	5.04
7)	T	Trichlorofluorome	0.389	0.361	0.364	0.460	0.509	0.499	0.536	0.445	16.48
8)	T	Acrolein	0.023	0.024	0.021	0.019	0.022	0.021	0.022	0.022	6.42
9)	MC	1,1-Dichloroethen	0.405	0.385	0.322	0.401	0.432	0.378	0.421	0.392	9.19
10)	T	Acetone		0.172	0.171	0.149	0.153	0.140	0.150	0.156	8.31
11)	T	Carbon disulfide	1.343	1.346	1.222	1.408	1.533	1.343	1.498	1.385	7.63
12)	T	Vinyl acetate	1.490	1.490	1.443	1.248	1.316	1.347	1.421	1.394	6.61
13)	T	Methylene chlorid		0.740	0.564	0.489	0.527	0.481	0.527	0.555	17.23
14)	T	Acrylonitrile	0.181	0.173	0.137	0.123	0.142	0.125	0.128	0.144	16.18
15)	T	tert-Butyl alcoho	0.052	0.059	0.056	0.048	0.052	0.048	0.053	0.053	7.67
16)	T	trans-1,2-Dichlor	0.532	0.508	0.468	0.464	0.504	0.450	0.497	0.489	5.92
17)	T	Methyl tert-butyl	1.703	1.666	1.533	1.403	1.507	1.392	1.522	1.532	7.73
18)	P	1,1-Dichloroethan	1.024	1.018	0.892	0.871	0.946	0.862	0.940	0.936	7.09
19)	T	Diisopropyl ether	1.893	1.924	1.745	1.670	1.778	1.636	1.792	1.777	5.97
20)	T	cis-1,2-Dichloroe	0.622	0.616	0.568	0.536	0.572	0.522	0.576	0.573	6.45
21)	T	2,2-Dichloropropa	0.555	0.589	0.543	0.568	0.586	0.521	0.550	0.559	4.33
22)	T	2-Butanone (MEK)	0.264	0.214	0.194	0.200	0.201	0.185	0.201	0.209	12.54
23)	T	Bromochloromethan	0.288	0.287	0.265	0.249	0.268	0.247	0.269	0.268	6.09
25)	C	Chloroform	0.981	0.975	0.912	0.868	0.928	0.847	0.933	0.921	5.45
26)	T	1,1,1-Trichloroet	0.699	0.672	0.617	0.706	0.774	0.661	0.733	0.694	7.35
27)	T	Carbon tetrachlor	0.490	0.454	0.426	0.587	0.654	0.553	0.617	0.540	15.89
28)	T	1,1-Dichloroprope	0.544	0.536	0.483	0.606	0.672	0.579	0.646	0.581	11.37
29)	T	1,2-Dichloroethan	0.841	0.790	0.717	0.686	0.739	0.680	0.754	0.744	7.72
30)	S	1,2-Dichloroethan	0.502	0.507	0.504	0.494	0.494	0.487	0.494	0.497	1.39
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.523	1.475	1.373	1.311	1.399	1.279	1.410	1.396	6.14
33)	M	Trichloroethene	0.488	0.427	0.344	0.335	0.370	0.320	0.355	0.377	15.85
34)	C	1,2-Dichloropropa	0.383	0.393	0.364	0.334	0.359	0.331	0.362	0.361	6.41
35)	T	Dibromomethane	0.232	0.206	0.205	0.194	0.208	0.192	0.208	0.206	6.29
36)	T	1,4-Dioxane	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	10.98
37)	T	Bromodichlorometh	0.559	0.526	0.476	0.451	0.499	0.466	0.511	0.498	7.53
38)	T	2-Chloroethyl vin	0.223	0.224	0.204	0.194	0.212	0.194	0.212	0.209	5.85
39)	T	cis-1,3-Dichlorop	0.674	0.607	0.580	0.548	0.603	0.567	0.617	0.599	6.82
40)	T	4-Methyl-2-pentan	0.431	0.392	0.328	0.300	0.315	0.282	0.304	0.336	16.24
41)	S	Toluene-d8	1.104	1.093	1.096	1.099	1.114	1.117	1.115	1.106	0.89
42)	MC	Toluene	0.916	0.861	0.794	0.794	0.872	0.788	0.871	0.842	5.92
43)	T	trans-1,3-Dichlor	0.581	0.552	0.533	0.498	0.553	0.511	0.557	0.541	5.32
44)	T	1,1,2-Trichloroet	0.271	0.259	0.242	0.221	0.240	0.220	0.239	0.242	7.64
45)	T	Tetrachloroethene	0.268	0.287	0.250	0.294	0.316	0.272	0.301	0.284	7.84
46)	T	1,3-Dichloropropa	0.564	0.523	0.499	0.471	0.512	0.467	0.508	0.506	6.47
47)	T	2-Hexanone	0.265	0.301	0.245	0.225	0.241	0.207	0.228	0.245	12.56
48)	T	Dibromochlorometh	0.357	0.349	0.327	0.310	0.364	0.331	0.367	0.343	6.19
49)	T	1,2-Dibromoethane	0.333	0.296	0.290	0.262	0.292	0.261	0.287	0.289	8.39
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.263	1.226	1.083	1.017	1.090	0.997	1.092	1.110	8.99
52)	T	1,1,1,2-Tetrachlo	0.446	0.425	0.392	0.379	0.408	0.379	0.414	0.406	6.12

53)	C	Ethylbenzene	1.824	1.752	1.584	1.597	1.716	1.545	1.705	1.675	6.08
54)	T	m,p-Xylene	0.730	0.690	0.627	0.613	0.667	0.598	0.664	0.656	7.05
55)	T	o-Xylene	0.751	0.743	0.656	0.625	0.674	0.609	0.671	0.675	8.02
56)	T	Styrene	1.343	1.274	1.167	1.106	1.211	1.101	1.213	1.202	7.27
57)	P	Bromoform	0.206	0.249	0.249	0.210	0.247	0.228	0.251	0.234	8.42
58)	T	Isopropylbenzene	1.434	1.376	1.255	1.363	1.449	1.289	1.435	1.372	5.52
59)	S	Bromofluorobenzen	0.509	0.496	0.501	0.497	0.513	0.500	0.502	0.503	1.20
60)	P	1,1,2,2-Tetrachlo	0.451	0.408	0.473	0.360	0.378	0.358	0.383	0.402	11.19
61)	T	Bromobenzene	0.548	0.480	0.459	0.416	0.446	0.405	0.440	0.456	10.47
62)	T	1,2,3-Trichloropr	0.456	0.435	0.379	0.345	0.366	0.328	0.358	0.381	12.41
63)	T	n-Propylbenzene	1.673	1.510	1.378	1.462	1.590	1.399	1.550	1.509	6.98
64)	T	2-Chlorotoluene	1.285	1.169	1.053	0.999	1.080	0.970	1.072	1.090	9.83
65)	T	1,3,5-Trimethylbe	1.289	1.209	1.131	1.112	1.210	1.079	1.193	1.175	6.11
66)	T	4-Chlorotoluene	1.530	1.371	1.264	1.185	1.308	1.174	1.298	1.304	9.29
67)	T	tert-Butylbenzene	0.855	0.777	0.700	0.776	0.838	0.745	0.819	0.787	6.92
68)	T	1,2,4-Trimethylbe	1.495	1.336	1.215	1.162	1.258	1.143	1.250	1.266	9.47
69)	T	sec-Butylbenzene	1.320	1.080	0.995	1.151	1.237	1.086	1.206	1.154	9.52
70)	T	1,3-Dichlorobenze	0.919	0.838	0.730	0.667	0.717	0.652	0.714	0.748	12.87
71)	T	4-Isopropyltoluen	1.200	1.028	0.955	1.024	1.105	0.982	1.075	1.053	7.84
72)	T	1,4-Dichlorobenze	0.974	0.825	0.751	0.698	0.730	0.668	0.727	0.768	13.43
73)	T	n-Butylbenzene	0.582	0.474	0.437	0.459	0.505	0.447	0.493	0.485	10.06
74)	T	1,2-Dichlorobenze	0.852	0.801	0.745	0.675	0.703	0.635	0.691	0.729	10.40
75)	T	1,2-Dibromo-3-chl	0.076	0.066	0.065	0.066	0.073	0.066	0.072	0.069	6.35
76)	T	1,2,4-Trichlorobe	0.354	0.352	0.311	0.388	0.403	0.375	0.408	0.370	9.19
77)	T	Hexachlorobutadie	0.149	0.119	0.143	0.153	0.157	0.139	0.154	0.145	9.00
78)	T	Naphthalene	1.352	1.158	1.079	1.029	1.065	0.981	1.059	1.103	11.07
79)	T	1,2,3-Trichlorobe	0.367	0.360	0.290	0.356	0.367	0.343	0.369	0.350	8.01
80)	T	1,1,2-Trichloro-1	0.256	0.217	0.183	0.244	0.249	0.203	0.215	0.224	12.01
81)	T	Methyl acetate	0.464	0.391	0.352	0.309	0.317	0.303	0.326	0.352	16.51
82)	T	Cyclohexane	0.267	0.279	0.291	0.436	0.418	0.335	0.359	0.341	19.74
83)	T	Methylcyclohexane	0.278	0.210	0.159	0.267	0.280	0.219	0.237	0.236	18.55

(#) = Out of Range ### Number of calibration levels exceeded format ###

JM061215.M Mon Jun 15 12:23:19 2015 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\06-12-15\
Data File : J8204.D
Acq On : 12 Jun 2015 15:52
Operator : MEI
Sample : ICV100,ICV100,A,5ml,100
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 15 12:25:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.303	0.358	-18.2	106	0.00
3	P	Chloromethane	0.488	0.469	3.9	96	0.00
4	C	Vinyl chloride	0.469	0.498	-6.2	93	0.00
5	T	Bromomethane	0.348	0.335	3.7	100	0.00
6	T	Chloroethane	0.315	0.321	-1.9	95	0.00
7	T	Trichlorofluoromethane	0.445	0.523	-17.5	103	-0.01
8	T	Acrolein	0.022	0.022	0.0	98	0.00
9	MC	1,1-Dichloroethene	0.392	0.403	-2.8	93	0.00
10	T	Acetone	0.156	0.151	3.2	98	0.00
11	T	Carbon disulfide	1.385	1.413	-2.0	92	0.00
12	T	Vinyl acetate	1.394	1.402	-0.6	107	0.00
13	T	Methylene chloride	0.555	0.509	8.3	97	0.01
14	T	Acrylonitrile	0.144	0.144	0.0	102	0.00
15	T	tert-Butyl alcohol (TBA)	0.053	0.051	3.8	100	0.00
16	T	trans-1,2-Dichloroethene	0.489	0.471	3.7	94	0.00
17	T	Methyl tert-butyl ether (MT	1.532	1.468	4.2	98	0.00
18	P	1,1-Dichloroethane	0.936	0.898	4.1	95	0.00
19	T	Diisopropyl ether (DIPE)	1.777	1.705	4.1	96	0.00
20	T	cis-1,2-Dichloroethene	0.573	0.553	3.5	97	0.00
21	T	2,2-Dichloropropane	0.559	0.563	-0.7	96	0.00
22	T	2-Butanone (MEK)	0.209	0.200	4.3	100	-0.01
23	T	Bromochloromethane	0.268	0.264	1.5	99	0.00
25	C	Chloroform	0.921	0.893	3.0	96	0.00
26	T	1,1,1-Trichloroethane	0.694	0.708	-2.0	92	-0.01
27	T	Carbon tetrachloride	0.540	0.591	-9.4	91	0.00
28	T	1,1-Dichloropropene	0.581	0.616	-6.0	92	0.00
29	T	1,2-Dichloroethane (EDC)	0.744	0.719	3.4	98	0.00
30	S	1,2-Dichloroethane-d4	0.497	0.499	-0.4	101	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	0.00
32	M	Benzene	1.396	1.350	3.3	96	-0.01
33	M	Trichloroethene	0.377	0.334	11.4	90	0.00
34	C	1,2-Dichloropropane	0.361	0.345	4.4	96	0.00
35	T	Dibromomethane	0.206	0.205	0.5	98	0.01
36	T	1,4-Dioxane	0.003	0.003	0.0	97	0.00
37	T	Bromodichloromethane	0.498	0.486	2.4	97	0.00
38	T	2-Chloroethyl vinyl ether	0.209	0.206	1.4	96	0.00
39	T	cis-1,3-Dichloropropene	0.599	0.593	1.0	98	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.336	0.308	8.3	97	0.00
41	S	Toluene-d8	1.106	1.110	-0.4	99	0.00
42	MC	Toluene	0.842	0.825	2.0	94	0.00
43	T	trans-1,3-Dichloropropene	0.541	0.533	1.5	96	0.00
44	T	1,1,2-Trichloroethane	0.242	0.231	4.5	96	0.00
45	T	Tetrachloroethene	0.284	0.288	-1.4	90	0.00
46	T	1,3-Dichloropropane	0.506	0.492	2.8	96	0.00

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47	T	2-Hexanone	0.245	0.225	8.2	93	0.00
48	T	Dibromochloromethane	0.343	0.344	-0.3	94	0.00
49	T	1,2-Dibromoethane (EDB)	0.289	0.278	3.8	95	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00
51	MP	Chlorobenzene	1.110	1.060	4.5	93	0.00
52	T	1,1,1,2-Tetrachloroethane	0.406	0.404	0.5	94	0.00
53	C	Ethylbenzene	1.675	1.649	1.6	91	0.00
54	T	m,p-Xylene	0.656	0.648	1.2	92	0.00
55	T	o-Xylene	0.675	0.663	1.8	94	0.00
56	T	Styrene	1.202	1.183	1.6	93	0.00
57	P	Bromoform	0.234	0.245	-4.7	95	0.00
58	T	Isopropylbenzene	1.372	1.412	-2.9	93	0.00
59	S	Bromofluorobenzene	0.503	0.510	-1.4	95	0.00
60	P	1,1,2,2-Tetrachloroethane	0.402	0.403	-0.2	101	0.00
61	T	Bromobenzene	0.456	0.442	3.1	94	0.01
62	T	1,2,3-Trichloropropane	0.381	0.366	3.9	95	0.00
63	T	n-Propylbenzene	1.509	1.519	-0.7	91	0.00
64	T	2-Chlorotoluene	1.090	1.063	2.5	94	0.00
65	T	1,3,5-Trimethylbenzene	1.175	1.189	-1.2	94	0.00
66	T	4-Chlorotoluene	1.304	1.269	2.7	92	0.00
67	T	tert-Butylbenzene	0.787	0.820	-4.2	93	0.00
68	T	1,2,4-Trimethylbenzene	1.266	1.252	1.1	95	0.00
69	T	sec-Butylbenzene	1.154	1.194	-3.5	92	0.00
70	T	1,3-Dichlorobenzene	0.748	0.713	4.7	95	0.00
71	T	4-Isopropyltoluene	1.053	1.070	-1.6	92	0.00
72	T	1,4-Dichlorobenzene	0.768	0.732	4.7	95	0.00
73	T	n-Butylbenzene	0.485	0.486	-0.2	92	0.00
74	T	1,2-Dichlorobenzene	0.729	0.700	4.0	95	0.00
75	T	1,2-Dibromo-3-chloropropane	0.069	0.075	-8.7	98	0.00
76	T	1,2,4-Trichlorobenzene	0.370	0.405	-9.5	96	0.00
77	T	Hexachlorobutadiene	0.145	0.153	-5.5	93	0.01
78	T	Naphthalene	1.103	1.093	0.9	98	0.00
79	T	1,2,3-Trichlorobenzene	0.350	0.365	-4.3	95	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.224	0.243	-8.5	93	0.00
81	T	Methyl acetate	0.352	0.335	4.8	101	0.00
82	T	Cyclohexane	0.341	0.394	-15.5	90	0.00
83	T	Methylcyclohexane	0.236	0.258	-9.3	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM061215.M Mon Jun 15 12:26:02 2015 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8637.D
Acq On : 2 Jul 2015 23:26
Operator : MEI
Sample : CCV100,CCV100,A,5ml,100
Misc :
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Jul 06 11:17:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	100	0.00
2	T	Dichlorodifluoromethane	0.303	0.351	-15.8	103	0.00
3	P	Chloromethane	0.488	0.487	0.2	99	0.00
4	C	Vinyl chloride	0.469	0.535	-14.1	100	-0.01
5	T	Bromomethane	0.348	0.381	-9.5	113	0.00
6	T	Chloroethane	0.315	0.354	-12.4	105	-0.01
7	T	Trichlorofluoromethane	0.445	0.529	-18.9	104	-0.01
8	T	Acrolein	0.022	0.026	-18.2	117	0.00
9	MC	1,1-Dichloroethene	0.392	0.445	-13.5	103	-0.01
10	T	Acetone	0.156	0.154	1.3	100	0.00
11	T	Carbon disulfide	1.385	1.516	-9.5	99	0.00
12	T	Vinyl acetate	1.394	1.118	19.8	85	0.00
13	T	Methylene chloride	0.555	0.577	-4.0	110	0.00
14	T	Acrylonitrile	0.144	0.145	-0.7	103	0.00
15	T	tert-Butyl alcohol (TBA)	0.053	0.047	11.3	91	0.00
16	T	trans-1,2-Dichloroethene	0.489	0.545	-11.5	109	0.00
17	T	Methyl tert-butyl ether (MT	1.532	1.671	-9.1	111	0.00
18	P	1,1-Dichloroethane	0.936	1.029	-9.9	109	0.00
19	T	Diisopropyl ether (DIPE)	1.777	1.879	-5.7	106	0.00
20	T	cis-1,2-Dichloroethene	0.573	0.632	-10.3	111	0.00
21	T	2,2-Dichloropropane	0.559	0.553	1.1	95	0.00
22	T	2-Butanone (MEK)	0.209	0.199	4.8	99	0.00
23	T	Bromochloromethane	0.268	0.298	-11.2	112	0.00
25	C	Chloroform	0.921	1.045	-13.5	113	0.00
26	T	1,1,1-Trichloroethane	0.694	0.821	-18.3	106	-0.01
27	T	Carbon tetrachloride	0.540	0.621	-15.0	95	0.00
28	T	1,1-Dichloropropene	0.581	0.677	-16.5	101	0.00
29	T	1,2-Dichloroethane (EDC)	0.744	0.846	-13.7	115	0.00
30	S	1,2-Dichloroethane-d4	0.497	0.526	-5.8	107	-0.01
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	104	0.00
32	M	Benzene	1.396	1.456	-4.3	109	-0.01
33	M	Trichloroethene	0.377	0.427	-13.3	121	0.00
34	C	1,2-Dichloropropane	0.361	0.370	-2.5	107	0.00
35	T	Dibromomethane	0.206	0.224	-8.7	112	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	97	0.00
37	T	Bromodichloromethane	0.498	0.524	-5.2	110	0.00
38	T	2-Chloroethyl vinyl ether	0.209	0.218	-4.3	107	0.00
39	T	cis-1,3-Dichloropropene	0.599	0.602	-0.5	104	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.336	0.303	9.8	100	0.00
41	S	Toluene-d8	1.106	1.115	-0.8	104	0.00
42	MC	Toluene	0.842	0.879	-4.4	105	0.00
43	T	trans-1,3-Dichloropropene	0.541	0.545	-0.7	103	0.00
44	T	1,1,2-Trichloroethane	0.242	0.253	-4.5	110	0.00
45	T	Tetrachloroethene	0.284	0.285	-0.4	94	0.00
46	T	1,3-Dichloropropane	0.506	0.535	-5.7	109	0.00

47	T	2-Hexanone	0.245	0.210	14.3	91	0.00
48	T	Dibromochloromethane	0.343	0.367	-7.0	105	0.00
49	T	1,2-Dibromoethane (EDB)	0.289	0.303	-4.8	108	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00
51	MP	Chlorobenzene	1.110	1.062	4.3	104	0.00
52	T	1,1,1,2-Tetrachloroethane	0.406	0.401	1.2	105	0.00
53	C	Ethylbenzene	1.675	1.558	7.0	97	-0.01
54	T	m,p-Xylene	0.656	0.600	8.5	96	-0.01
55	T	o-Xylene	0.675	0.618	8.4	98	0.00
56	T	Styrene	1.202	1.134	5.7	100	0.00
57	P	Bromoform	0.234	0.233	0.4	101	-0.01
58	T	Isopropylbenzene	1.372	1.270	7.4	94	0.00
59	S	Bromofluorobenzene	0.503	0.503	0.0	105	0.00
60	P	1,1,2,2-Tetrachloroethane	0.402	0.341	15.2	96	0.00
61	T	Bromobenzene	0.456	0.430	5.7	103	0.00
62	T	1,2,3-Trichloropropane	0.381	0.364	4.5	106	0.00
63	T	n-Propylbenzene	1.509	1.355	10.2	91	0.00
64	T	2-Chlorotoluene	1.090	0.971	10.9	96	0.00
65	T	1,3,5-Trimethylbenzene	1.175	1.057	10.0	93	0.00
66	T	4-Chlorotoluene	1.304	1.155	11.4	94	0.00
67	T	tert-Butylbenzene	0.787	0.724	8.0	92	0.00
68	T	1,2,4-Trimethylbenzene	1.266	1.117	11.8	95	0.00
69	T	sec-Butylbenzene	1.154	1.075	6.8	93	0.00
70	T	1,3-Dichlorobenzene	0.748	0.639	14.6	95	0.00
71	T	4-Isopropyltoluene	1.053	0.967	8.2	94	0.00
72	T	1,4-Dichlorobenzene	0.768	0.658	14.3	96	0.00
73	T	n-Butylbenzene	0.485	0.428	11.8	91	0.00
74	T	1,2-Dichlorobenzene	0.729	0.644	11.7	98	0.00
75	T	1,2-Dibromo-3-chloropropane	0.069	0.064	7.2	94	0.00
76	T	1,2,4-Trichlorobenzene	0.370	0.335	9.5	89	0.00
77	T	Hexachlorobutadiene	0.145	0.139	4.1	95	0.00
78	T	Naphthalene	1.103	0.958	13.1	96	0.00
79	T	1,2,3-Trichlorobenzene	0.350	0.347	0.9	101	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.224	0.186	17.0	80	0.00
81	T	Methyl acetate	0.352	0.305	13.4	103	0.00
82	T	Cyclohexane	0.341	0.283	17.0	72	0.00
83	T	Methylcyclohexane	0.236	0.196	16.9	75	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

JM061215.M Mon Jul 06 11:17:09 2015 RT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1394.D

Date Analyzed: 06/16/2015

Instrument ID: MSD_F

Time Analyzed: 16:40

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	468796	6.06	670874	6.88	541279	10.22
	UPPER LIMIT	937592	6.56	1341748	7.38	1082558	10.72
	LOWER LIMIT	234398	5.56	335437	6.38	270639.5	9.72
	LAB SAMPLE ID						
01	ICC2	472183	6.06	666193	6.88	546102	10.22
02	ICC20	471962	6.06	665465	6.88	545475	10.22
03	ICC1	500073	6.06	705060	6.88	582090	10.22
04	ICC5	473612	6.06	663624	6.88	554466	10.22
05	ICC200	475161	6.06	683782	6.88	563660	10.22
06	ICC150	481812	6.06	696400	6.88	566975	10.22
07	ICV100	478675	6.06	681212	6.88	562486	10.22
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22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1732.D

Instrument ID: MSD_F

Date Analyzed: 06/30/2015

Time Analyzed: 23:18

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	336488	6.06	455437	6.87	411772	10.22
	UPPER LIMIT	672976	6.56	910874	7.37	823544	10.72
	LOWER LIMIT	168244	5.56	227718.5	6.37	205886	9.72
	LAB SAMPLE ID						
01	BLKS150630-02	336849	6.06	459190	6.88	407144	10.22
02	05556-014	301114	6.06	410646	6.88	333855	10.22
03	05556-015	300022	6.06	415309	6.88	367601	10.22
04	05556-016	321615	6.06	442129	6.88	383840	10.22
05	05556-017	245763	6.06	343123	6.88	303916	10.22
06	LCSS150630-02	340629	6.06	457739	6.88	408908	10.22
07	LCSDS150630-02	361103	6.06	489935	6.88	434929	10.22
08	05428-011	258785	6.06	313783	6.88	177692*	10.22
09	05428-014	329088	6.06	452308	6.88	394174	10.22
10	05428-015	226020	6.06	318309	6.88	292282	10.22
11	05428-016	323361	6.06	446718	6.88	395839	10.22
12	05428-017	299481	6.06	407711	6.88	350605	10.22
13	05428-021	274936	6.06	359436	6.88	257144	10.22
14	05428-022	304329	6.06	405960	6.88	324432	10.22
15	05428-023	301801	6.06	410215	6.88	353555	10.22
16	05428-027	298424	6.06	416057	6.88	362006	10.22
17	05428-028	288297	6.06	403697	6.88	346970	10.22
18	05428-029	292924	6.06	397210	6.88	344510	10.22
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F1757.D

Instrument ID: MSD_F

Date Analyzed: 07/01/2015

Time Analyzed: 12:30

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	310992	6.06	430549	6.87	384744	10.22
	UPPER LIMIT	621984	6.56	861098	7.37	769488	10.72
	LOWER LIMIT	155496	5.56	215274.5	6.37	192372	9.72
	LAB SAMPLE ID						
01	BLKS150701-01	296090	6.06	402015	6.88	350814	10.22
02	LCSS150701-01	305629	6.06	415949	6.88	367976	10.22
03	05488-001	319674	6.06	438223	6.88	380598	10.22
04	05488-003	216088	6.06	300427	6.87	266377	10.22
05	05488-001MS	312012	6.06	424135	6.87	380302	10.22
06	05488-001MSD	324080	6.06	450143	6.88	400762	10.22
07	05555-005	247935	6.06	371281	6.88	200557	10.22
08	05428-011DUP	221139	6.06	269747	6.88	142493*	10.22
09	05428-020	311030	6.06	424218	6.88	368482	10.22
10	05428-026	245502	6.06	329104	6.88	210828	10.22
11	05487-001	281726	6.06	400318	6.88	340659	10.22
12	05487-003	280410	6.06	396936	6.88	320324	10.22
13	05487-006	284367	6.06	398328	6.88	321461	10.22
14	05487-008	358294	6.06	500605	6.88	421534	10.22
15	05487-010	356097	6.06	496928	6.88	426218	10.22
16	05346-022	384916	6.06	531981	6.88	445626	10.22
17	05346-033	187995	6.06	264666	6.87	237115	10.22
18	05346-034	296421	6.06	397863	6.88	282544	10.22
19							
20							
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8198.D

Date Analyzed: 06/12/2015

Instrument ID: MSD_J

Time Analyzed: 12:48

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	333954		6.09		487378		6.91		431596		10.25	
	UPPER LIMIT	667908		6.59		974756		7.41		863192		10.75	
	LOWER LIMIT	166977		5.59		243689		6.41		215798		9.75	
	LAB SAMPLE ID												
01	ICC5	362615		6.09		517034		6.91		441761		10.25	
02	ICC1	365320		6.09		519375		6.91		440209		10.25	
03	ICC2	339596		6.09		488980		6.91		414081		10.25	
04	ICC20	335482		6.09		483760		6.91		414685		10.25	
05	ICC150	372419		6.09		538696		6.91		468642		10.25	
06	ICC200	344706		6.09		500356		6.91		437393		10.25	
07	ICV100	334941		6.09		483877		6.91		410946		10.25	
08													
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22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): J8637.D

Date Analyzed: 07/02/2015

Instrument ID: MSD_J

Time Analyzed: 23:26

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	335083	6.09	508358	6.91	461419	10.25
	UPPER LIMIT	670166	6.59	1016716	7.41	922838	10.75
	LOWER LIMIT	167541.5	5.59	254179	6.41	230709.5	9.75
	LAB SAMPLE ID						
01	BLKA150702-02	350775	6.09	522113	6.91	453331	10.25
02	05428-030	340983	6.09	507502	6.91	454181	10.25
03	05428-031	296859	6.09	448291	6.91	385567	10.25
04	05428-032	349133	6.09	515247	6.91	451621	10.25
05	05623-001	343216	6.09	503656	6.91	442520	10.25
06	05623-001MS	300289	6.09	451835	6.91	405107	10.25
07	05623-001MSD	307431	6.09	464936	6.91	409565	10.25
08	LCSA150702-02	188078	6.09	300665	6.91	322344	10.25
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IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1742.D
Acq On : 1 Jul 2015 4:21
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 02 08:28:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

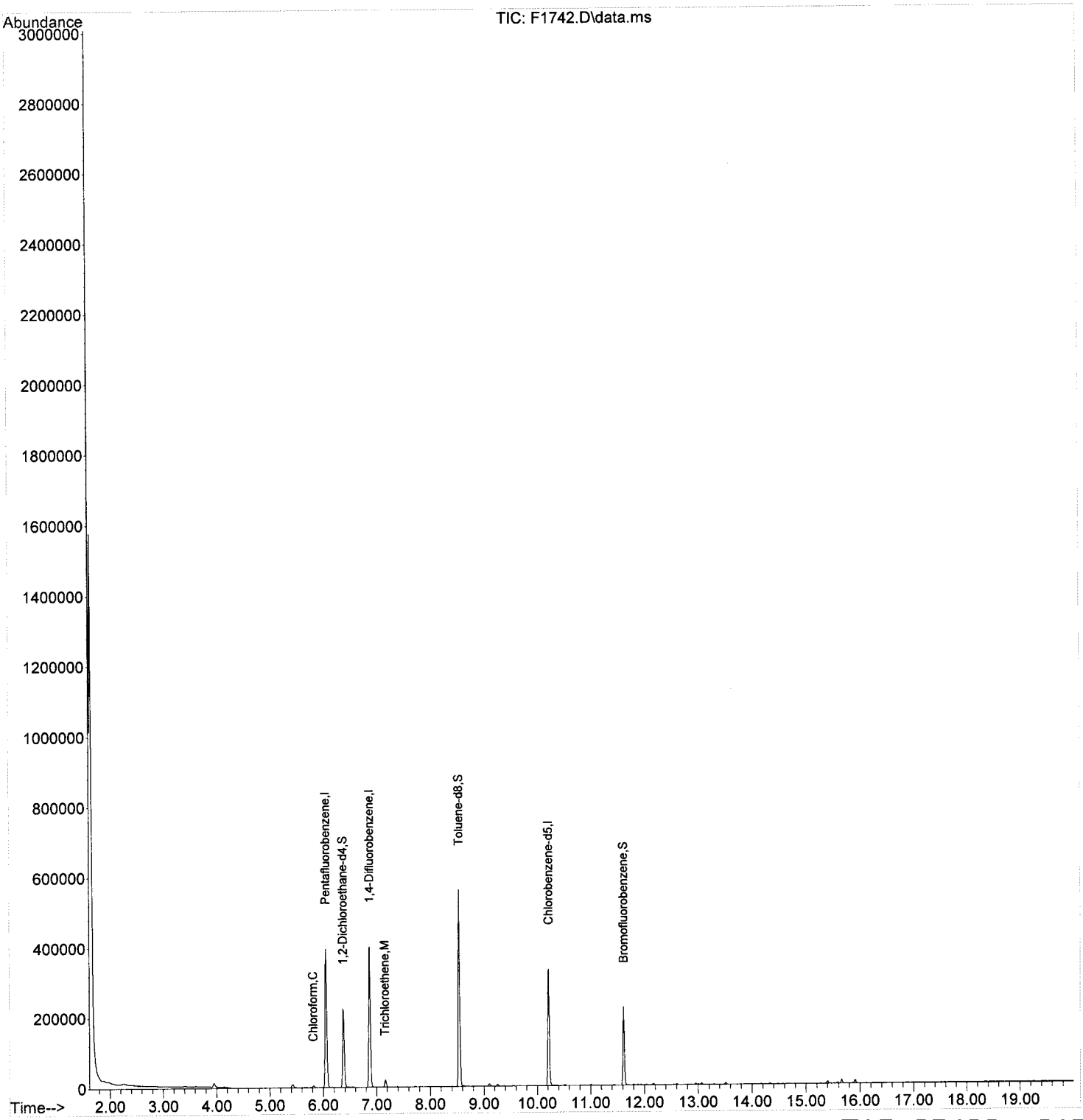
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	258785	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	313783	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	177692	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	212412	61.96	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 123.92%			
41) Toluene-d8	8.544	98	367873	50.32	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.64%			
59) Bromofluorobenzene	11.620	95	80098	35.12	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 70.24%			
Target Compounds						Qvalue
25) Chloroform	5.813	83	4418	0.74	UG	98
33) Trichloroethene	7.163	95	7237	2.54	UG	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1742.D
Acq On : 1 Jul 2015 4:21
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 02 08:28:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1742.D
Acq On : 1 Jul 2015 4:21
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1742.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	240	rVB	11278	27500	2.62%	0.620%
2	5.427	369	376	389	rBV	9285	29591	2.82%	0.667%
3	6.056	429	438	448	rBV	395387	844191	80.44%	19.038%
4	6.371	464	469	487	rBV	223663	487268	46.43%	10.988%
5	6.879	512	519	528	rBV	399786	834573	79.52%	18.821%
6	7.163	541	547	554	rVB	20665	41735	3.98%	0.941%
7	8.544	676	683	689	rBV	560678	1049469	100.00%	23.667%
8	9.102	732	738	747	rVB2	6331	16350	1.56%	0.369%
9	10.219	841	848	857	rBV	332484	660771	62.96%	14.901%
10	11.620	979	986	1000	rBV	222193	403601	38.46%	9.102%
11	15.660	1380	1384	1391	rVB	11864	19035	1.81%	0.429%
12	15.904	1401	1408	1413	rVB3	9450	20274	1.93%	0.457%

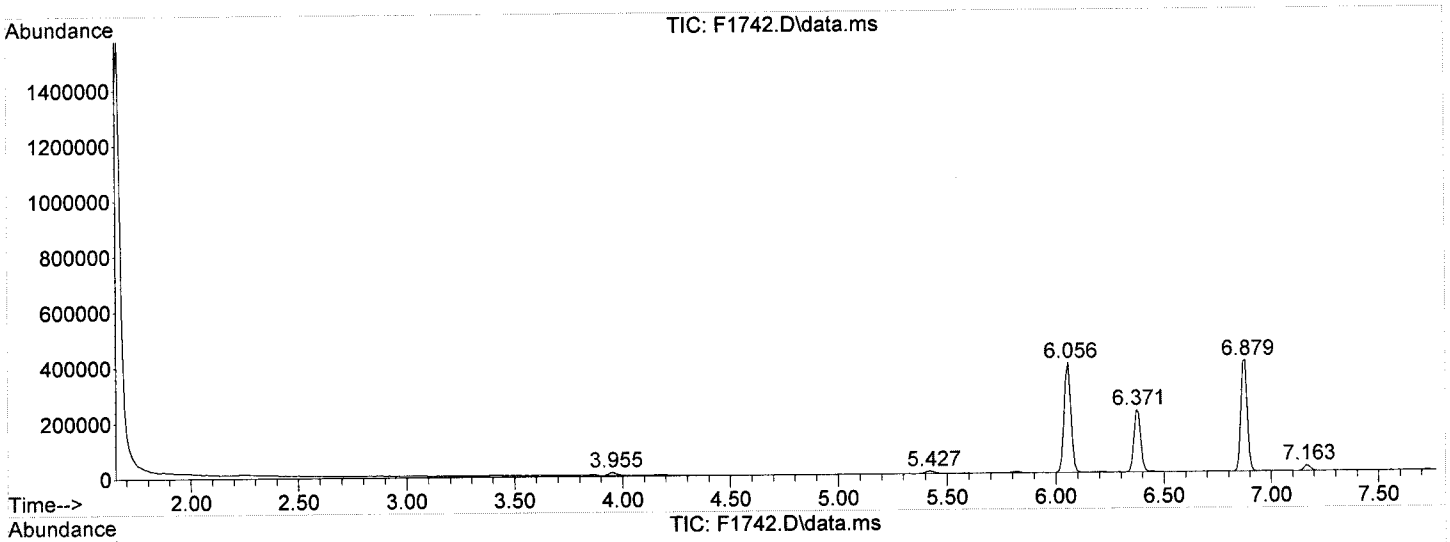
Sum of corrected areas: 4434358

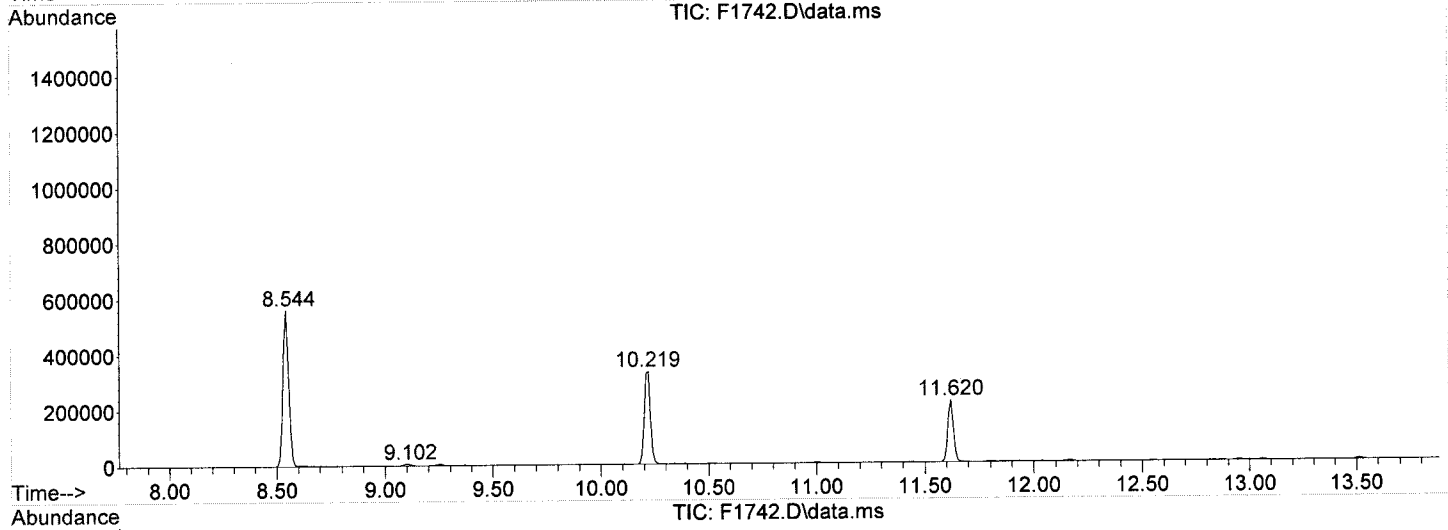
LSC Report - Integrated Chromatogram

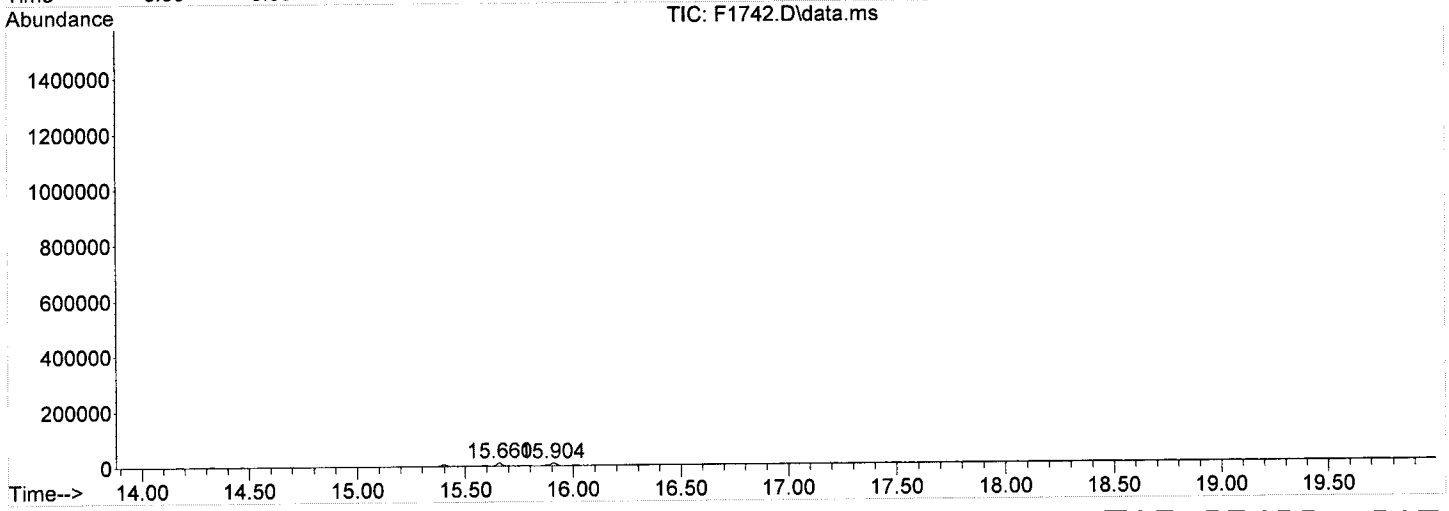
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1742.D
Acq On : 1 Jul 2015 4:21
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1769.D
Acq On : 1 Jul 2015 18:45
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011DUP,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 02 08:27:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	221139	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	269747	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	142493	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	198973	67.92	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 135.84%			
41) Toluene-d8	8.543	98	307514	48.93	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 97.86%			
59) Bromofluorobenzene	11.620	95	64508	35.27	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 70.54%			
Target Compounds						Qvalue
25) Chloroform	5.823	83	3147	0.62	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

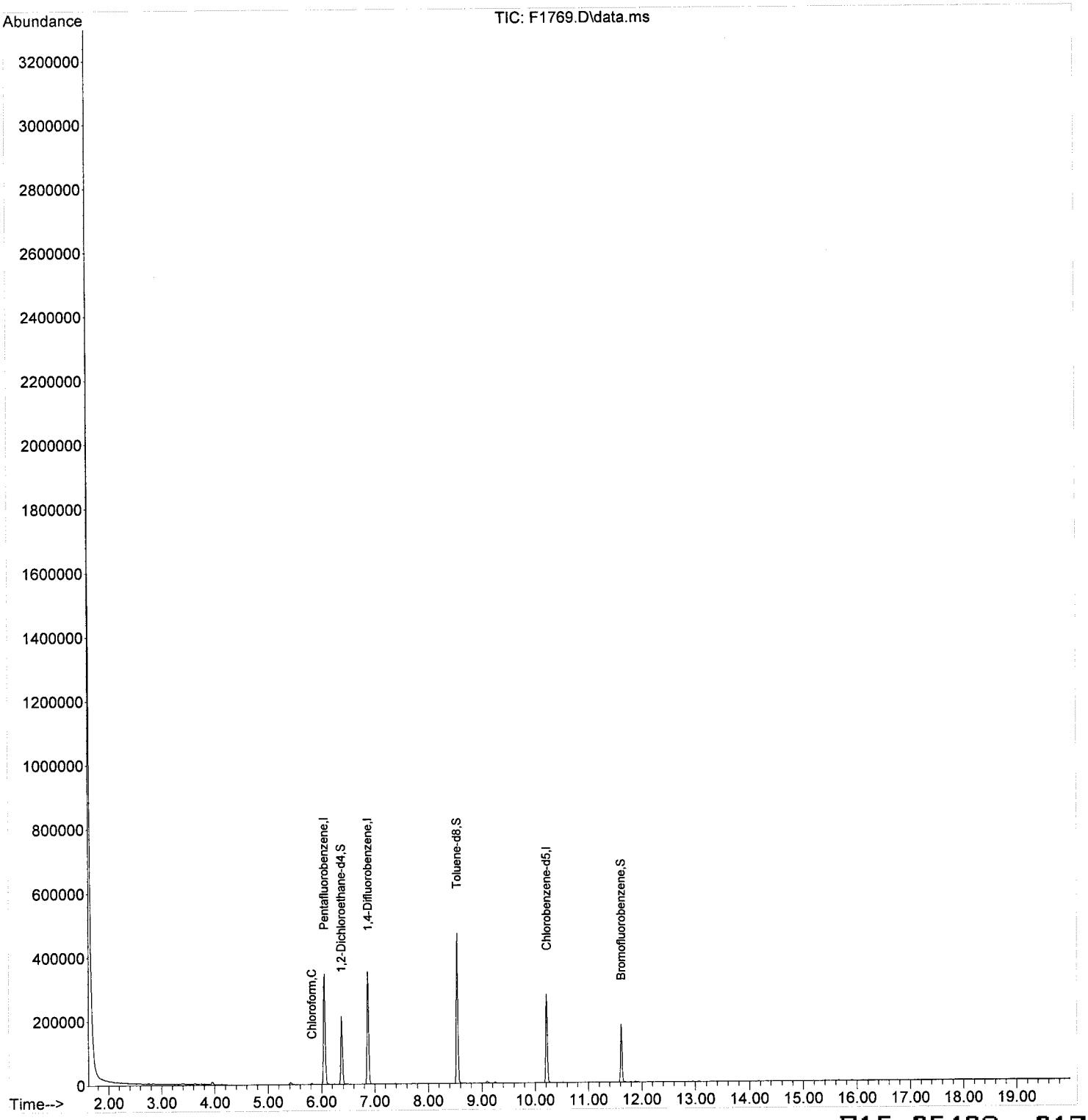
Sample re-analyzed to verify matrix interference of internal standards and/or surrogate QC recoveries

Analyst: XNS **Date:** 7/2/15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1769.D
Acq On : 1 Jul 2015 18:45
Operator : XING
Sample : X-3_(0.5-1.0)/,05428-011DUP,S,4g,23.3
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 02 08:27:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1743.D
Acq On : 1 Jul 2015 4:52
Operator : XING
Sample : E-1_(0.5-1.0)/,05428-014,S,4.5g,17.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 01 10:15:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	329088	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	452308	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	394174	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	249548	57.24	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 114.48%			
41) Toluene-d8	8.544	98	529695	50.26	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.52%			
59) Bromofluorobenzene	11.620	95	276580	54.67	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 109.34%			

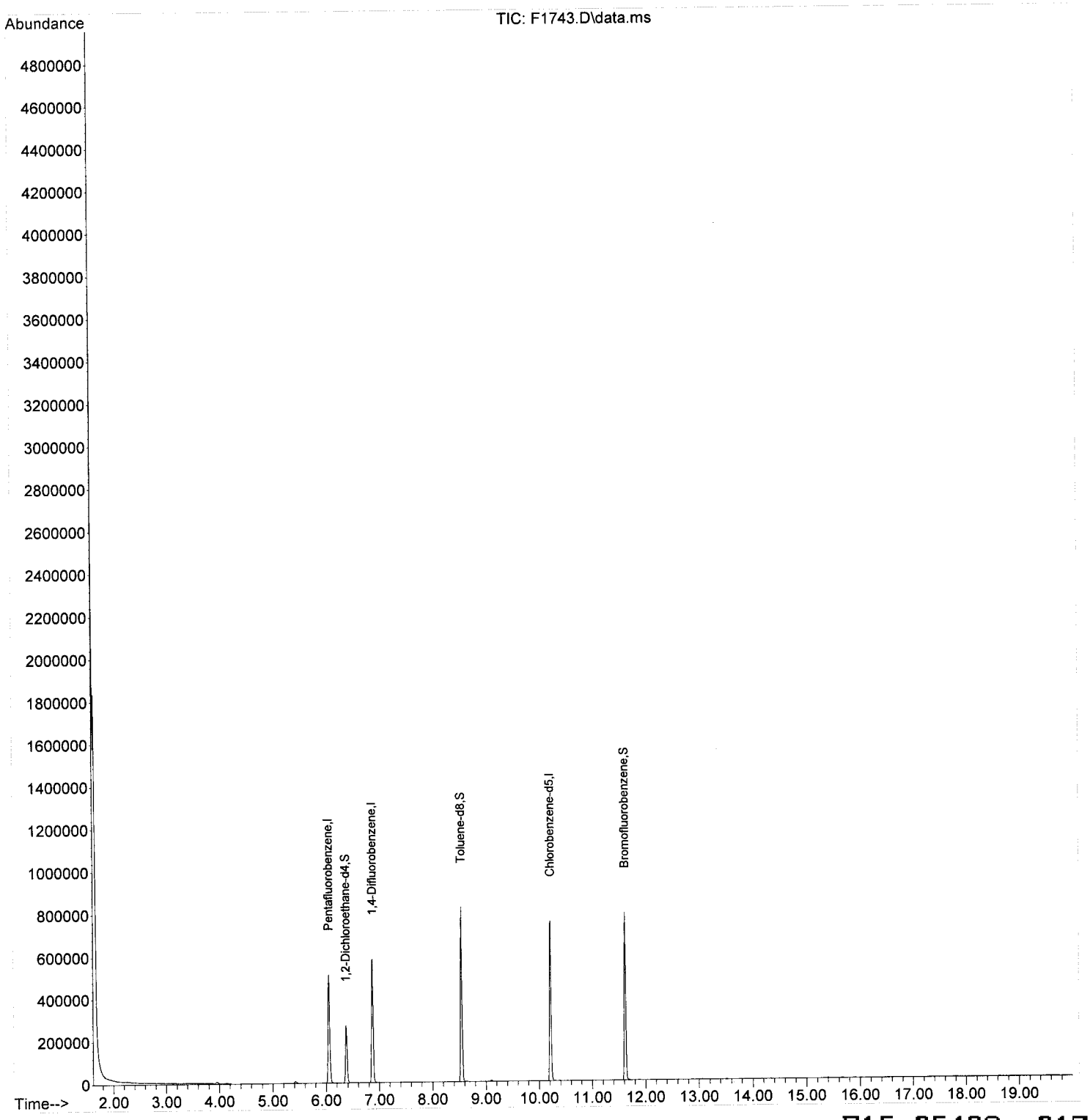
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1743.D
Acq On : 1 Jul 2015 4:52
Operator : XING
Sample : E-1_(0.5-1.0)/,05428-014,S,4.5g,17.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 01 10:15:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1743.D
Acq On : 1 Jul 2015 4:52
Operator : XING
Sample : E-1_(0.5-1.0)/,05428-014,S,4.5g,17.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1743.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	227	231	241	rVB	9159	25380	1.65%	0.345%
2	5.417	368	375	389	rBV	9238	26255	1.71%	0.357%
3	6.056	428	438	451	rBV	511909	1087062	70.86%	14.781%
4	6.371	462	469	484	rBV	269159	575195	37.50%	7.821%
5	6.879	511	519	534	rVB	581932	1210245	78.89%	16.456%
6	8.544	677	683	699	rBV	823490	1534009	100.00%	20.859%
7	10.219	841	848	861	rBV	753776	1481348	96.57%	20.143%
8	11.620	979	986	1000	rVB	790885	1414839	92.23%	19.238%

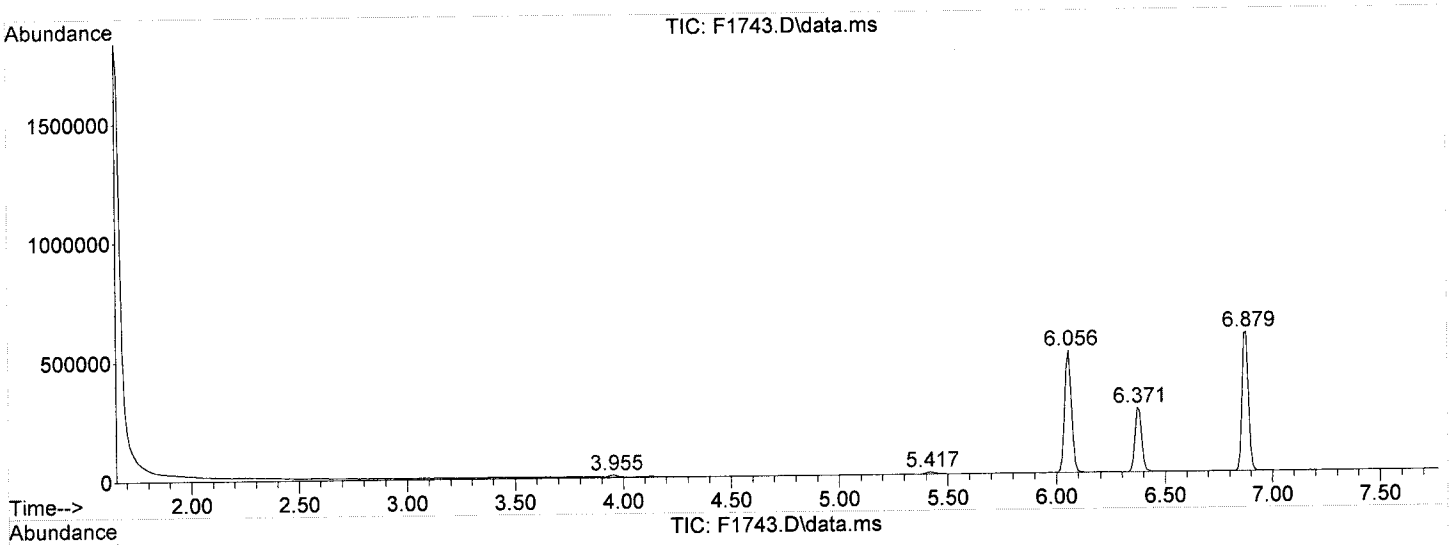
Sum of corrected areas: 7354333

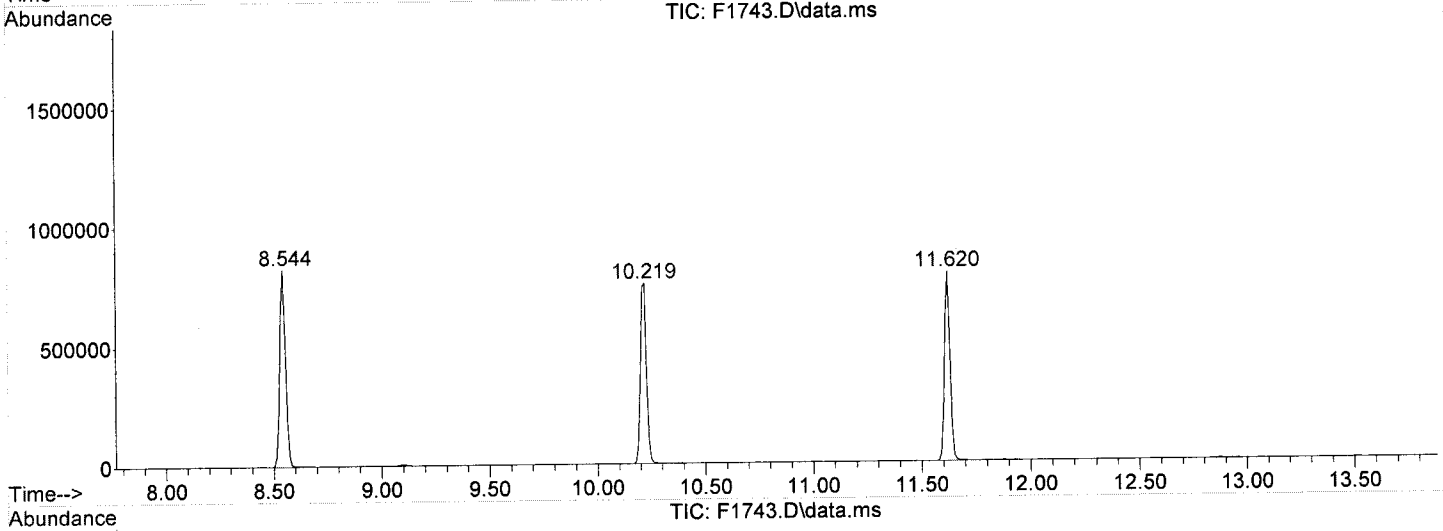
LSC Report - Integrated Chromatogram

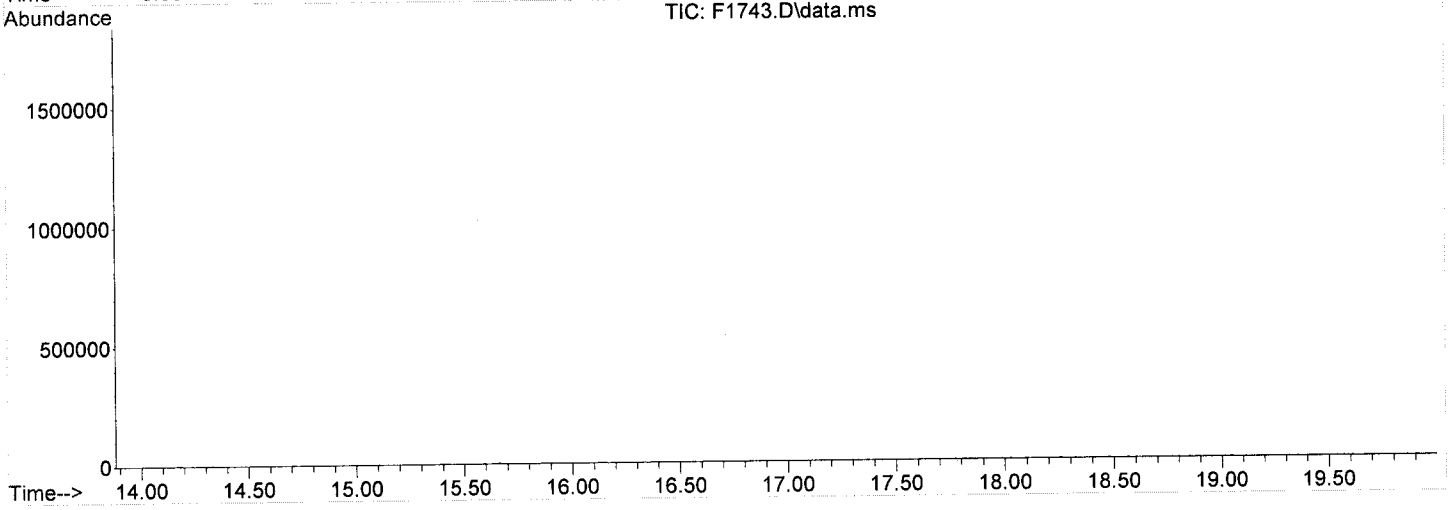
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1743.D
Acq On : 1 Jul 2015 4:52
Operator : XING
Sample : E-1_(0.5-1.0)/,05428-014,S,4.5g,17.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1744.D
Acq On : 1 Jul 2015 5:22
Operator : XING
Sample : E-1_(2.0-2.5)/,05428-015,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 01 10:17:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

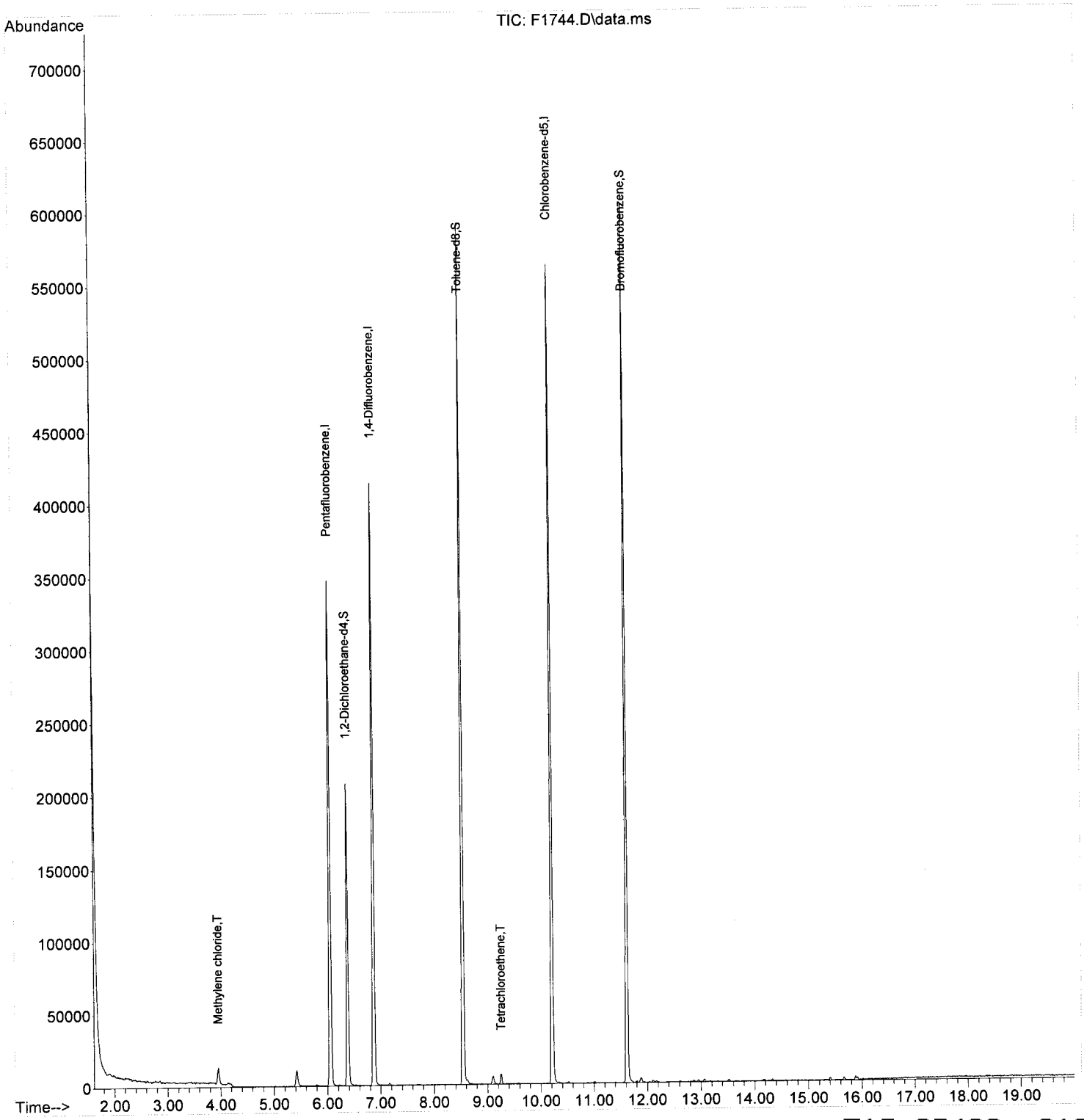
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.057	168	226020	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	318309	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	292282	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	191241	63.87	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 127.74%			
41) Toluene-d8	8.544	98	379767	51.21	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 102.42%			
59) Bromofluorobenzene	11.620	95	211303	56.33	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 112.66%			
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	5906	2.53	UG	98
45) Tetrachloroethene	9.254	166	2178	0.74	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1744.D
Acq On : 1 Jul 2015 5:22
Operator : XING
Sample : E-1_(2.0-2.5)/,05428-015,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Jul 01 10:17:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1744.D
Acq On : 1 Jul 2015 5:22
Operator : XING
Sample : E-1_(2.0-2.5)/,05428-015,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1744.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	238	rVB	11264	26100	2.37%	0.482%
2	4.138	245	249	262	rVB6	2871	15178	1.38%	0.280%
3	5.417	369	375	388	rBV	10873	31351	2.85%	0.578%
4	6.057	431	438	451	rBV	347258	751952	68.26%	13.875%
5	6.371	460	469	481	rBV	207959	437159	39.68%	8.066%
6	6.879	512	519	531	rBV	414005	862343	78.28%	15.911%
7	8.544	677	683	695	rBV	591926	1101665	100.00%	20.327%
8	9.102	731	738	745	rVB2	5552	13602	1.23%	0.251%
9	9.244	745	752	758	rBV	6925	13964	1.27%	0.258%
10	10.219	841	848	868	rVB	562892	1092493	99.17%	20.158%
11	11.620	975	986	999	rBV	604113	1073853	97.48%	19.814%

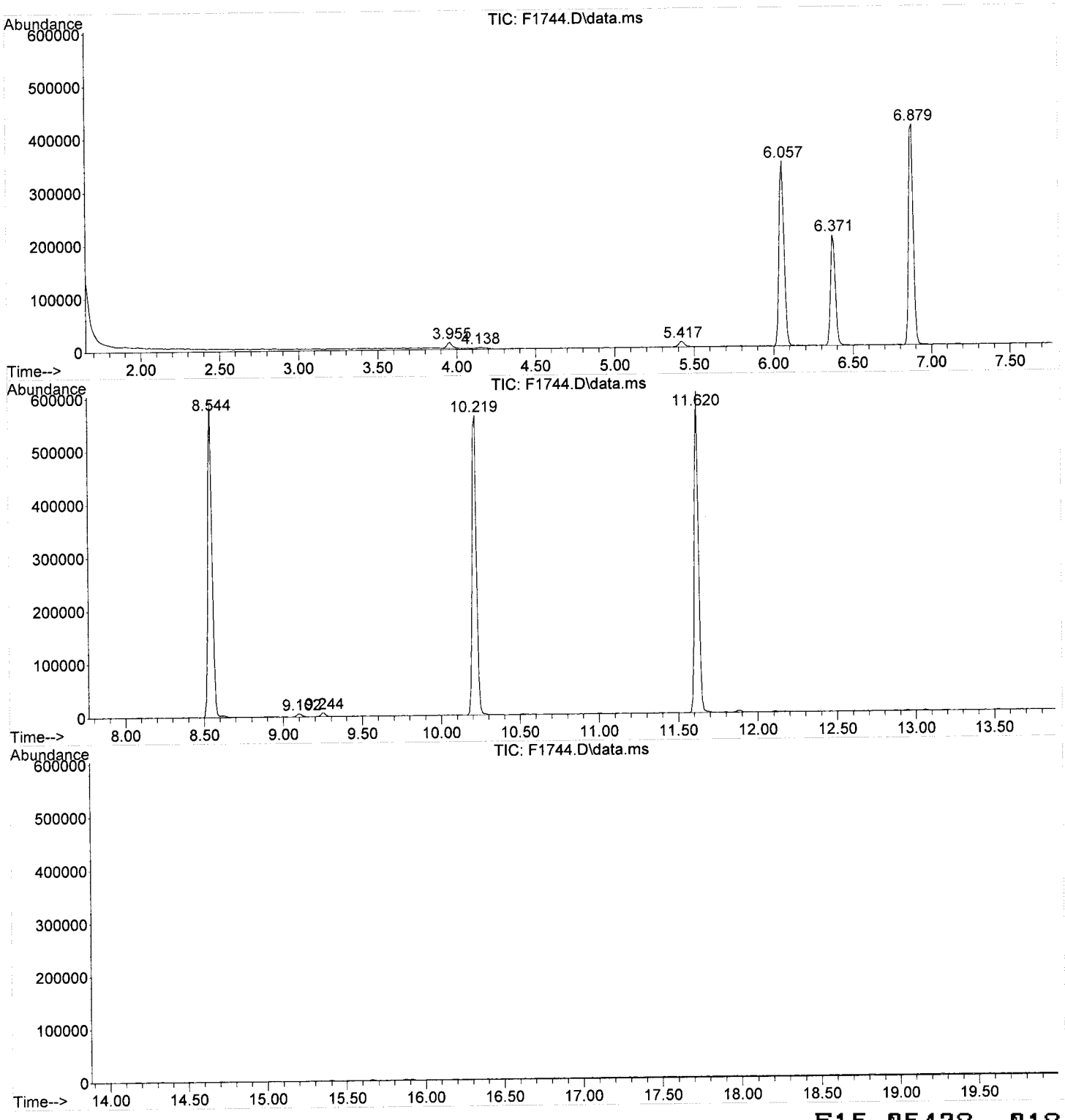
Sum of corrected areas: 5419660

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1744.D
Acq On : 1 Jul 2015 5:22
Operator : XING
Sample : E-1_(2.0-2.5)/,05428-015,S,4.9g,8.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



FS061615.M Wed Jul 01 10:17:41 2015 RP1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1745.D
Acq On : 1 Jul 2015 5:52
Operator : XING
Sample : E-1_(3.0-3.5)/,05428-016,S,6g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 01 10:18:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

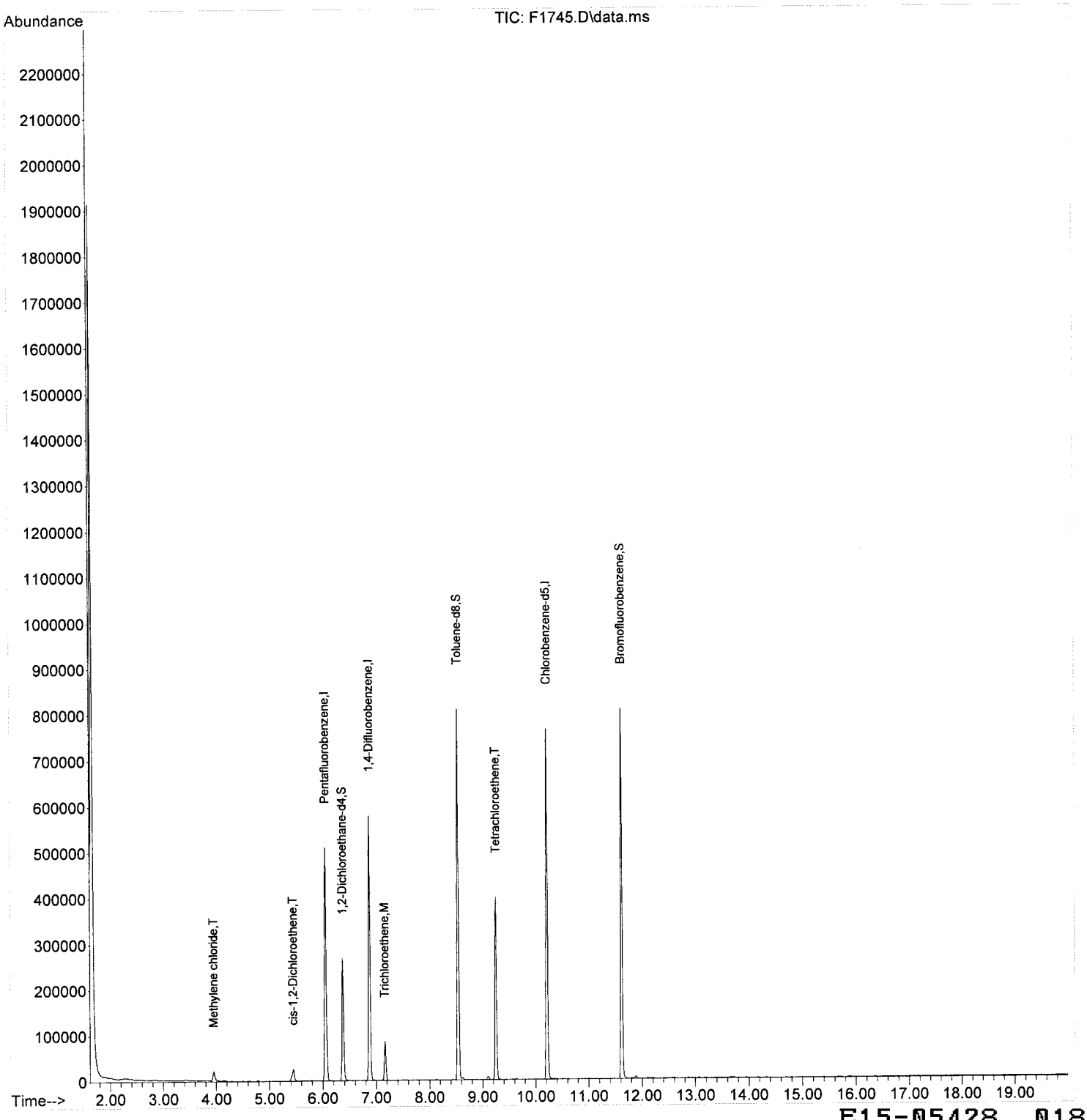
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	323361	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	446718	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	395839	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	251258	58.66	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery =	117.32%		
41) Toluene-d8	8.544	98	522220	50.17	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery =	100.34%		
59) Bromofluorobenzene	11.620	95	284704	56.04	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery =	112.08%		
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	11566	3.46	UG	98
20) cis-1,2-Dichloroethene	5.447	96	9691	2.41	UG	99
33) Trichloroethene	7.163	95	29754	7.32	UG	94
45) Tetrachloroethene	9.254	166	117934	28.63	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1745.D
Acq On : 1 Jul 2015 5:52
Operator : XING
Sample : E-1_(3.0-3.5)/,05428-016,S,6g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Jul 01 10:18:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1745.D
Acq On : 1 Jul 2015 5:52
Operator : XING
Sample : E-1_(3.0-3.5)/,05428-016,S,6g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 39 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1745.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	239	rBV	20700	50630	3.35%	0.601%
2	5.447	369	378	386	rBV2	26243	81652	5.40%	0.969%
3	6.056	429	438	447	rBV	509599	1085801	71.76%	12.880%
4	6.371	462	469	480	rBV	266843	563538	37.24%	6.685%
5	6.879	512	519	530	rBV	577737	1203985	79.57%	14.282%
6	7.163	539	547	554	rVB	84554	176652	11.67%	2.095%
7	8.544	677	683	689	rBV	809980	1513201	100.00%	17.950%
8	9.254	744	753	764	rVB	399051	780398	51.57%	9.257%
9	10.219	842	848	862	rBV	765140	1500104	99.13%	17.795%
10	11.620	977	986	999	rBV	808357	1474169	97.42%	17.487%

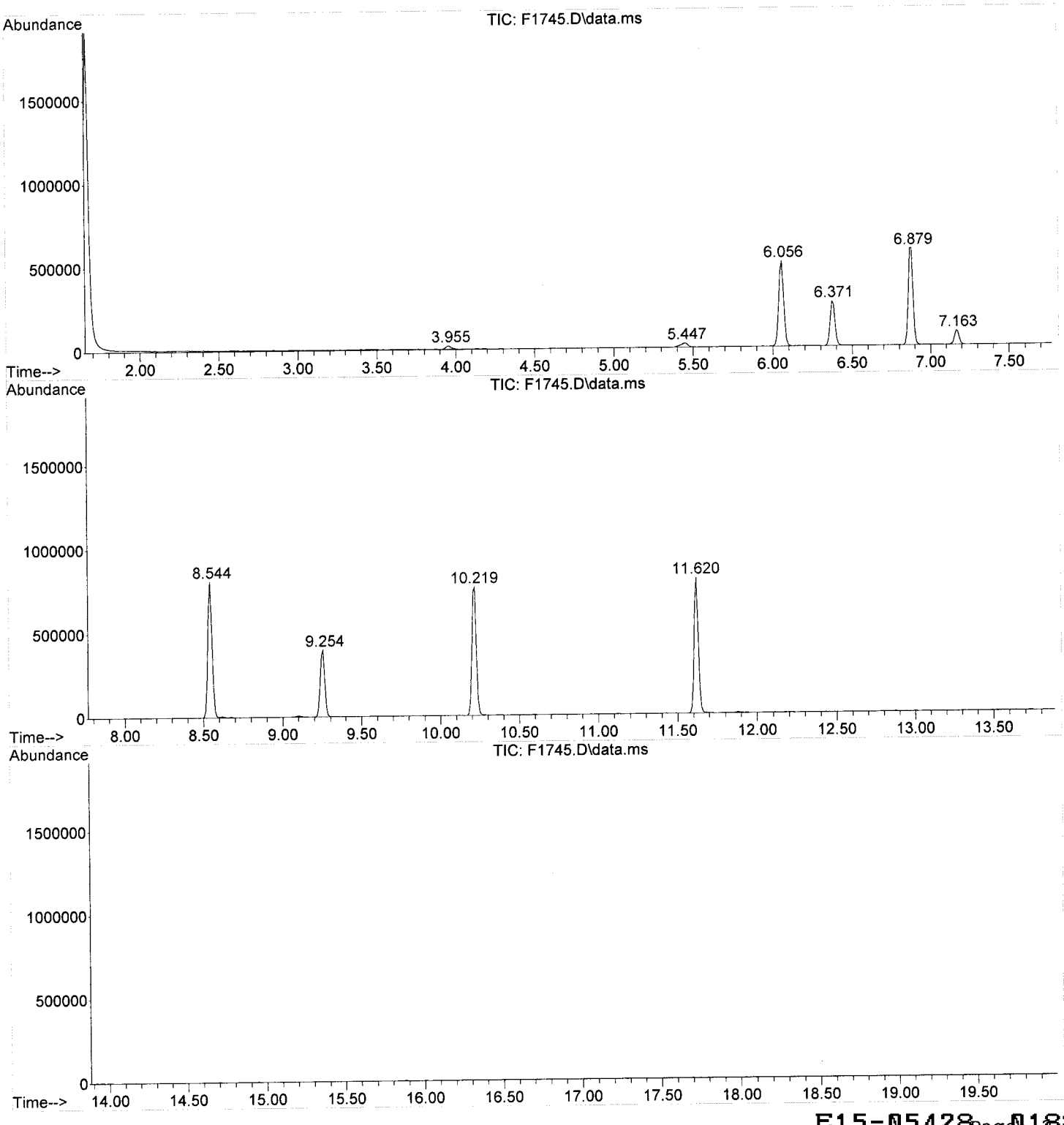
Sum of corrected areas: 8430130

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1745.D
Acq On : 1 Jul 2015 5:52
Operator : XING
Sample : E-1_(3.0-3.5)/,05428-016,S,6g,14.1
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 39 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1746.D
Acq On : 1 Jul 2015 6:23
Operator : XING
Sample : E-1_(4.5-5.0)/,05428-017,S,5.4g,18.6
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 01 10:19:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

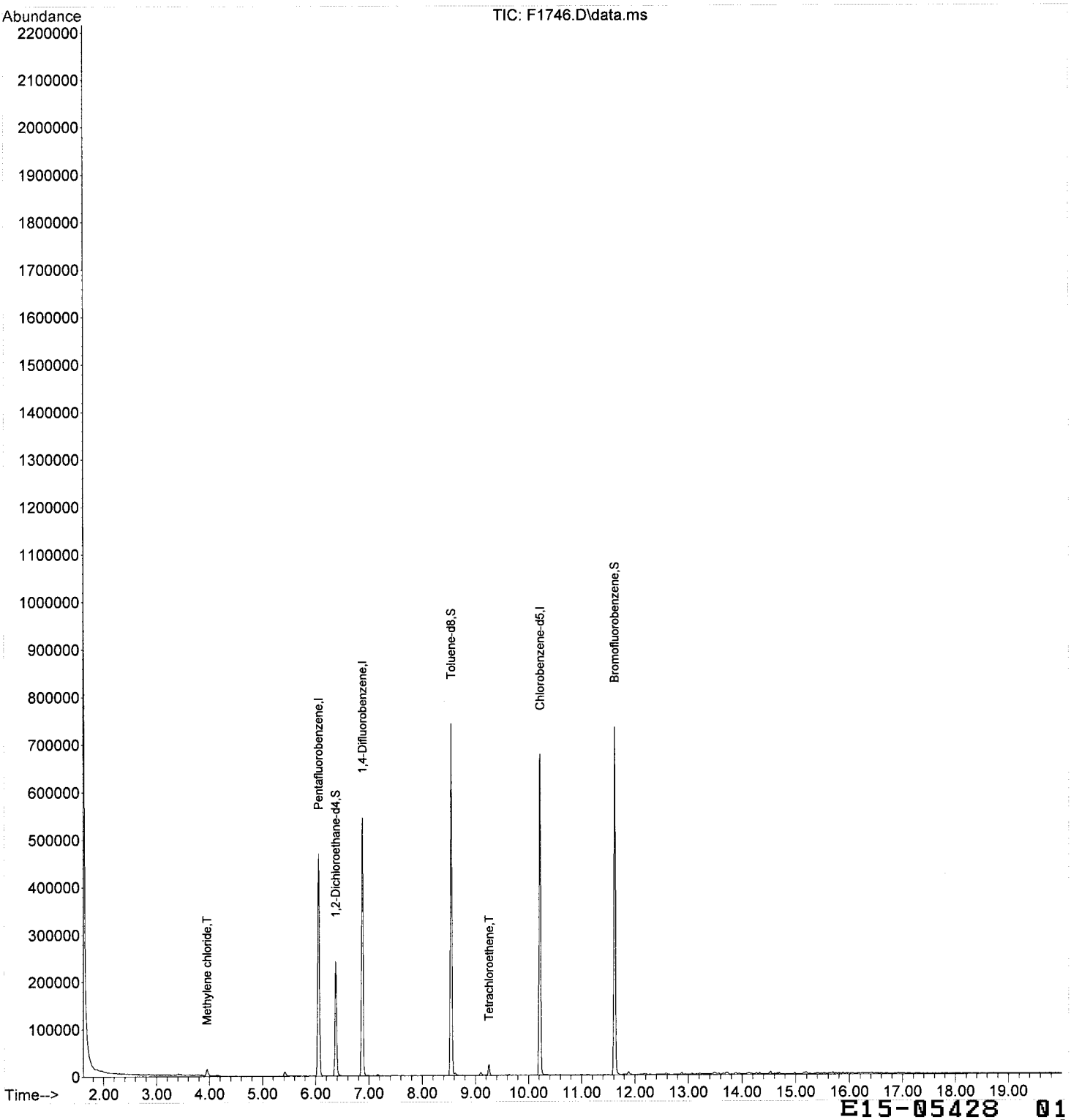
Internal Standards		R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene		6.056	168	299481	50.00	UG	0.00
31) 1,4-Difluorobenzene		6.879	114	407711	50.00	UG	0.00
50) Chlorobenzene-d5		10.219	117	350605	50.00	UG	0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4		6.371	65	226845	57.18	UG	0.00
Spiked Amount	50.000	Range 37 - 158		Recovery =	114.36%		
41) Toluene-d8		8.544	98	478205	50.34	UG	0.00
Spiked Amount	50.000	Range 45 - 154		Recovery =	100.68%		
59) Bromofluorobenzene		11.620	95	254710	56.60	UG	0.00
Spiked Amount	50.000	Range 46 - 150		Recovery =	113.20%		
Target Compounds							Qvalue
13) Methylene chloride		3.955	84	7914	2.55	UG	99
45) Tetrachloroethene		9.254	166	7549	2.01	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1746.D
Acq On : 1 Jul 2015 6:23
Operator : XING
Sample : E-1_(4.5-5.0)/,05428-017,S,5.4g,18.6
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Jul 01 10:19:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1746.D
Acq On : 1 Jul 2015 6:23
Operator : XING
Sample : E-1_(4.5-5.0)/,05428-017,S,5.4g,18.6
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 40 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1746.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	240	rVB	14391	34578	2.50%	0.500%
2	5.417	368	375	385	rBV	9444	26022	1.88%	0.376%
3	6.056	429	438	450	rBV	470052	994151	71.88%	14.382%
4	6.371	464	469	481	rBV	242541	519507	37.56%	7.516%
5	6.879	513	519	537	rVB	545550	1113398	80.50%	16.107%
6	8.544	677	683	689	rBV	743494	1383136	100.00%	20.009%
7	9.102	731	738	743	rBV	6277	14672	1.06%	0.212%
8	9.254	743	753	759	rVB	22821	47649	3.44%	0.689%
9	10.219	842	848	858	rBV	677863	1340652	96.93%	19.395%
10	11.620	979	986	998	rBV	734806	1352136	97.76%	19.561%
11	11.884	1008	1012	1021	rVB3	7137	19536	1.41%	0.283%
12	13.488	1163	1170	1175	rBV7	3918	15138	1.09%	0.219%
13	14.127	1225	1233	1242	rBV7	2763	15578	1.13%	0.225%
14	15.193	1330	1338	1344	rBV9	4975	21547	1.56%	0.312%
15	15.691	1377	1387	1390	rBV7	4108	14749	1.07%	0.213%

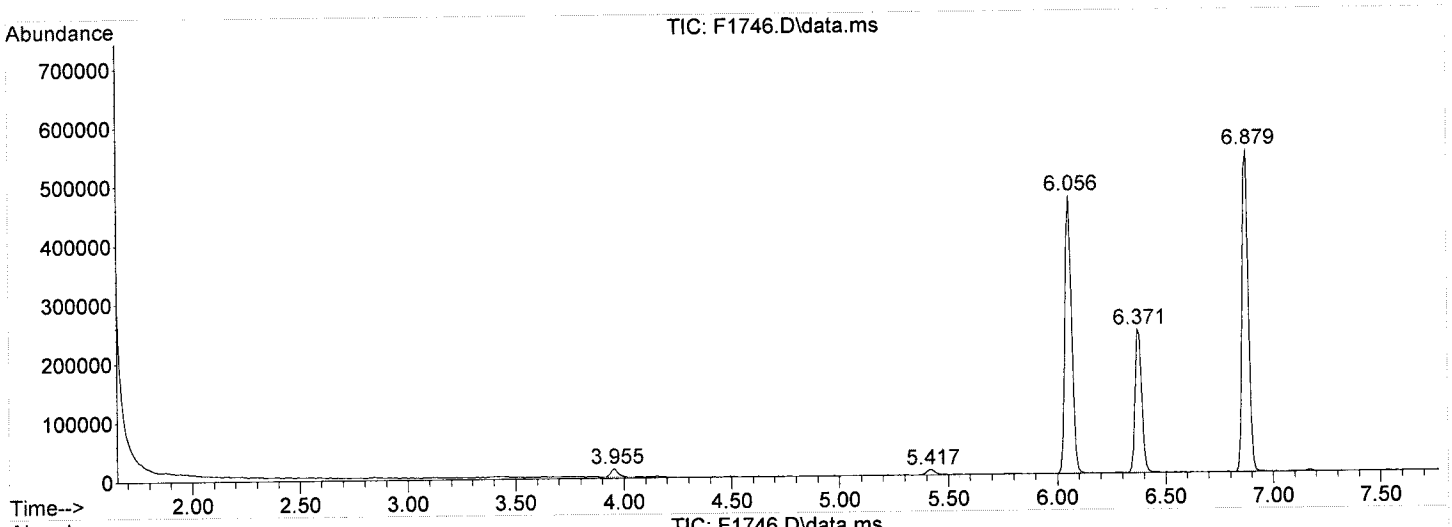
Sum of corrected areas: 6912449

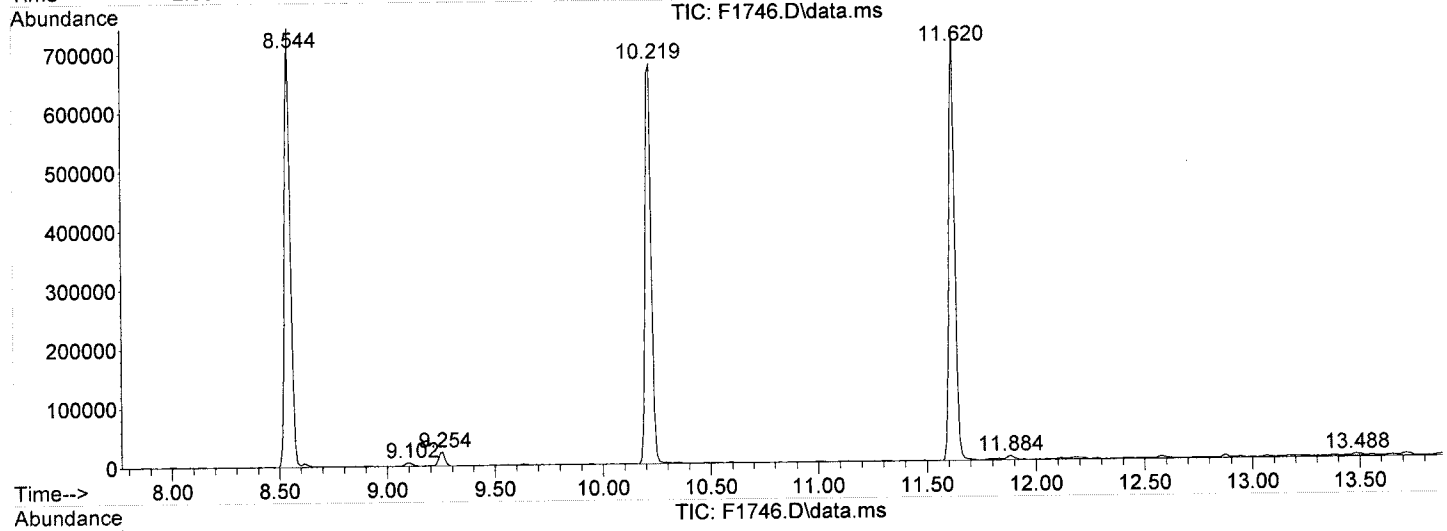
LSC Report - Integrated Chromatogram

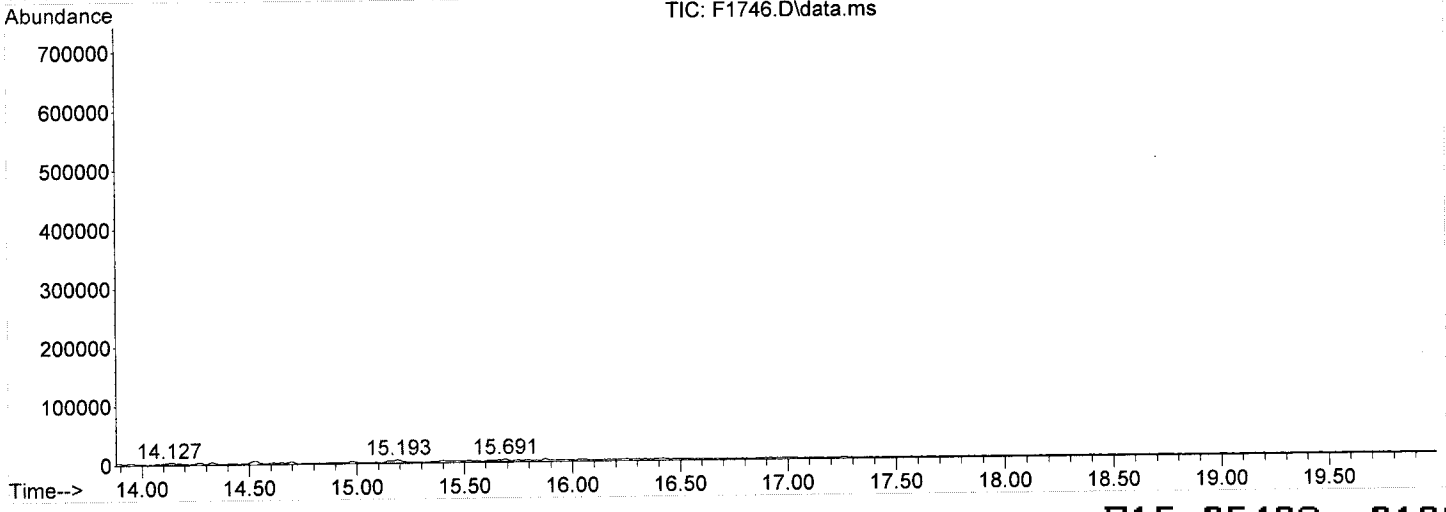
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1746.D
Acq On : 1 Jul 2015 6:23
Operator : XING
Sample : E-1_(4.5-5.0)/,05428-017,S,5.4g,18.6
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 40 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1770.D
Acq On : 1 Jul 2015 19:16
Operator : XING
Sample : E-2_(0.5-1.0)/,05428-020,S,4.1g,23.0
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 02 08:30:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	311030	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	424218	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	368482	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	249977	60.67	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 121.34%			
41) Toluene-d8	8.543	98	500506	50.64	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.28%			
59) Bromofluorobenzene	11.620	95	264277	55.88	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 111.76%			

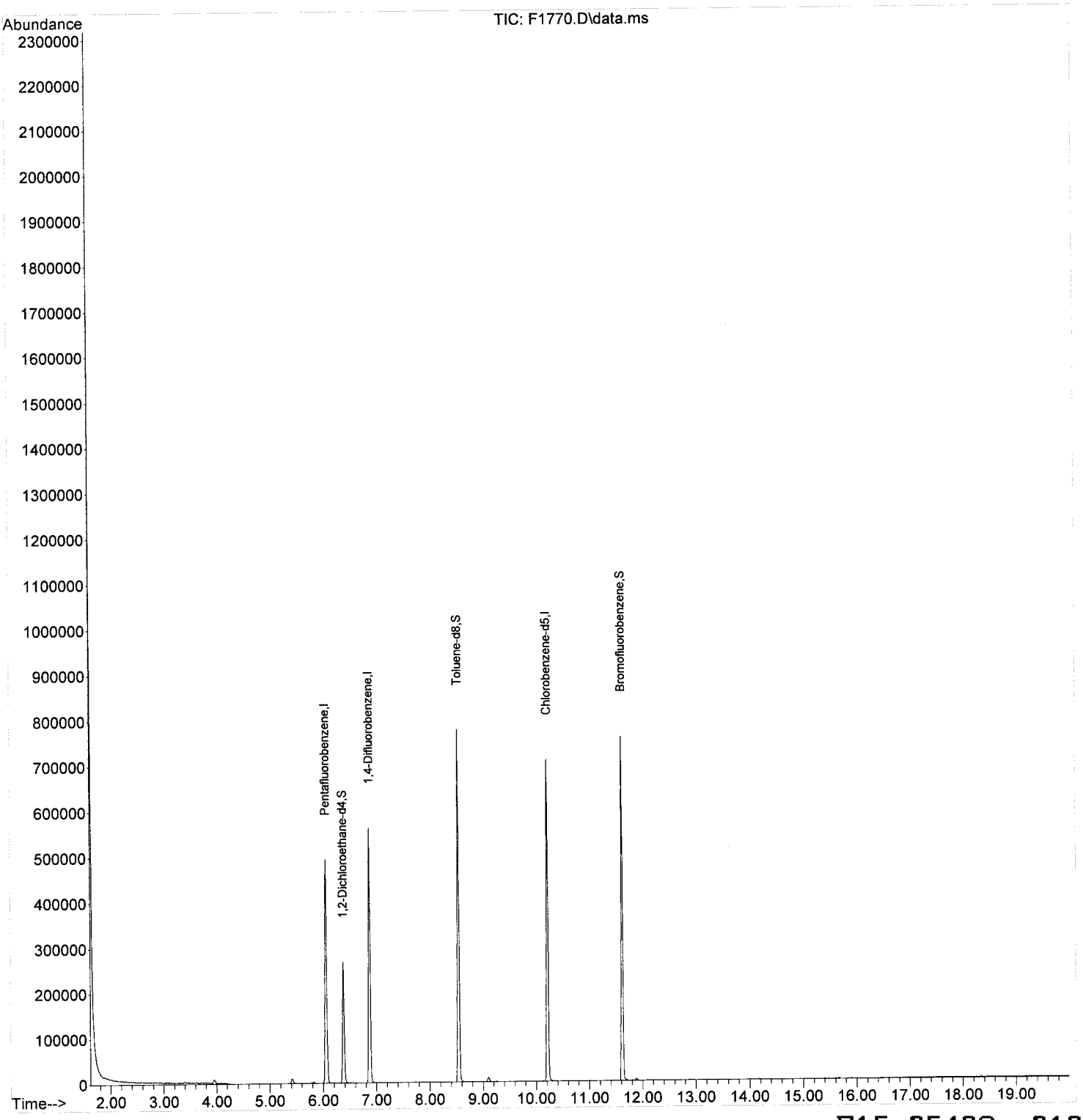
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1770.D
Acq On : 1 Jul 2015 19:16
Operator : XING
Sample : E-2_(0.5-1.0)/,05428-020,S,4.1g,23.0
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 02 08:30:47 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



FS061615.M Thu Jul 02 08:30:52 2015 RP1

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1770.D
Acq On : 1 Jul 2015 19:16
Operator : XING
Sample : E-2_(0.5-1.0)/,05428-020,S,4.1g,23.0
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 15 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1770.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	225	231	238	rBV	8381	21349	1.46%	0.301%
2	5.417	367	375	384	rBV	9894	27237	1.86%	0.384%
3	6.056	430	438	452	rBV	493512	1050248	71.69%	14.815%
4	6.371	462	469	480	rBV	267178	562363	38.38%	7.933%
5	6.879	512	519	532	rBV	561207	1169731	79.84%	16.500%
6	8.543	676	683	695	rBV	776654	1465075	100.00%	20.666%
7	9.102	732	738	745	rVB	9565	22091	1.51%	0.312%
8	10.219	842	848	862	rBV	709842	1410617	96.28%	19.898%
9	11.620	977	986	999	rBV	758890	1360494	92.86%	19.191%

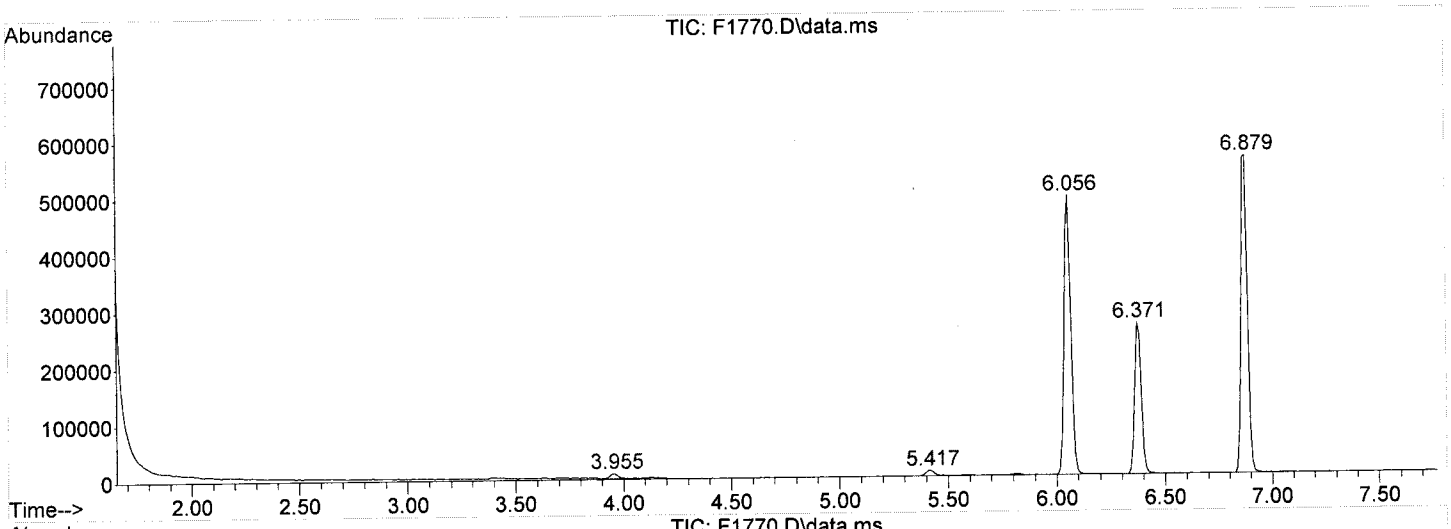
Sum of corrected areas: 7089205

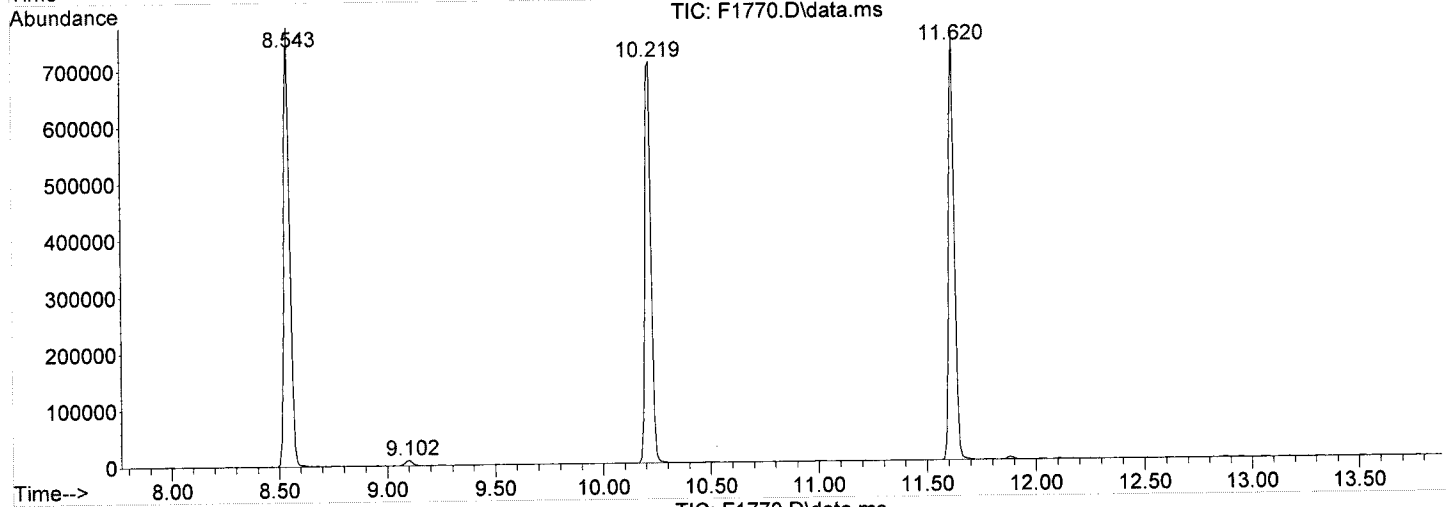
LSC Report - Integrated Chromatogram

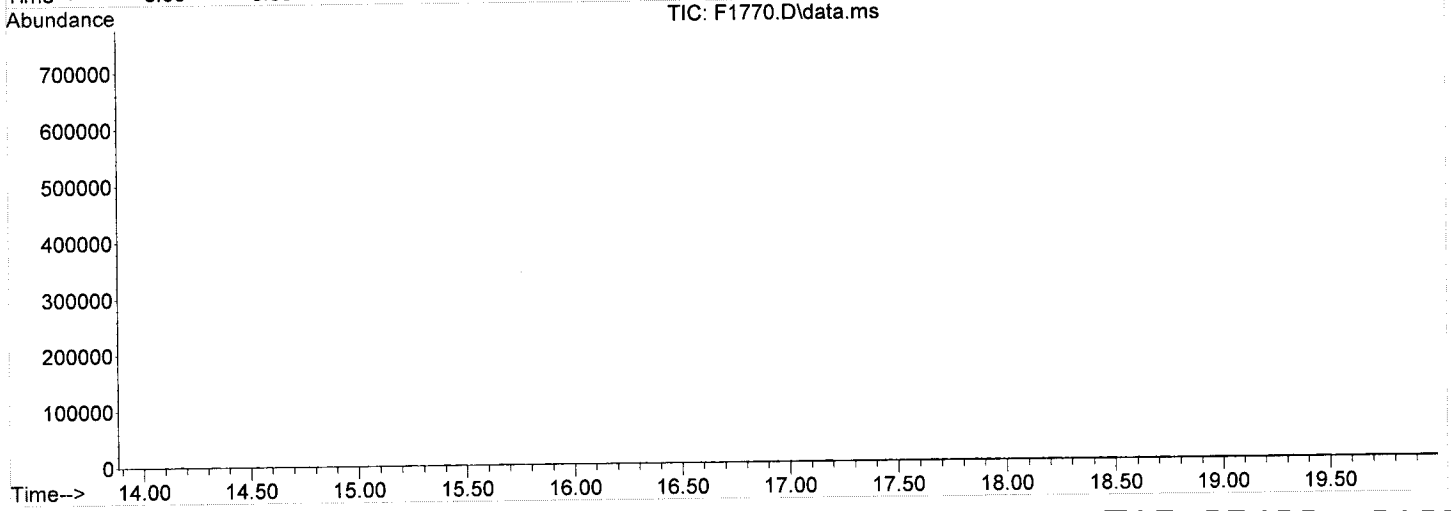
Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1770.D
Acq On : 1 Jul 2015 19:16
Operator : XING
Sample : E-2_(0.5-1.0)/,05428-020,S,4.1g,23.0
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1748.D
Acq On : 1 Jul 2015 7:23
Operator : XING
Sample : E-2_(2.0-2.5)/,05428-021,S,4.7g,10.9
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jul 01 10:21:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

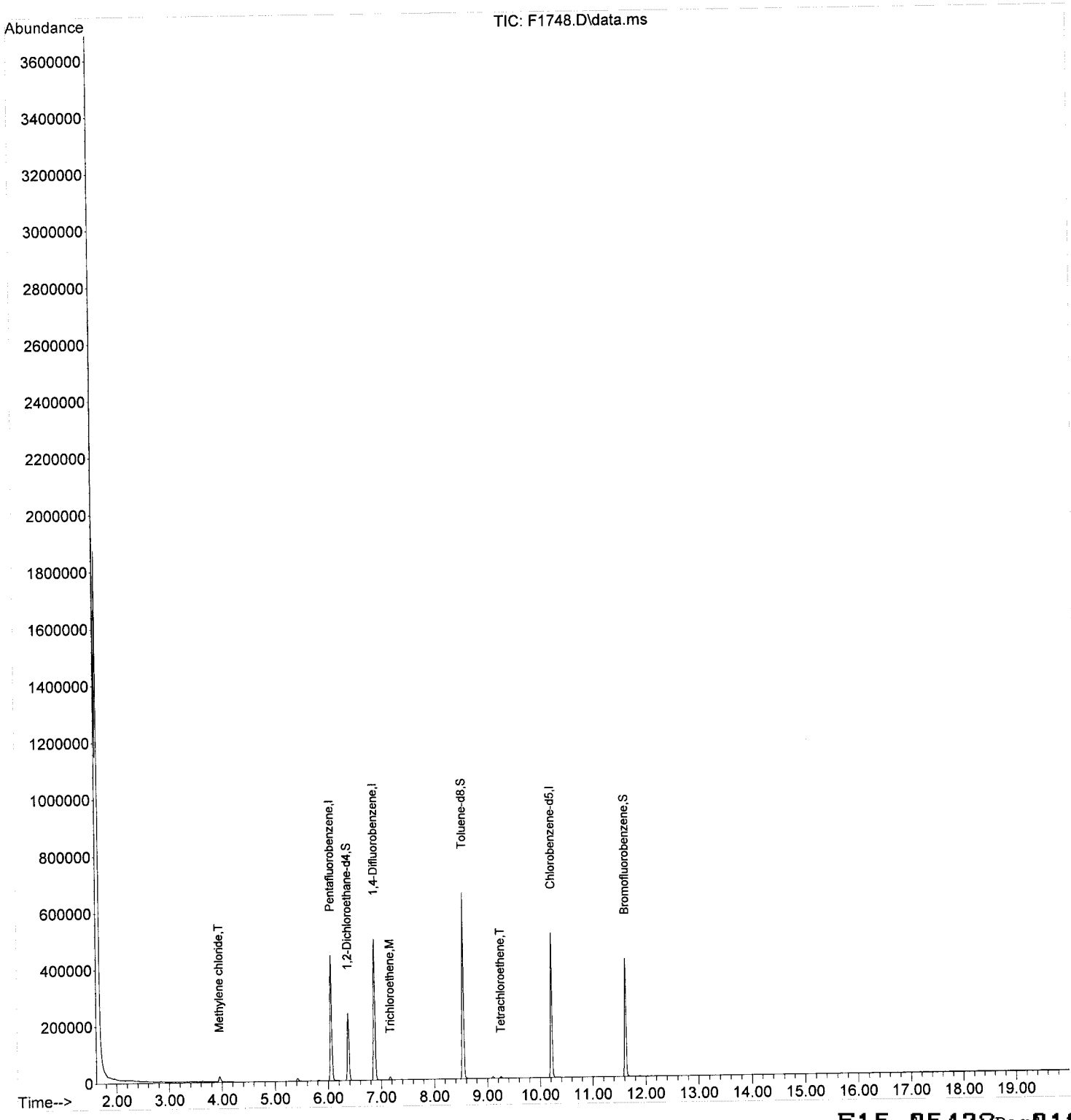
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.056	168	274936	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.879	114	359436	50.00	UG		0.00
50) Chlorobenzene-d5	10.219	117	257144	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.371	65	229630	63.05	UG		0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 126.10%				
41) Toluene-d8	8.544	98	418210	49.94	UG		0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 99.88%				
59) Bromofluorobenzene	11.620	95	143906	43.60	UG		0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 87.20%				
Target Compounds							Qvalue
13) Methylene chloride	3.955	84	10646	3.74	UG		97
33) Trichloroethene	7.173	95	3797	1.16	UG	#	66
45) Tetrachloroethene	9.254	166	1816	0.55	UG		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1748.D
Acq On : 1 Jul 2015 7:23
Operator : XING
Sample : E-2_(2.0-2.5)/,05428-021,S,4.7g,10.9
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Time: Jul 01 10:21:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1748.D
Acq On : 1 Jul 2015 7:23
Operator : XING
Sample : E-2_(2.0-2.5)/,05428-021,S,4.7g,10.9
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 42 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1748.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	238	rVB	19272	45665	3.73%	0.831%
2	5.417	370	375	390	rBV	9930	29256	2.39%	0.533%
3	6.056	430	438	456	rVB	443552	928466	75.92%	16.902%
4	6.371	464	469	484	rBV	236523	512492	41.91%	9.329%
5	6.879	511	519	530	rBV	497550	991202	81.06%	18.044%
6	7.163	543	547	554	rVB	10761	22945	1.88%	0.418%
7	8.544	677	683	696	rBV	657376	1222874	100.00%	22.261%
8	10.219	841	848	858	rBV	511262	982989	80.38%	17.894%
9	11.620	979	986	998	rBV	418082	757420	61.94%	13.788%

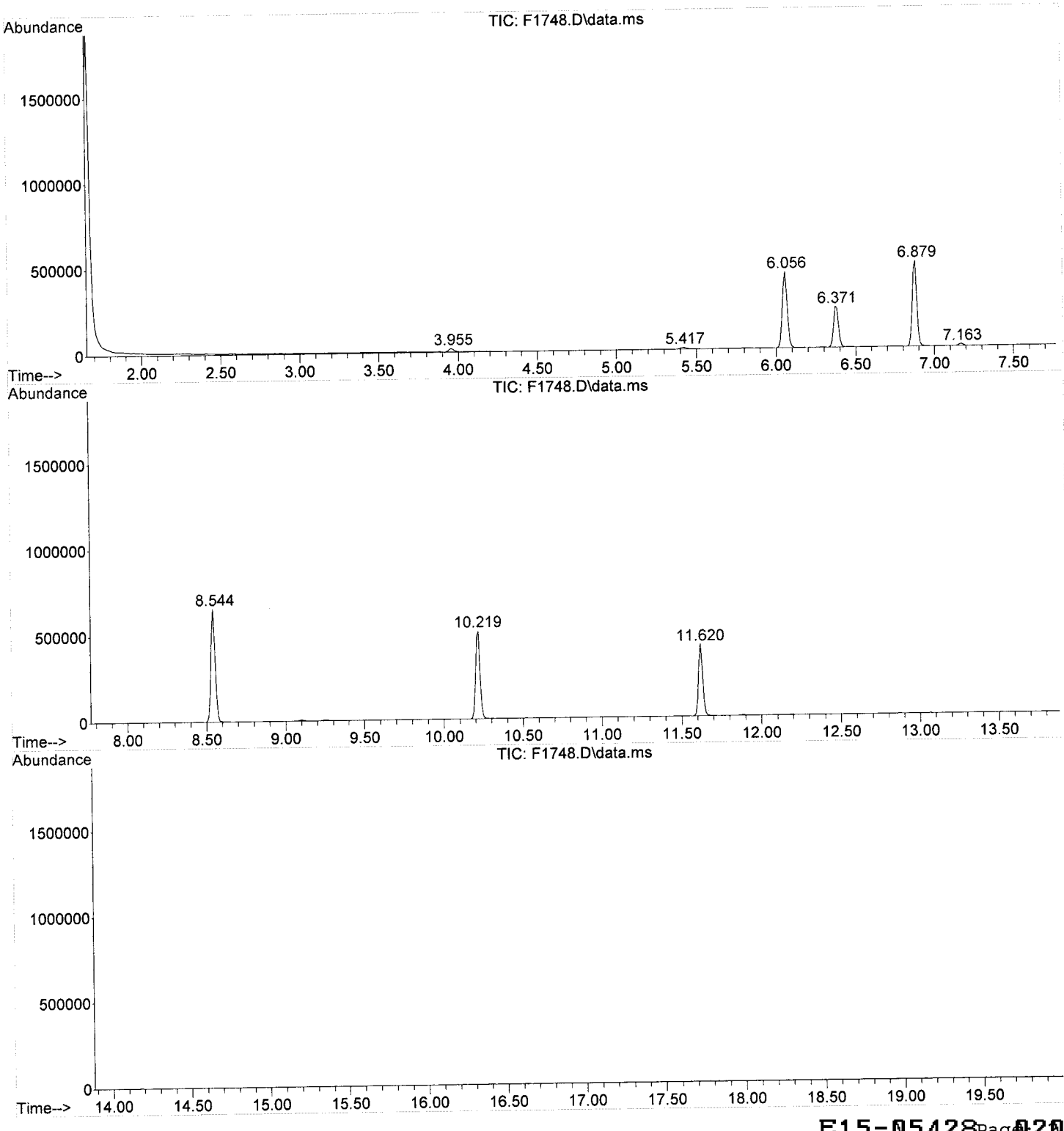
Sum of corrected areas: 5493309

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1748.D
Acq On : 1 Jul 2015 7:23
Operator : XING
Sample : E-2_(2.0-2.5)/,05428-021,S,4.7g,10.9
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 42 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1749.D
Acq On : 1 Jul 2015 7:54
Operator : XING
Sample : E-2_(3.0-3.5)/,05428-022,S,4.4g,7.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jul 01 10:22:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

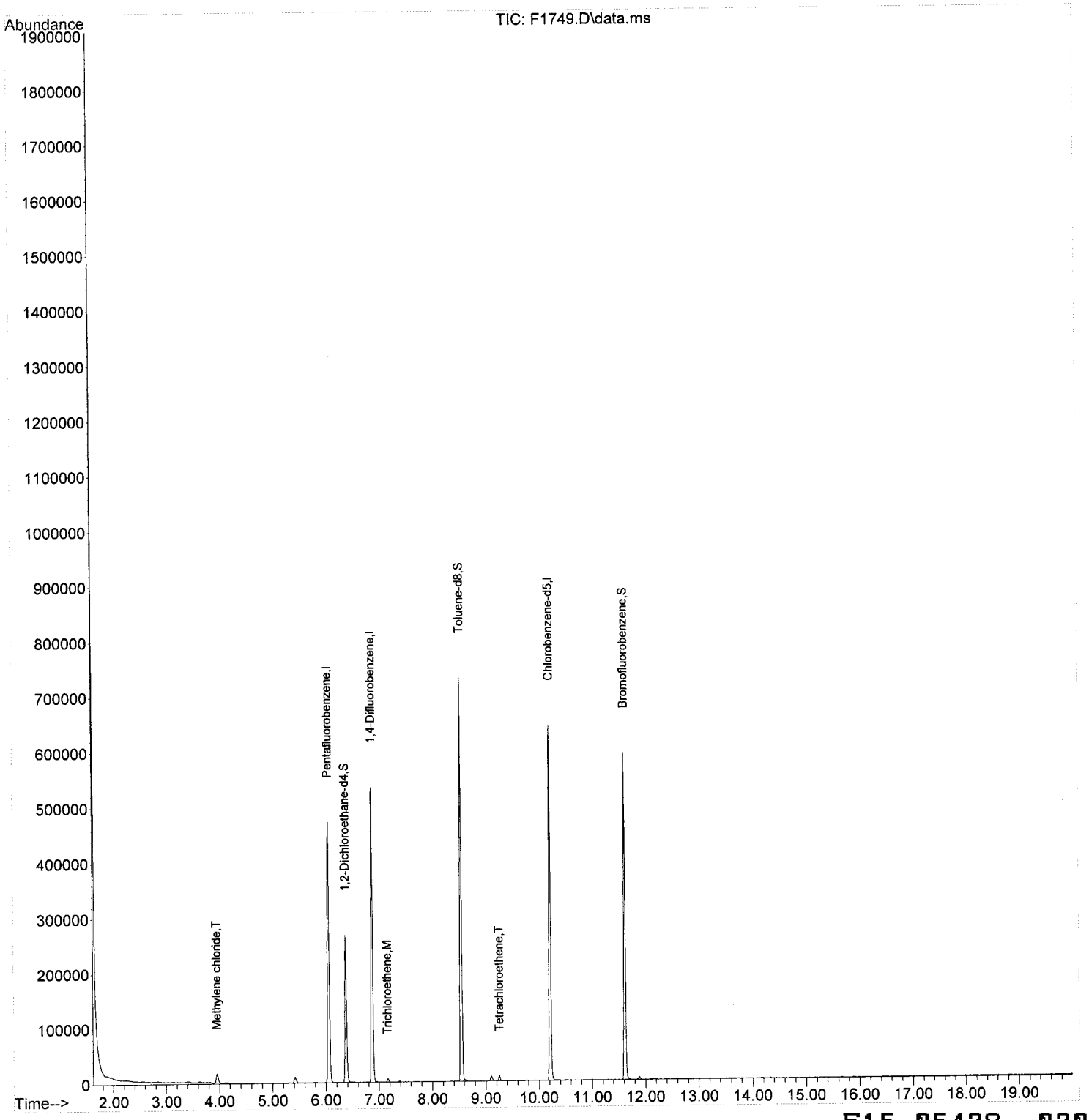
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	304329	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	405960	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	324432	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	252138	62.54	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 125.08%			
41) Toluene-d8	8.543	98	474901	50.21	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.42%			
59) Bromofluorobenzene	11.620	95	203262	48.81	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 97.62%			
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	9303	2.96	UG	99
33) Trichloroethene	7.163	95	1977	0.54	UG	99
45) Tetrachloroethene	9.254	166	2810	0.75	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1749.D
Acq On : 1 Jul 2015 7:54
Operator : XING
Sample : E-2_(3.0-3.5)/,05428-022,S,4.4g,7.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Time: Jul 01 10:22:39 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1749.D
Acq On : 1 Jul 2015 7:54
Operator : XING
Sample : E-2_(3.0-3.5)/,05428-022,S,4.4g,7.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1749.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	238	rVB	17069	44247	3.16%	0.680%
2	5.417	369	375	386	rBV	10894	30641	2.19%	0.471%
3	6.056	427	438	447	rBV	472396	1014023	72.52%	15.589%
4	6.371	463	469	483	rBV	267174	563962	40.33%	8.670%
5	6.879	511	519	533	rBV	534094	1111110	79.46%	17.082%
6	8.543	677	683	698	rBV	732502	1398346	100.00%	21.498%
7	9.102	729	738	744	rBV	9034	21905	1.57%	0.337%
8	9.254	748	753	761	rVV	9781	19298	1.38%	0.297%
9	10.219	842	848	861	rBV	644661	1246397	89.13%	19.162%
10	11.620	976	986	1000	rVB	593168	1054689	75.42%	16.214%

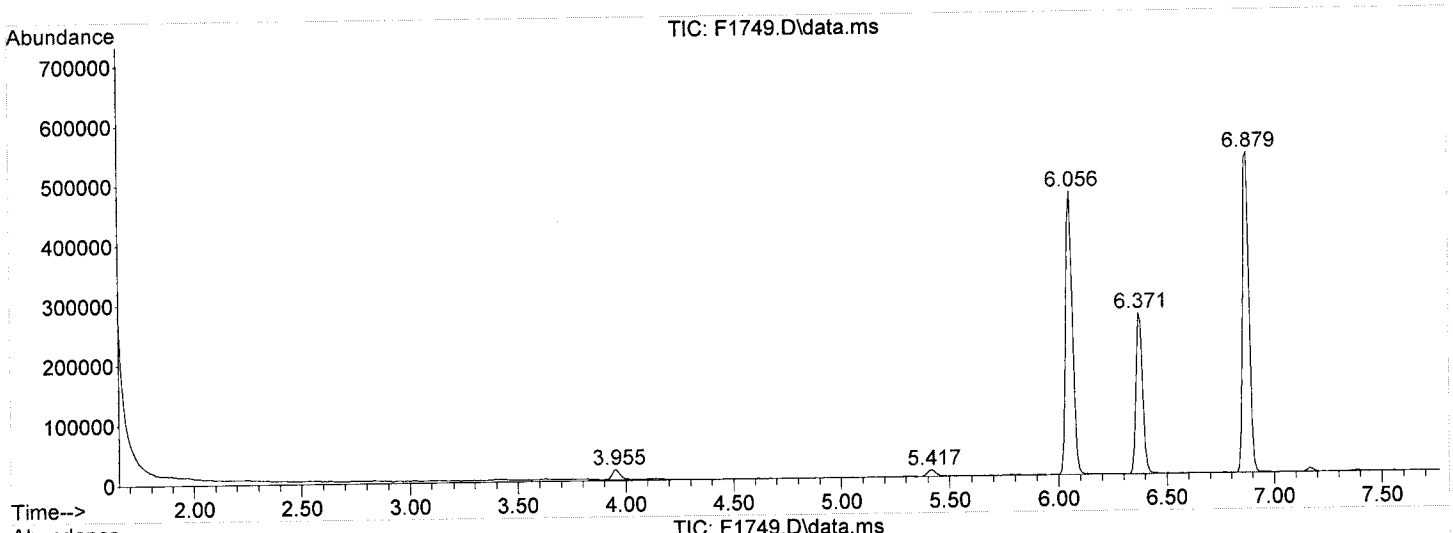
Sum of corrected areas: 6504618

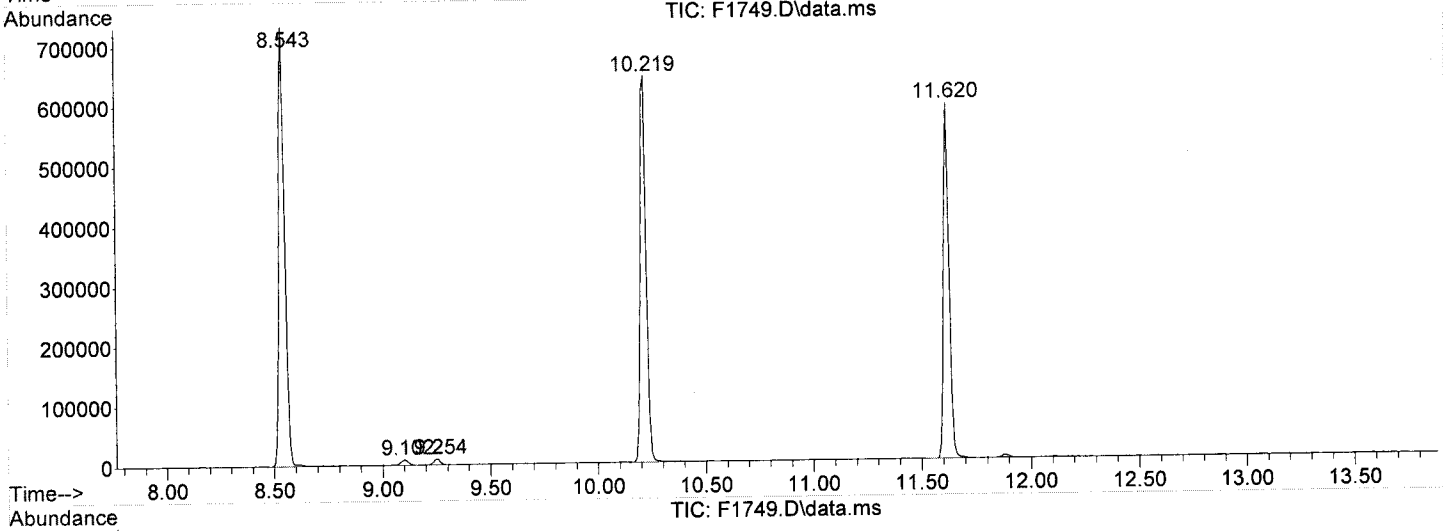
LSC Report - Integrated Chromatogram

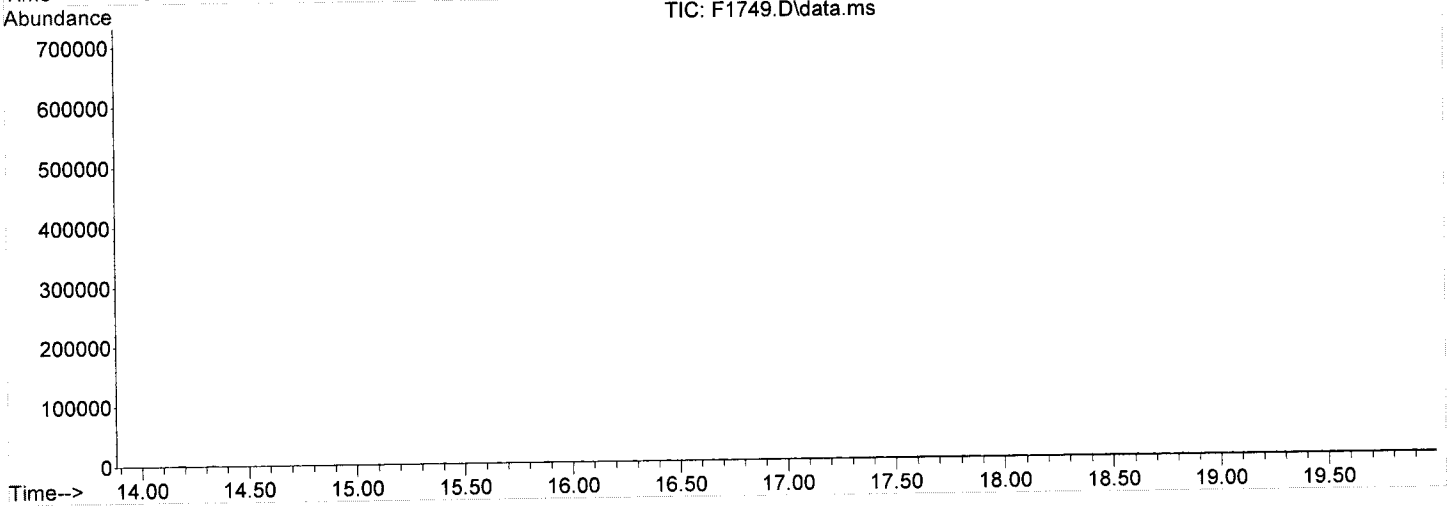
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1749.D
Acq On : 1 Jul 2015 7:54
Operator : XING
Sample : E-2_(3.0-3.5)/,05428-022,S,4.4g,7.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1750.D
Acq On : 1 Jul 2015 8:24
Operator : XING
Sample : E-2_(4.0-4.5)/,05428-023,S,4.7g,8.40
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jul 01 10:23:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

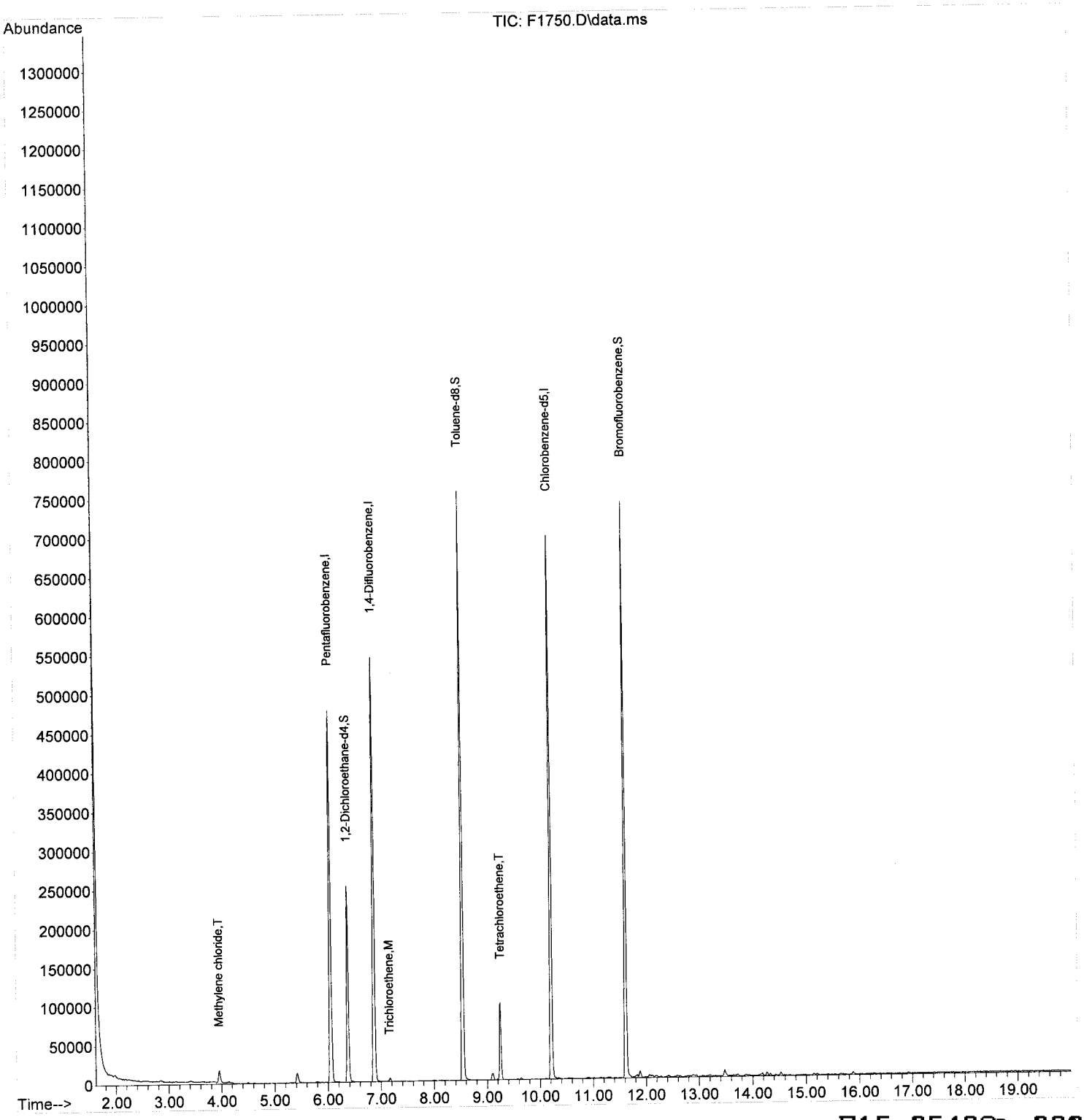
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	301801	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	410215	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	353555	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	233882	58.50	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery =	117.00%		
41) Toluene-d8	8.544	98	484776	50.72	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery =	101.44%		
59) Bromofluorobenzene	11.620	95	253327	55.83	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery =	111.66%		
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	8301	2.66	UG	99
33) Trichloroethene	7.163	95	1342	0.36	UG	98
45) Tetrachloroethene	9.254	166	29353	7.76	UG	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1750.D
Acq On : 1 Jul 2015 8:24
Operator : XING
Sample : E-2_(4.0-4.5)/,05428-023,S,4.7g,8.40
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Time: Jul 01 10:23:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1750.D
Acq On : 1 Jul 2015 8:24
Operator : XING
Sample : E-2_(4.0-4.5)/,05428-023,S,4.7g,8.40
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1750.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	240	rVB	15385	38080	2.68%	0.531%
2	4.128	245	248	260	rVB7	2958	14510	1.02%	0.202%
3	5.417	370	375	385	rBV	12506	34392	2.42%	0.480%
4	6.056	431	438	456	rBV	478066	1023249	72.10%	14.278%
5	6.371	460	469	484	rBV	252110	530284	37.36%	7.400%
6	6.879	511	519	539	rBV	544799	1139564	80.29%	15.901%
7	8.544	677	683	697	rBV	756126	1419256	100.00%	19.804%
8	9.102	729	738	743	rBV3	8130	21548	1.52%	0.301%
9	9.254	743	753	761	rVB	99553	206051	14.52%	2.875%
10	10.219	842	848	857	rBV	697947	1369243	96.48%	19.106%
11	11.620	979	986	997	rBV	740344	1330971	93.78%	18.572%
12	11.884	1008	1012	1020	rVB4	8113	18284	1.29%	0.255%
13	13.477	1162	1169	1175	rBV4	7930	21043	1.48%	0.294%

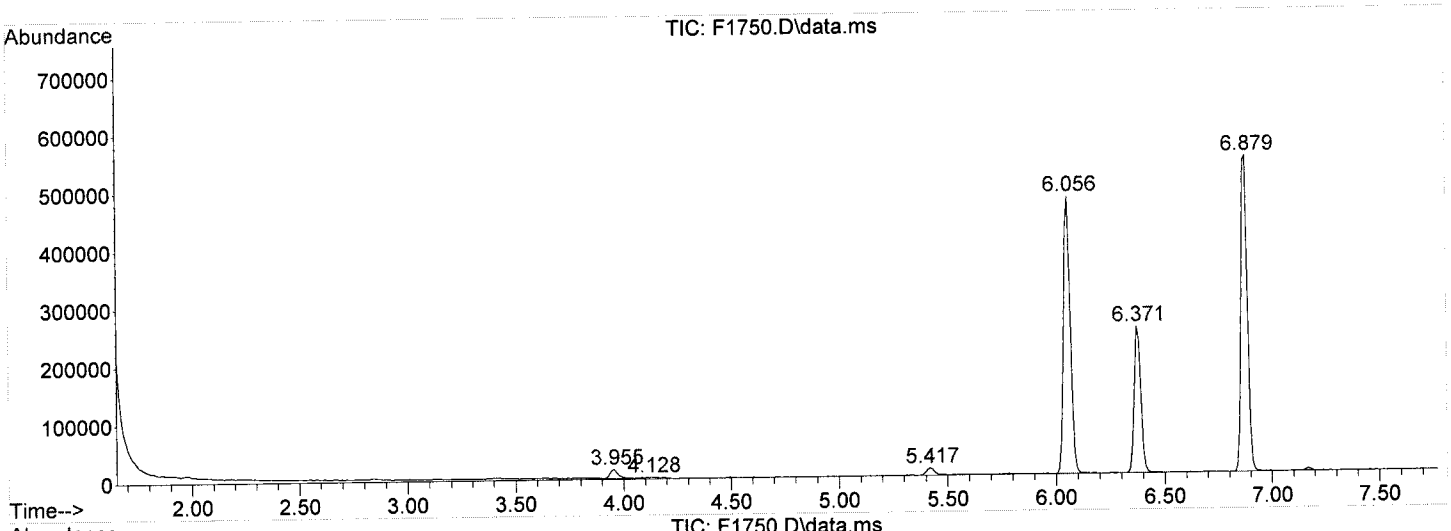
Sum of corrected areas: 7166475

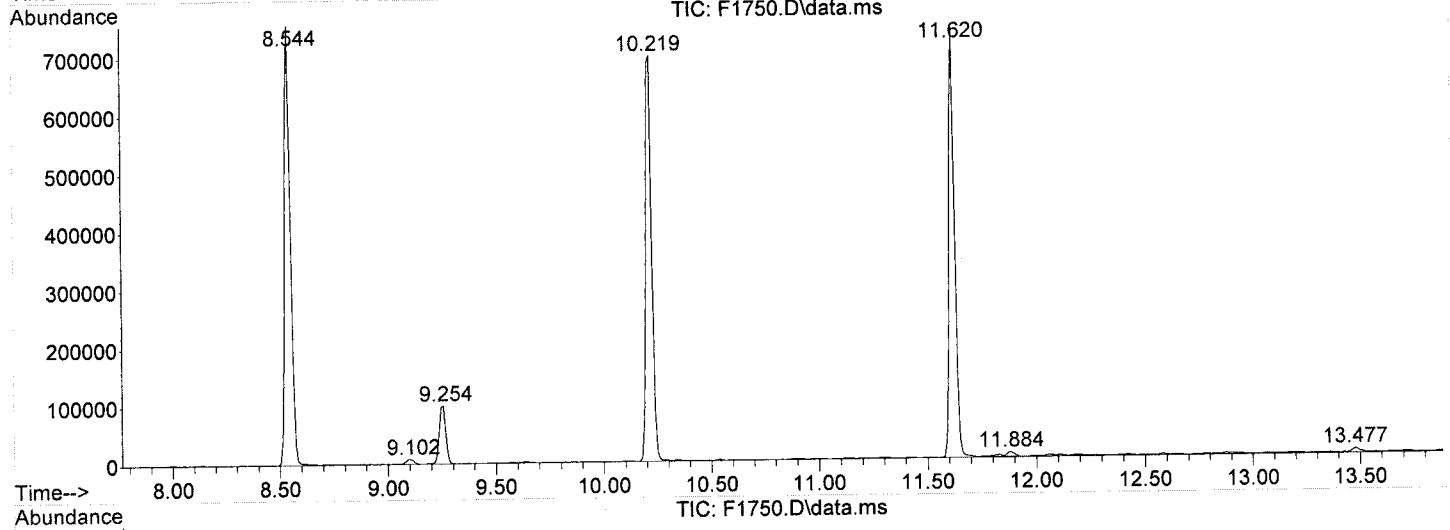
LSC Report - Integrated Chromatogram

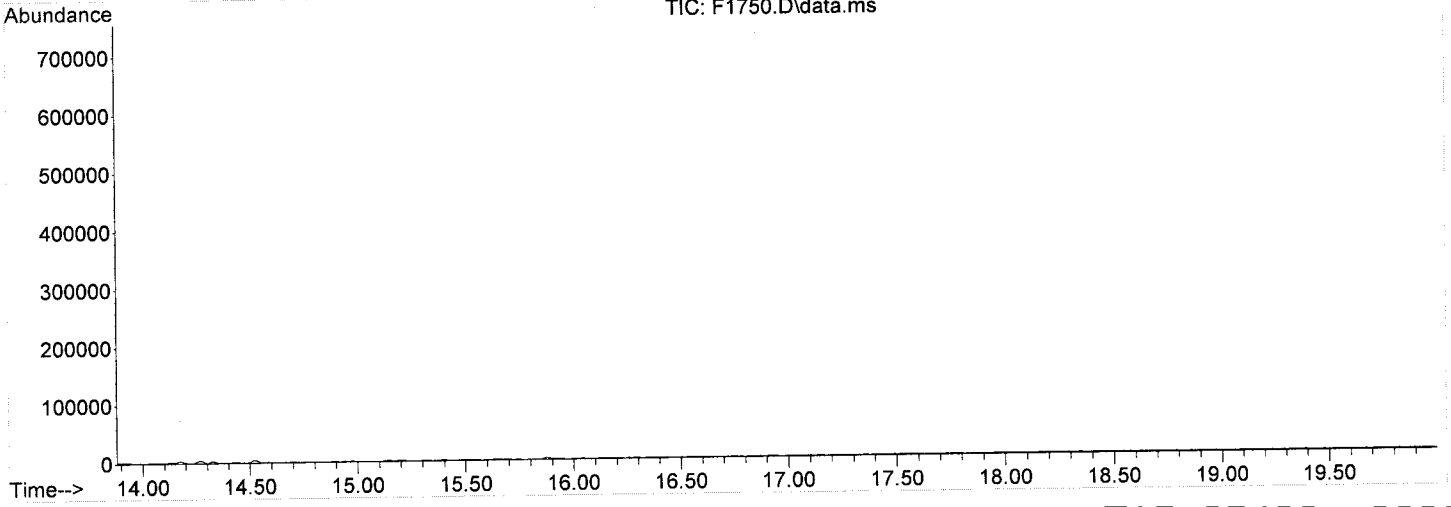
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1750.D
Acq On : 1 Jul 2015 8:24
Operator : XING
Sample : E-2_(4.0-4.5)/,05428-023,S,4.7g,8.40
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1771.D
Acq On : 1 Jul 2015 19:46
Operator : XING
Sample : E-7_(0.5-1.0)/,05428-026,S,3.7g,12.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 02 08:33:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

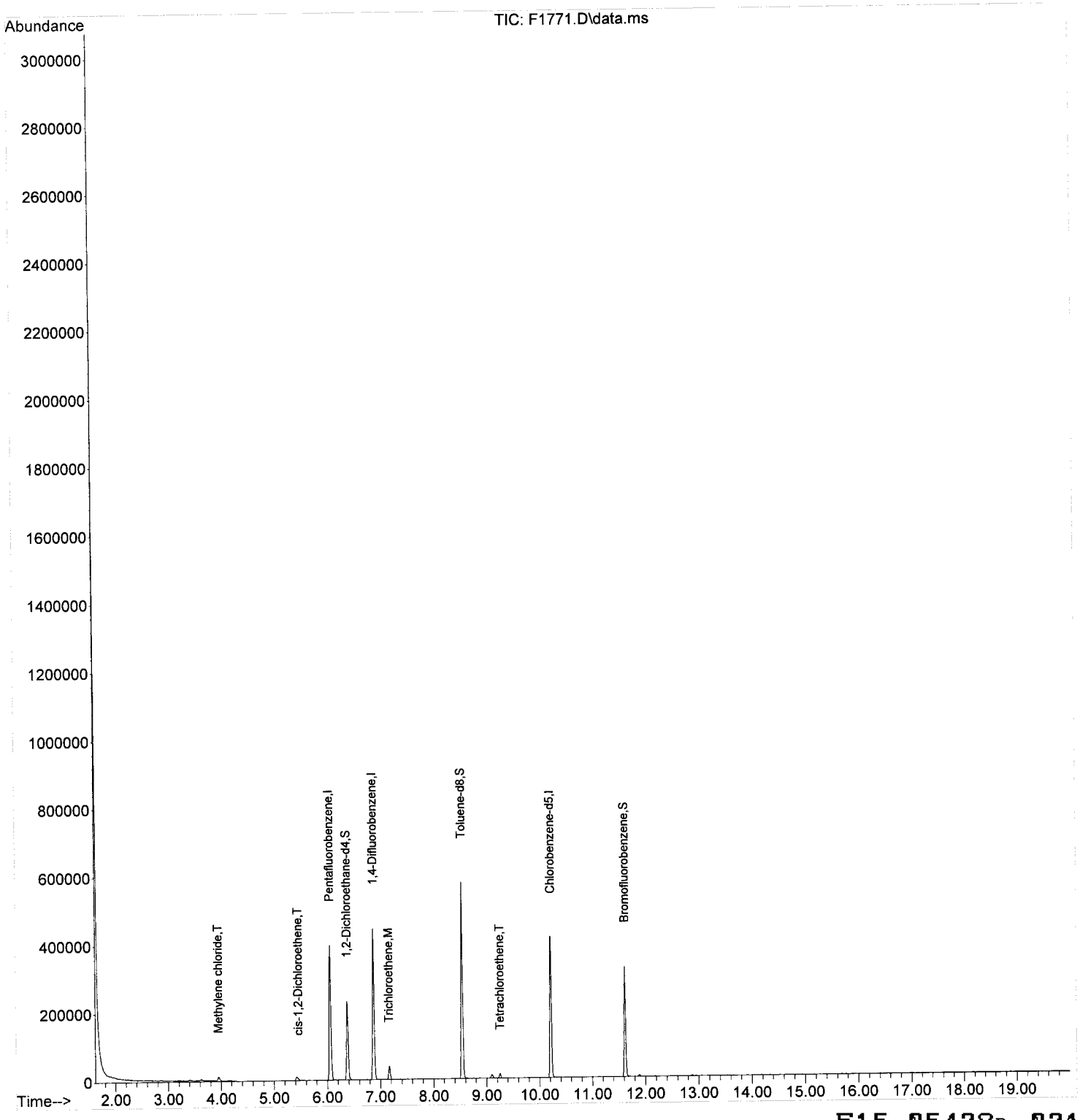
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.057	168	245502	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	329104	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	210828	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	223471	68.72	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 137.44%			
41) Toluene-d8	8.544	98	366490	47.80	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 95.60%			
59) Bromofluorobenzene	11.620	95	115845	42.81	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 85.62%			
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	6290	2.48	UG	99
20) cis-1,2-Dichloroethene	5.458	96	1201	0.39	UG	99
33) Trichloroethene	7.163	95	13627	4.55	UG	94
45) Tetrachloroethene	9.254	166	3651	1.20	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1771.D
Acq On : 1 Jul 2015 19:46
Operator : XING
Sample : E-7_(0.5-1.0)/,05428-026,S,3.7g,12.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jul 02 08:33:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1771.D
Acq On : 1 Jul 2015 19:46
Operator : XING
Sample : E-7_(0.5-1.0)/,05428-026,S,3.7g,12.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1771.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	241	rVV	11302	29986	2.78%	0.604%
2	4.138	244	249	262	rVB7	2425	15278	1.42%	0.308%
3	5.417	370	375	389	rBV2	10861	35819	3.32%	0.721%
4	6.057	431	438	450	rBV	396386	840222	77.85%	16.922%
5	6.371	461	469	480	rBV	231046	500743	46.39%	10.085%
6	6.879	509	519	530	rBV	443300	910614	84.37%	18.339%
7	7.163	542	547	555	rVB	38918	79350	7.35%	1.598%
8	8.544	675	683	701	rBV	576727	1079352	100.00%	21.738%
9	9.102	730	738	746	rVV	10134	25938	2.40%	0.522%
10	9.254	746	753	758	rVB	13122	26682	2.47%	0.537%
11	10.209	841	847	859	rBV	415649	811773	75.21%	16.349%
12	11.620	979	986	1001	rBV	323786	596887	55.30%	12.021%
13	11.884	1007	1012	1021	rVB5	5037	12740	1.18%	0.257%

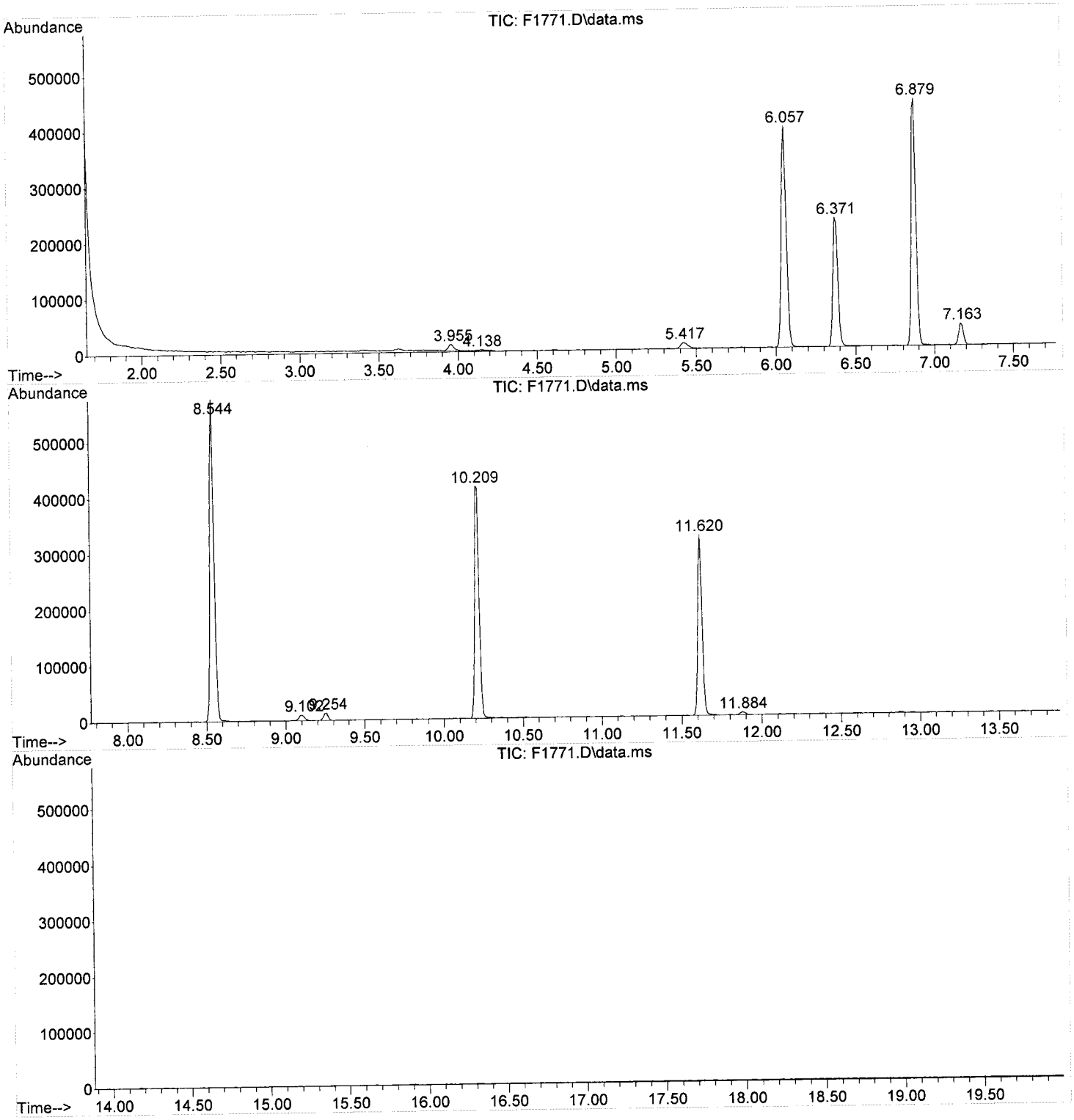
Sum of corrected areas: 4965384

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1771.D
Acq On : 1 Jul 2015 19:46
Operator : XING
Sample : E-7_(0.5-1.0)/,05428-026,S,3.7g,12.5
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1752.D
Acq On : 1 Jul 2015 9:25
Operator : XING
Sample : E-7_(2.0-2.5)/,05428-027,S,4.5g,4.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jul 01 10:25:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

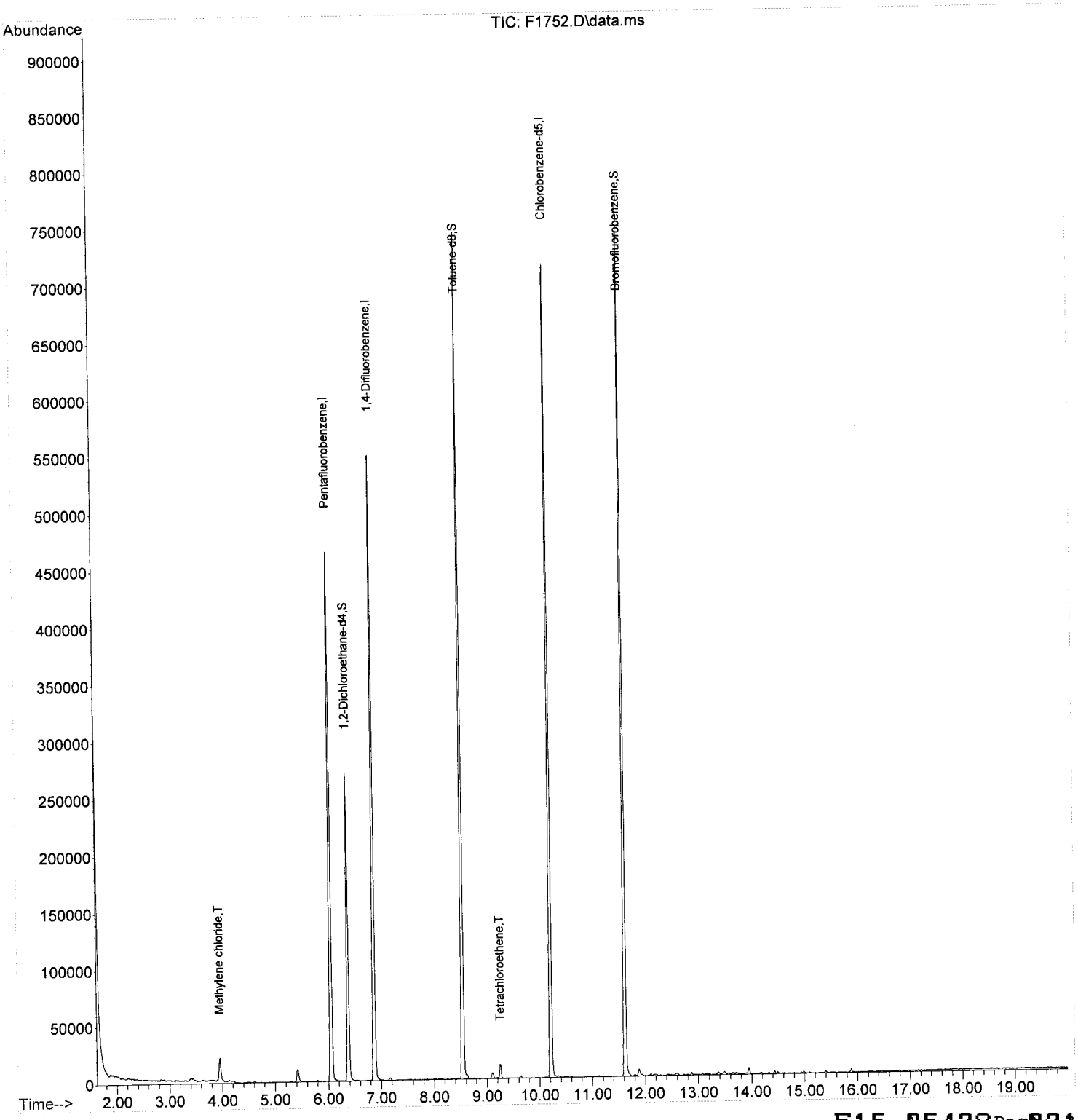
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.057	168	298424	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	416057	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	362006	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	252259	63.81	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 127.62%			
41) Toluene-d8	8.544	98	480593	49.58	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 99.16%			
59) Bromofluorobenzene	11.620	95	269656	58.04	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 116.08%			
Target Compounds						Qvalue
13) Methylene chloride	3.955	84	11257	3.65	UG	99
45) Tetrachloroethene	9.254	166	3994	1.04	UG	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1752.D
Acq On : 1 Jul 2015 9:25
Operator : XING
Sample : E-7_(2.0-2.5)/,05428-027,S,4.5g,4.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Quant Time: Jul 01 10:25:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



FS061615.M Wed Jul 01 10:25:44 2015 RP1

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1752.D
Acq On : 1 Jul 2015 9:25
Operator : XING
Sample : E-7_(2.0-2.5)/,05428-027,S,4.5g,4.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0
Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1752.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	223	231	239	rVB2	20484	51762	3.63%	0.729%
2	5.417	369	375	382	rBV	10971	30526	2.14%	0.430%
3	6.057	430	438	446	rBV	465149	1003287	70.33%	14.133%
4	6.371	462	469	482	rBV	270706	564541	39.57%	7.953%
5	6.879	509	519	537	rVB	549217	1151837	80.74%	16.226%
6	8.544	677	683	699	rBV	744874	1426612	100.00%	20.097%
7	9.244	744	752	762	rVB2	12360	27955	1.96%	0.394%
8	10.219	842	848	859	rBV	715529	1403270	98.36%	19.768%
9	11.620	979	986	999	rBV	767392	1405549	98.52%	19.800%
10	11.884	1008	1012	1022	rVB4	5835	17698	1.24%	0.249%
11	13.944	1204	1215	1226	rVB3	5809	15721	1.10%	0.221%

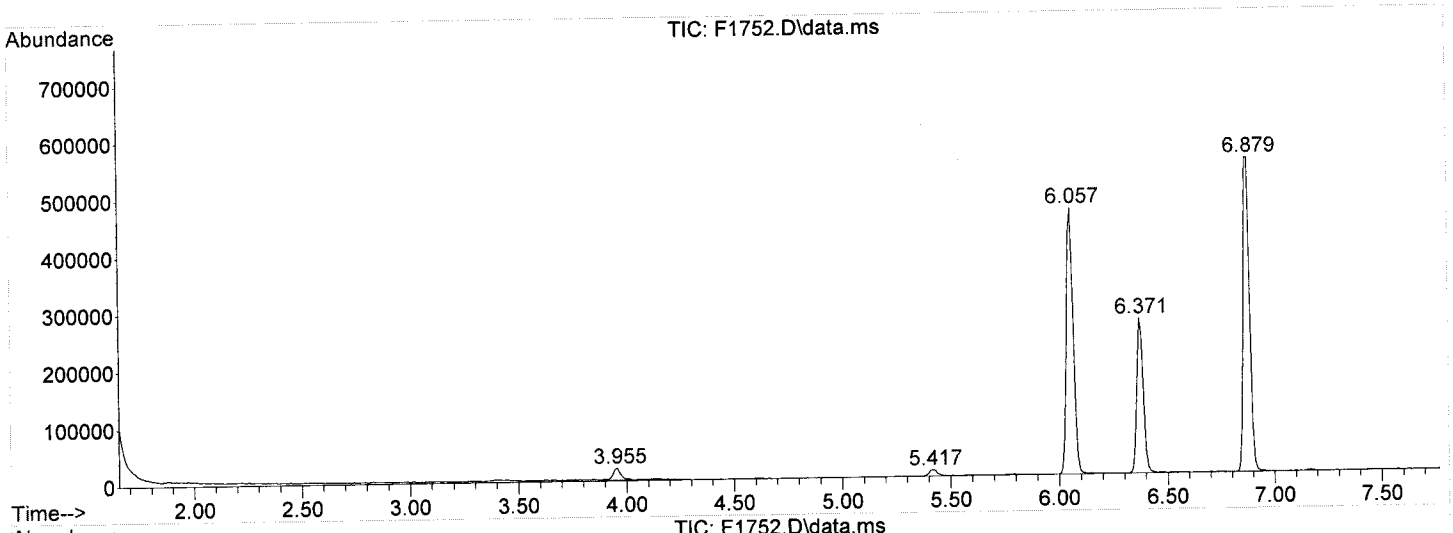
Sum of corrected areas: 7098758

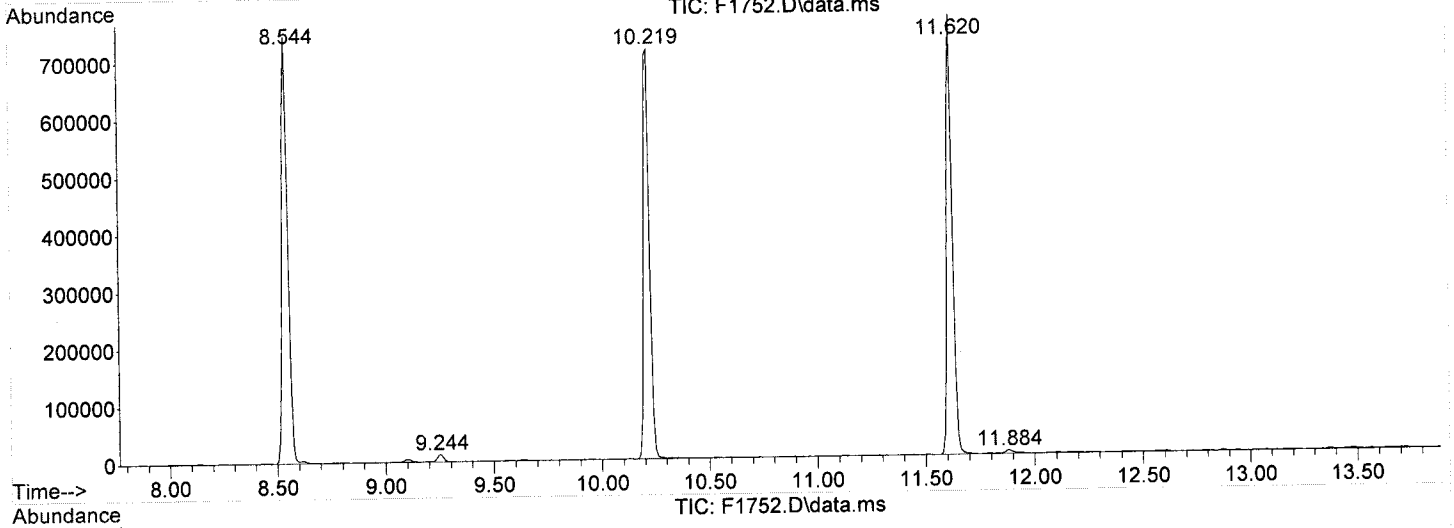
LSC Report - Integrated Chromatogram

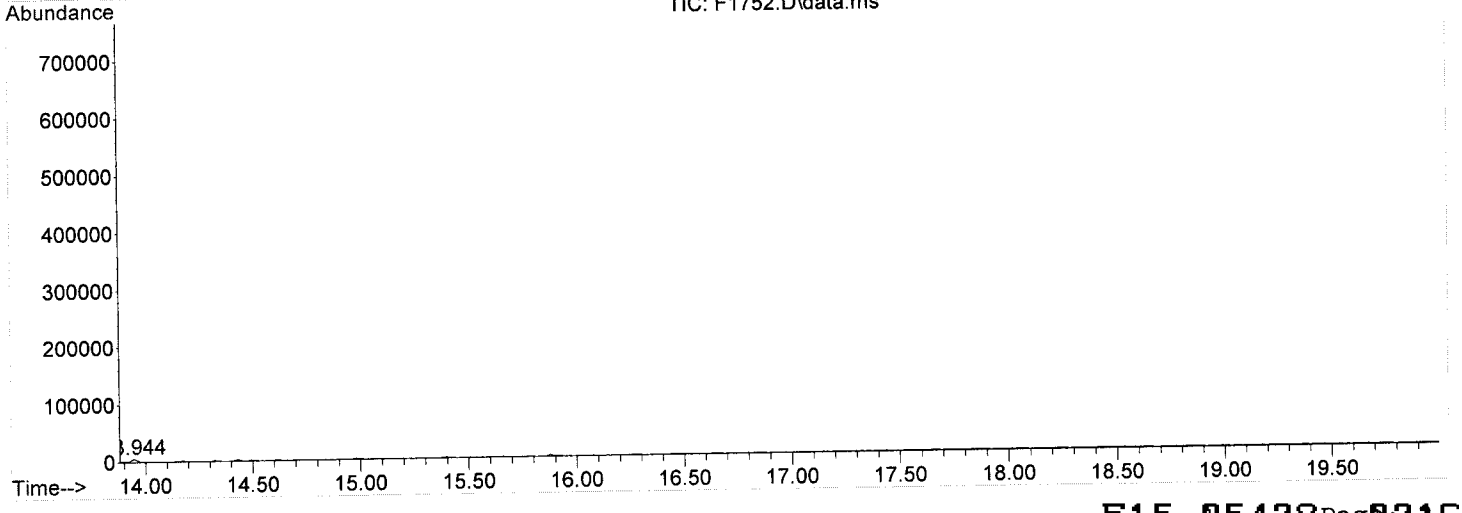
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1752.D
Acq On : 1 Jul 2015 9:25
Operator : XING
Sample : E-7_(2.0-2.5)/,05428-027,S,4.5g,4.90
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1753.D
Acq On : 1 Jul 2015 9:55
Operator : XING
Sample : E-7_(3.0-3.5)/,05428-028,S,5.3g,10.2
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jul 01 10:26:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

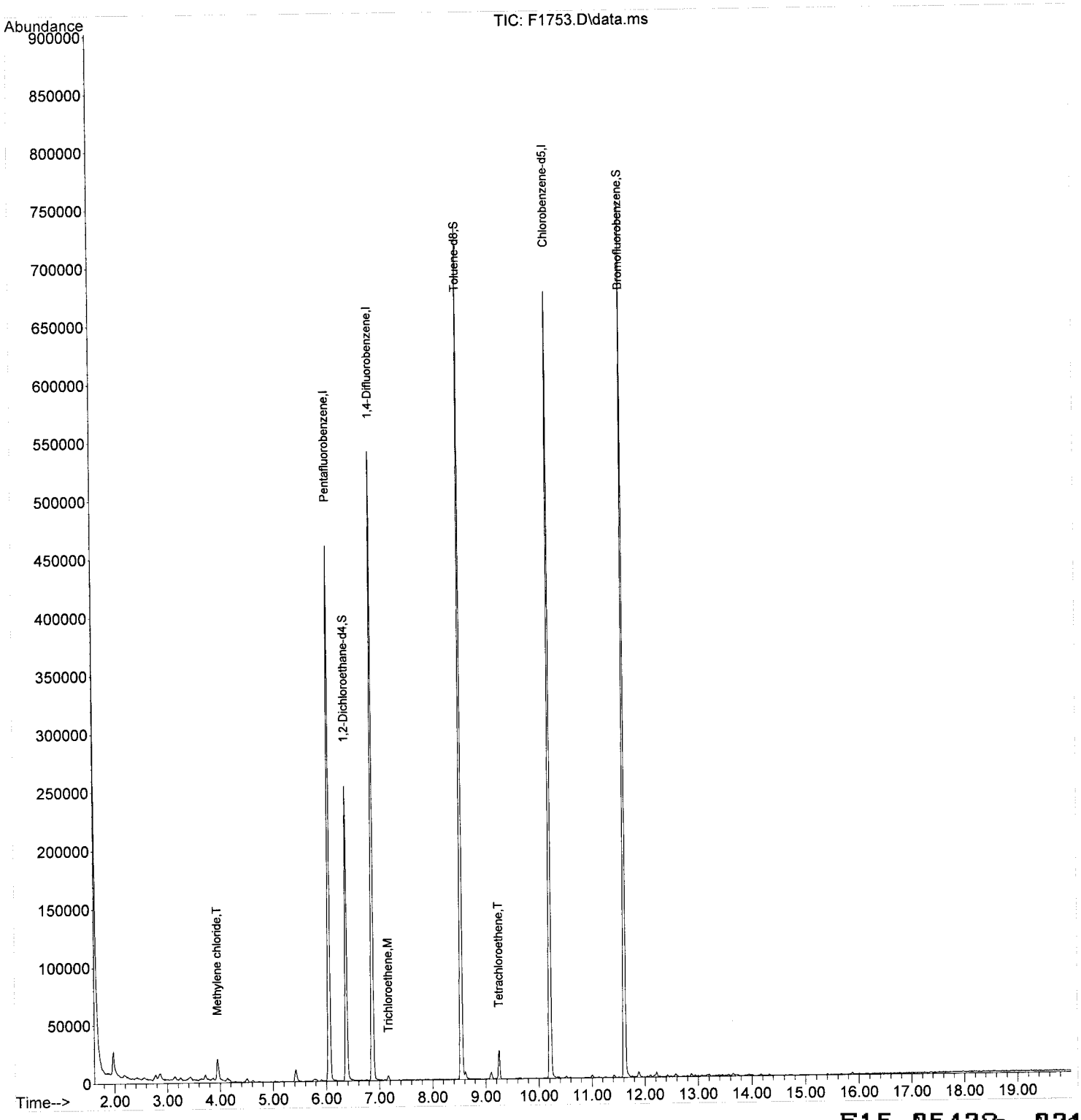
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	6.057	168	288297	50.00	UG		0.00
31) 1,4-Difluorobenzene	6.879	114	403697	50.00	UG		0.00
50) Chlorobenzene-d5	10.219	117	346970	50.00	UG		0.00
System Monitoring Compounds							
30) 1,2-Dichloroethane-d4	6.371	65	241520	63.24	UG		0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 126.48%				
41) Toluene-d8	8.544	98	470067	49.98	UG		0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 99.96%				
59) Bromofluorobenzene	11.620	95	256060	57.50	UG		0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 115.00%				
Target Compounds							Qvalue
13) Methylene chloride	3.955	84	11094	3.72	UG		98
33) Trichloroethene	7.173	95	1376	0.37	UG	#	64
45) Tetrachloroethene	9.254	166	7274	1.95	UG		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1753.D
Acq On : 1 Jul 2015 9:55
Operator : XING
Sample : E-7_(3.0-3.5)/,05428-028,S,5.3g,10.2
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Quant Time: Jul 01 10:26:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



FS061615.M Wed Jul 01 10:26:34 2015 RP1

LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1753.D
Acq On : 1 Jul 2015 9:55
Operator : XING
Sample : E-7_(3.0-3.5)/,05428-028,S,5.3g,10.2
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.2
Stop Thrs : 0

Filtering: 5
Min Area: 1 % of largest Peak
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1753.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.976	31	36	52	rVB3	22029	70899	5.14%	1.012%
2	2.179	54	56	70	rVB7	3488	16718	1.21%	0.239%
3	2.777	109	115	118	rBV5	4816	14870	1.08%	0.212%
4	2.869	118	124	133	rVB5	5553	22900	1.66%	0.327%
5	3.955	226	231	245	rVV	18707	56512	4.09%	0.807%
6	4.138	245	249	259	rVB4	3397	14274	1.03%	0.204%
7	5.417	370	375	390	rVB	10347	29993	2.17%	0.428%
8	6.057	431	438	447	rBV	459762	979037	70.94%	13.974%
9	6.371	460	469	479	rBV	253222	545861	39.55%	7.791%
10	6.869	513	518	534	rBV	540354	1120696	81.20%	15.996%
11	8.544	675	683	688	rBV	734287	1380093	100.00%	19.698%
12	9.102	731	738	744	rBV	6042	14112	1.02%	0.201%
13	9.244	744	752	758	rVB	24031	50165	3.63%	0.716%
14	10.219	841	848	859	rBV	676244	1348951	97.74%	19.254%
15	11.620	978	986	998	rBV	752006	1341117	97.18%	19.142%

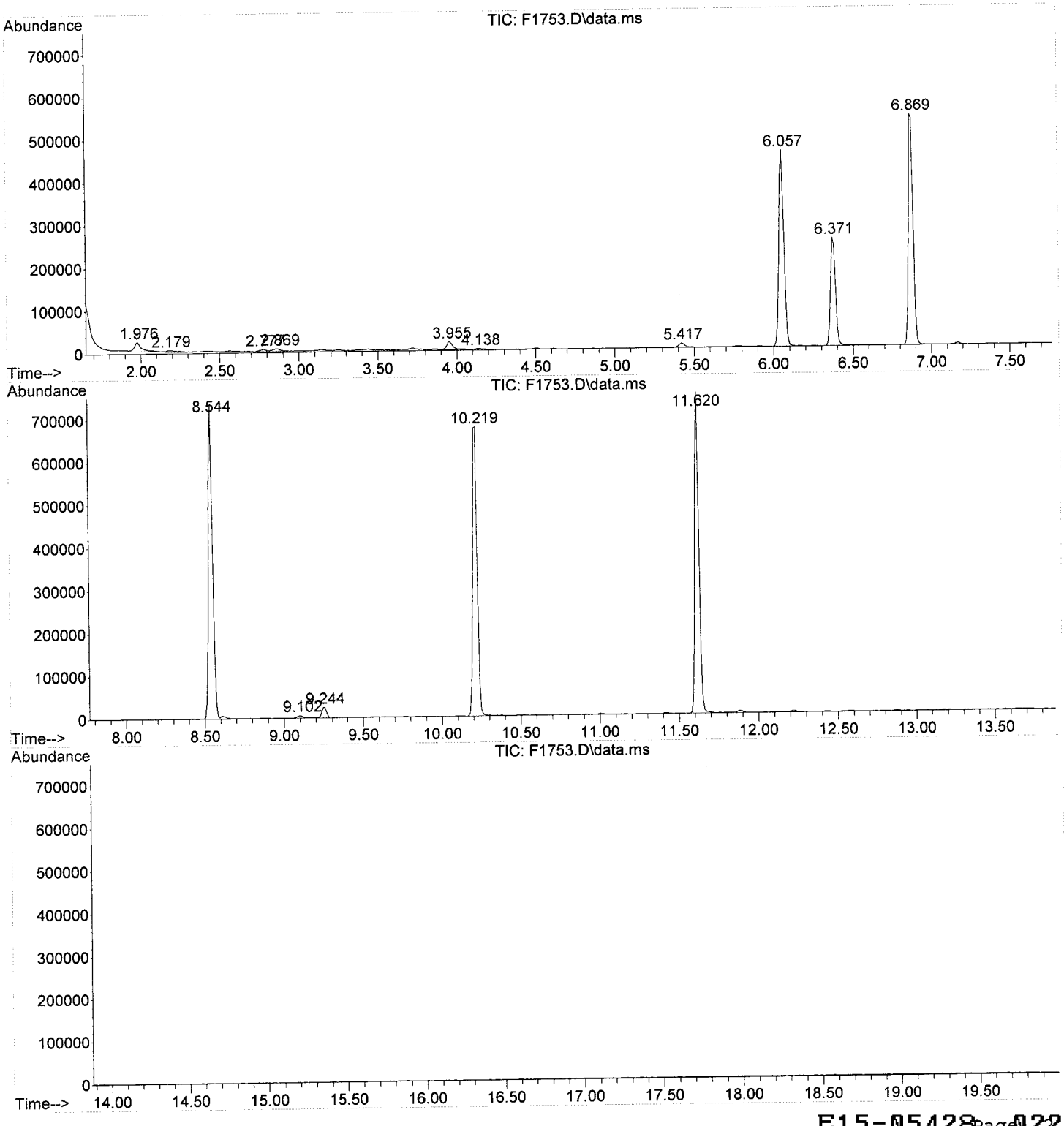
Sum of corrected areas: 7006198

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1753.D
Acq On : 1 Jul 2015 9:55
Operator : XING
Sample : E-7_(3.0-3.5)/,05428-028,S,5.3g,10.2
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1754.D
Acq On : 1 Jul 2015 10:25
Operator : XING
Sample : E-7_(4.5-5.0)/,05428-029,S,5.6g,11.8
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jul 01 10:48:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

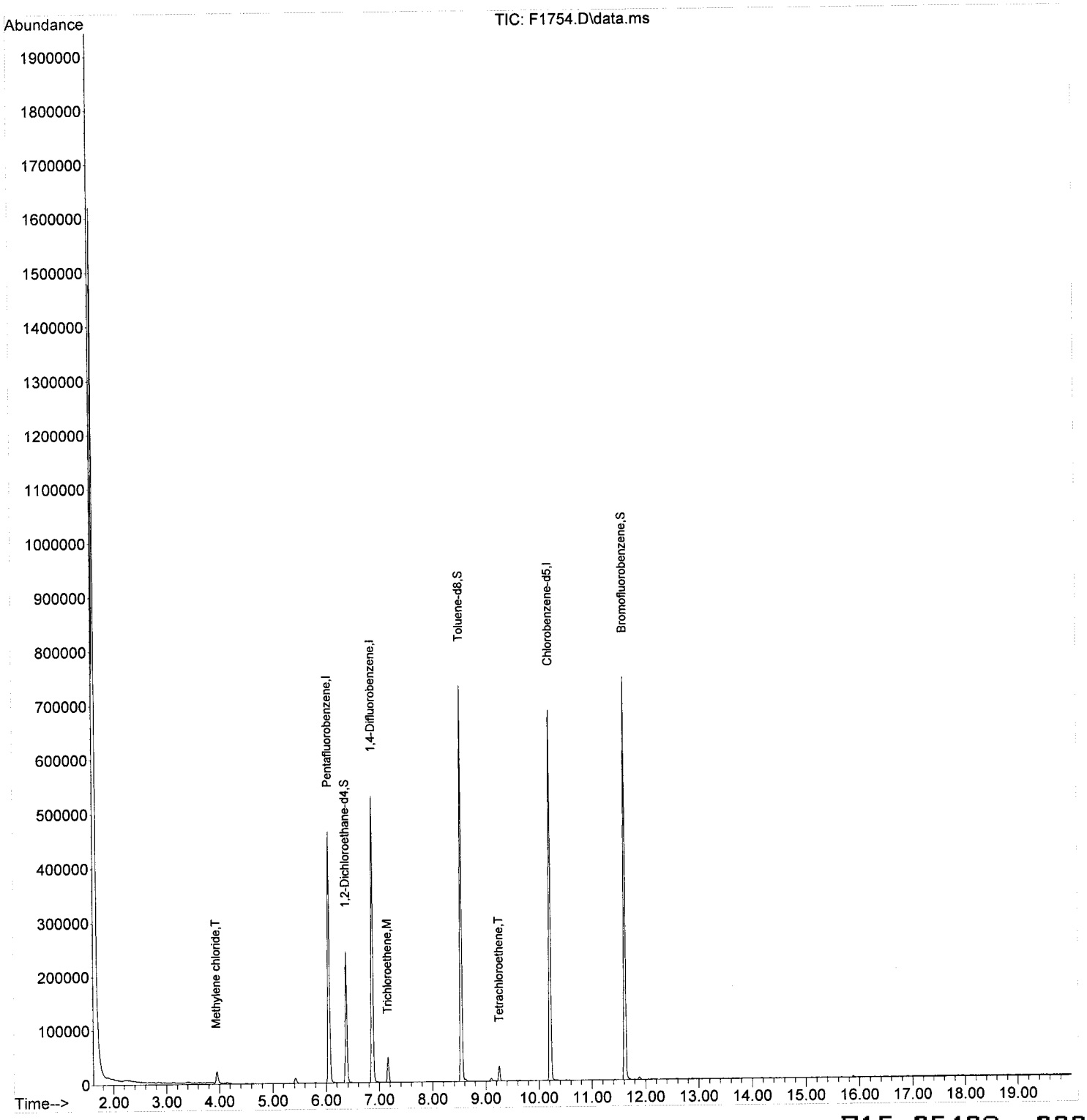
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	292924	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	397210	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	344510	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	235638	60.73	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 121.46%			
41) Toluene-d8	8.544	98	469192	50.70	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.40%			
59) Bromofluorobenzene	11.620	95	256343	57.97	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 115.94%			
Target Compounds						Qvalue
13) Methylene chloride	3.945	84	12476	4.12	UG	98
33) Trichloroethene	7.163	95	16516	4.57	UG	93
45) Tetrachloroethene	9.254	166	8243	2.25	UG	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1754.D
Acq On : 1 Jul 2015 10:25
Operator : XING
Sample : E-7_(4.5-5.0)/,05428-029,S,5.6g,11.8
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Jul 01 10:48:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1754.D
Acq On : 1 Jul 2015 10:25
Operator : XING
Sample : E-7_(4.5-5.0)/,05428-029,S,5.6g,11.8
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1754.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	241	rVB	21530	56210	4.05%	0.813%
2	5.417	368	375	388	rBV	9832	28109	2.02%	0.406%
3	6.056	430	438	451	rBV	464660	990009	71.32%	14.315%
4	6.371	464	469	488	rBV	243221	524602	37.79%	7.585%
5	6.879	513	519	534	rBV	529261	1100408	79.27%	15.911%
6	7.163	541	547	555	rVB	45861	95423	6.87%	1.380%
7	8.544	677	683	700	rBV	732060	1388151	100.00%	20.072%
8	9.254	744	753	759	rVB	27732	56322	4.06%	0.814%
9	10.219	842	848	870	rBV	684910	1343302	96.77%	19.423%
10	11.620	978	986	1000	rBV	744565	1333357	96.05%	19.280%

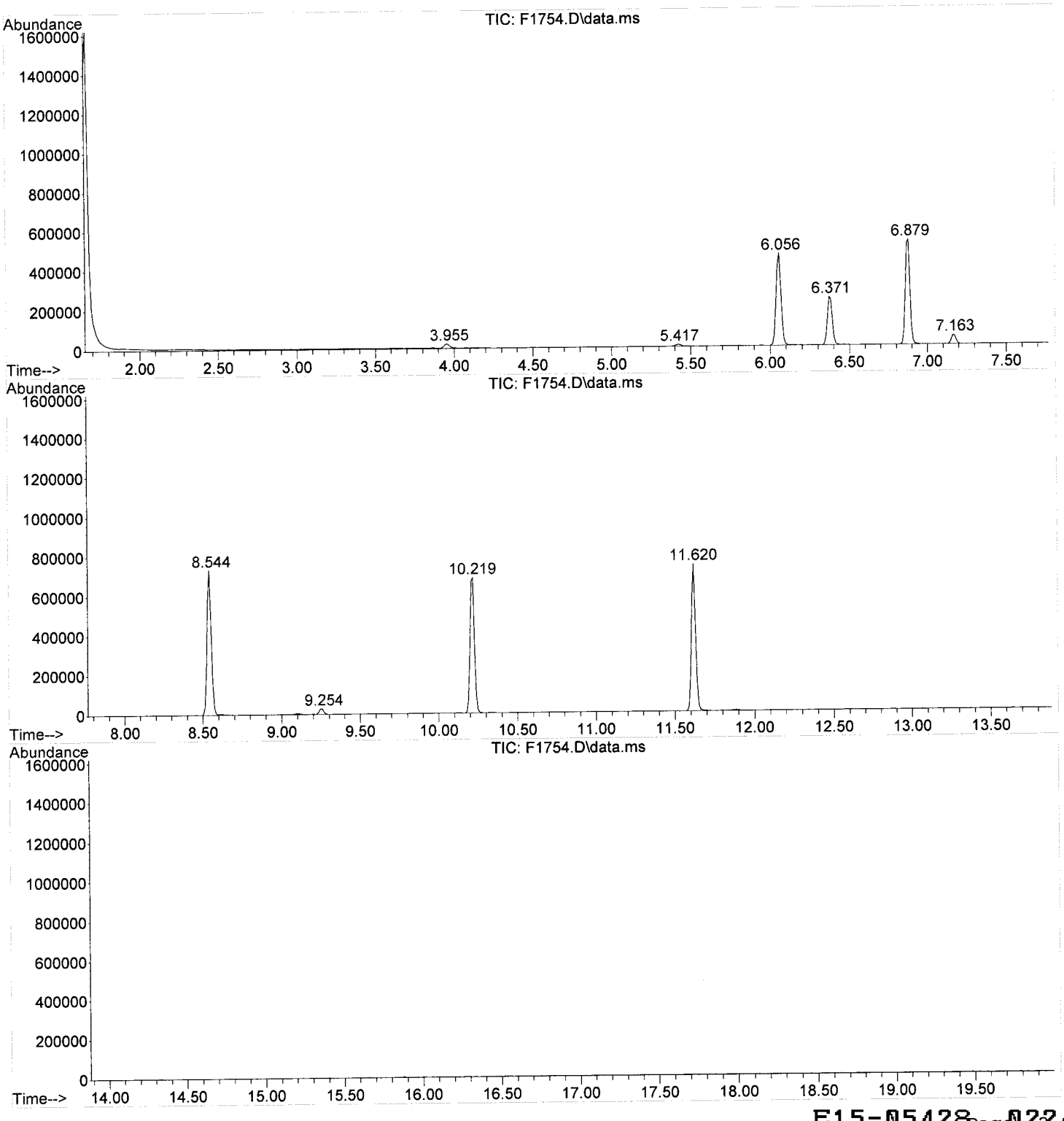
Sum of corrected areas: 6915893

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1754.D
Acq On : 1 Jul 2015 10:25
Operator : XING
Sample : E-7_(4.5-5.0)/,05428-029,S,5.6g,11.8
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P



FS061615.M Wed Jul 01 10:48:53 2015 RP1

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8642.D
Acq On : 3 Jul 2015 1:39
Operator : MEI
Sample : FB-062315,05428-030,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/24/15,
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 06 11:20:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	340983	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	507502	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	454181	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	183608	54.13	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 108.26%			
41) Toluene-d8	8.58	98	564718	50.33	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 100.66%			
59) Bromofluorobenzene	11.65	95	217620	47.67	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.34%			

Target Compounds	Qvalue

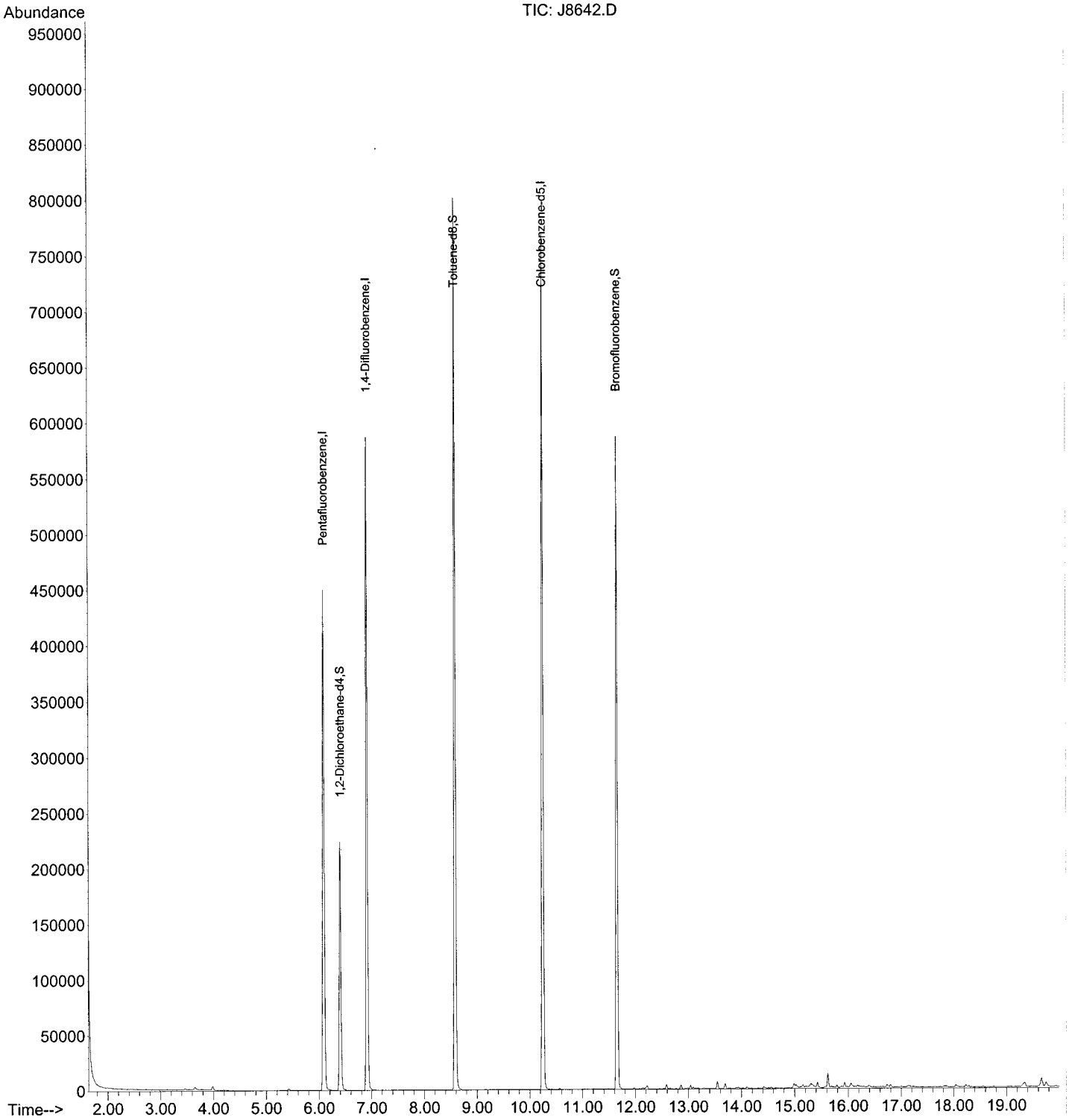
(#) = qualifier out of range (m) = manual integration (+) = signals summed

E15-05428_0225

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8642.D
Acq On : 3 Jul 2015 1:39
Operator : MEI
Sample : FB-062315,05428-030,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/24/15,
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Jul 06 11:20:20 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8642.D
Acq On : 3 Jul 2015 1:39
Operator : MEI
Sample : FB-062315,05428-030,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/24/15,
ALS Vial : 35 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM061215.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.091	431	441	459	rBB	449776	964991	63.84%	14.417%
2	6.404	464	472	485	rBB	224049	483240	31.97%	7.220%
3	6.911	516	522	542	rBB	586802	1179233	78.02%	17.618%
4	8.582	678	687	701	rBB	801351	1511469	100.00%	22.582%
5	10.252	846	852	866	rBB	769716	1439598	95.24%	21.508%
6	11.650	984	990	1002	rBB	586863	1072687	70.97%	16.026%
7	15.619	1373	1382	1387	rBB4	12625	22973	1.52%	0.343%
8	19.660	1773	1781	1787	rBB4	7876	19075	1.26%	0.285%

Sum of corrected areas: 6693266

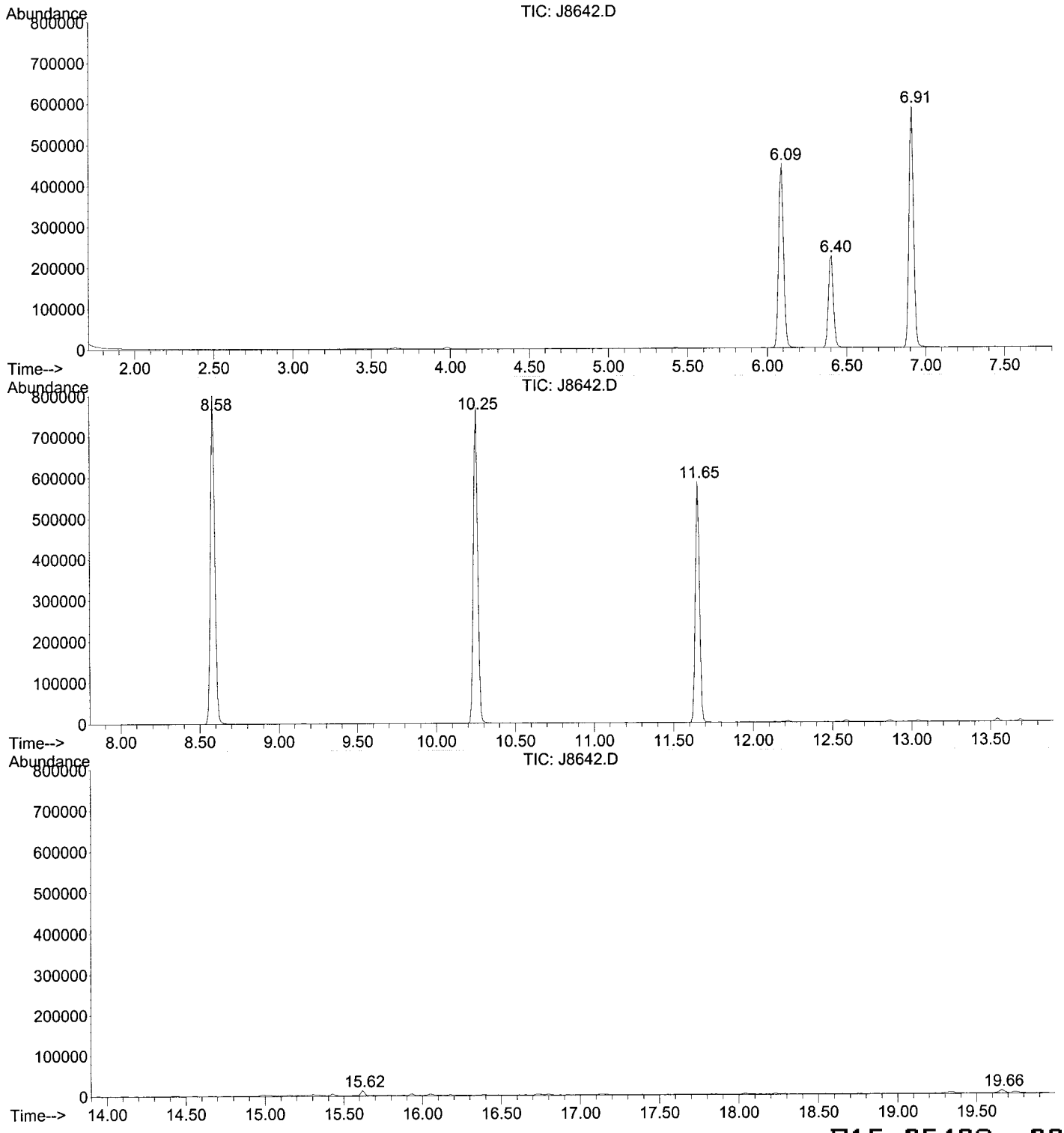
E15-05428_0227

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8642.D
Acq On : 3 Jul 2015 1:39
Operator : MEI
Sample : FB-062315,05428-030,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/23/15,06/24/15,
ALS Vial : 35 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8643.D
Acq On : 3 Jul 2015 2:05
Operator : MEI
Sample : TB-062415,05428-031,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 06 11:21:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	296859	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	448291	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	385567	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	160392	54.32	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 108.64%			
41) Toluene-d8	8.58	98	484597	48.89	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 97.78%			
59) Bromofluorobenzene	11.65	95	183622	47.38	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 94.76%			

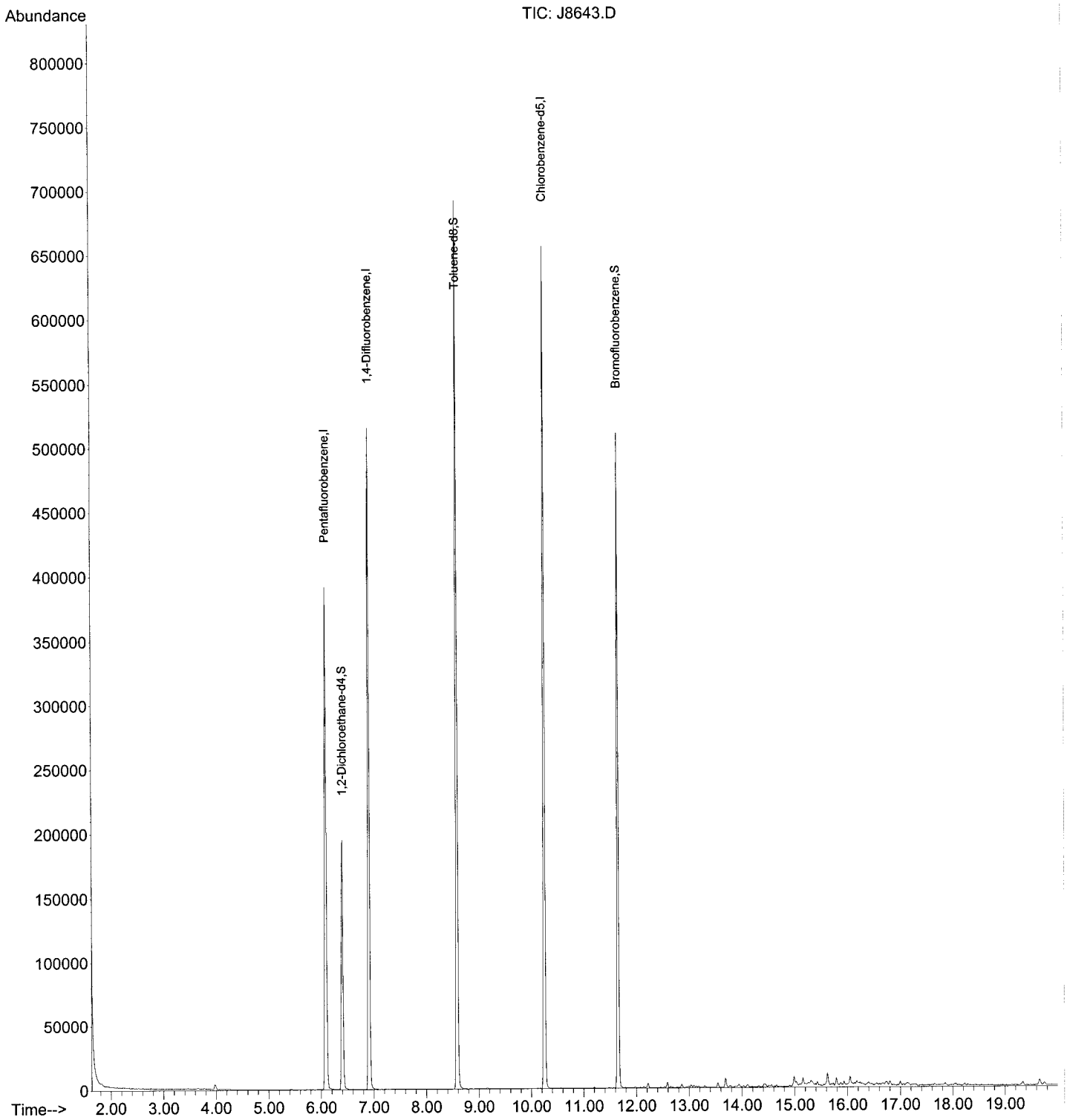
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8643.D
Acq On : 3 Jul 2015 2:05
Operator : MEI
Sample : TB-062415,05428-031,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 36 Sample Multiplier: 1

Quant Time: Jul 06 11:21:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8643.D
Acq On : 3 Jul 2015 2:05
Operator : MEI
Sample : TB-062415,05428-031,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 36 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM061215.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.091	435	441	460	rBB	391464	843142	64.94%	14.480%
2	6.405	464	472	486	rBB	194576	422754	32.56%	7.260%
3	6.911	513	522	543	rBB	515420	1042647	80.31%	17.906%
4	8.582	680	687	707	rBB	691894	1298339	100.00%	22.297%
5	10.253	846	852	866	rBB	655932	1229597	94.71%	21.116%
6	11.650	984	990	1000	rBB	510704	914608	70.44%	15.707%
7	13.685	1183	1191	1196	rBB2	6839	13076	1.01%	0.225%
8	14.992	1314	1320	1328	rBB6	7258	20772	1.60%	0.357%
9	15.620	1372	1382	1387	rBB5	9721	24252	1.87%	0.416%
10	16.045	1417	1424	1431	rBB4	6092	13796	1.06%	0.237%

Sum of corrected areas: 5822983

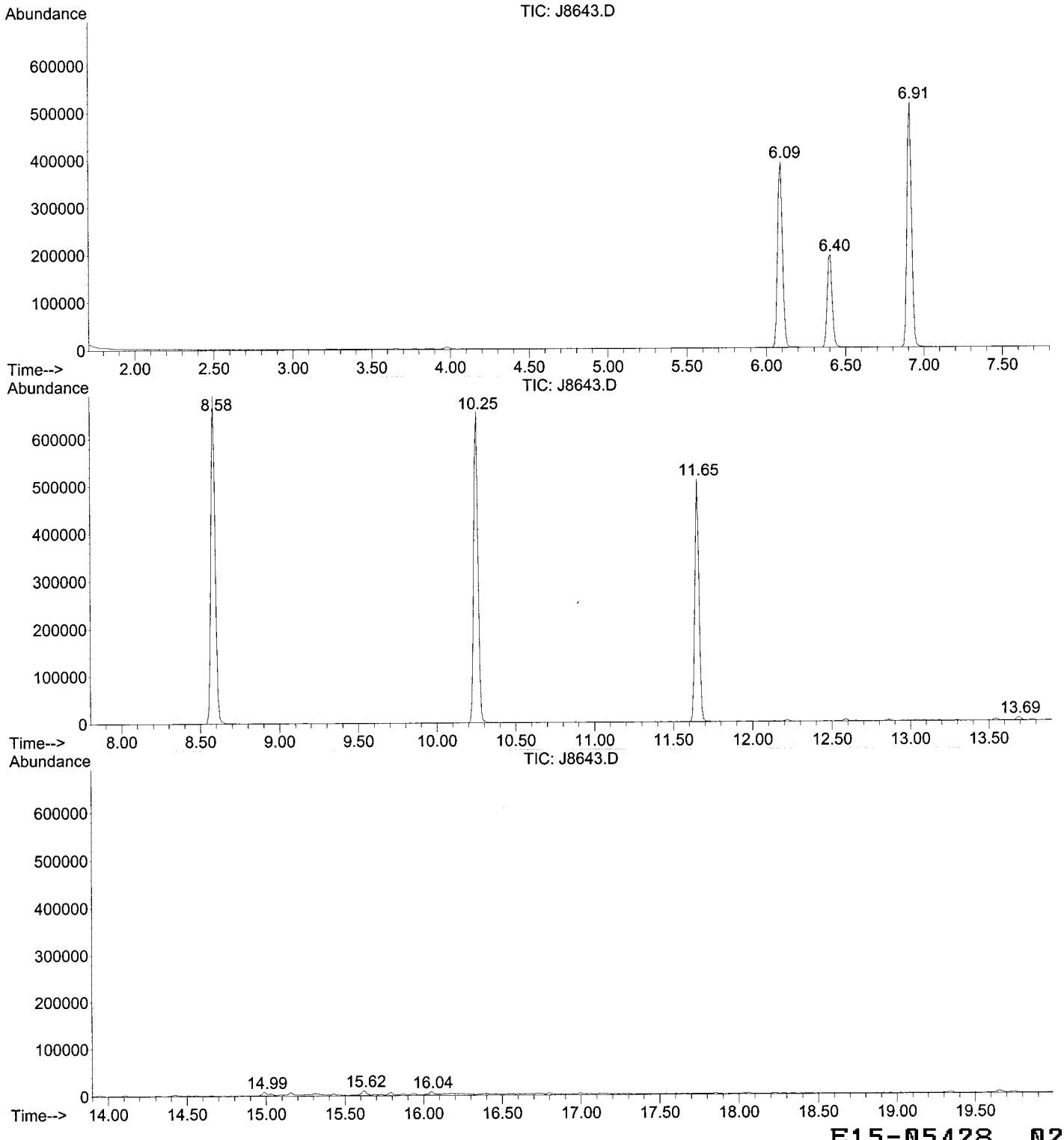
E15-05428_0231

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8643.D
Acq On : 3 Jul 2015 2:05
Operator : MEI
Sample : TB-062415,05428-031,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 36 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8644.D
Acq On : 3 Jul 2015 2:32
Operator : MEI
Sample : FB-062415,05428-032,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 06 11:28:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	349133	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	515247	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	451621	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.40	65	183267	52.77	UG	0.00
Spiked Amount 50.000	Range 43 - 133		Recovery = 105.54%			
41) Toluene-d8	8.58	98	561148	49.26	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.52%			
59) Bromofluorobenzene	11.65	95	216924	47.79	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 95.58%			

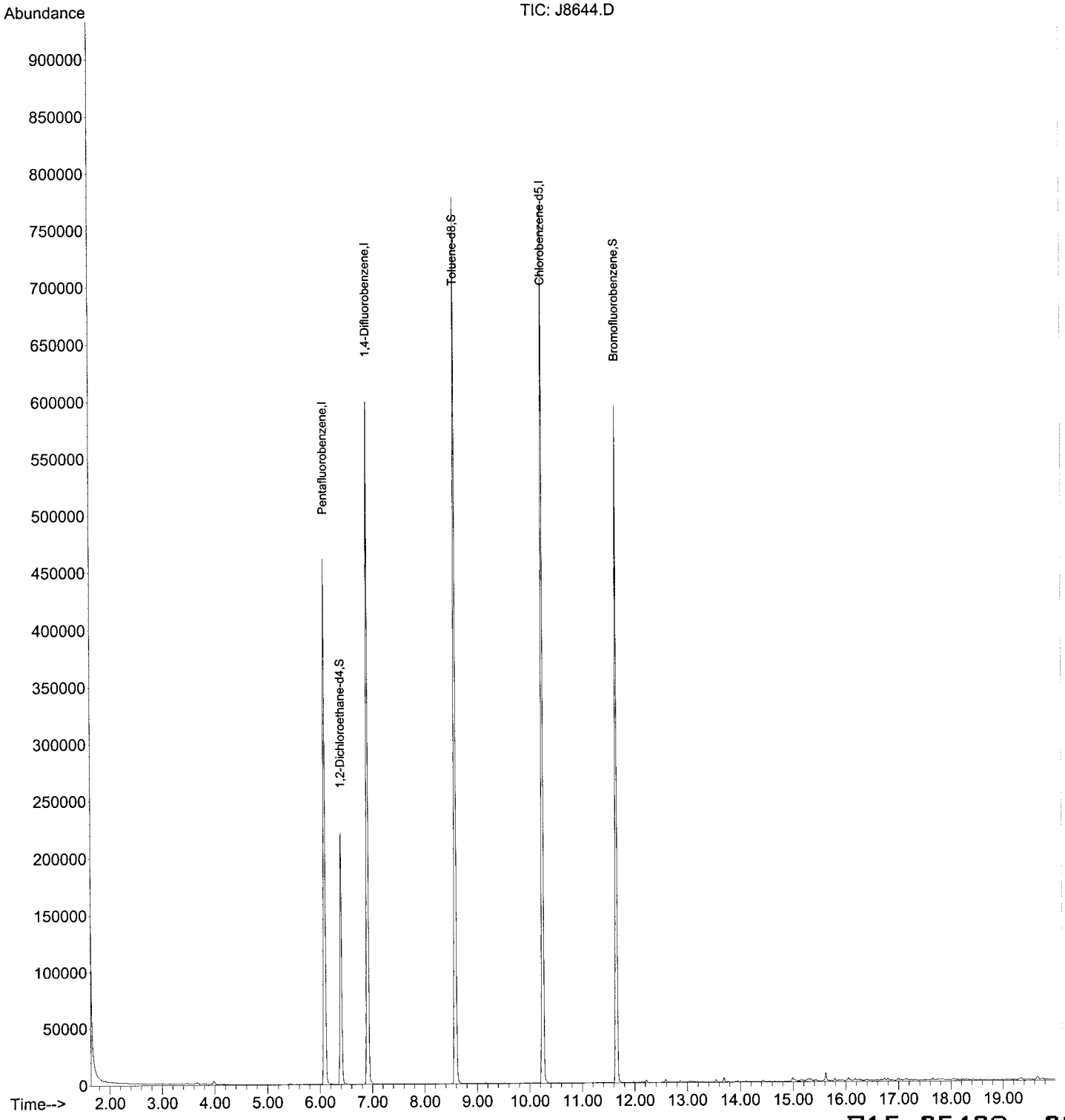
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8644.D
Acq On : 3 Jul 2015 2:32
Operator : MEI
Sample : FB-062415,05428-032,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Jul 06 11:28:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8644.D
Acq On : 3 Jul 2015 2:32
Operator : MEI
Sample : FB-062415,05428-032,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 37 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM061215.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.091	434	441	459	rBB	461208	990070	65.85%	14.796%
2	6.404	461	472	488	rBB	221516	481997	32.06%	7.203%
3	6.911	514	522	539	rBB	599172	1196569	79.58%	17.882%
4	8.582	680	687	703	rBB	777655	1503538	100.00%	22.470%
5	10.252	843	852	865	rBB	770037	1444875	96.10%	21.593%
6	11.650	982	990	1001	rBB	594379	1074326	71.45%	16.055%

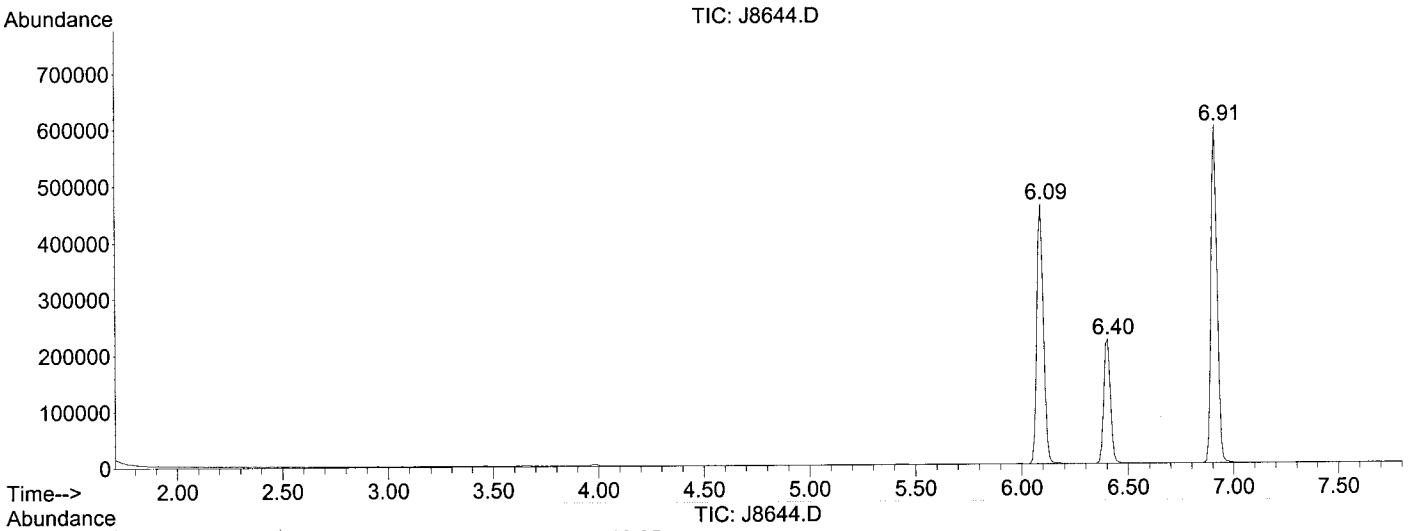
Sum of corrected areas: 6691375

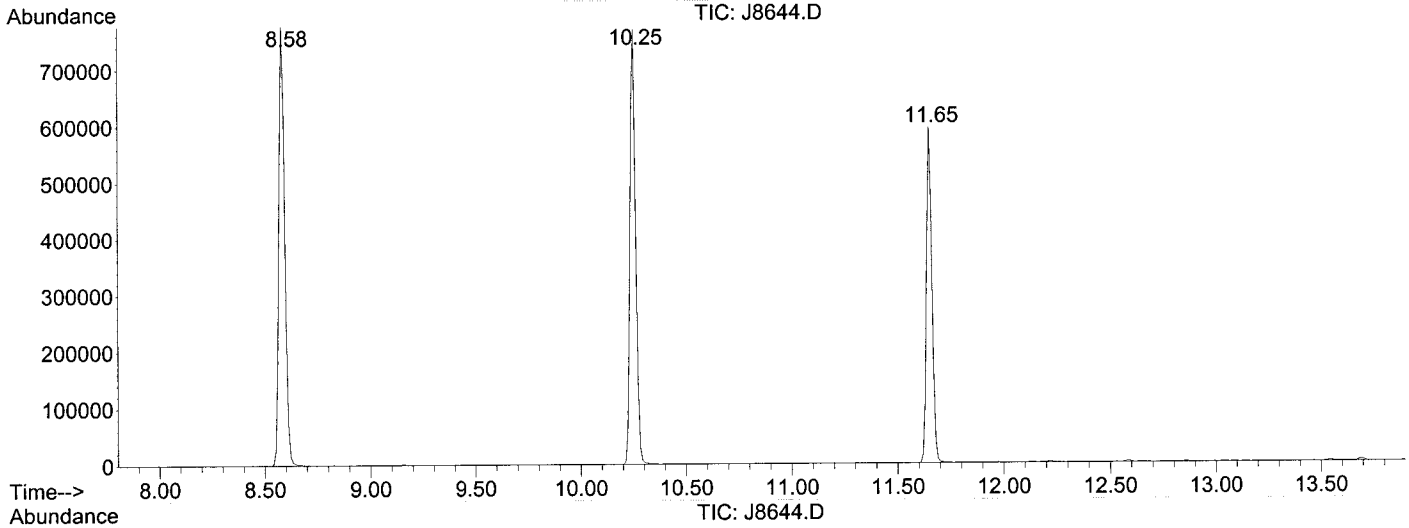
LSC Report - Integrated Chromatogram

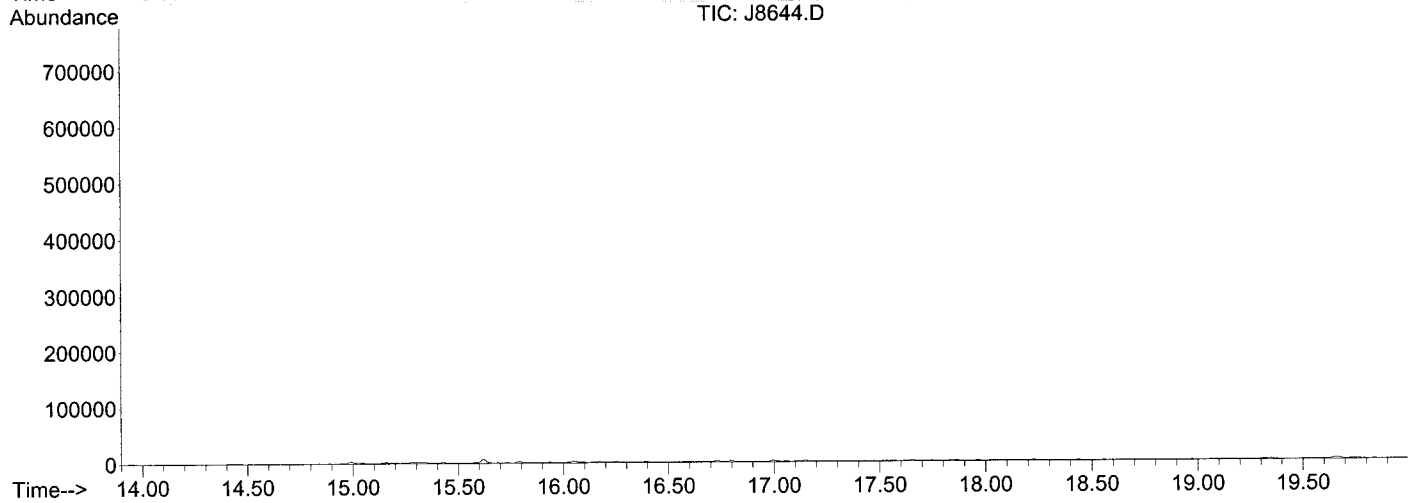
Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8644.D
Acq On : 3 Jul 2015 2:32
Operator : MEI
Sample : FB-062415,05428-032,A,5ml,100
Misc : AMEC-SMRST/AMTRAK_,06/24/15,06/24/15,
ALS Vial : 37 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P







INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150702-02
Client ID: BLKA150702-02
Date Received:
Date Analyzed: 07/03/2015
Data file: J8641.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		1.00	0.685
Chloromethane	ND		1.00	0.493
Vinyl chloride	ND		1.00	0.463
Bromomethane	ND		1.00	0.684
Chloroethane	ND		1.00	0.829
Trichlorofluoromethane	ND		1.00	0.813
1,1-Dichloroethene	ND		1.00	0.491
Acetone	ND		2.00	1.43
Carbon disulfide	ND		1.00	0.505
Methylene chloride	ND		2.00	1.99
trans-1,2-Dichloroethene	ND		1.00	0.544
Methyl tert-butyl ether (MTBE)	ND		1.00	0.491
1,1-Dichloroethane	ND		1.00	0.358
cis-1,2-Dichloroethene	ND		1.00	0.479
2-Butanone (MEK)	ND		1.00	0.872
Bromochloromethane	ND		1.00	0.636
Chloroform	ND		1.00	0.511
1,1,1-Trichloroethane	ND		1.00	0.485
Carbon tetrachloride	ND		1.00	0.668
1,2-Dichloroethane (EDC)	ND		1.00	0.573
Benzene	ND		1.00	0.388
Trichloroethene	ND		1.00	0.357
1,2-Dichloropropane	ND		1.00	0.556
1,4-Dioxane	ND		200	82.7
Bromodichloromethane	ND		1.00	0.526
cis-1,3-Dichloropropene	ND		1.00	0.441
4-Methyl-2-pentanone (MIBK)	ND		1.00	0.867

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA150702-02
Client ID: BLKA150702-02
Date Received:
Date Analyzed: 07/03/2015
Data file: J8641.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Toluene	ND		1.00	0.370
trans-1,3-Dichloropropene	ND		1.00	0.416
1,1,2-Trichloroethane	ND		1.00	0.633
Tetrachloroethene	ND		1.00	0.495
2-Hexanone	ND		1.00	0.693
Dibromochloromethane	ND		1.00	0.516
1,2-Dibromoethane (EDB)	ND		1.00	0.677
Chlorobenzene	ND		1.00	0.395
Ethylbenzene	ND		1.00	0.420
Total Xylenes	ND		2.00	1.04
Styrene	ND		1.00	0.370
Bromoform	ND		1.00	0.663
Isopropylbenzene	ND		1.00	0.581
1,1,2,2-Tetrachloroethane	ND		1.00	0.691
1,3-Dichlorobenzene	ND		1.00	0.416
1,4-Dichlorobenzene	ND		1.00	0.409
1,2-Dichlorobenzene	ND		1.00	0.401
1,2-Dibromo-3-chloropropane	ND		1.00	0.930
1,2,4-Trichlorobenzene	ND		1.00	0.483
1,2,3-Trichlorobenzene	ND		1.00	0.449
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.00	0.972
Methyl acetate	ND		1.00	0.897
Cyclohexane	ND		1.00	0.818
Methylcyclohexane	ND		1.00	0.773
1,3-Dichloropropene (cis- and trans-)	ND		1.00	0.441

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0238

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKA150702-02
Client ID: BLKA150702-02
Date Received:
Date Analyzed: 07/03/2015
Data file: J8641.D

GC/MS Column: DB-624
Sample wt/vol: 5ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

CAS #	Compound	Estimated Concentration	Q	Retention Time

No peaks detected

Total TICs = 0

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8641.D
Acq On : 3 Jul 2015 1:12
Operator : MEI
Sample : BLKA150702-02,BLKA150702-02,A,5ml,100
Misc :
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 06 11:18:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.09	168	350775	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.91	114	522113	50.00	UG	0.00
50) Chlorobenzene-d5	10.25	117	453331	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.39	65	187821	53.83	UG	-0.01
Spiked Amount 50.000	Range 43 - 133		Recovery = 107.66%			
41) Toluene-d8	8.58	98	571209	49.48	UG	0.00
Spiked Amount 50.000	Range 39 - 137		Recovery = 98.96%			
59) Bromofluorobenzene	11.65	95	219443	48.16	UG	0.00
Spiked Amount 50.000	Range 23 - 145		Recovery = 96.32%			

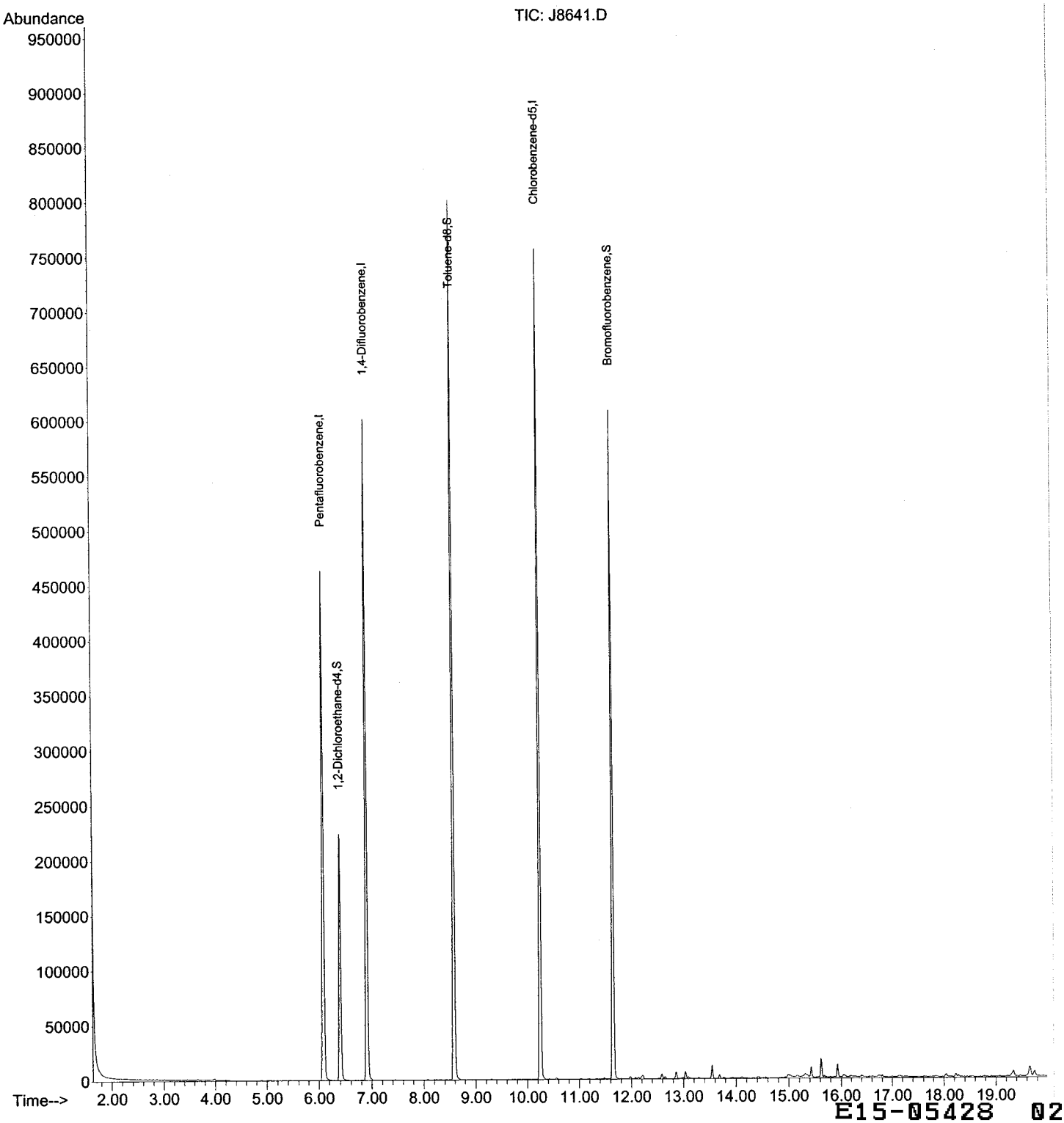
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8641.D
Acq On : 3 Jul 2015 1:12
Operator : MEI
Sample : BLKA150702-02,BLKA150702-02,A,5ml,100
Misc :
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Jul 06 11:18:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Mon Jun 15 12:24:18 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8641.D
Acq On : 3 Jul 2015 1:12
Operator : MEI
Sample : BLKA150702-02,BLKA150702-02,A,5ml,100
Misc :
ALS Vial : 34 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.001 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Tangent else baseline drop >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\JM061215.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	6.091	431	441	458	rBB	463622	1002896	65.45%	14.578%
2	6.394	465	471	488	rBB	224012	491672	32.09%	7.147%
3	6.911	514	522	541	rBB	601533	1217544	79.46%	17.698%
4	8.582	675	687	711	rBB	800748	1532283	100.00%	22.273%
5	10.252	846	852	865	rBB	756531	1441962	94.11%	20.961%
6	11.650	984	990	1002	rBB	609154	1087308	70.96%	15.805%
7	13.543	1173	1177	1183	rBB	12264	19157	1.25%	0.278%
8	15.619	1377	1382	1386	rBB2	17013	28637	1.87%	0.416%
9	15.933	1408	1413	1418	rBB	11497	17775	1.16%	0.258%
10	19.336	1741	1749	1754	rBB4	5093	15571	1.02%	0.226%
11	19.660	1771	1781	1785	rBB3	8368	24613	1.61%	0.358%

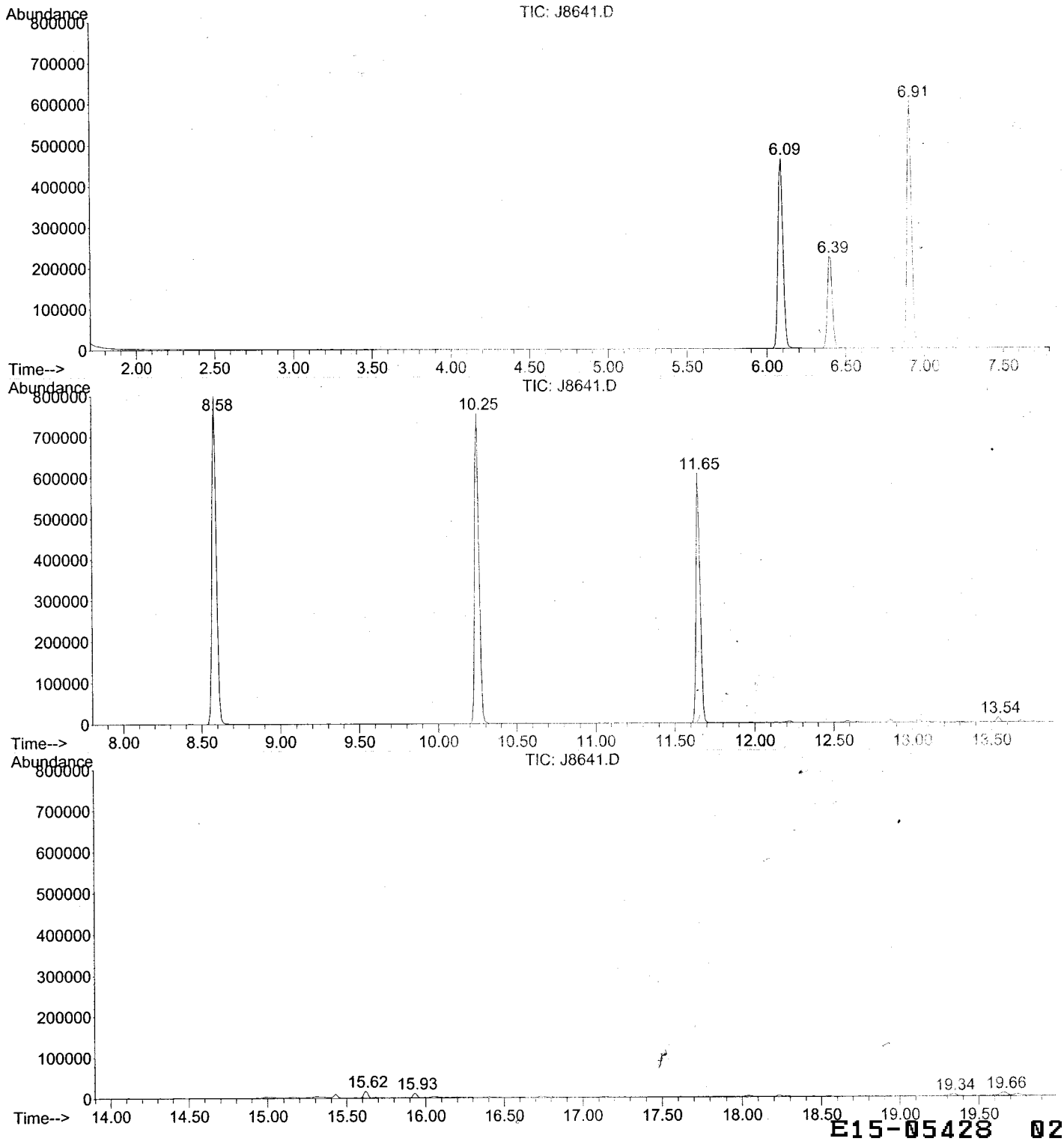
Sum of corrected areas: 6879418

LSC Report - Integrated Chromatogram

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : J8641.D
Acq On : 3 Jul 2015 1:12
Operator : MEI
Sample : BLKA150702-02,BLKA150702-02,A,5ml,100
Misc :
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\JM061215.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\DATABASE\NIST05A.L
TIC Integration Parameters: LSCINT.P



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
Data file: F1735.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.00044
Chloromethane	ND		0.001	0.000449
Vinyl chloride	ND		0.001	0.000426
Bromomethane	ND		0.001	0.00064
Chloroethane	ND		0.001	0.000507
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000488
Acetone	ND		0.005	0.000697
Carbon disulfide	ND		0.001	0.000572
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.001	0.000374
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000373
1,1-Dichloroethane	ND		0.001	0.000269
cis-1,2-Dichloroethene	ND		0.001	0.000319
2-Butanone (MEK)	ND		0.001	0.000748
Bromochloromethane	ND		0.001	0.000422
Chloroform	ND		0.001	0.00042
1,1,1-Trichloroethane	ND		0.001	0.000437
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000348
Benzene	ND		0.001	0.000272
Trichloroethene	ND		0.001	0.000322
1,2-Dichloropropane	ND		0.001	0.000354
1,4-Dioxane	ND		0.200	0.020
Bromodichloromethane	ND		0.001	0.000418
cis-1,3-Dichloropropene	ND		0.001	0.0004
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000501

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
Data file: F1735.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.000291
trans-1,3-Dichloropropene	ND		0.001	0.000305
1,1,2-Trichloroethane	ND		0.001	0.000235
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000578
Dibromochloromethane	ND		0.001	0.000295
1,2-Dibromoethane (EDB)	ND		0.001	0.000353
Chlorobenzene	ND		0.001	0.000336
Ethylbenzene	ND		0.001	0.000342
Total Xylenes	ND		0.002	0.000803
Styrene	ND		0.001	0.000358
Bromoform	ND		0.001	0.000461
Isopropylbenzene	ND		0.001	0.000438
1,1,2,2-Tetrachloroethane	ND		0.001	0.000392
1,3-Dichlorobenzene	ND		0.001	0.000471
1,4-Dichlorobenzene	ND		0.001	0.00053
1,2-Dichlorobenzene	ND		0.001	0.000482
1,2-Dibromo-3-chloropropane	ND		0.001	0.000639
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000573
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000691
Methyl acetate	ND		0.001	0.000539
Cyclohexane	ND		0.005	0.000519
Methylcyclohexane	ND		0.001	0.000558
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.0004

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0245

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150630-02
Client ID: BLKS150630-02
Date Received:
Date Analyzed: 07/01/2015
Date File: F1735.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1735.D
Acq On : 1 Jul 2015 00:49
Operator : XING
Sample : BLKS150630-02,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 09:55:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.057	168	336849	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	459190	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	407144	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	255011	57.15	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 114.30%			
41) Toluene-d8	8.544	98	539924	50.47	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.94%			
59) Bromofluorobenzene	11.620	95	294173	56.29	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 112.58%			

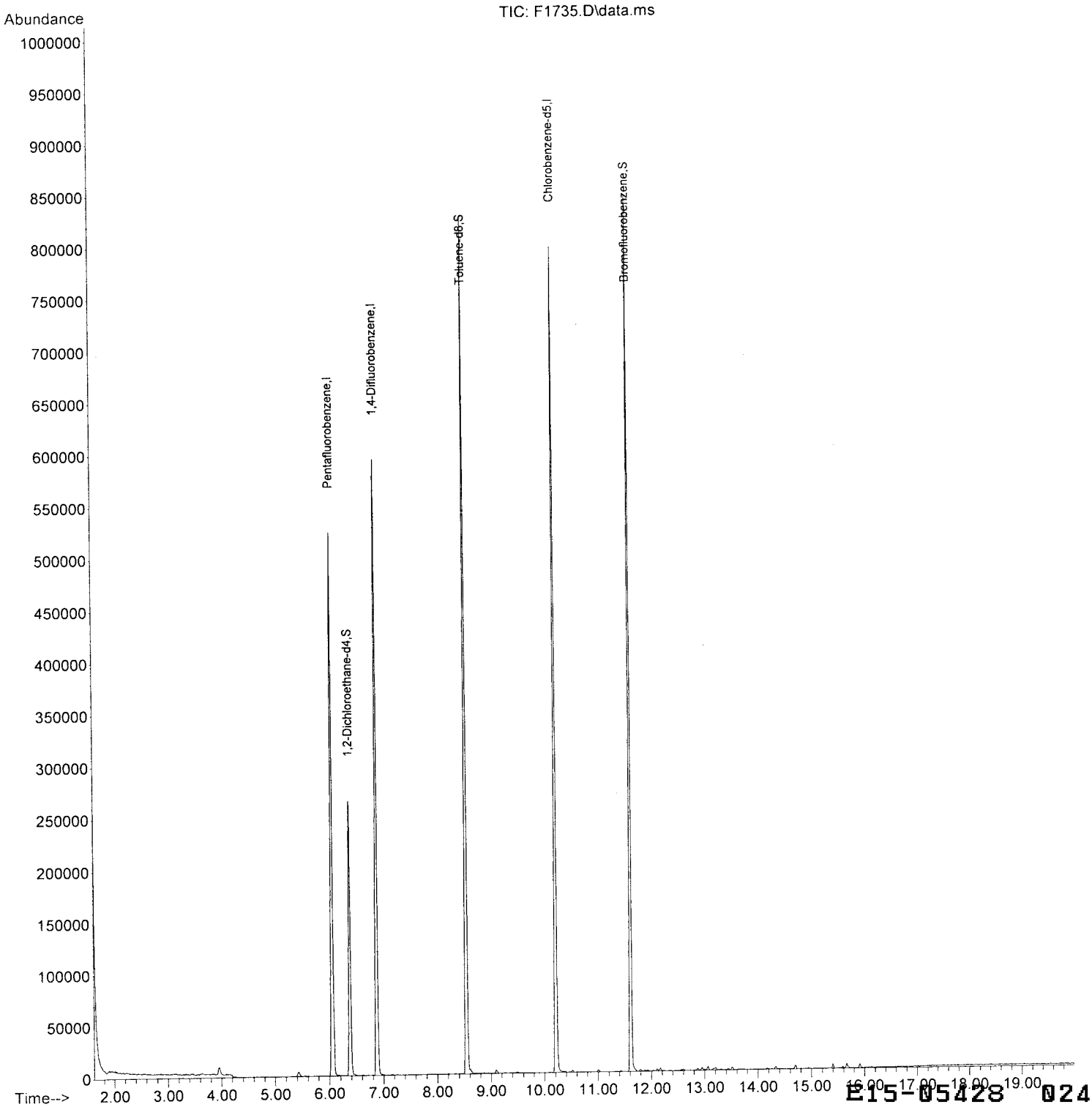
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1735.D
Acq On : 1 Jul 2015 00:49
Operator : XING
Sample : BLKS150630-02,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Jul 01 09:55:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1735.D
Acq On : 1 Jul 2015 00:49
Operator : XING
Sample : BLKS150630-02,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1735.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	238	rVB	7358	20492	1.32%	0.272%
2	6.057	430	438	447	rBV	523832	1100478	70.69%	14.626%
3	6.371	460	469	484	rBV	265395	578797	37.18%	7.692%
4	6.879	513	519	536	rBV	593384	1234836	79.32%	16.412%
5	8.544	675	683	698	rBV	826567	1556809	100.00%	20.691%
6	10.219	838	848	862	rBV	797008	1529001	98.21%	20.321%
7	11.620	980	986	999	rBV	845529	1503793	96.59%	19.986%

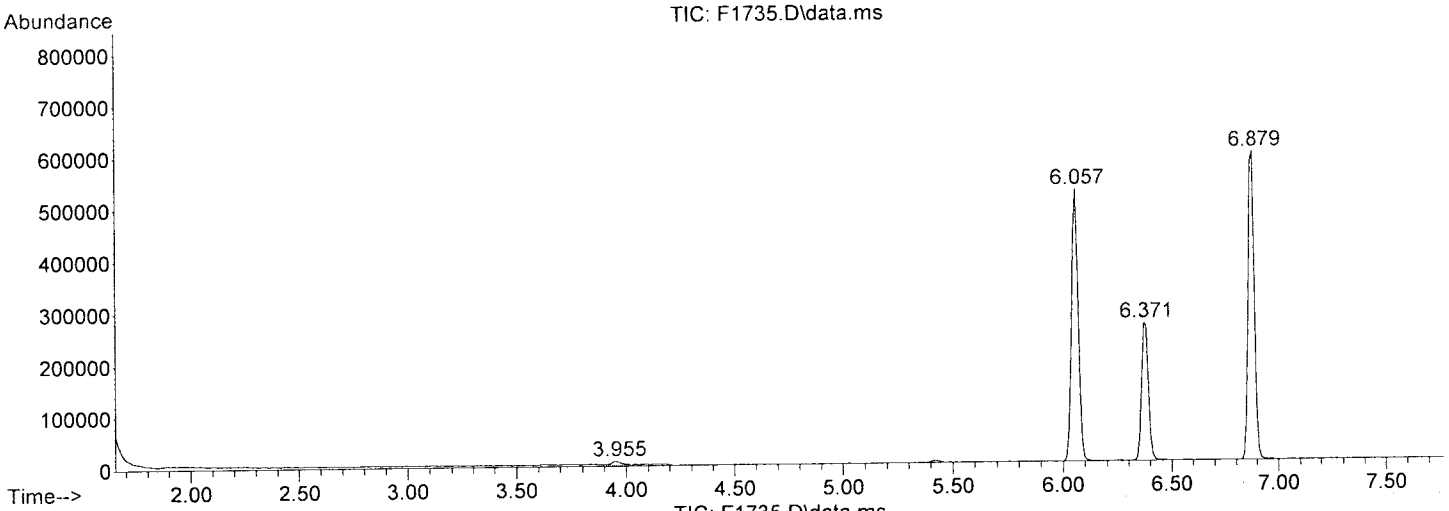
Sum of corrected areas: 7524206

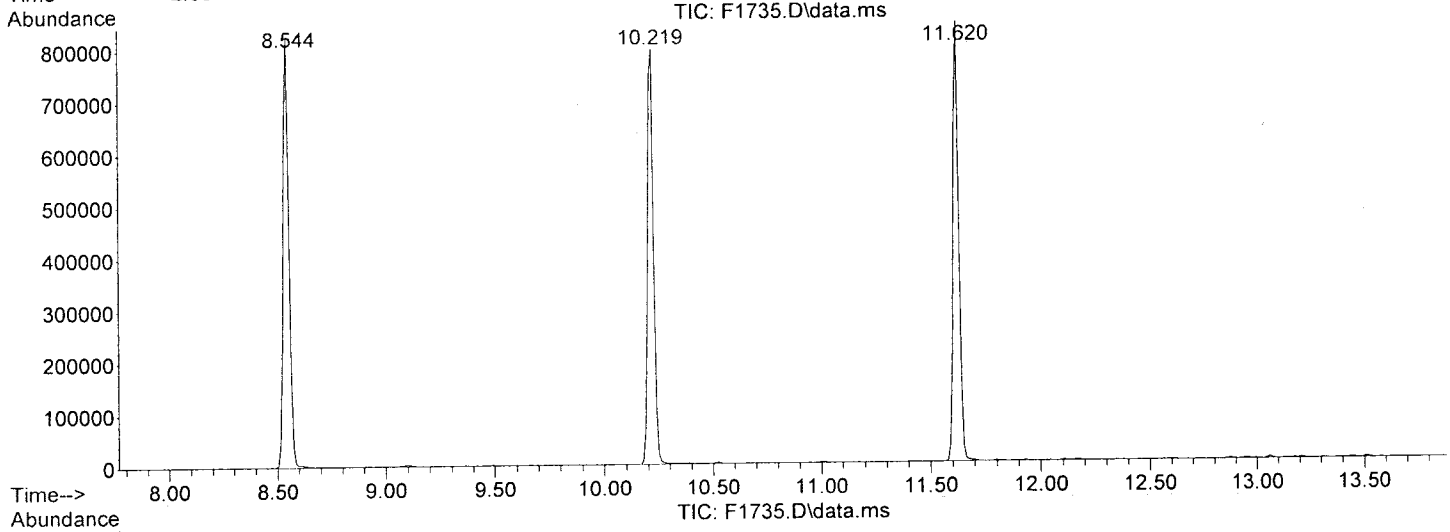
LSC Report - Integrated Chromatogram

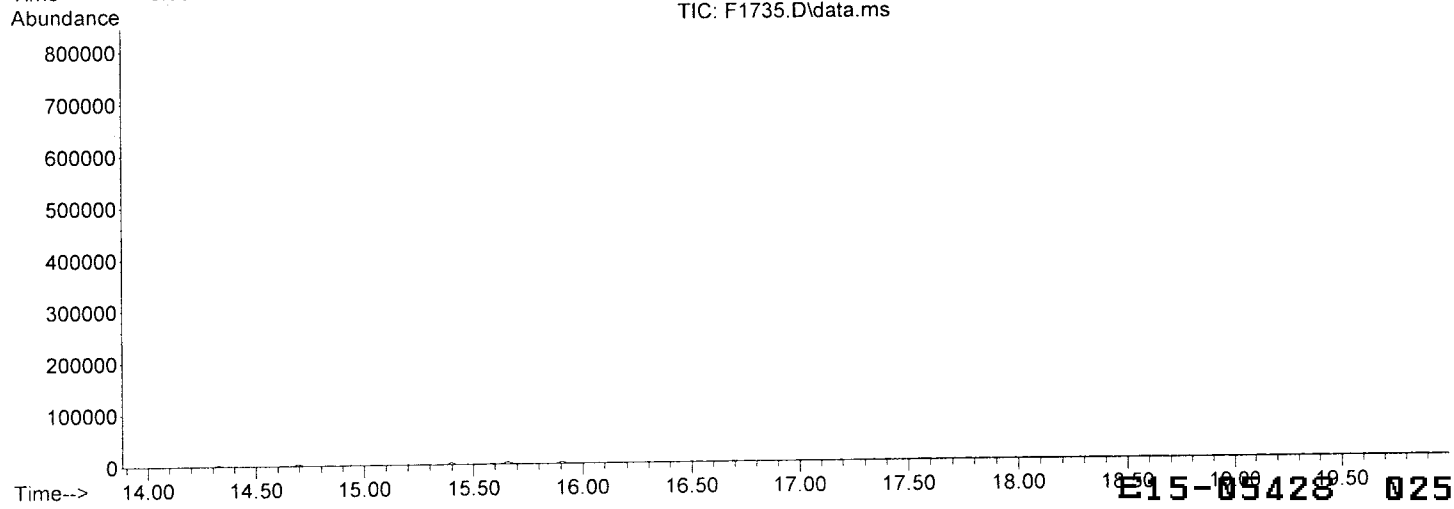
Data Path : C:\msdchem\1\DATA\06-30-15\
Data File : F1735.D
Acq On : 1 Jul 2015 00:49
Operator : XING
Sample : BLKS150630-02,BLKS150630-02,S,5g,0
Misc :
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







E15-05428 0250

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150701-01
Client ID: BLKS150701-01
Date Received:
Date Analyzed: 07/01/2015
Data file: F1759.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Dichlorodifluoromethane	ND		0.001	0.00044
Chloromethane	ND		0.001	0.000449
Vinyl chloride	ND		0.001	0.000426
Bromomethane	ND		0.001	0.00064
Chloroethane	ND		0.001	0.000507
Trichlorofluoromethane	ND		0.001	0.000813
1,1-Dichloroethene	ND		0.001	0.000488
Acetone	ND		0.005	0.000697
Carbon disulfide	ND		0.001	0.000572
Methylene chloride	ND		0.002	0.00198
trans-1,2-Dichloroethene	ND		0.001	0.000374
Methyl tert-butyl ether (MTBE)	ND		0.001	0.000373
1,1-Dichloroethane	ND		0.001	0.000269
cis-1,2-Dichloroethene	ND		0.001	0.000319
2-Butanone (MEK)	ND		0.001	0.000748
Bromochloromethane	ND		0.001	0.000422
Chloroform	ND		0.001	0.00042
1,1,1-Trichloroethane	ND		0.001	0.000437
Carbon tetrachloride	ND		0.001	0.000668
1,2-Dichloroethane (EDC)	ND		0.001	0.000348
Benzene	ND		0.001	0.000272
Trichloroethene	ND		0.001	0.000322
1,2-Dichloropropane	ND		0.001	0.000354
1,4-Dioxane	ND		0.200	0.020
Bromodichloromethane	ND		0.001	0.000418
cis-1,3-Dichloropropene	ND		0.001	0.0004
4-Methyl-2-pentanone (MIBK)	ND		0.001	0.000501

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS150701-01
Client ID: BLKS150701-01
Date Received:
Date Analyzed: 07/01/2015
Data file: F1759.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Toluene	ND		0.001	0.000291
trans-1,3-Dichloropropene	ND		0.001	0.000305
1,1,2-Trichloroethane	ND		0.001	0.000235
Tetrachloroethene	ND		0.001	0.000495
2-Hexanone	ND		0.001	0.000578
Dibromochloromethane	ND		0.001	0.000295
1,2-Dibromoethane (EDB)	ND		0.001	0.000353
Chlorobenzene	ND		0.001	0.000336
Ethylbenzene	ND		0.001	0.000342
Total Xylenes	ND		0.002	0.000803
Styrene	ND		0.001	0.000358
Bromoform	ND		0.001	0.000461
Isopropylbenzene	ND		0.001	0.000438
1,1,2,2-Tetrachloroethane	ND		0.001	0.000392
1,3-Dichlorobenzene	ND		0.001	0.000471
1,4-Dichlorobenzene	ND		0.001	0.00053
1,2-Dichlorobenzene	ND		0.001	0.000482
1,2-Dibromo-3-chloropropane	ND		0.001	0.000639
1,2,4-Trichlorobenzene	ND		0.001	0.00044
1,2,3-Trichlorobenzene	ND		0.001	0.000573
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.001	0.000691
Methyl acetate	ND		0.001	0.000539
Cyclohexane	ND		0.005	0.000519
Methylcyclohexane	ND		0.001	0.000558
1,3-Dichloropropene (cis- and trans-)	ND		0.001	0.0004

Total Target Compounds (52): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0252

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS
Tentatively Identified Compounds

Lab ID: BLKS150701-01
Client ID: BLKS150701-01
Date Received:
Date Analyzed: 07/01/2015
Date File: F1759.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

CAS #	Compound	Estimated Concentration	Q	Retention Time
	No peaks detected			

Total TICs = 0

D --- Dilution Performed

J --- Estimated concentration for TICs

N --- Presumptive evidence of a compound from the use of GC/MS NIST library search

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1759.D
Acq On : 1 Jul 2015 13:30
Operator : XING
Sample : BLKS150701-01,BLKS150701-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 02 09:07:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.056	168	296090	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.879	114	402015	50.00	UG	0.00
50) Chlorobenzene-d5	10.219	117	350814	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.371	65	251063	64.01	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 128.02%			
41) Toluene-d8	8.544	98	471545	50.34	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.68%			
59) Bromofluorobenzene	11.620	95	260258	57.80	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 115.60%			

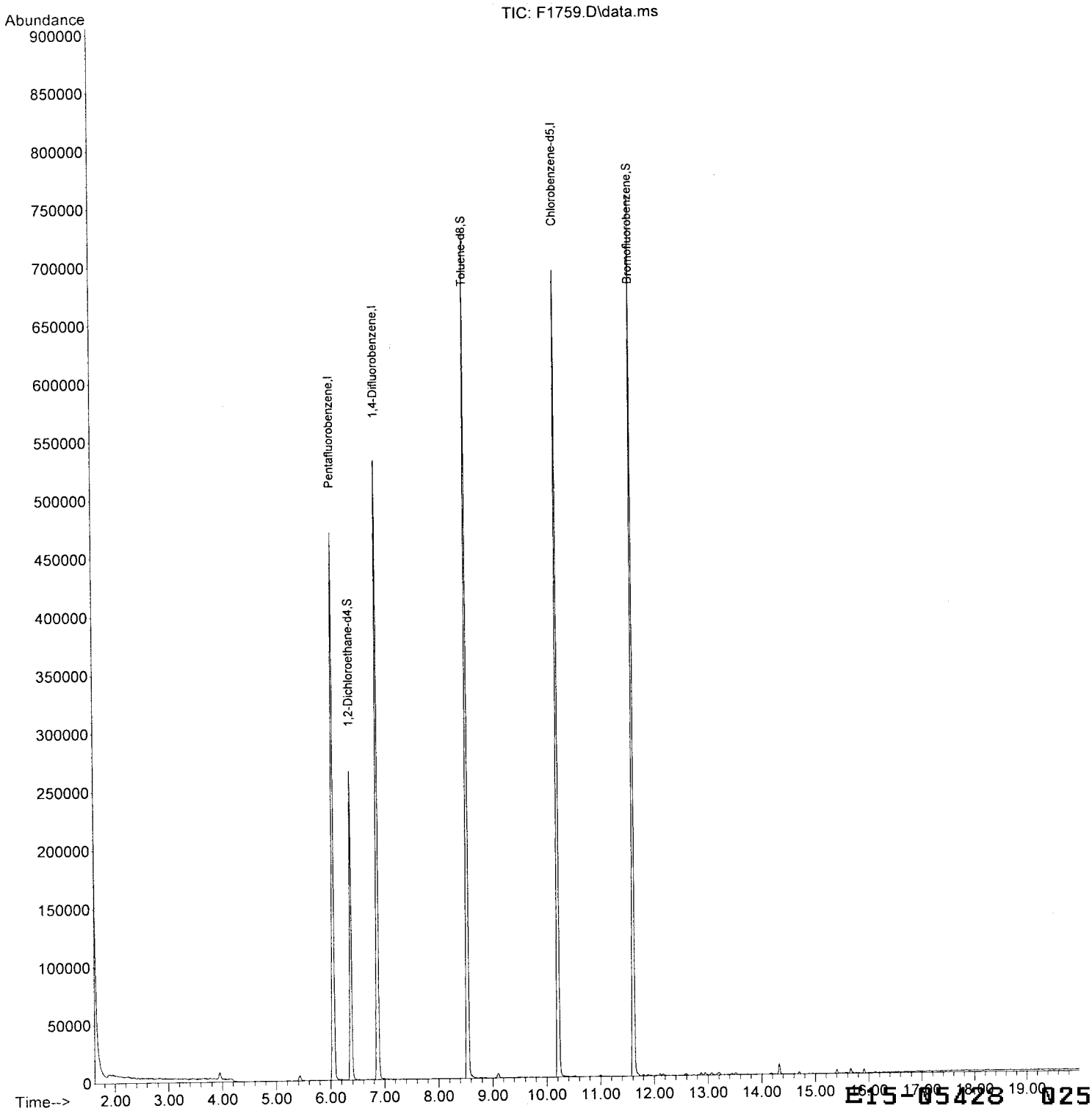
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1759.D
Acq On : 1 Jul 2015 13:30
Operator : XING
Sample : BLKS150701-01,BLKS150701-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 02 09:07:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Wed Jun 17 14:31:24 2015
Response via : Initial Calibration



LSC Area Percent Report

Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1759.D
Acq On : 1 Jul 2015 13:30
Operator : XING
Sample : BLKS150701-01,BLKS150701-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Integration Parameters: LSCINT.P
Integrator: RTE
Smoothing : ON Filtering: 5
Sampling : 1 Min Area: 1 % of largest Peak
Start Thrs: 0.2 Max Peaks: 100
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : C:\MSDCHEM\1\METHODS\FS061615.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C

Signal : TIC: F1759.

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.955	226	231	236	rVB	6142	14595	1.05%	0.214%
2	5.427	361	376	391	rBV	4683	14668	1.06%	0.215%
3	6.056	430	438	447	rBV	470605	1006447	72.43%	14.726%
4	6.371	461	469	482	rBV	265763	555633	39.99%	8.130%
5	6.869	511	518	528	rBV	532005	1116140	80.32%	16.331%
6	8.544	675	683	702	rBV	728730	1389557	100.00%	20.331%
7	10.219	841	848	861	rBV	692794	1365644	98.28%	19.981%
8	11.620	978	986	999	rBV	755335	1354151	97.45%	19.813%
9	14.330	1247	1253	1262	rVB2	8820	17799	1.28%	0.260%

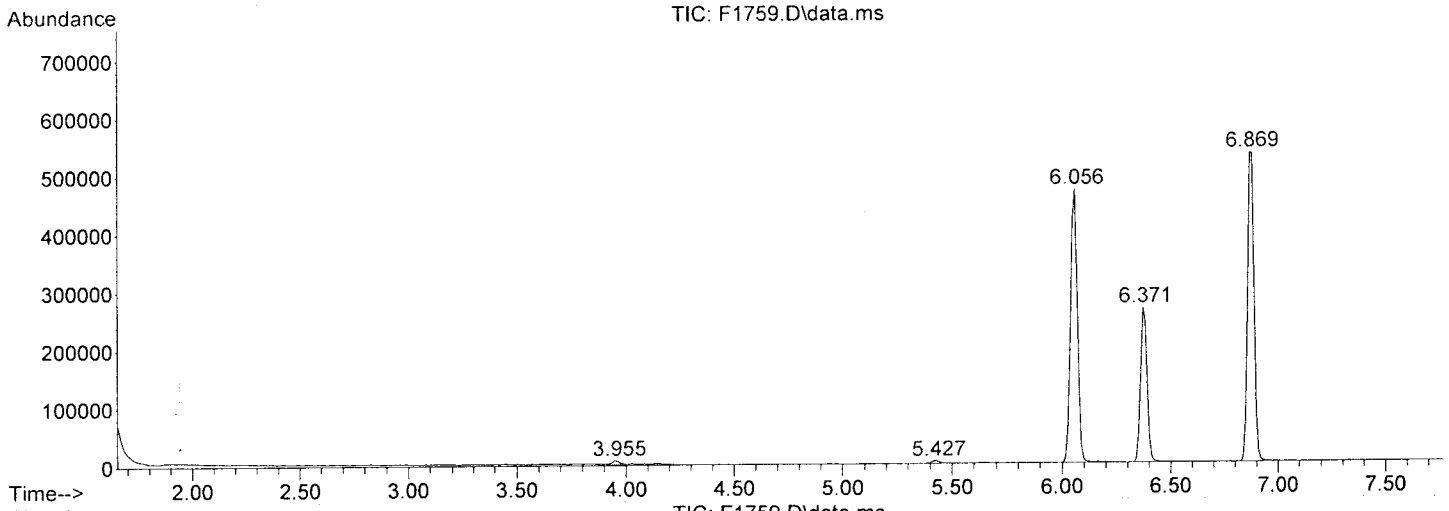
Sum of corrected areas: 6834634

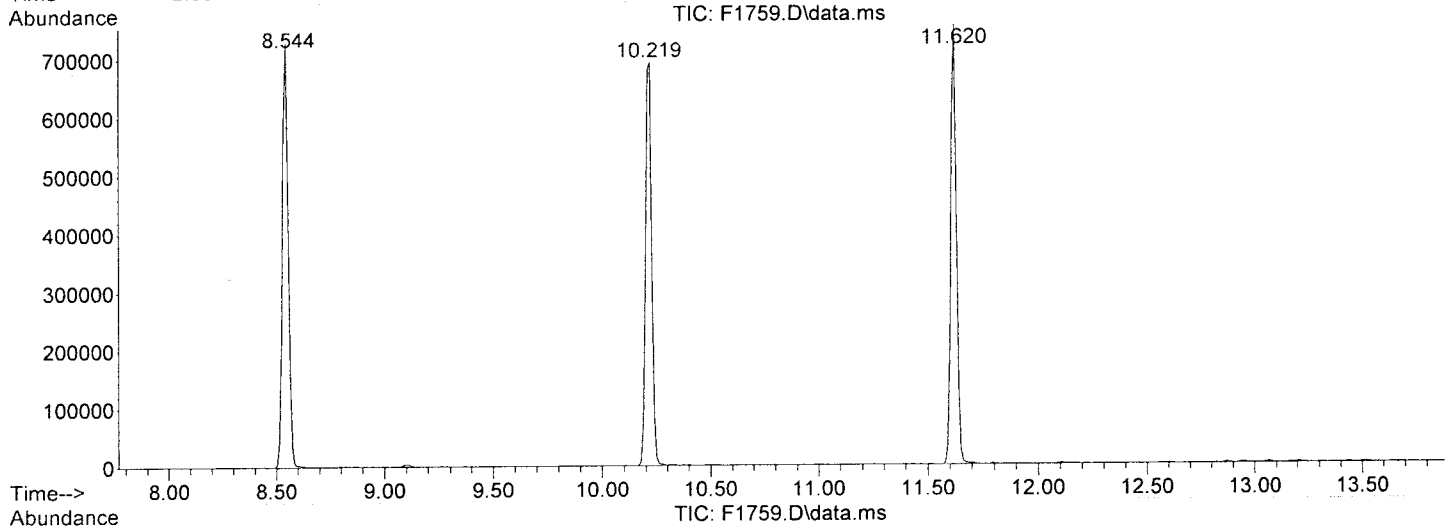
LSC Report - Integrated Chromatogram

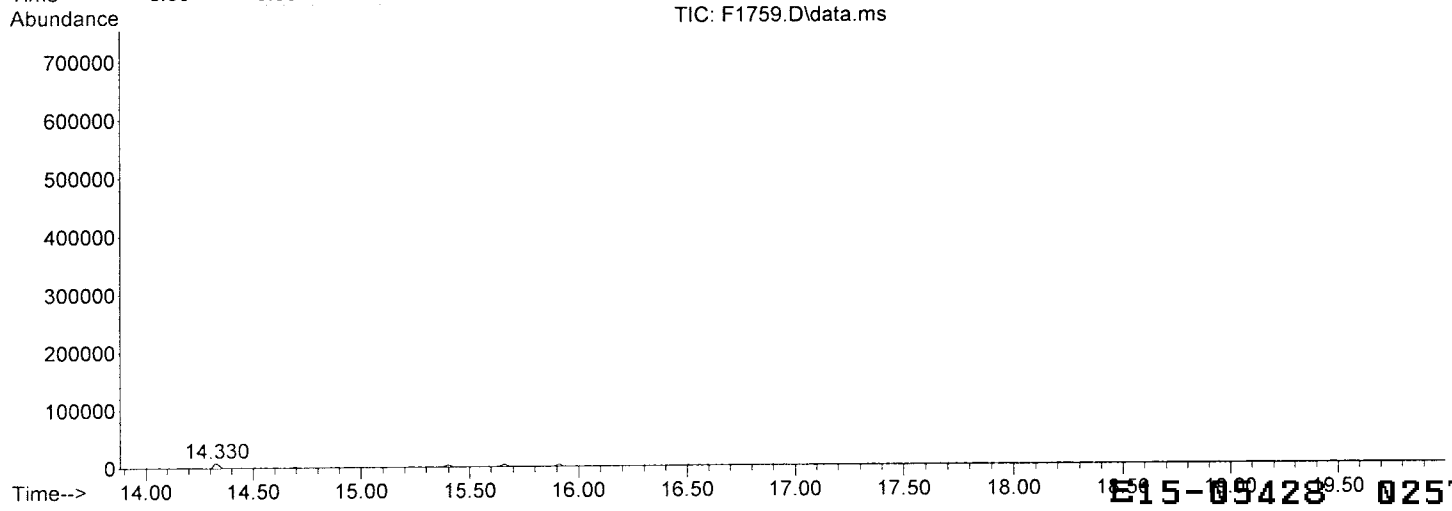
Data Path : C:\msdchem\1\DATA\07-01-15\
Data File : F1759.D
Acq On : 1 Jul 2015 13:30
Operator : XING
Sample : BLKS150701-01,BLKS150701-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\FS061615.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C

TIC Library : C:\Database\NIST05a.L
TIC Integration Parameters: LSCINT.P







E15-09428 0257

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA150629-16	AQUEOUS	79		61		75		48	
PCB	LCSA150629-16	AQUEOUS	84		68		81		63	
PCB	LCSDA150629-16	AQUEOUS	85		69		82		63	
FB	E15-05346-027	AQUEOUS	88		74		85		61	
FB	E15-05430-103	AQUEOUS	86		77		84		64	
FB-1	E15-05338-007	AQUEOUS	84		73		81		65	
FB-06221	E15-05367-040	AQUEOUS	86		83		83		73	
FB-06231	E15-05428-030	AQUEOUS	92		85		89		77	
FB-06241	E15-05428-032	AQUEOUS	88		80		86		77	
FB-06251	E15-05467-012	AQUEOUS	87		81		85		78	
FIELD_BL	E15-05470-016	AQUEOUS	87		81		85		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-12	SOIL	102		78		93		78	
PCB	LCSS150701-12	SOIL	103		79		94		77	
PCB	05428-013MS	SOIL	88		77		92		77	
PCB	05428-013MSD	SOIL	89		79		93		79	
E-25_(2.	E15-05428-013	SOIL	89		74		92		78	
E-15_(0.	E15-05428-018	SOIL	84		78		93		90	
E-15_(2.	E15-05428-019	SOIL	100		70		97		81	
E-10_(0.	E15-05428-024	SOIL	95		70		94		89	
E-10_(2.	E15-05428-025	SOIL	96		78		96		85	
C-1	E15-05432-001	SOLID	99		83		95		84	
C-2	E15-05432-002	SOLID	105		86		99		86	
C-3	E15-05432-003	SOLID	99		60		94		81	
C-4	E15-05432-004	SOLID	96		62		91		73	
C-5	E15-05432-005	SOLID	90		50		87		83	
C-6	E15-05432-006	SOLID	96		61		92		73	
C-7	E15-05432-007	SOLID	96		57		92		74	
C-8	E15-05432-008	SOLID	94		46		90		63	
E-13_(0.	E15-05467-001	SOIL	93		57		95		71	
E-13_(2.	E15-05467-002	SOIL	86		109		103		124	
E-21_(0.	E15-05467-003	SOIL	74		115		90		128	
E-21_(2.	E15-05467-004	SOIL	85		63		93		143	
E-23_(0.	E15-05467-005	SOIL	77		90		89		94	
E-23_(2.	E15-05467-006	SOIL	79		87		94		111	
E-25_(0.	E15-05467-007	SOIL	82		76		93		104	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-12	SOIL	102		78		93		78	
PCB	LCSS150701-12	SOIL	103		79		94		77	
PCB	05428-013MS	SOIL	88		77		92		77	
PCB	05428-013MSD	SOIL	89		79		93		79	
E-28_(2.	E15-05428-013	SOIL	89		74		92		78	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

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PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-12	SOIL	102		78		93		78	
PCB	LCSS150701-12	SOIL	103		79		94		77	
E-21_(0.	E15-05467-003DL	SOIL	100		94		100		107	
E-23_(0.	E15-05467-005DL	SOIL	94		86		94		114	
E-23_(2.	E15-05467-006DL	SOIL	91		93		93		98	
E-25_(0.	E15-05467-007DL	SOIL	98		81		93		106	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-05	SOIL	96		104		95		110	
PCB	LCSS150701-05	SOIL	96		107		96		107	
PCB	05632-023MS	SOIL	92		113		90		102	
PCB	05632-023MSD	SOIL	92		136		89		126	
S-17/0.5	E15-05632-024	SOIL	97		111		95		128	
S-16/0.5	E15-05632-023	SOIL	96		145		98		96	
SB-2A	E15-05638-004	SOIL	91		108		90		103	
SB-2B	E15-05638-005	SOIL	90		107		88		101	
SB-3A	E15-05638-007	SOIL	86		88		86		83	
SB-3B	E15-05638-008	SOIL	90		87		86		98	
SB-4A	E15-05638-010	SOIL	89		86		87		85	
SB-4B	E15-05638-011	SOIL	92		93		91		97	
SB-6A	E15-05638-016	SOIL	94		91		93		88	
SB-6B	E15-05638-017	SOIL	91		115		88		108	
SB-8B	E15-05638-022	SOIL	92		97		89		95	
BG-1	E15-05421-001	SOIL	87		172	M	79		1386	M
CS-1	E15-05395-001	SOLID	89		106		86		107	
CS-2	E15-05395-002	SOLID	88		94		87		118	
E-20_(2.	E15-05428-002	SOIL	86		94		85		96	
E-22_(0.	E15-05428-003	SOIL	84		99		82		100	
E-22_(2.	E15-05428-004	SOIL	93		98		93		114	
E-29_(0.	E15-05428-005	SOIL	86		107		81		109	
E-29_(2.	E15-05428-006	SOIL	86		105		85		101	
E-20_(0.	E15-05428-001	SOIL	120		110		150		130	
E-22_(0.	E15-05428-003DL	SOIL	99		113		89		109	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-08	SOIL	103		78		94		78	
PCB	LCSS150701-08	SOIL	103		78		93		78	
PCB	05367-005MS	SOIL	80		79		88		79	
PCB	05367-005MSD	SOIL	81		78		89		89	
E-18_(0.	E15-05367-005	SOIL	81		76		90		87	
E-18_(2.	E15-05367-006	SOIL	97		69		92		111	
E-11_(0.	E15-05367-011	SOIL	78		83		89		86	
E-11_(2.	E15-05367-012	SOIL	91		73		91		118	
E-12_(0.	E15-05367-013	SOIL	76		89		90		91	
E-12_(2.	E15-05367-014	SOIL	88		72		89		127	
E-14_(0.	E15-05367-015	SOIL	77		83		86		83	
E-14_(2.	E15-05367-016	SOIL	88		72		90		91	
X-2_(2.0	E15-05367-024	SOIL	98		72		93		88	
E-8_(0.5	E15-05367-025	SOIL	84		74		89		74	
E-8_(2.0	E15-05367-026	SOIL	90		75		90		96	
E-17_(2.	E15-05367-028	SOIL	86		96		98		135	
E-9_(0.5	E15-05367-029	SOIL	80		86		89		94	
E-9_(2.0	E15-05367-030	SOIL	93		74		89		88	
E-19_(0.	E15-05428-007	SOIL	85		77		88		80	
E-19_(2.	E15-05428-008	SOIL	92		70		90		81	
E-27_(0.	E15-05428-009	SOIL	71		90		87		88	
E-27_(2.	E15-05428-010	SOIL	88		77		91		95	
E-25_(0.	E15-05428-012	SOIL	78		77		86		79	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-08	SOIL	103		78		94		78	
PCB	LCSS150701-08	SOIL	103		78		93		78	
PCB	05367-005MS	SOIL	80		79		88		79	
PCB	05367-005MSD	SOIL	81		78		89		89	
E-18_(0.	E15-05367-005	SOIL	81		76		90		87	
E-28_(0.	E15-05428-012	SOIL	78		77		86		79	
E-18_(0.	E15-05367-005DL	SOIL	107		78		100		83	
E-28_(0.	E15-05428-012DL	SOIL	101		80		96		99	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

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PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-08	SOIL	103		78		94		78	
PCB	LCSS150701-08	SOIL	103		78		93		78	
E-18_(0.	E15-05367-005DL	SOIL	107		72		100		83	
E-11_(0.	E15-05367-011DL	SOIL	100		72		96		89	
E-12_(0.	E15-05367-013DL	SOIL	120		90		140		110	
E-14_(0.	E15-05367-015DL	SOIL	102		80		98		104	
E-17_(0.	E15-05367-027	SOIL	80		60		100		80	
E-9_(0.5	E15-05367-029	SOIL	87		68		92		72	
E-19_(0.	E15-05428-007DL	SOIL	100		78		94		86	
E-27_(0.	E15-05428-009DL	SOIL	97		86		101		104	
E-25_(0.	E15-05428-012DL	SOIL	101		80		96		99	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-07	SOIL	92		81		87		85	
PCB	LCSS150701-07	SOIL	105		123		99		124	
PCB	05367-003MS	SOIL	70		75		72		86	
PCB	05367-003MSD	SOIL	68		84		69		84	
E-3_(4.5	E15-05367-004	SOIL	92		100		89		111	
E-4_(2.0	E15-05367-008	SOIL	62		95		64		100	
E-4_(3.0	E15-05367-009	SOIL	76		85		76		93	
E-4_(4.5	E15-05367-010	SOIL	79		80		79		86	
X-1_(4.5	E15-05367-023	SOIL	67		84		67		90	
E-6_(0.5	E15-05367-039	SOIL	43		52		51		64	
E-6_(2.0	E15-05367-041	SOIL	75		85		69		90	
E-6_(3.0	E15-05367-042	SOIL	71		82		66		86	
E-6_(4.0	E15-05367-043	SOIL	66		81		60		91	
E-1_(0.5	E15-05428-014	SOIL	40		47		51		55	
E-1_(2.0	E15-05428-015	SOIL	75		72		71		81	
E-1_(3.0	E15-05428-016	SOIL	73		67		69		71	
E-1_(4.5	E15-05428-017	SOIL	74		73		70		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-07	SOIL	92		81		87		85	
PCB	LCSS150701-07	SOIL	105		123		99		124	
E-3_(2.0	E15-05367-003	SOIL	100		100		100		100	
E-4_(0.5	E15-05367-007	SOIL	100		150		100		150	
E-4_(2.0	E15-05367-008DL	SOIL	86		98		79		102	
E-4_(3.0	E15-05367-009DL	SOIL	106		91		98		98	
E-4_(4.5	E15-05367-010DL	SOIL	108		122		102		134	
X-1_(4.5	E15-05367-023DL	SOIL	96		92		90		106	
E-6_(0.5	E15-05367-039DL	SOIL	66		104		66		110	
X-3_(0.5	E15-05428-011	SOIL	100		150		100		150	
E-1_(0.5	E15-05428-014DL	SOIL	62		106		64		114	
E-2_(0.5	E15-05428-020	SOIL	80		140		100		120	
E-2_(2.0	E15-05428-021	SOIL	100		150		140		140	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/07/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-11	SOIL	106		101		103		100	
PCB	LCSS150701-11	SOIL	99		89		94		92	
PCB	05589-001MS	SOIL	85		94		88		101	
PCB	05589-001MSD	SOIL	88		97		91		109	
E-2_(3.0	E15-05428-022	SOIL	67		84		71		86	
E-2_(4.0	E15-05428-023	SOIL	76		80		76		90	
E-7_(0.5	E15-05428-026	SOIL	53		66		69		80	
E-7_(2.0	E15-05428-027	SOIL	90		109		84		120	
E-7_(3.0	E15-05428-028	SOIL	84		86		79		87	
E-7_(4.5	E15-05428-029	SOIL	87		116		81		111	
F-2	E15-05470-009	SOIL	63		67		60		86	
F-1	E15-05470-010	SOIL	109		96		101		116	
F-1D	E15-05470-011	SOIL	99		101		92		116	
F-3	E15-05470-012	SOIL	83		85		84		100	
F-4	E15-05470-013	SOIL	84		102		84		112	
F-5	E15-05470-014	SOIL	92		94		97		112	
15-109	E15-05589-001	SOIL	70		82		70		124	
E-2_(3.0	E15-05428-022DL	SOIL	88		90		83		93	
E-2_(4.0	E15-05428-023DL	SOIL	96		96		90		104	
E-7_(0.5	E15-05428-026DL	SOIL	75		116		78		120	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Sample 05470-013 was double spiked with surrogate. % recoveries have been adjusted to reflect this.

E15-05428 0268

AQUEOUS PCB LCS/LCSD ACCURACY RECOVERY

Matrix spike Lab sample ID: BLKA150629-16
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	LCS CONC. (ug/L)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	399.5	80	40 - 140
Aroclor-1260	500	0.0	291.1	58	40 - 140

Compound	SAMPLE CONC. (ug/L)	LCSD CONC. (ug/L)	LCSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	405.0	81	1	50/20	40 - 140
Aroclor-1260	0.0	303.8	61	4	50/20	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05428-013
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.77g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	535.4	107	40 - 140
Aroclor-1260	500	1370.8	1719.8	70	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	544.1	109	2	50/30	40 - 140
Aroclor-1260	1370.8	1721.6	70	0	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-12
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	519.0	104	40 - 140
Aroclor-1260	500	0.0	450.3	90	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-05
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	552.2	110	40 - 140
Aroclor-1260	500	0.0	564.5	113	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-08
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	520.0	104	40 - 140
Aroclor-1260	500	0.0	462.3	92	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-07
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	425.8	85	40 - 140
Aroclor-1260	500	0.0	454.4	91	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-11
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	483.5	97	40 - 140
Aroclor-1260	500	0.0	449.9	90	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: 05632-023MSD
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC	#	QC LIMITS REC.
Aroclor-1016	500	0.0	850.8	170	*$	40 - 140
Aroclor-1260	500	0.0	1973.2	395	*$	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	860.1	172	*$	1		50/30	40 - 140
Aroclor-1260	0.0	2680.5	536	*$	30		50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05367-005
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.11g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC	#	QC LIMITS REC.
Aroclor-1016	500	0.0	537.9	108		40 - 140
Aroclor-1260	500	2537.0	3731.6	239	*$	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	471.8	94		13		50/30	40 - 140
Aroclor-1260	2537.0	2793.1	51		29		50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05367-003
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30.40g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	446.7	89	40 - 140
Aroclor-1260	500	267.7	27732.6	5493 *$	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	406.0	81	10	50/30	40 - 140
Aroclor-1260	267.7	30071.8	*$ 5961	8	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05589-001
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 30.12g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	467.8	94	40 - 140
Aroclor-1260	500	0.0	447.0	89	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	471.3	94	1	50/30	40 - 140
Aroclor-1260	0.0	454.6	91	2	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

PCB METHOD BLANK SUMMARY

Lab File ID: R5413.D

Instrument ID: GC-R

Date Extracted: 06/29/2015

Matrix: AQUEOUS

Date Analyzed: 06/30/2015

Time Analyzed: 18:42

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA150629-16	06/30/2015	18:59
PCB	LCSDA150629-16	06/30/2015	19:17
FB	E15-05346-027	06/30/2015	19:34
FB	E15-05430-103	06/30/2015	19:51
FB-1	E15-05338-007	06/30/2015	20:09
FB-06221	E15-05367-040	06/30/2015	20:26
FB-06231	E15-05428-030	06/30/2015	20:44
FB-06241	E15-05428-032	06/30/2015	21:01
FB-06251	E15-05467-012	06/30/2015	21:19
FIELD_BL	E15-05470-016	06/30/2015	21:36

PCB METHOD BLANK SUMMARY

Lab File ID: Y3022.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-12	07/02/2015	21:27
PCB	05428-013MS	07/02/2015	21:45
PCB	05428-013MSD	07/02/2015	22:02
E-25_(2.	E15-05428-013	07/02/2015	22:19
E-15_(0.	E15-05428-018	07/02/2015	22:37
E-15_(2.	E15-05428-019	07/02/2015	22:54
E-10_(0.	E15-05428-024	07/02/2015	23:11
E-10_(2.	E15-05428-025	07/02/2015	23:29
C-1	E15-05432-001	07/03/2015	01:13
C-2	E15-05432-002	07/03/2015	01:30
C-3	E15-05432-003	07/03/2015	01:47
C-4	E15-05432-004	07/03/2015	02:05
C-5	E15-05432-005	07/03/2015	02:22
C-6	E15-05432-006	07/03/2015	02:39
C-7	E15-05432-007	07/03/2015	02:57
C-8	E15-05432-008	07/03/2015	03:14
E-13_(0.	E15-05467-001	07/03/2015	03:31
E-13_(2.	E15-05467-002	07/03/2015	03:49
E-21_(0.	E15-05467-003	07/03/2015	04:06
E-21_(2.	E15-05467-004	07/03/2015	04:23
E-23_(0.	E15-05467-005	07/03/2015	04:41
E-23_(2.	E15-05467-006	07/03/2015	04:58
E-25_(0.	E15-05467-007	07/03/2015	05:15

PCB METHOD BLANK SUMMARY

Lab File ID:	Y3022.D	Instrument ID:	GC-Y
Date Extracted:	07/01/2015	Matrix:	SOIL
Date Analyzed:	07/02/2015	Time Analyzed:	21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-12	07/02/2015	21:27
PCB	05428-013MS	07/02/2015	21:45
PCB	05428-013MSD	07/02/2015	22:02
E-28_(2.	E15-05428-013	07/02/2015	22:19

Rev E15-05428 0281A

PCB METHOD BLANK SUMMARY

Lab File ID: Y3022.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-12	07/02/2015	21:27
E-21_(0.	E15-05467-003DL	07/06/2015	12:03
E-23_(0.	E15-05467-005DL	07/06/2015	12:20
E-23_(2.	E15-05467-006DL	07/06/2015	12:38
E-25_(0.	E15-05467-007DL	07/06/2015	12:55

PCB METHOD BLANK SUMMARY

Lab File ID: Y3074.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 17:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-07	07/06/2015	17:50
E-3_(2.0	E15-05367-003	07/07/2015	14:00
E-4_(0.5	E15-05367-007	07/07/2015	14:17
E-4_(2.0	E15-05367-008DL	07/07/2015	14:34
E-4_(3.0	E15-05367-009DL	07/07/2015	14:52
E-4_(4.5	E15-05367-010DL	07/07/2015	15:09
X-1_(4.5	E15-05367-023DL	07/07/2015	15:26
E-6_(0.5	E15-05367-039DL	07/07/2015	15:44
X-3_(0.5	E15-05428-011	07/07/2015	16:01
E-1_(0.5	E15-05428-014DL	07/07/2015	16:18
E-2_(0.5	E15-05428-020	07/07/2015	16:36
E-2_(2.0	E15-05428-021	07/07/2015	16:53

PCB METHOD BLANK SUMMARY

Lab File ID: R5486.D

Instrument ID: GC-R

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 13:11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-05	07/02/2015	13:29
PCB	05632-023MS	07/02/2015	13:46
PCB	05632-023MSD	07/02/2015	14:04
S-17/0.5	E15-05632-024	07/02/2015	15:19
S-16/0.5	E15-05632-023	07/02/2015	15:36
SB-2A	E15-05638-004	07/02/2015	16:28
SB-2B	E15-05638-005	07/02/2015	16:46
SB-3A	E15-05638-007	07/02/2015	17:03
SB-3B	E15-05638-008	07/02/2015	17:21
SB-4A	E15-05638-010	07/02/2015	17:38
SB-4B	E15-05638-011	07/02/2015	17:56
SB-6A	E15-05638-016	07/02/2015	18:13
SB-6B	E15-05638-017	07/02/2015	18:31
SB-8B	E15-05638-022	07/02/2015	18:48
BG-1	E15-05421-001	07/02/2015	19:05
CS-1	E15-05395-001	07/02/2015	19:23
CS-2	E15-05395-002	07/02/2015	19:40
E-20_(2.	E15-05428-002	07/02/2015	20:15
E-22_(0.	E15-05428-003	07/02/2015	20:32
E-22_(2.	E15-05428-004	07/02/2015	20:50
E-29_(0.	E15-05428-005	07/02/2015	21:07
E-29_(2.	E15-05428-006	07/02/2015	21:25
E-20_(0.	E15-05428-001	07/06/2015	09:23
E-22_(0.	E15-05428-003DL	07/06/2015	09:41

PCB METHOD BLANK SUMMARY

Lab File ID: Y2994.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-08	07/02/2015	11:38
PCB	05367-005MS	07/02/2015	11:56
PCB	05367-005MSD	07/02/2015	12:13
E-18_(0.	E15-05367-005	07/02/2015	12:31
E-18_(2.	E15-05367-006	07/02/2015	12:48
E-11_(0.	E15-05367-011	07/02/2015	13:05
E-11_(2.	E15-05367-012	07/02/2015	13:23
E-12_(0.	E15-05367-013	07/02/2015	14:15
E-12_(2.	E15-05367-014	07/02/2015	14:32
E-14_(0.	E15-05367-015	07/02/2015	14:49
E-14_(2.	E15-05367-016	07/02/2015	15:07
X-2_(2.0	E15-05367-024	07/02/2015	15:24
E-8_(0.5	E15-05367-025	07/02/2015	15:41
E-8_(2.0	E15-05367-026	07/02/2015	15:59
E-17_(2.	E15-05367-028	07/02/2015	16:32
E-9_(0.5	E15-05367-029	07/02/2015	16:50
E-9_(2.0	E15-05367-030	07/02/2015	17:07
E-19_(0.	E15-05428-007	07/02/2015	17:59
E-19_(2.	E15-05428-008	07/02/2015	18:16
E-27_(0.	E15-05428-009	07/02/2015	18:34
E-27_(2.	E15-05428-010	07/02/2015	18:51
E-25_(0.	E15-05428-012	07/02/2015	19:08

PCB METHOD BLANK SUMMARY

Lab File ID:	Y2994.D	Instrument ID:	GC-Y
Date Extracted:	07/01/2015	Matrix:	SOIL
Date Analyzed:	07/02/2015	Time Analyzed:	11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-08	07/02/2015	11:38
PCB	05367-005MS	07/02/2015	11:56
PCB	05367-005MSD	07/02/2015	12:13
E-18_(0.	E15-05367-005	07/02/2015	12:31
E-28_(0.	E15-05428-012	07/02/2015	19:08
E-18_(0.	E15-05367-005DL	07/03/2015	07:00
E-28_(0.	E15-05428-012DL	07/06/2015	11:45

Rev E15-05428 0285A

PCB METHOD BLANK SUMMARY

Lab File ID: Y2994.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 11:21

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-08	07/02/2015	11:38
E-18_(0.	E15-05367-005DL	07/03/2015	07:00
E-11_(0.	E15-05367-011DL	07/03/2015	07:17
E-12_(0.	E15-05367-013DL	07/03/2015	07:34
E-14_(0.	E15-05367-015DL	07/03/2015	07:52
E-17_(0.	E15-05367-027	07/06/2015	10:25
E-9_(0.5	E15-05367-029	07/06/2015	10:53
E-19_(0.	E15-05428-007DL	07/06/2015	11:11
E-27_(0.	E15-05428-009DL	07/06/2015	11:28
E-25_(0.	E15-05428-012DL	07/06/2015	11:45

PCB METHOD BLANK SUMMARY

Lab File ID: Y3074.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 17:32

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-07	07/06/2015	17:50
PCB	05367-003MS	07/06/2015	18:07
PCB	05367-003MSD	07/06/2015	18:25
E-3_(4.5	E15-05367-004	07/06/2015	18:59
E-4_(2.0	E15-05367-008	07/06/2015	19:34
E-4_(3.0	E15-05367-009	07/06/2015	19:51
E-4_(4.5	E15-05367-010	07/06/2015	20:09
X-1_(4.5	E15-05367-023	07/06/2015	20:26
E-6_(0.5	E15-05367-039	07/06/2015	20:44
E-6_(2.0	E15-05367-041	07/06/2015	21:01
E-6_(3.0	E15-05367-042	07/06/2015	21:19
E-6_(4.0	E15-05367-043	07/06/2015	21:36
E-1_(0.5	E15-05428-014	07/06/2015	23:55
E-1_(2.0	E15-05428-015	07/07/2015	00:12
E-1_(3.0	E15-05428-016	07/07/2015	00:29
E-1_(4.5	E15-05428-017	07/07/2015	00:47

PCB METHOD BLANK SUMMARY

Lab File ID: Y3100.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/07/2015

Time Analyzed: 02:30

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-11	07/07/2015	02:48
PCB	05589-001MS	07/07/2015	03:05
PCB	05589-001MSD	07/07/2015	03:23
E-2_(3.0	E15-05428-022	07/07/2015	03:40
E-2_(4.0	E15-05428-023	07/07/2015	03:57
E-7_(0.5	E15-05428-026	07/07/2015	04:15
E-7_(2.0	E15-05428-027	07/07/2015	04:32
E-7_(3.0	E15-05428-028	07/07/2015	04:49
E-7_(4.5	E15-05428-029	07/07/2015	06:51
F-2	E15-05470-009	07/07/2015	07:08
F-1	E15-05470-010	07/07/2015	07:25
F-1D	E15-05470-011	07/07/2015	07:43
F-3	E15-05470-012	07/07/2015	08:00
F-4	E15-05470-013	07/07/2015	08:17
F-5	E15-05470-014	07/07/2015	08:35
15-109	E15-05589-001	07/07/2015	08:52
E-2_(3.0	E15-05428-022DL	07/07/2015	17:10
E-2_(4.0	E15-05428-023DL	07/07/2015	17:28
E-7_(0.5	E15-05428-026DL	07/07/2015	17:45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.24	3.24	3.24	3.24	3.24	3.24	3.17	3.31
Aroclor-1016 {2}	4.07	4.07	4.07	4.07	4.07	4.07	4.00	4.14
Aroclor-1016 {3}	4.62	4.63	4.62	4.62	4.62	4.62	4.55	4.69
Aroclor-1016 {4}	5.13	5.13	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1016 {5}	5.53	5.53	5.53	5.53	5.53	5.53	5.46	5.60
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.03				2.96	3.10
Aroclor-1221 {3}			3.16				3.09	3.23
Aroclor-1221 {4}			3.24				3.17	3.31
Aroclor-1221 {5}			3.83				3.76	3.90
Aroclor-1232			3.24				3.17	3.31
Aroclor-1232 {2}			4.07				4.00	4.14
Aroclor-1232 {3}			4.74				4.67	4.81
Aroclor-1232 {4}			5.33				5.26	5.40
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.07				4.00	4.14
Aroclor-1242 {2}			5.01				4.94	5.08
Aroclor-1242 {3}			5.33				5.26	5.40
Aroclor-1242 {4}			6.03				5.96	6.10
Aroclor-1242 {5}			6.31				6.24	6.38
Aroclor-1248			4.47				4.39	4.55
Aroclor-1248 {2}			5.01				4.93	5.09
Aroclor-1248 {3}			5.33				5.25	5.41
Aroclor-1248 {4}			6.04				5.96	6.12
Aroclor-1248 {5}			6.32				6.24	6.40
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.87				6.79	6.95
Aroclor-1254 {3}			7.04				6.95	7.13
Aroclor-1254 {4}			7.47				7.38	7.56
Aroclor-1254 {5}			8.33				8.24	8.42
Aroclor-1260	8.32	8.33	8.33	8.32	8.32	8.32	7.42	9.22
Aroclor-1260 {2}	9.00	9.00	9.00	9.00	9.00	9.00	8.10	9.90
Aroclor-1260 {3}	9.48	9.48	9.48	9.48	9.47	9.48	8.58	10.38
Aroclor-1260 {4}	9.97	9.97	9.96	9.96	9.96	9.96	9.06	10.86
Aroclor-1260 {5}	11.03	11.02	11.02	11.02	11.02	11.02	10.12	11.92

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1035220	1134677	1200626	1141101	1179553	1138235	5.60
Aroclor-1016 {2}	1465857	1417900	1561807	1517080	1549717	1502472	4.00
Aroclor-1016 {3}	1971167	1971569	2134979	2053626	2147950	2055858	4.14
Aroclor-1016 {4}	1161680	1093048	1154206	1080175	1119575	1121737	3.22
Aroclor-1016 {5}	1714728	1531336	1696349	1641444	1758369	1668445	5.24
Aroclor-1221			449690				
Aroclor-1221 {2}			797648				
Aroclor-1221 {3}			494086				
Aroclor-1221 {4}			1826249				
Aroclor-1221 {5}			349620				
Aroclor-1232			1283730				
Aroclor-1232 {2}			679188				
Aroclor-1232 {3}			600221				
Aroclor-1232 {4}			546220				
Aroclor-1232 {5}			888909				
Aroclor-1242			1327257				
Aroclor-1242 {2}			826000				
Aroclor-1242 {3}			1025010				
Aroclor-1242 {4}			2509146				
Aroclor-1242 {5}			1614150				
Aroclor-1248			2660626				
Aroclor-1248 {2}			1486008				
Aroclor-1248 {3}			1797318				
Aroclor-1248 {4}			3729181				
Aroclor-1248 {5}			2536819				
Aroclor-1254			4149122				
Aroclor-1254 {2}			3098341				
Aroclor-1254 {3}			4553666				
Aroclor-1254 {4}			4265173				
Aroclor-1254 {5}			4303752				
Aroclor-1260	4131374	3602975	4306509	4242607	4423326	4141358	7.70
Aroclor-1260 {2}	2439674	2054713	2406192	2420883	2455212	2355335	7.18
Aroclor-1260 {3}	5614242	5258674	6353528	6215095	6341158	5956539	8.30
Aroclor-1260 {4}	2638606	2324791	2795276	2788768	2865653	2682619	8.07
Aroclor-1260 {5}	1517585	1427974	1525858	1491030	1509914	1494472	2.63
					Average %RSD		5.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.79	3.79	3.79	3.79	3.79	3.79	3.72	3.86
Aroclor-1016 {2}	4.39	4.39	4.39	4.39	4.39	4.39	4.32	4.46
Aroclor-1016 {3}	5.15	5.15	5.15	5.15	5.15	5.15	5.08	5.22
Aroclor-1016 {4}	5.36	5.36	5.36	5.36	5.36	5.36	5.29	5.43
Aroclor-1016 {5}	5.54	5.54	5.54	5.54	5.54	5.54	5.47	5.61
Aroclor-1221			2.45				2.38	2.52
Aroclor-1221 {2}			3.46				3.39	3.53
Aroclor-1221 {3}			3.70				3.63	3.77
Aroclor-1221 {4}			3.79				3.72	3.86
Aroclor-1221 {5}			5.15				5.08	5.22
Aroclor-1232			3.70				3.63	3.77
Aroclor-1232 {2}			4.71				4.64	4.78
Aroclor-1232 {3}			5.15				5.08	5.22
Aroclor-1232 {4}			5.36				5.29	5.43
Aroclor-1232 {5}			6.14				6.07	6.21
Aroclor-1242			4.78				4.71	4.85
Aroclor-1242 {2}			5.54				5.47	5.61
Aroclor-1242 {3}			6.14				6.07	6.21
Aroclor-1242 {4}			6.30				6.23	6.37
Aroclor-1242 {5}			6.85				6.78	6.92
Aroclor-1248			5.15				5.07	5.23
Aroclor-1248 {2}			5.74				5.66	5.82
Aroclor-1248 {3}			6.14				6.06	6.22
Aroclor-1248 {4}			6.29				6.21	6.37
Aroclor-1248 {5}			6.65				6.57	6.73
Aroclor-1254			7.14				7.06	7.22
Aroclor-1254 {2}			7.73				7.65	7.81
Aroclor-1254 {3}			8.36				8.27	8.45
Aroclor-1254 {4}			8.58				8.49	8.67
Aroclor-1254 {5}			9.17				9.08	9.26
Aroclor-1260	7.92	7.91	7.92	7.92	7.92	7.92	7.02	8.82
Aroclor-1260 {2}	8.17	8.17	8.17	8.17	8.17	8.17	7.27	9.07
Aroclor-1260 {3}	9.77	9.77	9.77	9.77	9.77	9.77	8.87	10.67
Aroclor-1260 {4}	10.28	10.28	10.28	10.28	10.28	10.28	9.38	11.18
Aroclor-1260 {5}	10.87	10.87	10.87	10.87	10.87	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	727179	649681	599818	572679	596428	629157	9.78
Aroclor-1016 {2}	1451309	1253159	1169195	1102953	1162450	1227813	11.07
Aroclor-1016 {3}	2849344	2530697	2600004	2514006	2692095	2637229	5.22
Aroclor-1016 {4}	1324756	1271114	1143157	1071810	1116437	1185455	9.07
Aroclor-1016 {5}	1029139	916078	878209	835898	880789	908023	8.09
Aroclor-1221			248315				
Aroclor-1221 {2}			395120				
Aroclor-1221 {3}			243765				
Aroclor-1221 {4}			924924				
Aroclor-1221 {5}			157727				
Aroclor-1232			155379				
Aroclor-1232 {2}			170266				
Aroclor-1232 {3}			1103692				
Aroclor-1232 {4}			515970				
Aroclor-1232 {5}			518462				
Aroclor-1242			453993				
Aroclor-1242 {2}			757756				
Aroclor-1242 {3}			959648				
Aroclor-1242 {4}			979390				
Aroclor-1242 {5}			1546010				
Aroclor-1248			1344062				
Aroclor-1248 {2}			2099649				
Aroclor-1248 {3}			1468554				
Aroclor-1248 {4}			1371497				
Aroclor-1248 {5}			722538				
Aroclor-1254			1762464				
Aroclor-1254 {2}			1459628				
Aroclor-1254 {3}			1313798				
Aroclor-1254 {4}			1001882				
Aroclor-1254 {5}			2271862				
Aroclor-1260	1114518	1071341	1054896	1020713	940767	1040447	6.26
Aroclor-1260 {2}	1736190	1550859	1474231	1399297	1445588	1521233	8.69
Aroclor-1260 {3}	1591443	1402133	1426458	1400913	1455999	1455389	5.45
Aroclor-1260 {4}	3835300	3153994	3293958	3277088	3383463	3388761	7.75
Aroclor-1260 {5}	2687365	2299414	2360009	2336144	2380674	2412721	6.49
					Average %RSD		7.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.61				8.49	8.73
Aroclor-1262 {2}			9.48				9.36	9.60
Aroclor-1262 {3}			10.11				9.99	10.23
Aroclor-1262 {4}			10.19				10.07	10.31
Aroclor-1262 {5}			11.02				10.90	11.14
Aroclor-1268			10.11				9.99	10.23
Aroclor-1268 {2}			10.19				10.07	10.31
Aroclor-1268 {3}			10.66				10.54	10.78
Aroclor-1268 {4}			11.02				10.90	11.14
Aroclor-1268 {5}			11.62				11.50	11.74

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.77				9.65	9.89
Aroclor-1262 {2}			10.28				10.16	10.40
Aroclor-1262 {3}			10.77				10.65	10.89
Aroclor-1262 {4}			10.86				10.74	10.98
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.77				10.65	10.89
Aroclor-1268 {2}			10.86				10.74	10.98
Aroclor-1268 {3}			11.11				10.99	11.23
Aroclor-1268 {4}			11.91				11.79	12.03
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3942099				
Aroclor-1262 {2}			7631823				
Aroclor-1262 {3}			2755124				
Aroclor-1262 {4}			3476908				
Aroclor-1262 {5}			2531033				
Aroclor-1268			7248111				
Aroclor-1268 {2}			9271222				
Aroclor-1268 {3}			6927535				
Aroclor-1268 {4}			2776800				
Aroclor-1268 {5}			21046728				

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1738813				
Aroclor-1262 {2}			4008201				
Aroclor-1262 {3}			1271006				
Aroclor-1262 {4}			2847748				
Aroclor-1262 {5}			513693				
Aroclor-1268			4026781				
Aroclor-1268 {2}			4415953				
Aroclor-1268 {3}			3441265				
Aroclor-1268 {4}			1482145				
Aroclor-1268 {5}			10901949				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3021.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1248450	9.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1459422	2.87
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2153358	4.74
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1160017	3.41
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1673764	0.32
Aroclor-1260	8.33	7.42	9.22	4141358	3841492	7.24
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1962626	16.67
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5254919	11.78
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2154907	19.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1283214	14.14

Data File: Y3021.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	612648	2.62
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1164984	5.12
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2558796	2.97
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1109967	6.37
Aroclor-1016 {5}	5.54	5.47	5.61	908023	848730	6.53
Aroclor-1260	7.92	7.02	8.82	1040447	954903	8.22
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1295787	14.82
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1210913	16.80
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2768561	18.30
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	1946172	19.34

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3032.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1274065	11.93
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1668575	11.06
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2271346	10.48
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1215949	8.40
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1765462	5.81
Aroclor-1260	8.33	7.42	9.22	4141358	4503660	8.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2520198	7.00
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6485409	8.88
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2664680	0.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1481540	0.87

Data File: Y3032.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	635559	1.02
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210344	1.42
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2716194	2.99
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1185605	0.01
Aroclor-1016 {5}	5.54	5.47	5.61	908023	907360	0.07
Aroclor-1260	7.92	7.02	8.82	1040447	1070893	2.93
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1467749	3.52
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438854	1.14
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3365800	0.68
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2430287	0.73

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3055.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1249590	9.78
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1425194	5.14
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2121582	3.20
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1205332	7.45
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1695215	1.60
Aroclor-1260	8.33	7.42	9.22	4141358	3851645	7.00
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1938282	17.71
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5252544	11.82
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2213141	17.50
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1282827	14.16

Data File: Y3055.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	640788	1.85
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1212509	1.25
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2683131	1.74
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1182590	0.24
Aroclor-1016 {5}	5.54	5.47	5.61	908023	903170	0.53
Aroclor-1260	7.92	7.02	8.82	1040447	997470	4.13
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1381031	9.22
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1279710	12.07
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2913217	14.03
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	2072422	14.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3056.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1339496	17.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1593650	6.07
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2307503	12.24
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1217027	8.49
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1787366	7.13
Aroclor-1260	8.33	7.42	9.22	4141358	4095878	1.10
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2120942	9.95
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5563039	6.61
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2375486	11.45
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1258259	15.81

Data File: Y3056.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	693129	10.17
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1292323	5.25
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2867215	8.72
Aroclor-1016 {4}	5.37	5.29	5.43	1185455	1235456	4.22
Aroclor-1016 {5}	5.54	5.47	5.61	908023	952956	4.95
Aroclor-1260	7.92	7.02	8.82	1040447	1050696	0.99
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1433485	5.77
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1373278	5.64
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3149693	7.05
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2241538	7.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3066.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1300400	14.25
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1630197	8.50
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2389934	16.25
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1304204	16.27
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856225	11.25
Aroclor-1260	8.33	7.42	9.22	4141358	4308258	4.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2253041	4.34
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5995207	0.65
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2541612	5.26
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1309646	12.37

Data File: Y3066.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	697702	10.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1324110	7.84
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2915672	10.56
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1270603	7.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	971414	6.98
Aroclor-1260	7.92	7.02	8.82	1040447	1075474	3.37
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1486540	2.28
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1388714	4.58
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3197845	5.63
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2278661	5.56

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y2993.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1308746	14.98
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1666537	10.92
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2341594	13.90
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1213602	8.19
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856792	11.29
Aroclor-1260	8.33	7.42	9.22	4141358	4705900	13.63
Aroclor-1260 {2}	9.00	8.10	9.90	2355335	2553976	8.43
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6614887	11.05
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2907575	8.39
Aroclor-1260 {5}	11.02	10.12	11.92	1494472	1525140	2.05

Data File: Y2993.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	631836	0.43
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210631	1.40
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2753198	4.40
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1186588	0.10
Aroclor-1016 {5}	5.54	5.47	5.61	908023	920091	1.33
Aroclor-1260	7.92	7.02	8.82	1040447	1096803	5.42
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1502289	1.25
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1464879	0.65
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3313207	2.23
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2378242	1.43

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3003.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1241919	9.11
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1518132	1.04
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2152661	4.71
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1128175	0.57
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1652684	0.94
Aroclor-1260	8.33	7.42	9.22	4141358	3836215	7.37
Aroclor-1260 {2}	9.00	8.10	9.90	2355335	2006617	14.81
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5236037	12.10
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2286981	14.75
Aroclor-1260 {5}	11.02	10.12	11.92	1494472	1369559	8.36

Data File: Y3003.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	611174	2.86
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1166135	5.02
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2575414	2.34
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1112834	6.13
Aroclor-1016 {5}	5.54	5.47	5.61	908023	852982	6.06
Aroclor-1260	7.92	7.02	8.82	1040447	964886	7.26
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1312055	13.75
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1218755	16.26
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2748919	18.88
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	1935431	19.78

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3021.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1248450	9.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1459422	2.87
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2153358	4.74
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1160017	3.41
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1673764	0.32
Aroclor-1260	8.33	7.42	9.22	4141358	3841492	7.24
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1962626	16.67
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5254919	11.78
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2154907	19.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1283214	14.14

Data File: Y3021.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	612648	2.62
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1164984	5.12
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2558796	2.97
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1109967	6.37
Aroclor-1016 {5}	5.54	5.47	5.61	908023	848730	6.53
Aroclor-1260	7.92	7.02	8.82	1040447	954903	8.22
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1295787	14.82
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1210913	16.80
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2768561	18.30
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	1946172	19.34

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3032.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1274065	11.93
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1668575	11.06
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2271346	10.48
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1215949	8.40
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1765462	5.81
Aroclor-1260	8.33	7.42	9.22	4141358	4503660	8.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2520198	7.00
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6485409	8.88
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2664680	0.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1481540	0.87

Data File: Y3032.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	635559	1.02
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210344	1.42
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2716194	2.99
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1185605	0.01
Aroclor-1016 {5}	5.54	5.47	5.61	908023	907360	0.07
Aroclor-1260	7.92	7.02	8.82	1040447	1070893	2.93
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1467749	3.52
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438854	1.14
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3365800	0.68
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2430287	0.73

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3055.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1249590	9.78
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1425194	5.14
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2121582	3.20
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1205332	7.45
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1695215	1.60
Aroclor-1260	8.33	7.42	9.22	4141358	3851645	7.00
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1938282	17.71
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5252544	11.82
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2213141	17.50
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1282827	14.16

Data File: Y3055.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	640788	1.85
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1212509	1.25
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2683131	1.74
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1182590	0.24
Aroclor-1016 {5}	5.54	5.47	5.61	908023	903170	0.53
Aroclor-1260	7.92	7.02	8.82	1040447	997470	4.13
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1381031	9.22
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1279710	12.07
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2913217	14.03
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	2072422	14.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3056.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1339496	17.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1593650	6.07
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2307503	12.24
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1217027	8.49
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1787366	7.13
Aroclor-1260	8.33	7.42	9.22	4141358	4095878	1.10
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2120942	9.95
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5563039	6.61
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2375486	11.45
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1258259	15.81

Data File: Y3056.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	693129	10.17
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1292323	5.25
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2867215	8.72
Aroclor-1016 {4}	5.37	5.29	5.43	1185455	1235456	4.22
Aroclor-1016 {5}	5.54	5.47	5.61	908023	952956	4.95
Aroclor-1260	7.92	7.02	8.82	1040447	1050696	0.99
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1433485	5.77
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1373278	5.64
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3149693	7.05
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2241538	7.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3066.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1300400	14.25
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1630197	8.50
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2389934	16.25
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1304204	16.27
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856225	11.25
Aroclor-1260	8.33	7.42	9.22	4141358	4308258	4.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2253041	4.34
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5995207	0.65
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2541612	5.26
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1309646	12.37

Data File: Y3066.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	697702	10.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1324110	7.84
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2915672	10.56
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1270603	7.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	971414	6.98
Aroclor-1260	7.92	7.02	8.82	1040447	1075474	3.37
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1486540	2.28
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1388714	4.58
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3197845	5.63
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2278661	5.56

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3073.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1251064	9.91
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1483320	1.27
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2179319	6.01
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1195525	6.58
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1736367	4.07
Aroclor-1260	8.34	7.42	9.22	4141358	4545170	9.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2482016	5.38
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6771801	13.69
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2950430	9.98
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1605036	7.40

Data File: Y3073.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	607974	3.37
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1151370	6.23
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2591146	1.75
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1135876	4.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	873267	3.83
Aroclor-1260	7.92	7.02	8.82	1040447	1035352	0.49
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1444744	5.03
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1459740	0.30
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3458587	2.06
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2514634	4.22

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3090.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1311908	15.26
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1662073	10.62
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2310298	12.38
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1234615	10.06
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1770376	6.11
Aroclor-1260	8.34	7.42	9.22	4141358	4374408	5.63
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2421012	2.79
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6237028	4.71
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2361454	11.97
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1339823	10.35

Data File: Y3090.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	648563	3.08
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1217920	0.81
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2692822	2.11
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1186821	0.12
Aroclor-1016 {5}	5.54	5.47	5.61	908023	908927	0.10
Aroclor-1260	7.92	7.02	8.82	1040447	1028109	1.19
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1424452	6.36
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1404577	3.49
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3272856	3.42
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2371368	1.71

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3110.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1305225	14.67
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1709652	13.79
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2357395	14.67
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1258049	12.15
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1785870	7.04
Aroclor-1260	8.33	7.42	9.22	4141358	4071807	1.68
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2202647	6.48
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5572554	6.45
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2440673	9.02
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1225661	17.99

Data File: Y3110.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	662683	5.33
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1238971	0.91
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2729322	3.49
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1207735	1.88
Aroclor-1016 {5}	5.54	5.47	5.61	908023	919052	1.21
Aroclor-1260	7.92	7.02	8.82	1040447	1016191	2.33
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1394774	8.31
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1308307	10.11
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2970447	12.34
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2114771	12.35

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3131.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1263162	10.98
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1350794	10.10
Aroclor-1016 {3}	4.64	4.55	4.69	2055858	2097805	2.04
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1187656	5.88
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1681596	0.79
Aroclor-1260	8.34	7.42	9.22	4141358	4184054	1.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2087478	11.37
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	5912878	0.73
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2579996	3.83
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1355936	9.27

Data File: Y3131.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.80	3.72	3.86	629157	638337	1.46
Aroclor-1016 {2}	4.41	4.32	4.46	1227813	1165121	5.11
Aroclor-1016 {3}	5.17	5.08	5.22	2637229	2603759	1.27
Aroclor-1016 {4}	5.38	5.29	5.43	1185455	1142168	3.65
Aroclor-1016 {5}	5.55	5.47	5.61	908023	876885	3.43
Aroclor-1260	7.93	7.02	8.82	1040447	1016249	2.33
Aroclor-1260 {2}	8.18	7.27	9.07	1521233	1408698	7.40
Aroclor-1260 {3}	9.78	8.87	10.67	1455389	1410706	3.07
Aroclor-1260 {4}	10.29	9.38	11.18	3388761	3271501	3.46
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2358325	2.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3147.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1343984	18.08
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1368564	8.91
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2246321	9.26
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1277619	13.90
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1801884	8.00
Aroclor-1260	8.34	7.42	9.22	4141358	4494095	8.52
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2203079	6.46
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6686130	12.25
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2811582	4.81
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1508246	0.92

Data File: Y3147.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	659894	4.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1228583	0.06
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2720790	3.17
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1206309	1.76
Aroclor-1016 {5}	5.54	5.47	5.61	908023	923284	1.68
Aroclor-1260	7.92	7.02	8.82	1040447	1053045	1.21
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1445534	4.98
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438592	1.15
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3376317	0.37
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2436062	0.97

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3090.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1311908	15.26
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1662073	10.62
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2310298	12.38
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1234615	10.06
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1770376	6.11
Aroclor-1260	8.34	7.42	9.22	4141358	4374408	5.63
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2421012	2.79
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6237028	4.71
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2361454	11.97
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1339823	10.35

Data File: Y3090.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	648563	3.08
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1217920	0.81
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2692822	2.11
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1186821	0.12
Aroclor-1016 {5}	5.54	5.47	5.61	908023	908927	0.10
Aroclor-1260	7.92	7.02	8.82	1040447	1028109	1.19
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1424452	6.36
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1404577	3.49
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3272856	3.42
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2371368	1.71

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3110.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1305225	14.67
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1709652	13.79
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2357395	14.67
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1258049	12.15
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1785870	7.04
Aroclor-1260	8.33	7.42	9.22	4141358	4071807	1.68
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2202647	6.48
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5572554	6.45
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2440673	9.02
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1225661	17.99

Data File: Y3110.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	662683	5.33
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1238971	0.91
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2729322	3.49
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1207735	1.88
Aroclor-1016 {5}	5.54	5.47	5.61	908023	919052	1.21
Aroclor-1260	7.92	7.02	8.82	1040447	1016191	2.33
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1394774	8.31
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1308307	10.11
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2970447	12.34
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2114771	12.35

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3120.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1317399	15.74
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1717133	14.29
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2417193	17.58
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1286910	14.72
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1843106	10.47
Aroclor-1260	8.33	7.42	9.22	4141358	4422476	6.79
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2388292	1.40
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6173780	3.65
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2426980	9.53
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1489089	0.36

Data File: Y3120.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	698443	11.01
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1316801	7.25
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2940558	11.50
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1281760	8.12
Aroclor-1016 {5}	5.54	5.47	5.61	908023	989222	8.94
Aroclor-1260	7.92	7.02	8.82	1040447	1116681	7.33
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1549112	1.83
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1527452	4.95
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3533362	4.27
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2547696	5.59

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3131.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1263162	10.98
Aroclor-1016 {2}	4.08	4.00	4.14	1502472	1350794	10.10
Aroclor-1016 {3}	4.64	4.55	4.69	2055858	2097805	2.04
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1187656	5.88
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1681596	0.79
Aroclor-1260	8.34	7.42	9.22	4141358	4184054	1.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2087478	11.37
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	5912878	0.73
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2579996	3.83
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1355936	9.27

Data File: Y3131.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.80	3.72	3.86	629157	638337	1.46
Aroclor-1016 {2}	4.41	4.32	4.46	1227813	1165121	5.11
Aroclor-1016 {3}	5.17	5.08	5.22	2637229	2603759	1.27
Aroclor-1016 {4}	5.38	5.29	5.43	1185455	1142168	3.65
Aroclor-1016 {5}	5.55	5.47	5.61	908023	876885	3.43
Aroclor-1260	7.93	7.02	8.82	1040447	1016249	2.33
Aroclor-1260 {2}	8.18	7.27	9.07	1521233	1408698	7.40
Aroclor-1260 {3}	9.78	8.87	10.67	1455389	1410706	3.07
Aroclor-1260 {4}	10.29	9.38	11.18	3388761	3271501	3.46
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2358325	2.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-Y

Data File: Y3147.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1343984	18.08
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1368564	8.91
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2246321	9.26
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1277619	13.90
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1801884	8.00
Aroclor-1260	8.34	7.42	9.22	4141358	4494095	8.52
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2203079	6.46
Aroclor-1260 {3}	9.49	8.58	10.38	5956539	6686130	12.25
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2811582	4.81
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1508246	0.92

Data File: Y3147.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	659894	4.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1228583	0.06
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2720790	3.17
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1206309	1.76
Aroclor-1016 {5}	5.54	5.47	5.61	908023	923284	1.68
Aroclor-1260	7.92	7.02	8.82	1040447	1053045	1.21
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1445534	4.98
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438592	1.15
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3376317	0.37
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2436062	0.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.18	3.18	3.18	3.17	3.17	3.17	3.10	3.24
Aroclor-1016 {2}	4.01	4.01	4.01	4.00	4.00	4.00	3.93	4.07
Aroclor-1016 {3}	4.56	4.56	4.56	4.55	4.55	4.56	4.49	4.63
Aroclor-1016 {4}	5.06	5.06	5.06	5.06	5.06	5.06	4.99	5.13
Aroclor-1016 {5}	5.47	5.46	5.46	5.46	5.45	5.46	5.39	5.53
Aroclor-1221			2.09				2.02	2.16
Aroclor-1221 {2}			2.98				2.91	3.05
Aroclor-1221 {3}			3.10				3.03	3.17
Aroclor-1221 {4}			3.18				3.11	3.25
Aroclor-1221 {5}			3.77				3.70	3.84
Aroclor-1232			3.18				3.11	3.25
Aroclor-1232 {2}			4.01				3.94	4.08
Aroclor-1232 {3}			4.68				4.61	4.75
Aroclor-1232 {4}			5.27				5.20	5.34
Aroclor-1232 {5}			5.47				5.40	5.54
Aroclor-1242			4.01				3.94	4.08
Aroclor-1242 {2}			4.95				4.88	5.02
Aroclor-1242 {3}			5.27				5.20	5.34
Aroclor-1242 {4}			5.97				5.90	6.04
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.41				4.33	4.49
Aroclor-1248 {2}			4.95				4.87	5.03
Aroclor-1248 {3}			5.27				5.19	5.35
Aroclor-1248 {4}			5.98				5.90	6.06
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.37				6.29	6.45
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.41				7.32	7.50
Aroclor-1254 {5}			8.28				8.19	8.37
Aroclor-1260	8.28	8.28	8.27	8.26	8.25	8.27	7.37	9.17
Aroclor-1260 {2}	8.94	8.94	8.94	8.93	8.93	8.94	8.04	9.84
Aroclor-1260 {3}	9.43	9.43	9.42	9.41	9.41	9.42	8.52	10.32
Aroclor-1260 {4}	9.93	9.92	9.91	9.90	9.89	9.91	9.01	10.81
Aroclor-1260 {5}	10.98	10.98	10.97	10.96	10.96	10.97	10.07	11.87

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R

GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	383548	375292	385763	375421	359640	375933	2.73
Aroclor-1016 {2}	503591	530508	497528	500692	481758	502815	3.51
Aroclor-1016 {3}	681685	668513	662817	670162	650188	666673	1.72
Aroclor-1016 {4}	390492	369352	384791	347143	330681	364492	6.94
Aroclor-1016 {5}	529731	514847	535436	529296	521001	526062	1.54
Aroclor-1221			147211				
Aroclor-1221 {2}			254307				
Aroclor-1221 {3}			149368				
Aroclor-1221 {4}			547853				
Aroclor-1221 {5}			133657				
Aroclor-1232			386422				
Aroclor-1232 {2}			220885				
Aroclor-1232 {3}			174797				
Aroclor-1232 {4}			319751				
Aroclor-1232 {5}			258228				
Aroclor-1242			420497				
Aroclor-1242 {2}			242599				
Aroclor-1242 {3}			588549				
Aroclor-1242 {4}			1187200				
Aroclor-1242 {5}			429341				
Aroclor-1248			765975				
Aroclor-1248 {2}			430311				
Aroclor-1248 {3}			864904				
Aroclor-1248 {4}			2086442				
Aroclor-1248 {5}			526706				
Aroclor-1254			1217349				
Aroclor-1254 {2}			892550				
Aroclor-1254 {3}			1304938				
Aroclor-1254 {4}			1526940				
Aroclor-1254 {5}			1478160				
Aroclor-1260	1356939	1186664	1302633	1371900	1363279	1316283	5.88
Aroclor-1260 {2}	742135	683611	759465	782547	765810	746714	5.11
Aroclor-1260 {3}	1766316	1688283	2029923	2166907	2129858	1956257	11.08
Aroclor-1260 {4}	898826	750678	850957	950128	954853	881089	9.57
Aroclor-1260 {5}	541345	502458	563054	601497	596253	560921	7.30
					Average %RSD		5.54

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.75	3.75	3.75	3.75	3.75	3.75	3.68	3.82
Aroclor-1016 {2}	4.36	4.36	4.36	4.35	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.12	5.12	5.12	5.11	5.11	5.12	5.05	5.19
Aroclor-1016 {4}	5.33	5.33	5.33	5.32	5.32	5.33	5.26	5.40
Aroclor-1016 {5}	5.51	5.50	5.50	5.50	5.49	5.50	5.43	5.57
Aroclor-1221			2.42				2.35	2.49
Aroclor-1221 {2}			3.43				3.36	3.50
Aroclor-1221 {3}			3.66				3.59	3.73
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.12				5.05	5.19
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.33				5.26	5.40
Aroclor-1232 {4}			5.51				5.44	5.58
Aroclor-1232 {5}			6.11				6.04	6.18
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.50				5.43	5.57
Aroclor-1242 {3}			6.11				6.04	6.18
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.82				6.75	6.89
Aroclor-1248			5.12				5.04	5.20
Aroclor-1248 {2}			5.71				5.63	5.79
Aroclor-1248 {3}			6.11				6.03	6.19
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.63				6.55	6.71
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.15				8.06	8.24
Aroclor-1254 {4}			8.34				8.25	8.43
Aroclor-1254 {5}			9.15				9.06	9.24
Aroclor-1260	7.89	7.89	7.89	7.88	7.88	7.89	6.99	8.79
Aroclor-1260 {2}	8.14	8.14	8.14	8.14	8.13	8.14	7.24	9.04
Aroclor-1260 {3}	9.75	9.75	9.75	9.74	9.74	9.74	8.84	10.64
Aroclor-1260 {4}	10.26	10.26	10.26	10.25	10.25	10.26	9.36	11.16
Aroclor-1260 {5}	10.85	10.85	10.85	10.84	10.84	10.85	9.95	11.75

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	2116191	2184167	2069500	1963430	1828497	2032357	6.86
Aroclor-1016 {2}	4032217	4376841	3930273	3803138	3565832	3941660	7.59
Aroclor-1016 {3}	7791958	8929233	8616852	8889690	8671818	8579910	5.37
Aroclor-1016 {4}	4274487	4074906	4139189	3771123	3566867	3965314	7.29
Aroclor-1016 {5}	3241005	3252905	3167215	2917390	2809404	3077584	6.56
Aroclor-1221			1101307				
Aroclor-1221 {2}			1591569				
Aroclor-1221 {3}			931575				
Aroclor-1221 {4}			3241230				
Aroclor-1221 {5}			767749				
Aroclor-1232			2398551				
Aroclor-1232 {2}			1010687				
Aroclor-1232 {3}			1902389				
Aroclor-1232 {4}			1470120				
Aroclor-1232 {5}			1969846				
Aroclor-1242			1767216				
Aroclor-1242 {2}			2671204				
Aroclor-1242 {3}			3427878				
Aroclor-1242 {4}			3387777				
Aroclor-1242 {5}			5330277				
Aroclor-1248			4728954				
Aroclor-1248 {2}			7333442				
Aroclor-1248 {3}			5066691				
Aroclor-1248 {4}			4686159				
Aroclor-1248 {5}			2534546				
Aroclor-1254			6166460				
Aroclor-1254 {2}			5082450				
Aroclor-1254 {3}			4179985				
Aroclor-1254 {4}			5985162				
Aroclor-1254 {5}			7752886				
Aroclor-1260	3440198	3725384	3815643	3646592	3118275	3549219	7.83
Aroclor-1260 {2}	5653519	5439844	5082333	4794742	4639360	5121959	8.31
Aroclor-1260 {3}	4528784	4795138	4543939	4444612	4428232	4548141	3.23
Aroclor-1260 {4}	10838904	10757351	10551106	10180290	10126019	10490734	3.11
Aroclor-1260 {5}	6703349	7156159	7298639	6951763	6817890	6985560	3.48
					Average %RSD		5.96

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.56				8.44	8.68
Aroclor-1262 {2}			9.43				9.31	9.55
Aroclor-1262 {3}			10.06				9.94	10.18
Aroclor-1262 {4}			10.14				10.02	10.26
Aroclor-1262 {5}			10.98				10.86	11.10
Aroclor-1268			10.06				9.94	10.18
Aroclor-1268 {2}			10.14				10.02	10.26
Aroclor-1268 {3}			10.61				10.49	10.73
Aroclor-1268 {4}			10.74				10.62	10.86
Aroclor-1268 {5}			11.58				11.46	11.70

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.75				9.63	9.87
Aroclor-1262 {2}			10.26				10.14	10.38
Aroclor-1262 {3}			10.76				10.64	10.88
Aroclor-1262 {4}			10.85				10.73	10.97
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.76				10.64	10.88
Aroclor-1268 {2}			10.84				10.72	10.96
Aroclor-1268 {3}			11.10				10.98	11.22
Aroclor-1268 {4}			11.24				11.12	11.36
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1168212				
Aroclor-1262 {2}			2239849				
Aroclor-1262 {3}			879258				
Aroclor-1262 {4}			1126181				
Aroclor-1262 {5}			839831				
Aroclor-1268			2311054				
Aroclor-1268 {2}			3012042				
Aroclor-1268 {3}			2314168				
Aroclor-1268 {4}			631651				
Aroclor-1268 {5}			7380276				

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5360706				
Aroclor-1262 {2}			12638729				
Aroclor-1262 {3}			4064561				
Aroclor-1262 {4}			8668956				
Aroclor-1262 {5}			2098932				
Aroclor-1268			11967904				
Aroclor-1268 {2}			12782905				
Aroclor-1268 {3}			10108282				
Aroclor-1268 {4}			2858263				
Aroclor-1268 {5}			29150062				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5401.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	389866	3.71
Aroclor-1016 {2}	4.01	3.93	4.07	502815	515488	2.52
Aroclor-1016 {3}	4.56	4.49	4.63	666673	683552	2.53
Aroclor-1016 {4}	5.07	4.99	5.13	364492	351877	3.46
Aroclor-1016 {5}	5.47	5.39	5.53	526062	525343	0.14
Aroclor-1260	8.27	7.37	9.17	1316283	1299868	1.25
Aroclor-1260 {2}	8.94	8.04	9.84	746714	728779	2.40
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	1955817	0.02
Aroclor-1260 {4}	9.91	9.01	10.81	881089	876409	0.53
Aroclor-1260 {5}	10.97	10.07	11.87	560921	510817	8.93

Data File: R5401.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2139076	5.25
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4220504	7.07
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9368061	9.19
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	4118329	3.86
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3205909	4.17
Aroclor-1260	7.90	6.99	8.79	3549219	3228705	9.03
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4622896	9.74
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4147919	8.80
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	8976984	14.43
Aroclor-1260 {5}	10.86	9.95	11.75	6985560	5988006	14.28

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5424.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	415039	10.40
Aroclor-1016 {2}	4.01	3.93	4.07	502815	535457	6.49
Aroclor-1016 {3}	4.56	4.49	4.63	666673	718890	7.83
Aroclor-1016 {4}	5.07	4.99	5.13	364492	390403	7.11
Aroclor-1016 {5}	5.47	5.39	5.53	526062	565847	7.56
Aroclor-1260	8.27	7.37	9.17	1316283	1334254	1.37
Aroclor-1260 {2}	8.94	8.04	9.84	746714	746865	0.02
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	2038526	4.21
Aroclor-1260 {4}	9.91	9.01	10.81	881089	881737	0.07
Aroclor-1260 {5}	10.98	10.07	11.87	560921	535984	4.45

Data File: R5424.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	2032357	2312450	13.78
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4568460	15.90
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	10119055	17.94
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4576445	15.41
Aroclor-1016 {5}	5.50	5.43	5.57	3077584	3587966	16.58
Aroclor-1260	7.89	6.99	8.79	3549219	3894443	9.73
Aroclor-1260 {2}	8.14	7.24	9.04	5121959	5008381	2.22
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4223262	7.14
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9217606	12.14
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6233678	10.76

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-R

Data File: R5485.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	391629	4.18
Aroclor-1016 {2}	4.01	3.93	4.07	502815	519653	3.35
Aroclor-1016 {3}	4.56	4.49	4.63	666673	684611	2.69
Aroclor-1016 {4}	5.07	4.99	5.13	364492	374977	2.88
Aroclor-1016 {5}	5.47	5.39	5.53	526062	539044	2.47
Aroclor-1260	8.27	7.37	9.17	1316283	1287110	2.22
Aroclor-1260 {2}	8.94	8.04	9.84	746714	746275	0.06
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2027559	3.64
Aroclor-1260 {4}	9.91	9.01	10.81	881089	899813	2.13
Aroclor-1260 {5}	10.98	10.07	11.87	560921	615265	9.69

Data File: R5485.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2231444	9.80
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4234405	7.43
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9368354	9.19
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4196063	5.82
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3282165	6.65
Aroclor-1260	7.89	6.99	8.79	3549219	3912491	10.24
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5113757	0.16
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4757377	4.60
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	11121525	6.01
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	8067242	15.48

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-R

Data File: R5495.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	368157	2.07
Aroclor-1016 {2}	4.01	3.93	4.07	502815	490779	2.39
Aroclor-1016 {3}	4.56	4.49	4.63	666673	658317	1.25
Aroclor-1016 {4}	5.07	4.99	5.13	364492	357880	1.81
Aroclor-1016 {5}	5.47	5.39	5.53	526062	518310	1.47
Aroclor-1260	8.27	7.37	9.17	1316283	1235624	6.13
Aroclor-1260 {2}	8.95	8.04	9.84	746714	722793	3.20
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2008970	2.69
Aroclor-1260 {4}	9.92	9.01	10.81	881089	904933	2.71
Aroclor-1260 {5}	10.98	10.07	11.87	560921	492344	12.23

Data File: R5495.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2133393	4.97
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4064034	3.10
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9068025	5.69
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4023188	1.46
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3222439	4.71
Aroclor-1260	7.89	6.99	8.79	3549219	3614622	1.84
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4879061	4.74
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4435405	2.48
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	10768836	2.65
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	7660639	9.66

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-R

Data File: R5515.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	365121	2.88
Aroclor-1016 {2}	4.01	3.93	4.07	502815	485134	3.52
Aroclor-1016 {3}	4.57	4.49	4.63	666673	652963	2.06
Aroclor-1016 {4}	5.07	4.99	5.13	364492	356973	2.06
Aroclor-1016 {5}	5.47	5.39	5.53	526062	510432	2.97
Aroclor-1260	8.28	7.37	9.17	1316283	1202849	8.62
Aroclor-1260 {2}	8.95	8.04	9.84	746714	679167	9.05
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1862644	4.79
Aroclor-1260 {4}	9.91	9.01	10.81	881089	806010	8.52
Aroclor-1260 {5}	10.98	10.07	11.87	560921	556644	0.76

Data File: R5515.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2254073	10.91
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4169720	5.79
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9160683	6.77
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4083594	2.98
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3191590	3.70
Aroclor-1260	7.89	6.99	8.79	3549219	3768900	6.19
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4910280	4.13
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4143251	8.90
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9598830	8.50
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6625980	5.15

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-R

Data File: R5516.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	386207	2.73
Aroclor-1016 {2}	4.01	3.93	4.07	502815	521897	3.79
Aroclor-1016 {3}	4.56	4.49	4.63	666673	685183	2.78
Aroclor-1016 {4}	5.07	4.99	5.13	364492	366403	0.52
Aroclor-1016 {5}	5.47	5.39	5.53	526062	531151	0.97
Aroclor-1260	8.27	7.37	9.17	1316283	1247071	5.26
Aroclor-1260 {2}	8.94	8.04	9.84	746714	725006	2.91
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	1851761	5.34
Aroclor-1260 {4}	9.91	9.01	10.81	881089	781972	11.25
Aroclor-1260 {5}	10.97	10.07	11.87	560921	460775	17.85

Data File: R5516.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2098584	3.26
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4057634	2.94
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9012353	5.04
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	3959932	0.14
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3063821	0.45
Aroclor-1260	7.90	6.99	8.79	3549219	3425805	3.48
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5000408	2.37
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4522212	0.57
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9989745	4.78
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6834537	2.16

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-R

Data File: R5519.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	391344	4.10
Aroclor-1016 {2}	4.01	3.93	4.07	502815	522445	3.90
Aroclor-1016 {3}	4.57	4.49	4.63	666673	696118	4.42
Aroclor-1016 {4}	5.07	4.99	5.13	364492	370382	1.62
Aroclor-1016 {5}	5.47	5.39	5.53	526062	541991	3.03
Aroclor-1260	8.27	7.37	9.17	1316283	1346183	2.27
Aroclor-1260 {2}	8.94	8.04	9.84	746714	785029	5.13
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2079646	6.31
Aroclor-1260 {4}	9.91	9.01	10.81	881089	885647	0.52
Aroclor-1260 {5}	10.97	10.07	11.87	560921	537919	4.10

Data File: R5519.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	2032357	2163345	6.45
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4097498	3.95
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9086220	5.90
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4060015	2.39
Aroclor-1016 {5}	5.50	5.43	5.57	3077584	3136086	1.90
Aroclor-1260	7.89	6.99	8.79	3549219	4017727	13.20
Aroclor-1260 {2}	8.14	7.24	9.04	5121959	5243406	2.37
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4985231	9.61
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	11072832	5.55
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	7593959	8.71

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.07 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA150629-16	06/30/2015	18:42	2.72		12.07		2.87		12.55	
PCB	LCSA150629-16	06/30/2015	18:59	2.72		12.07		2.87		12.55	
PCB	LCSDA150629-16	06/30/2015	19:17	2.72		12.07		2.87		12.55	
FB	E15-05346-027	06/30/2015	19:34	2.71		12.07		2.87		12.55	
FB	E15-05430-103	06/30/2015	19:51	2.71		12.07		2.87		12.55	
FB-1	E15-05338-007	06/30/2015	20:09	2.72		12.07		2.87		12.55	
FB-06221	E15-05367-040	06/30/2015	20:26	2.72		12.07		2.87		12.55	
FB-06231	E15-05428-030	06/30/2015	20:44	2.72		12.07		2.88		12.55	
FB-06241	E15-05428-032	06/30/2015	21:01	2.71		12.06		2.87		12.55	
FB-06251	E15-05467-012	06/30/2015	21:19	2.72		12.07		2.87		12.55	
FIELD_BL	E15-05470-016	06/30/2015	21:36	2.71		12.07		2.87		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-12	07/02/2015	21:10	2.77		12.11		2.91		12.56	
PCB	LCSS150701-12	07/02/2015	21:27	2.77		12.11		2.91		12.56	
PCB	05428-013MS	07/02/2015	21:45	2.77		12.11		2.90		12.56	
PCB	05428-013MSD	07/02/2015	22:02	2.77		12.12		2.91		12.56	
E-25_(2.	E15-05428-013	07/02/2015	22:19	2.77		12.12		2.91		12.56	
E-15_(0.	E15-05428-018	07/02/2015	22:37	2.77		12.11		2.91		12.56	
E-15_(2.	E15-05428-019	07/02/2015	22:54	2.77		12.12		2.91		12.56	
E-10_(0.	E15-05428-024	07/02/2015	23:11	2.77		12.11		2.90		12.56	
E-10_(2.	E15-05428-025	07/02/2015	23:29	2.77		12.11		2.91		12.56	
C-1	E15-05432-001	07/03/2015	01:13	2.77		12.11		2.91		12.56	
C-2	E15-05432-002	07/03/2015	01:30	2.77		12.11		2.90		12.56	
C-3	E15-05432-003	07/03/2015	01:47	2.77		12.11		2.91		12.56	
C-4	E15-05432-004	07/03/2015	02:05	2.77		12.11		2.91		12.56	
C-5	E15-05432-005	07/03/2015	02:22	2.77		12.11		2.91		12.56	
C-6	E15-05432-006	07/03/2015	02:39	2.77		12.11		2.91		12.56	
C-7	E15-05432-007	07/03/2015	02:57	2.77		12.11		2.91		12.56	
C-8	E15-05432-008	07/03/2015	03:14	2.77		12.11		2.91		12.56	
E-13_(0.	E15-05467-001	07/03/2015	03:31	2.77		12.11		2.91		12.56	
E-13_(2.	E15-05467-002	07/03/2015	03:49	2.77		12.11		2.91		12.56	
E-21_(0.	E15-05467-003	07/03/2015	04:06	2.77		12.11		2.91		12.56	
E-21_(2.	E15-05467-004	07/03/2015	04:23	2.77		12.11		2.91		12.56	
E-23_(0.	E15-05467-005	07/03/2015	04:41	2.78		12.11		2.91		12.56	
E-23_(2.	E15-05467-006	07/03/2015	04:58	2.77		12.11		2.91		12.56	
E-25_(0.	E15-05467-007	07/03/2015	05:15	2.77		12.12		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-12	07/02/2015	21:10	2.77		12.11		2.91		12.56	
PCB	LCSS150701-12	07/02/2015	21:27	2.77		12.11		2.91		12.56	
PCB	05428-013MS	07/02/2015	21:45	2.77		12.11		2.90		12.56	
PCB	05428-013MSD	07/02/2015	22:02	2.77		12.12		2.91		12.56	
E-28_(2.	E15-05428-013	07/02/2015	22:19	2.77		12.12		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

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PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-12	07/02/2015	21:10	2.77		12.11		2.91		12.56	
PCB	LCSS150701-12	07/02/2015	21:27	2.77		12.11		2.91		12.56	
E-21_(0.	E15-05467-003DL	07/06/2015	12:03	2.78		12.11		2.91		12.56	
E-23_(0.	E15-05467-005DL	07/06/2015	12:20	2.78		12.11		2.91		12.56	
E-23_(2.	E15-05467-006DL	07/06/2015	12:38	2.78		12.11		2.91		12.56	
E-25_(0.	E15-05467-007DL	07/06/2015	12:55	2.78		12.11		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.06 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-05	07/02/2015	13:11	2.72		12.06		2.87		12.55	
PCB	LCSS150701-05	07/02/2015	13:29	2.72		12.06		2.87		12.55	
PCB	05632-023MS	07/02/2015	13:46	2.72		12.06		2.87		12.55	
PCB	05632-023MSD	07/02/2015	14:04	2.72		12.06		2.87		12.55	
S-17/0.5	E15-05632-024	07/02/2015	15:19	2.71		12.06		2.87		12.55	
S-16/0.5	E15-05632-023	07/02/2015	15:36	2.72		12.06		2.87		12.55	
SB-2A	E15-05638-004	07/02/2015	16:28	2.71		12.06		2.87		12.55	
SB-2B	E15-05638-005	07/02/2015	16:46	2.72		12.06		2.87		12.55	
SB-3A	E15-05638-007	07/02/2015	17:03	2.71		12.06		2.87		12.55	
SB-3B	E15-05638-008	07/02/2015	17:21	2.71		12.07		2.87		12.55	
SB-4A	E15-05638-010	07/02/2015	17:38	2.71		12.06		2.87		12.55	
SB-4B	E15-05638-011	07/02/2015	17:56	2.71		12.07		2.87		12.55	
SB-6A	E15-05638-016	07/02/2015	18:13	2.71		12.06		2.87		12.55	
SB-6B	E15-05638-017	07/02/2015	18:31	2.71		12.07		2.87		12.55	
SB-8B	E15-05638-022	07/02/2015	18:48	2.71		12.07		2.87		12.55	
BG-1	E15-05421-001	07/02/2015	19:05	2.72		12.06		2.87		12.51	
CS-1	E15-05395-001	07/02/2015	19:23	2.71		12.06		2.87		12.55	
CS-2	E15-05395-002	07/02/2015	19:40	2.71		12.06		2.87		12.55	
E-20_(2.	E15-05428-002	07/02/2015	20:15	2.71		12.06		2.87		12.55	
E-22_(0.	E15-05428-003	07/02/2015	20:32	2.71		12.06		2.87		12.55	
E-22_(2.	E15-05428-004	07/02/2015	20:50	2.71		12.07		2.87		12.55	
E-29_(0.	E15-05428-005	07/02/2015	21:07	2.71		12.06		2.87		12.55	
E-29_(2.	E15-05428-006	07/02/2015	21:25	2.71		12.06		2.87		12.55	
E-20_(0.	E15-05428-001	07/06/2015	09:23	2.72		12.07		2.88		12.55	
E-22_(0.	E15-05428-003DL	07/06/2015	09:41	2.72		12.06		2.87		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-08	07/02/2015	11:21	2.77		12.11		2.91		12.56	
PCB	LCSS150701-08	07/02/2015	11:38	2.77		12.11		2.91		12.56	
PCB	05367-005MS	07/02/2015	11:56	2.77		12.11		2.90		12.56	
PCB	05367-005MSD	07/02/2015	12:13	2.77		12.11		2.90		12.55	
E-18_(0.	E15-05367-005	07/02/2015	12:31	2.77		12.11		2.91		12.56	
E-18_(2.	E15-05367-006	07/02/2015	12:48	2.77		12.11		2.90		12.56	
E-11_(0.	E15-05367-011	07/02/2015	13:05	2.77		12.11		2.90		12.55	
E-11_(2.	E15-05367-012	07/02/2015	13:23	2.77		12.11		2.91		12.56	
E-12_(0.	E15-05367-013	07/02/2015	14:15	2.77		12.11		2.90		12.55	
E-12_(2.	E15-05367-014	07/02/2015	14:32	2.77		12.11		2.91		12.56	
E-14_(0.	E15-05367-015	07/02/2015	14:49	2.77		12.11		2.91		12.56	
E-14_(2.	E15-05367-016	07/02/2015	15:07	2.77		12.11		2.91		12.56	
X-2_(2.0	E15-05367-024	07/02/2015	15:24	2.77		12.11		2.91		12.56	
E-8_(0.5	E15-05367-025	07/02/2015	15:41	2.77		12.11		2.90		12.56	
E-8_(2.0	E15-05367-026	07/02/2015	15:59	2.77		12.11		2.91		12.56	
E-17_(2.	E15-05367-028	07/02/2015	16:32	2.77		12.11		2.91		12.56	
E-9_(0.5	E15-05367-029	07/02/2015	16:50	2.77		12.11		2.91		12.56	
E-9_(2.0	E15-05367-030	07/02/2015	17:07	2.77		12.11		2.91		12.56	
E-19_(0.	E15-05428-007	07/02/2015	17:59	2.77		12.11		2.90		12.56	
E-19_(2.	E15-05428-008	07/02/2015	18:16	2.77		12.11		2.90		12.56	
E-27_(0.	E15-05428-009	07/02/2015	18:34	2.77		12.11		2.91		12.56	
E-27_(2.	E15-05428-010	07/02/2015	18:51	2.77		12.11		2.90		12.56	
E-25_(0.	E15-05428-012	07/02/2015	19:08	2.77		12.11		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-08	07/02/2015	11:21	2.77		12.11		2.91		12.56	
PCB	LCSS150701-08	07/02/2015	11:38	2.77		12.11		2.91		12.56	
PCB	05367-005MS	07/02/2015	11:56	2.77		12.11		2.90		12.56	
PCB	05367-005MSD	07/02/2015	12:13	2.77		12.11		2.90		12.55	
E-18_(0.	E15-05367-005	07/02/2015	12:31	2.77		12.11		2.91		12.56	
E-28_(0.	E15-05428-012	07/02/2015	19:08	2.77		12.11		2.91		12.56	
E-18_(0.	E15-05367-005DL	07/03/2015	07:00	2.78		12.11		2.91		12.56	
E-28_(0.	E15-05428-012DL	07/06/2015	11:45	2.77		12.12		2.91		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

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PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-08	07/02/2015	11:21	2.77		12.11		2.91		12.56	
PCB	LCSS150701-08	07/02/2015	11:38	2.77		12.11		2.91		12.56	
E-18_(0.	E15-05367-005DL	07/03/2015	07:00	2.78		12.11		2.91		12.56	
E-11_(0.	E15-05367-011DL	07/03/2015	07:17	2.78		12.11		2.91		12.56	
E-12_(0.	E15-05367-013DL	07/03/2015	07:34	2.78		12.12		2.91		12.56	
E-14_(0.	E15-05367-015DL	07/03/2015	07:52	2.78		12.12		2.91		12.56	
E-17_(0.	E15-05367-027	07/06/2015	10:25	2.78		12.12		2.92		12.57	
E-9_(0.5	E15-05367-029	07/06/2015	10:53	2.78		12.12		2.92		12.56	
E-19_(0.	E15-05428-007DL	07/06/2015	11:11	2.77		12.12		2.91		12.56	
E-27_(0.	E15-05428-009DL	07/06/2015	11:28	2.78		12.11		2.91		12.55	
E-25_(0.	E15-05428-012DL	07/06/2015	11:45	2.77		12.12		2.91		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-07	07/06/2015	17:32	2.77		12.11		2.91		12.56	
PCB	LCSS150701-07	07/06/2015	17:50	2.78		12.11		2.91		12.56	
E-3_(2.0	E15-05367-003	07/07/2015	14:00	2.78		12.12		2.92		12.57	
E-4_(0.5	E15-05367-007	07/07/2015	14:17	2.78		12.12		2.91		12.56	
E-4_(2.0	E15-05367-008DL	07/07/2015	14:34	2.78		12.12		2.91		12.56	
E-4_(3.0	E15-05367-009DL	07/07/2015	14:52	2.78		12.12		2.91		12.56	
E-4_(4.5	E15-05367-010DL	07/07/2015	15:09	2.78		12.12		2.91		12.56	
X-1_(4.5	E15-05367-023DL	07/07/2015	15:26	2.78		12.12		2.91		12.56	
E-6_(0.5	E15-05367-039DL	07/07/2015	15:44	2.78		12.12		2.91		12.56	
X-3_(0.5	E15-05428-011	07/07/2015	16:01	2.78		12.12		2.91		12.57	
E-1_(0.5	E15-05428-014DL	07/07/2015	16:18	2.78		12.11		2.92		12.56	
E-2_(0.5	E15-05428-020	07/07/2015	16:36	2.78		12.12		2.92		12.57	
E-2_(2.0	E15-05428-021	07/07/2015	16:53	2.78		12.12		2.92		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-07	07/06/2015	17:32	2.77		12.11		2.91		12.56	
PCB	LCSS150701-07	07/06/2015	17:50	2.78		12.11		2.91		12.56	
PCB	05367-003MS	07/06/2015	18:07	2.77		12.11		2.91		12.55	
PCB	05367-003MSD	07/06/2015	18:25	2.77		12.11		2.91		12.56	
E-3_(4.5	E15-05367-004	07/06/2015	18:59	2.77		12.12		2.91		12.55	
E-4_(2.0	E15-05367-008	07/06/2015	19:34	2.79		12.12		2.92		12.56	
E-4_(3.0	E15-05367-009	07/06/2015	19:51	2.78		12.11		2.91		12.56	
E-4_(4.5	E15-05367-010	07/06/2015	20:09	2.77		12.12		2.91		12.56	
X-1_(4.5	E15-05367-023	07/06/2015	20:26	2.78		12.11		2.91		12.56	
E-6_(0.5	E15-05367-039	07/06/2015	20:44	2.77		12.11		2.91		12.56	
E-6_(2.0	E15-05367-041	07/06/2015	21:01	2.78		12.11		2.91		12.56	
E-6_(3.0	E15-05367-042	07/06/2015	21:19	2.78		12.12		2.91		12.56	
E-6_(4.0	E15-05367-043	07/06/2015	21:36	2.79		12.12		2.92		12.56	
E-1_(0.5	E15-05428-014	07/06/2015	23:55	2.77		12.11		2.91		12.56	
E-1_(2.0	E15-05428-015	07/07/2015	00:12	2.77		12.11		2.91		12.56	
E-1_(3.0	E15-05428-016	07/07/2015	00:29	2.77		12.12		2.91		12.56	
E-1_(4.5	E15-05428-017	07/07/2015	00:47	2.77		12.12		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.12 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-11	07/07/2015	02:30	2.77		12.12		2.91		12.56	
PCB	LCSS150701-11	07/07/2015	02:48	2.77		12.12		2.91		12.56	
PCB	05589-001MS	07/07/2015	03:05	2.77		12.12		2.91		12.56	
PCB	05589-001MSD	07/07/2015	03:23	2.77		12.11		2.91		12.56	
E-2_(3.0	E15-05428-022	07/07/2015	03:40	2.77		12.12		2.91		12.56	
E-2_(4.0	E15-05428-023	07/07/2015	03:57	2.77		12.11		2.91		12.56	
E-7_(0.5	E15-05428-026	07/07/2015	04:15	2.77		12.11		2.91		12.56	
E-7_(2.0	E15-05428-027	07/07/2015	04:32	2.79		12.11		2.92		12.56	
E-7_(3.0	E15-05428-028	07/07/2015	04:49	2.77		12.11		2.91		12.56	
E-7_(4.5	E15-05428-029	07/07/2015	06:51	2.78		12.11		2.91		12.56	
F-2	E15-05470-009	07/07/2015	07:08	2.78		12.12		2.91		12.56	
F-1	E15-05470-010	07/07/2015	07:25	2.78		12.12		2.91		12.56	
F-1D	E15-05470-011	07/07/2015	07:43	2.78		12.11		2.92		12.56	
F-3	E15-05470-012	07/07/2015	08:00	2.78		12.12		2.91		12.56	
F-4	E15-05470-013	07/07/2015	08:17	2.79		12.12		2.92		12.56	
F-5	E15-05470-014	07/07/2015	08:35	2.78		12.11		2.91		12.56	
15-109	E15-05589-001	07/07/2015	08:52	2.78		12.11		2.91		12.56	
E-2_(3.0	E15-05428-022DL	07/07/2015	17:10	2.78		12.11		2.91		12.56	
E-2_(4.0	E15-05428-023DL	07/07/2015	17:28	2.78		12.12		2.91		12.56	
E-7_(0.5	E15-05428-026DL	07/07/2015	17:45	2.78		12.11		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5517.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 9:23
Operator : JS
Sample : E-20_(0.,E15-05428-001,S,5.02g,17.8,20
Misc : 150701-05,07/01/15,06/24/15,100
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:20:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	49650922	361.2E6	2.469	2.959
Spiked Amount 200.000			Recovery	=	1.23%	1.48%
2) S DCB	12.07	12.55	18871768	87914027	2.284m	2.561m
Spiked Amount 200.000			Recovery	=	1.14%	1.28%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	498.8E6	1135.3E6	378.957	319.870
34) L8 Aroclor-1260 {2}	8.94	8.15	244.0E6	1457.8E6	326.820	284.626
35) L8 Aroclor-1260 {3}	9.42	9.75	706.8E6	1709.4E6	361.280	375.839
36) L8 Aroclor-1260 {4}	9.91	10.26	330.8E6	3863.2E6	375.452	368.244
37) L8 Aroclor-1260 {5}	10.97	10.86	164.6E6	2722.4E6	293.496	389.725 #
Sum Aroclor-1260			1945.0E6	10888.1E6	1736.004	1738.304
Average Aroclor-1260					347.201	347.661
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

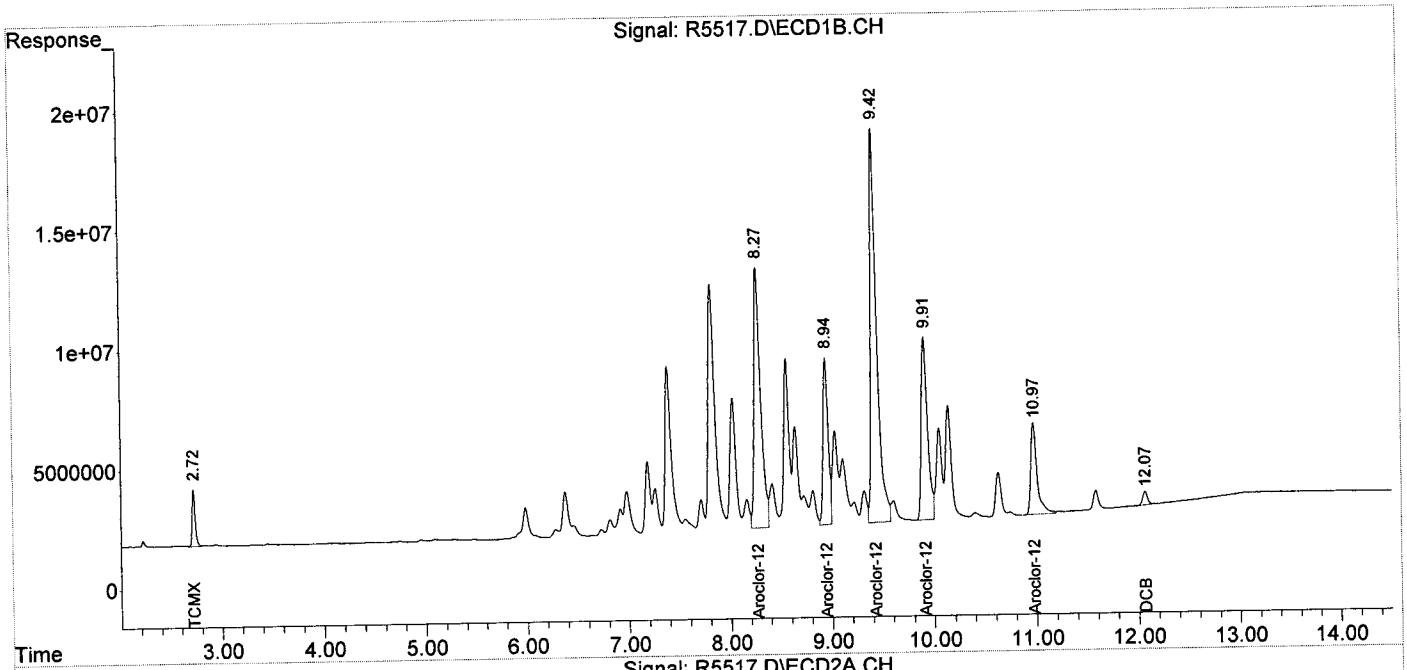
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

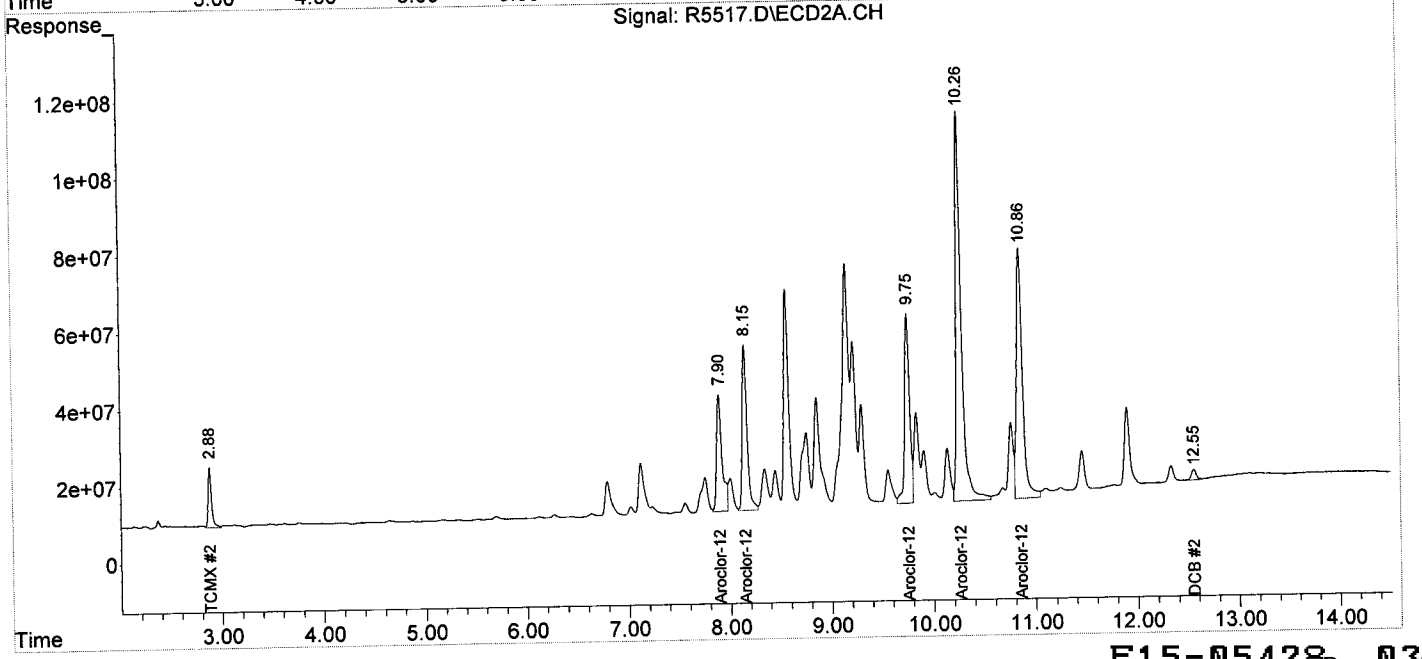
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5517.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 9:23
Operator : JS
Sample : E-20_(0.,E15-05428-001,S,5.02g,17.8,20
Misc : 150701-05,07/01/15,06/24/15,100
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:20:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5509.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 20:15
Operator : JS
Sample : E-20_(2.,E15-05428-002,S,5.94g,5.60,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:09:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.87	3468.9E6	20843.5E6	172.496	170.752
Spiked Amount 200.000			Recovery	=	86.25%	85.38%
2) S DCB	12.06	12.55	1557.3E6	6608.4E6	188.500	192.503m
Spiked Amount 200.000			Recovery	=	94.25%	96.25%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	1604.1E6	3017.9E6	1218.645	850.297 #
34) L8 Aroclor-1260 {2}	8.94	8.14	764.0E6	3930.2E6	1023.188	767.326 #
35) L8 Aroclor-1260 {3}	9.42	9.75	2323.8E6	5014.2E6	1187.897	1102.473
36) L8 Aroclor-1260 {4}	9.91	10.26	1193.3E6	11520.4E6	1354.319	1098.152
37) L8 Aroclor-1260 {5}	10.97	10.85	723.6E6	9293.6E6	1290.086	1330.401m
Sum Aroclor-1260			6608.9E6	32776.3E6	6074.136	5148.649
Average Aroclor-1260					1214.827	1029.730
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

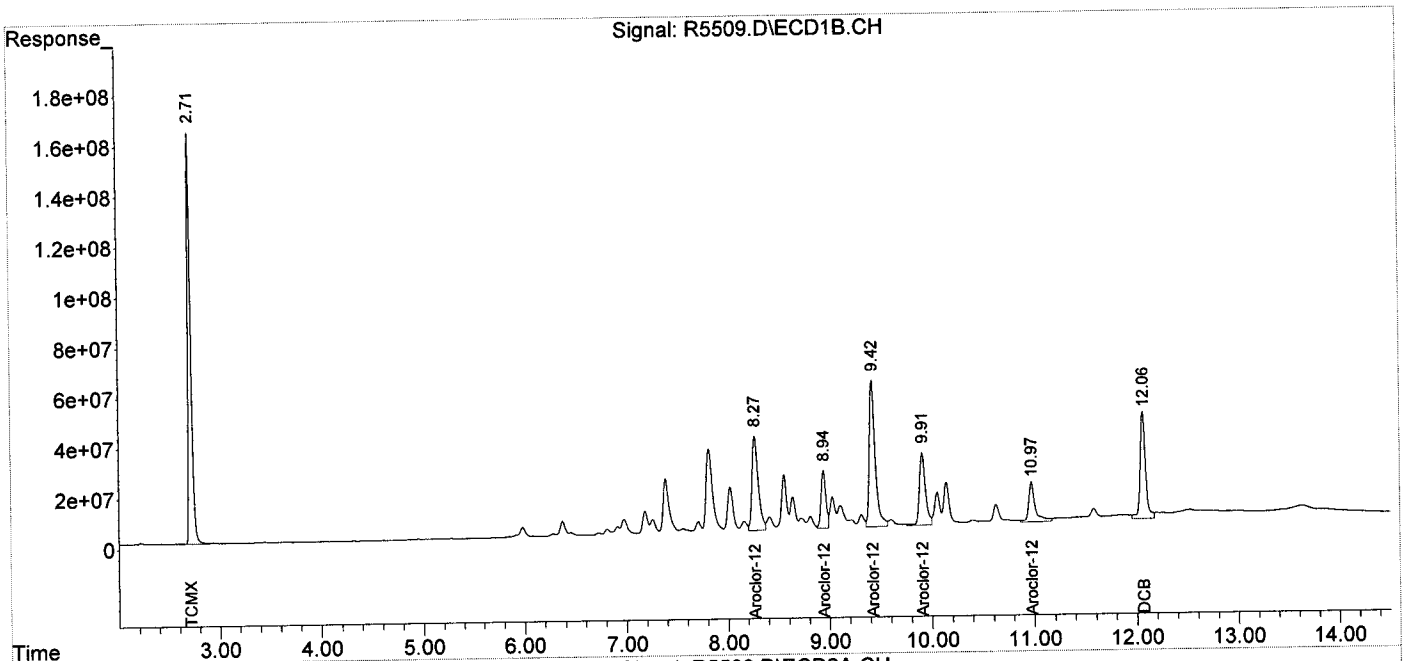
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

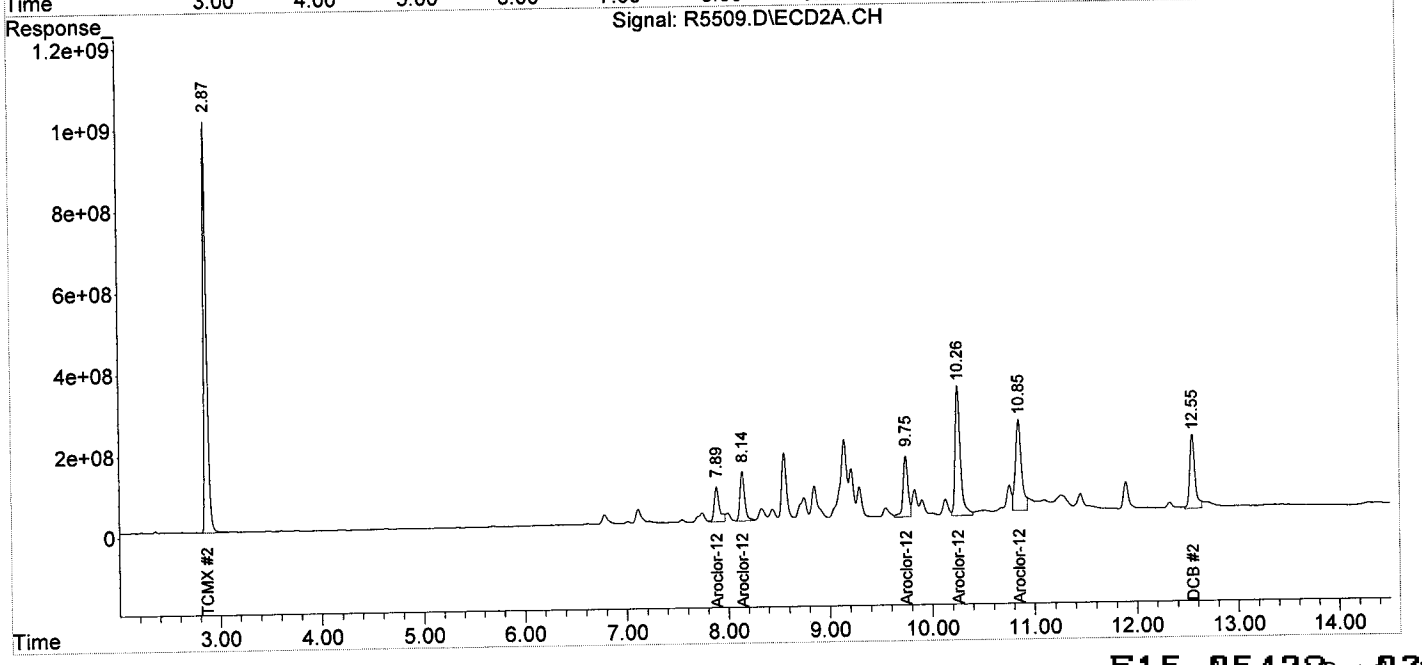
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5509.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 20:15
Operator : JS
Sample : E-20_(2.,E15-05428-002,S,5.94g,5.60,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:09:04 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDChem\1\DATA\07-06-15\
Data File : R5518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 9:41
Operator : JS
Sample : E-22_(0.,E15-05428-003,S,5.34g,11.8,20
Misc : 150701-05,07/01/15,06/24/15,5
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:20:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.72	2.87	793.4E6	4356.3E6	39.454	35.688
Spiked Amount 200.000				Recovery	=	19.73%	17.84%
2) S DCB		12.06	12.55	373.8E6	1488.4E6	45.251	43.356
Spiked Amount 200.000				Recovery	=	22.63%	21.68%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.27	7.89	679.5E6	1614.1E6	516.210	454.767
34) L8 Aroclor-1260	{2}	8.94	8.14	308.2E6	1822.9E6	412.784	355.890
35) L8 Aroclor-1260	{3}	9.42	9.75	915.0E6	2171.8E6	467.716	477.511
36) L8 Aroclor-1260	{4}	9.91	10.26	449.4E6	4889.6E6	510.106	466.088
37) L8 Aroclor-1260	{5}	10.97	10.85	263.1E6	3507.1E6	469.115	502.047
Sum Aroclor-1260				2615.3E6	14005.4E6	2375.930	2256.303
Average Aroclor-1260						475.186	451.261
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

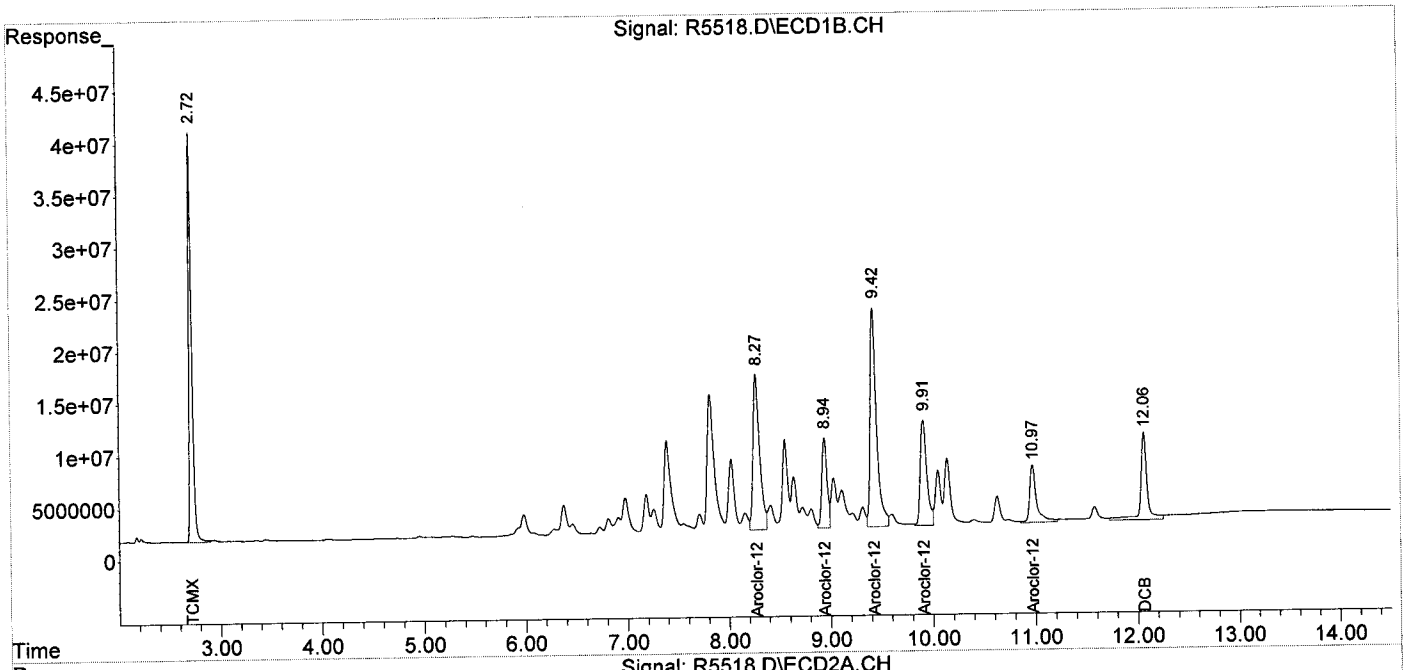
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

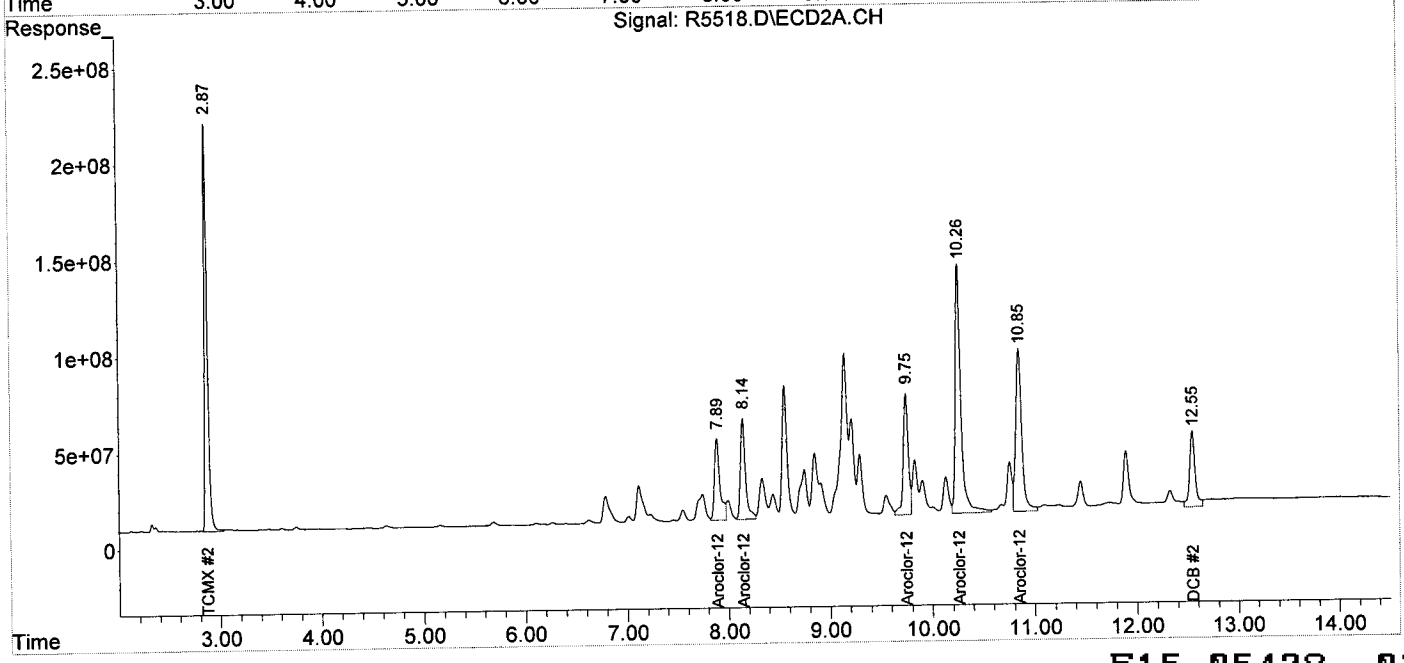
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : R5518.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 9:41
Operator : JS
Sample : E-22_(0.,E15-05428-003,S,5.34g,11.8,20
Misc : 150701-05,07/01/15,06/24/15,5
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:20:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5511.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 20:50
Operator : JS
Sample : E-22_(2.,E15-05428-004,S,5.42g,5.40,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:13:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.87	3733.0E6	22597.5E6	185.626	185.121
Spiked Amount 200.000			Recovery	=	92.81%	92.56%
2) S DCB	12.07	12.55	1626.7E6	7853.9E6	196.899	228.785
Spiked Amount 200.000			Recovery	=	98.45%	114.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.28	7.89	93455511	234.7E6	71.000	66.126
34) L8 Aroclor-1260 {2}	8.94	8.15	38744639	285.9E6	51.887	55.820
35) L8 Aroclor-1260 {3}	9.43	9.75	121.6E6	341.6E6	62.173	75.114
36) L8 Aroclor-1260 {4}	9.92	10.26	59959866	684.4E6	68.052	65.235m
37) L8 Aroclor-1260 {5}	10.97	10.85	32873506	504.5E6	58.606m	72.218m
Sum Aroclor-1260			346.7E6	2051.1E6	311.717	334.513
Average Aroclor-1260					62.343	66.903
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

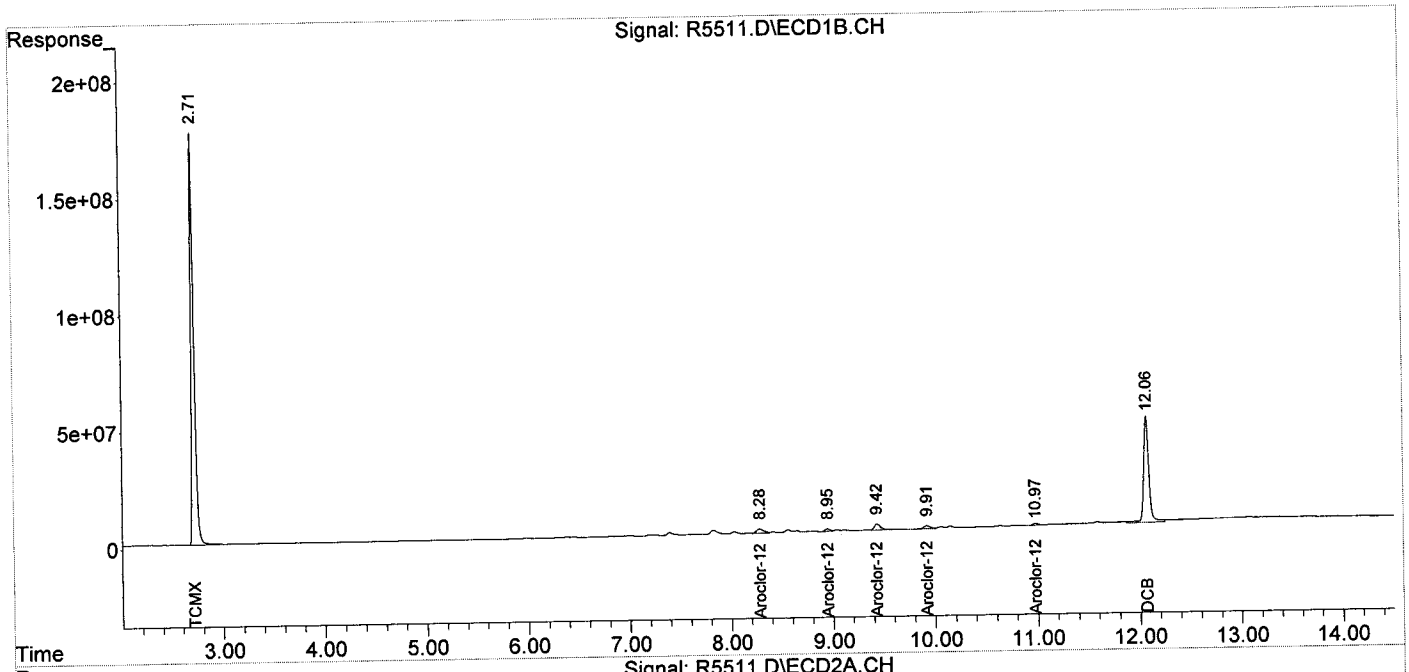
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

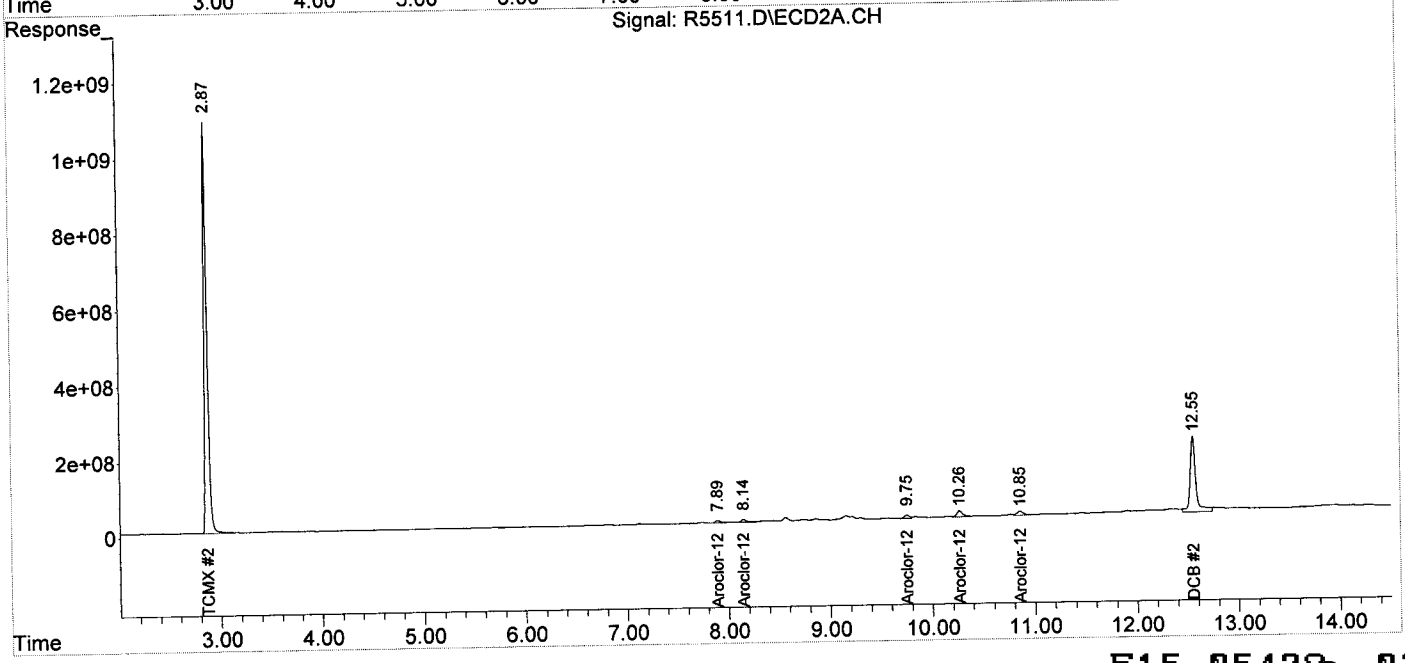
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5511.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 20:50
Operator : JS
Sample : E-22_(2.,E15-05428-004,S,5.42g,5.40,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:13:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5512.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:07
Operator : JS
Sample : E-29_(0.,E15-05428-005,S,5.06g,23.1,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:14:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.71	2.87	3468.0E6	19752.2E6	172.448	161.813
Spiked Amount 200.000				Recovery	=	86.22%	80.91%
2) S DCB		12.06	12.55	1764.6E6	7508.9E6	213.591m	218.735
Spiked Amount 200.000				Recovery	=	106.80%	109.37%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.26	7.89	1467.1E6	2317.5E6	1114.574	652.955 #
34) L8 Aroclor-1260	{2}	8.94	0.00	754.9E6	0	1010.903	N.D. d#
35) L8 Aroclor-1260	{3}	9.42	9.74	2121.0E6	3648.5E6	1084.213	802.200 #
36) L8 Aroclor-1260	{4}	9.90	10.25	959.9E6	9356.2E6	1089.416m	891.855
37) L8 Aroclor-1260	{5}	10.97	10.85	622.1E6	7483.4E6	1109.079m	1071.272
Sum Aroclor-1260				5924.9E6	22805.6E6	5408.185	3418.282
Average Aroclor-1260						1081.637	854.571
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

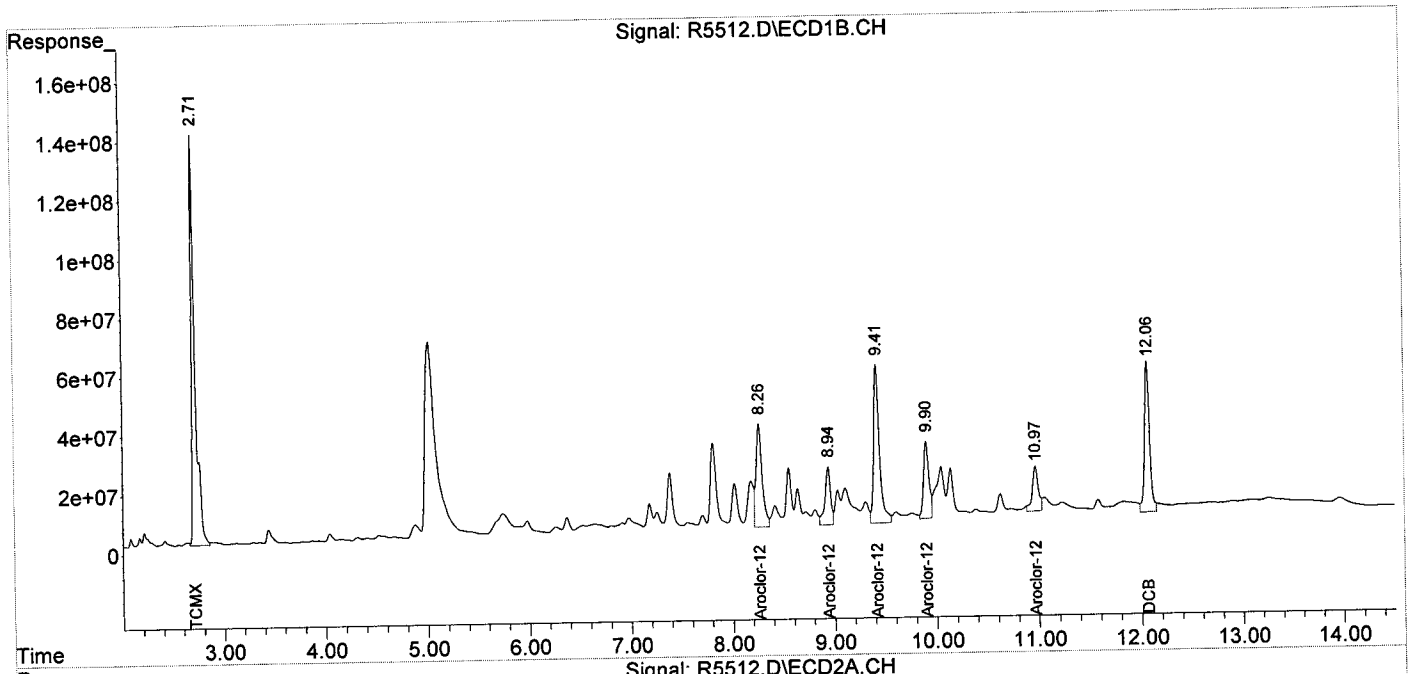
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

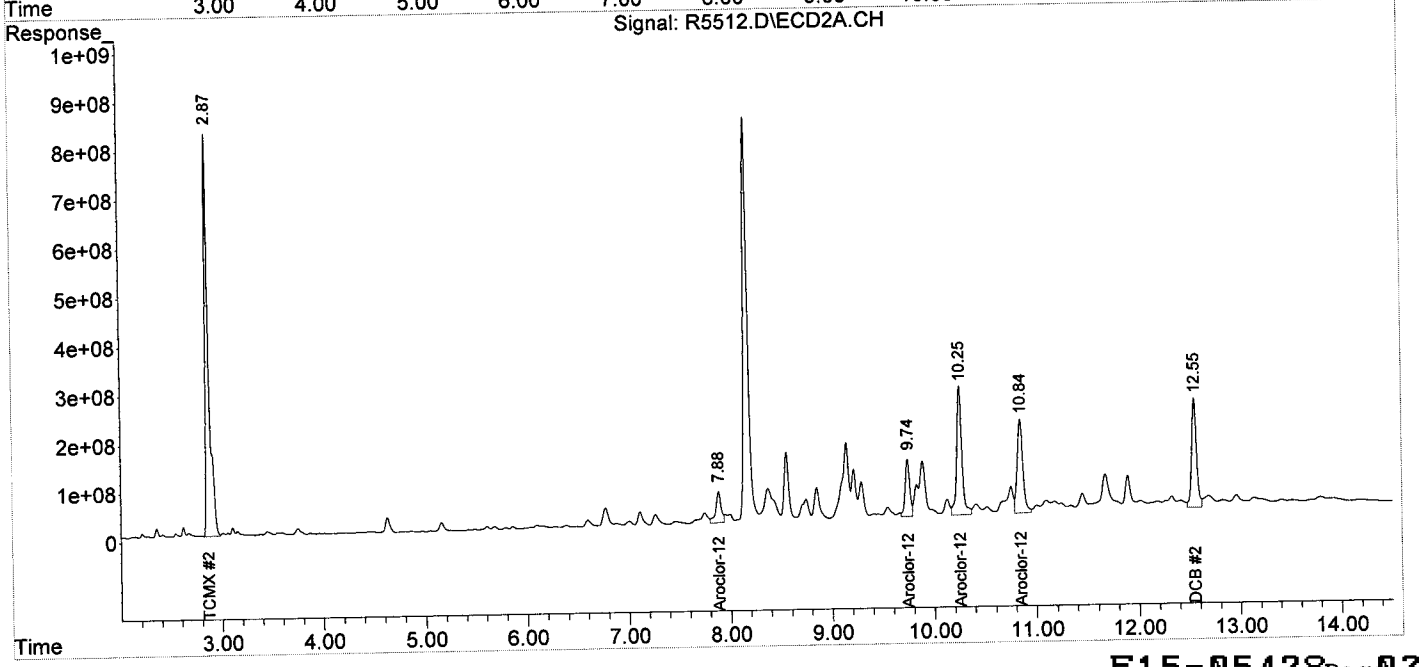
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5512.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:07
Operator : JS
Sample : E-29_(0.,E15-05428-005,S,5.06g,23.1,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:14:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5513.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:25
Operator : JS
Sample : E-29_(2.,E15-05428-006,S,5.59g,8.40,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:15:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		2.71	2.87	3457.4E6	20831.0E6	171.921	170.650
Spiked Amount 200.000				Recovery	=	85.96%	85.33%
2) S DCB		12.06	12.55	1736.6E6	6948.2E6	210.211	202.400m
Spiked Amount 200.000				Recovery	=	105.11%	101.20%
Target Compounds							
Sum Aroclor-1016				0	0	N.D.	N.D.
Average Aroclor-1016						0.000	0.000
Sum Aroclor-1221				0	0	N.D.	N.D.
Average Aroclor-1221						0.000	0.000
Sum Aroclor-1232				0	0	N.D.	N.D.
Average Aroclor-1232						0.000	0.000
Sum Aroclor-1242				0	0	N.D.	N.D.
Average Aroclor-1242						0.000	0.000
Sum Aroclor-1248				0	0	N.D.	N.D.
Average Aroclor-1248						0.000	0.000
Sum Aroclor-1254				0	0	N.D.	N.D.
Average Aroclor-1254						0.000	0.000
33) L8 Aroclor-1260		8.27	7.89	121.9E6	210.1E6	92.628	59.184 #
34) L8 Aroclor-1260	{2}	8.94	0.00	56761144	0	76.015	N.D. d#
35) L8 Aroclor-1260	{3}	9.43	9.75	162.5E6	430.2E6	83.052	94.578
36) L8 Aroclor-1260	{4}	9.91	10.26	81156702	804.4E6	92.110m	76.678
37) L8 Aroclor-1260	{5}	10.98	10.85	42179113	719.7E6	75.196m	103.024m#
Sum Aroclor-1260				464.5E6	2164.3E6	419.000	333.464
Average Aroclor-1260						83.800	83.366
Sum Aroclor-1262				0	0	N.D.	N.D.
Average Aroclor-1262						0.000	0.000
Sum Aroclor-1268				0	0	N.D.	N.D.
Average Aroclor-1268						0.000	0.000

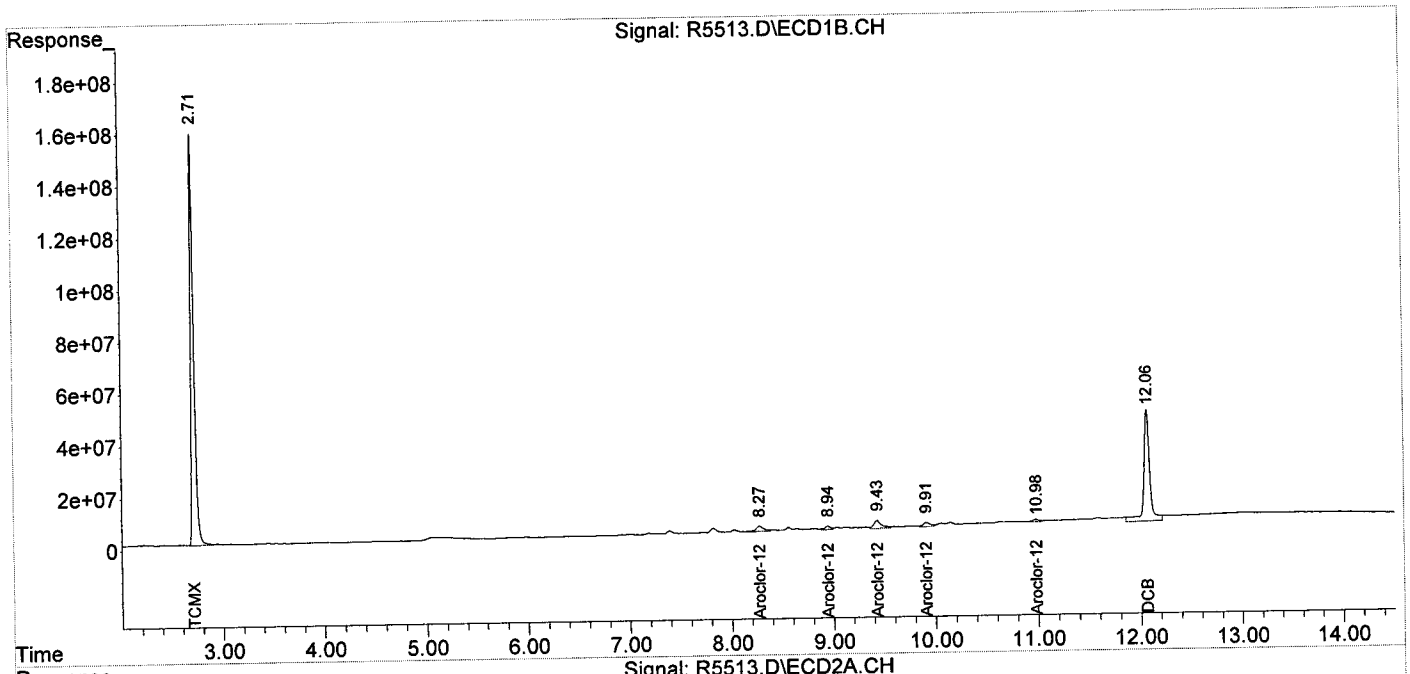
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

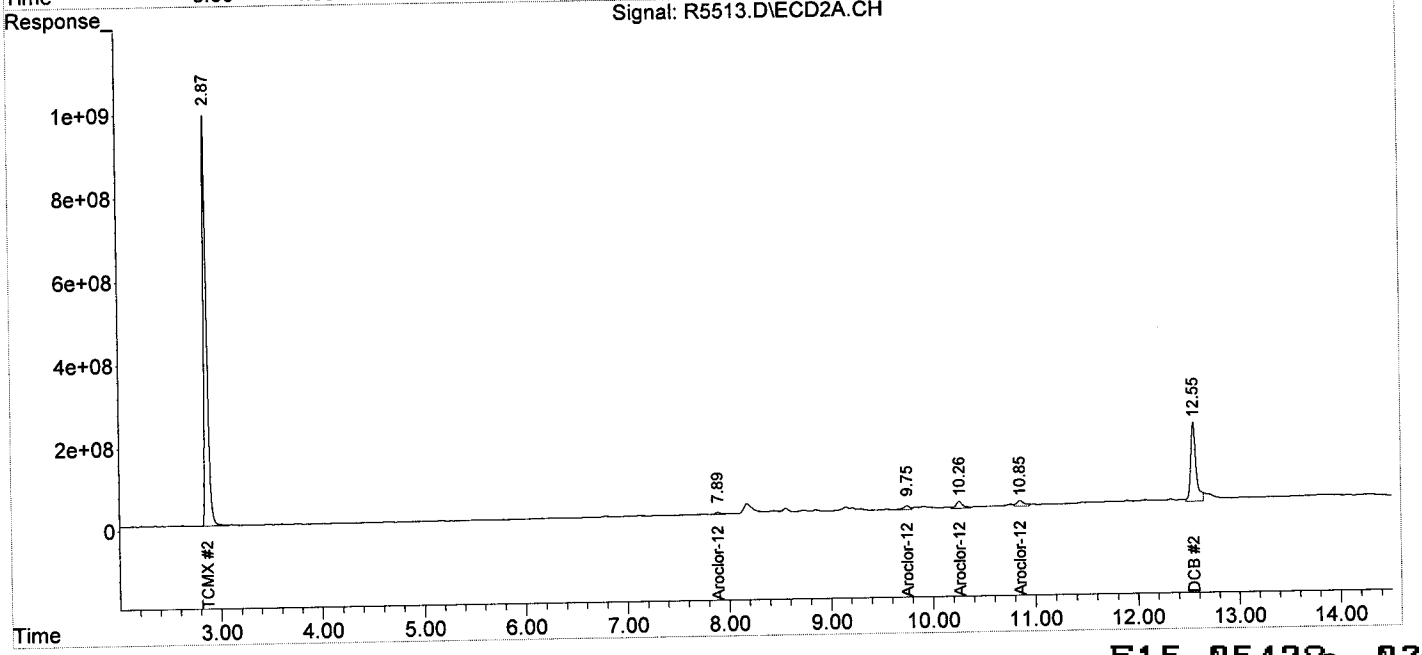
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : R5513.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:25
Operator : JS
Sample : E-29_(2.,E15-05428-006,S,5.59g,8.40,20
Misc : 150701-05,07/01/15,06/24/15,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 12:15:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3015.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 17:59
Operator : JS
Sample : E-19_(0.,E15-05428-007,S,5.36g,12.9,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:34:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	11264.6E6	6105.9E6	169.130	176.181
Spiked Amount 200.000			Recovery	=	84.56%	88.09%
2) S DCB	12.11	12.56	3165.6E6	1965.3E6	154.554	159.002
Spiked Amount 200.000			Recovery	=	77.28%	79.50%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	11989.8E6	2458.7E6	2895.128	2363.098
34) L8 Aroclor-1260 {2}	9.00	8.17	5395.0E6	3118.9E6	2290.528	2050.213
35) L8 Aroclor-1260 {3}	9.48	9.77	15146.4E6	3813.3E6	2542.813	2620.117
36) L8 Aroclor-1260 {4}	9.96	10.27	7492.4E6	9262.2E6	2792.930	2733.202
37) L8 Aroclor-1260 {5}	11.02	10.86	3623.3E6	6683.3E6	2424.450	2770.014
Sum Aroclor-1260			43646.7E6	25336.3E6	12945.849	12536.644
Average Aroclor-1260					2589.170	2507.329
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

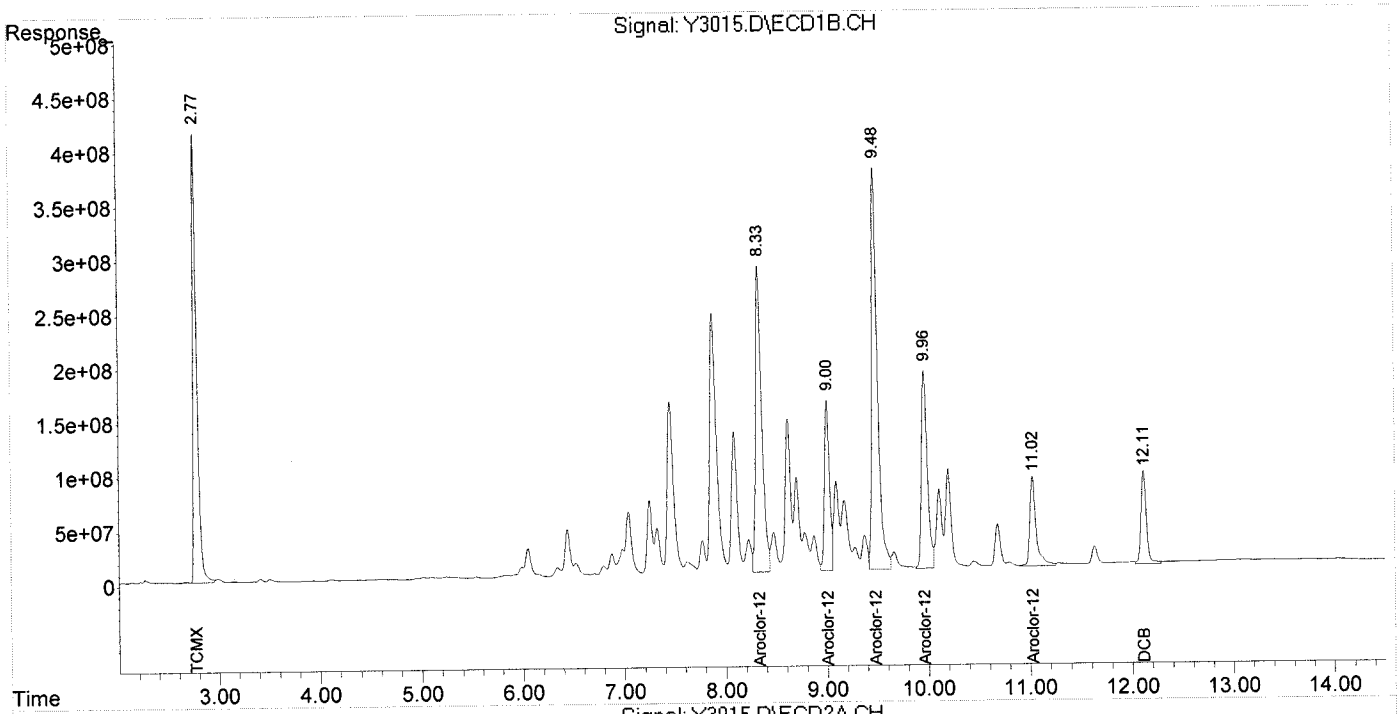
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

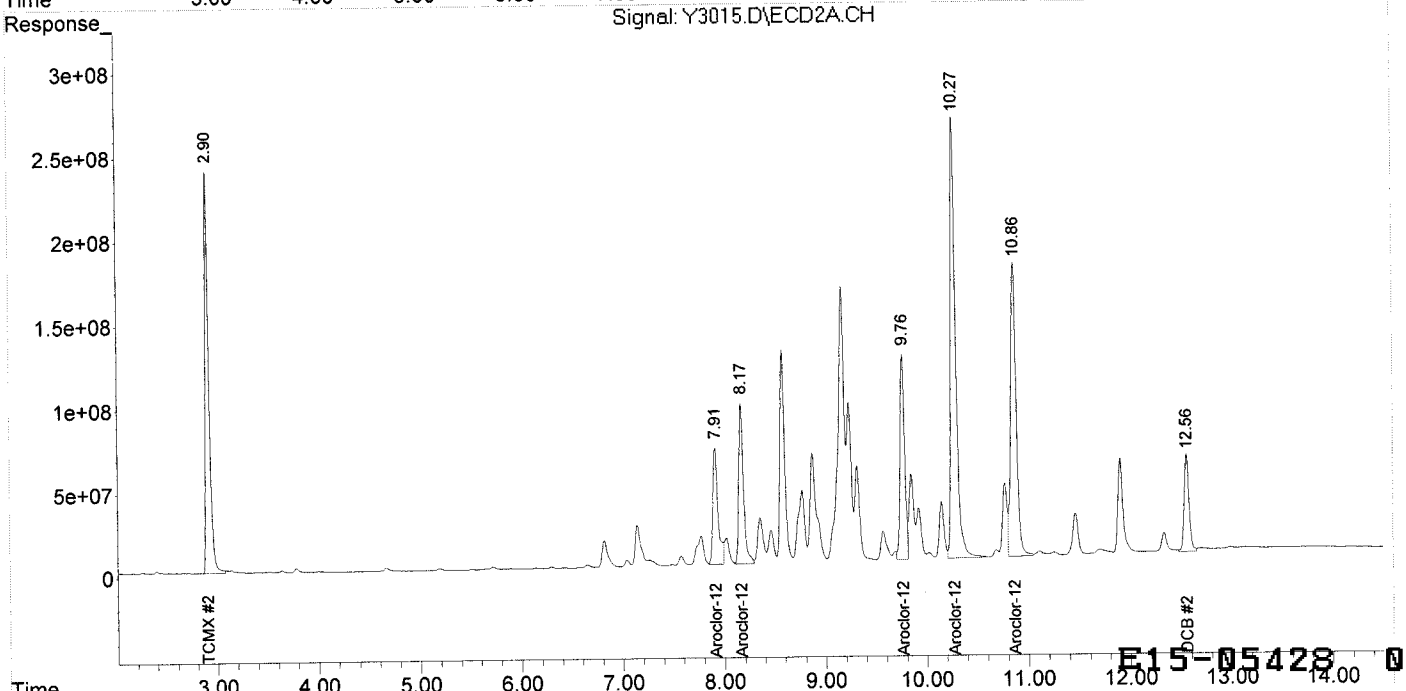
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3015.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 17:59
Operator : JS
Sample : E-19_(0.,E15-05428-007,S,5.36g,12.9,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:34:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3059.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:11
Operator : JS
Sample : E-19_(0.,E15-05428-007DL,S,5.36g,12.9,20
Misc : 150701-08,07/01/15,06/24/15,5
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:34:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	2663.9E6	1305.0E6	39.996	37.653
Spiked Amount 200.000			Recovery	=	20.00%	18.83%
2) S DCB	12.12	12.56	636.7E6	422.8E6	31.085	34.207
Spiked Amount 200.000			Recovery	=	15.54%	17.10%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	2675.7E6	544.4E6	646.096	523.251
34) L8 Aroclor-1260 {2}	9.00	8.17	1206.1E6	678.3E6	512.063	445.896
35) L8 Aroclor-1260 {3}	9.48	9.77	3281.9E6	800.1E6	550.977	549.751
36) L8 Aroclor-1260 {4}	9.97	10.28	1600.8E6	1841.5E6	596.736	543.405
37) L8 Aroclor-1260 {5}	11.02	10.86	701.3E6	1338.6E6	469.287	554.820
Sum Aroclor-1260			9465.9E6	5202.9E6	2775.158	2617.122
Average Aroclor-1260					555.032	523.424
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

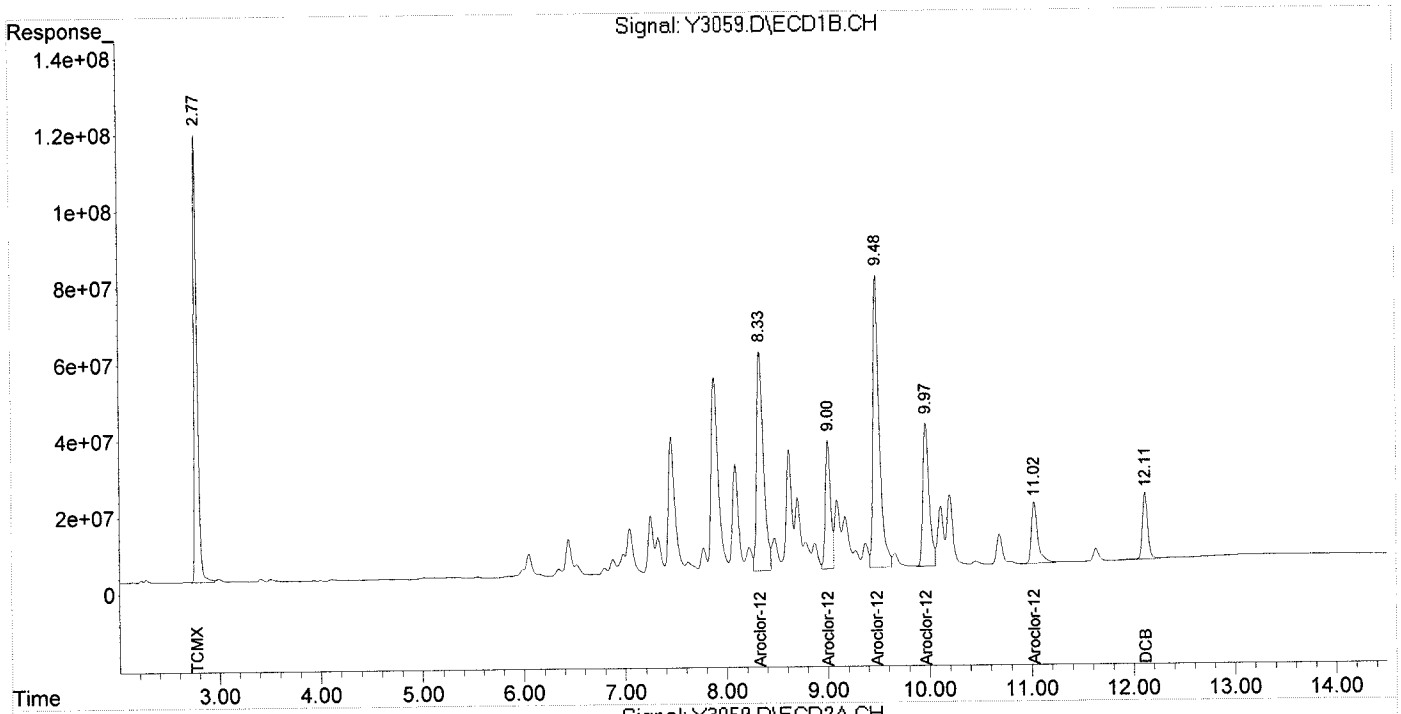
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

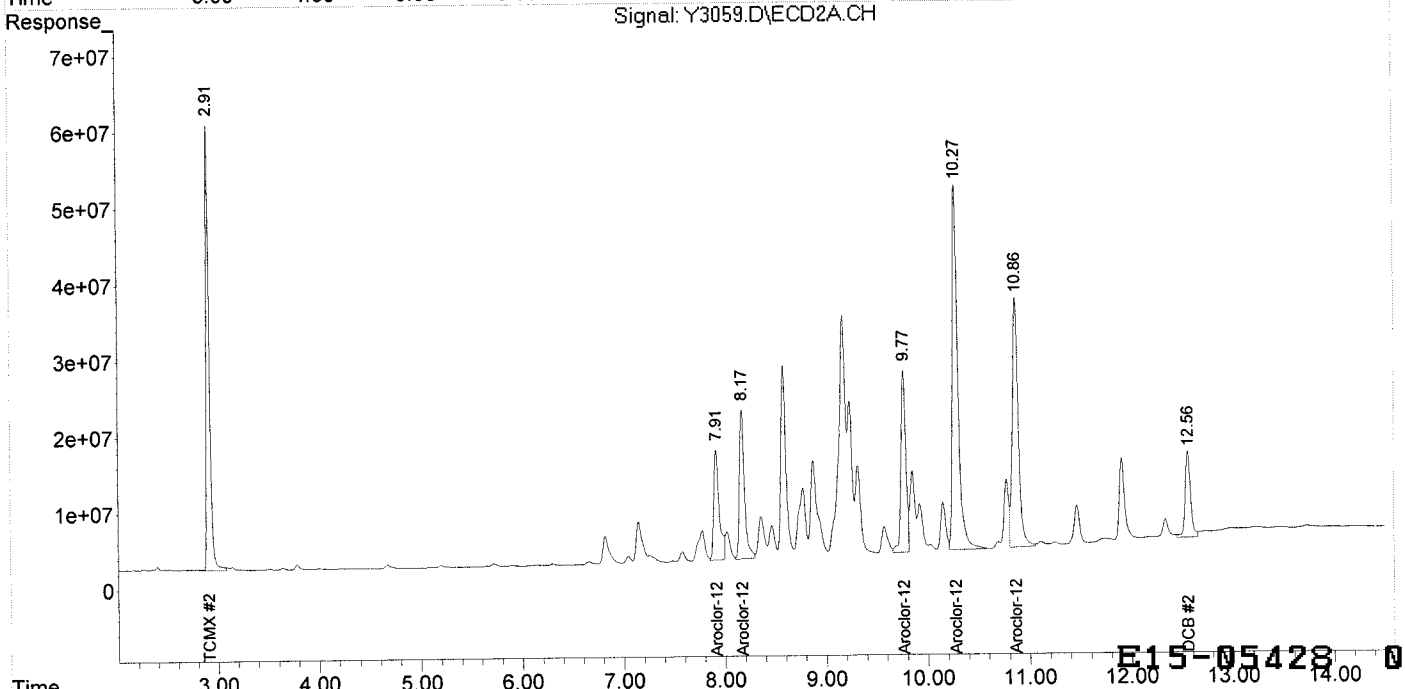
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3059.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:11
Operator : JS
Sample : E-19_(0.,E15-05428-007DL,S,5.36g,12.9,20
Misc : 150701-08,07/01/15,06/24/15,5
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:34:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3016.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:16
Operator : JS
Sample : E-19_(2.,E15-05428-008,S,5.37g,8.80,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	12264.6E6	6238.0E6	184.143	179.992
Spiked Amount 200.000			Recovery	=	92.07%	90.00%
2) S DCB	12.11	12.56	2863.1E6	1992.5E6	139.785	161.203
Spiked Amount 200.000			Recovery	=	69.89%	80.60%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	5467.0E6	1055.8E6	1320.109	1014.742
34) L8 Aroclor-1260 {2}	9.00	8.17	2477.8E6	1349.6E6	1051.988	887.147
35) L8 Aroclor-1260 {3}	9.48	9.77	6822.1E6	1659.2E6	1145.315	1140.057
36) L8 Aroclor-1260 {4}	9.97	10.28	3321.6E6	3886.2E6	1238.206	1146.782
37) L8 Aroclor-1260 {5}	11.03	10.87	1529.0E6	2815.6E6	1023.096	1166.970
Sum Aroclor-1260			19617.6E6	10766.3E6	5778.714	5355.698
Average Aroclor-1260					1155.743	1071.140
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

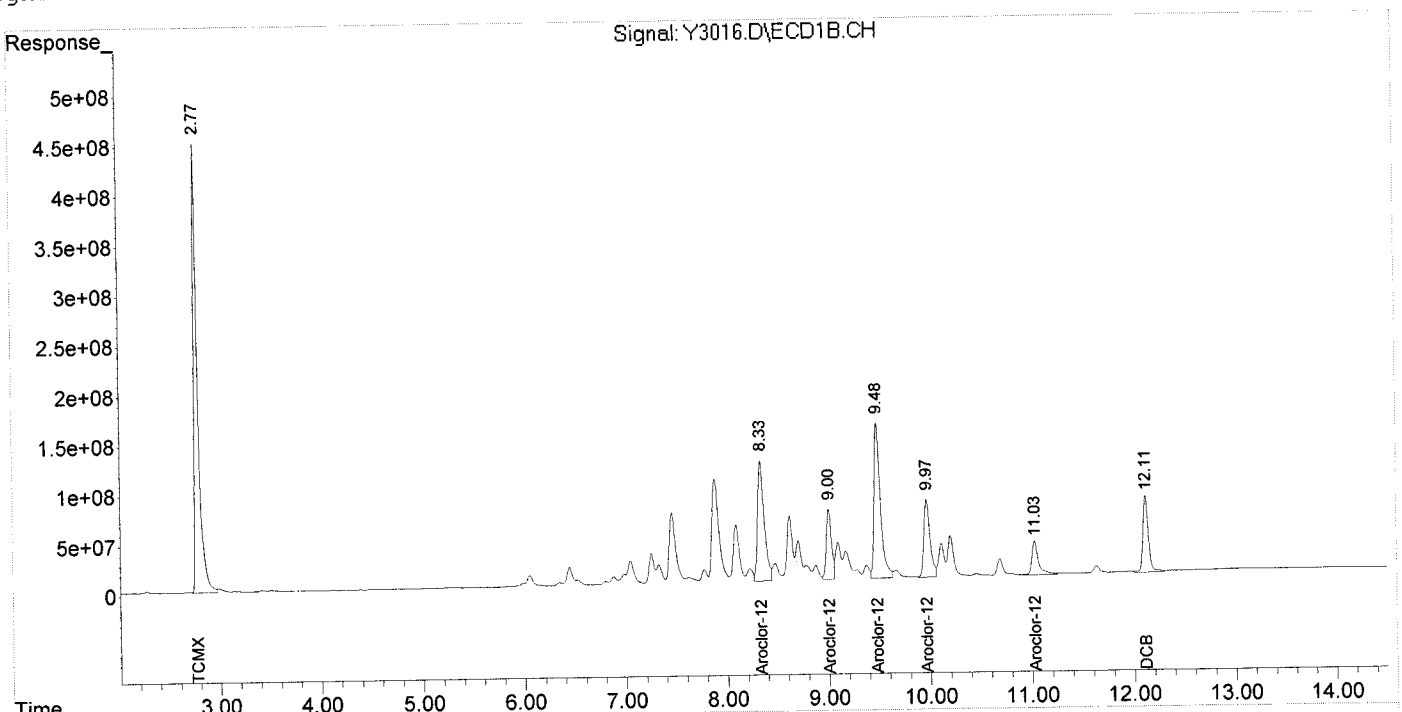
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

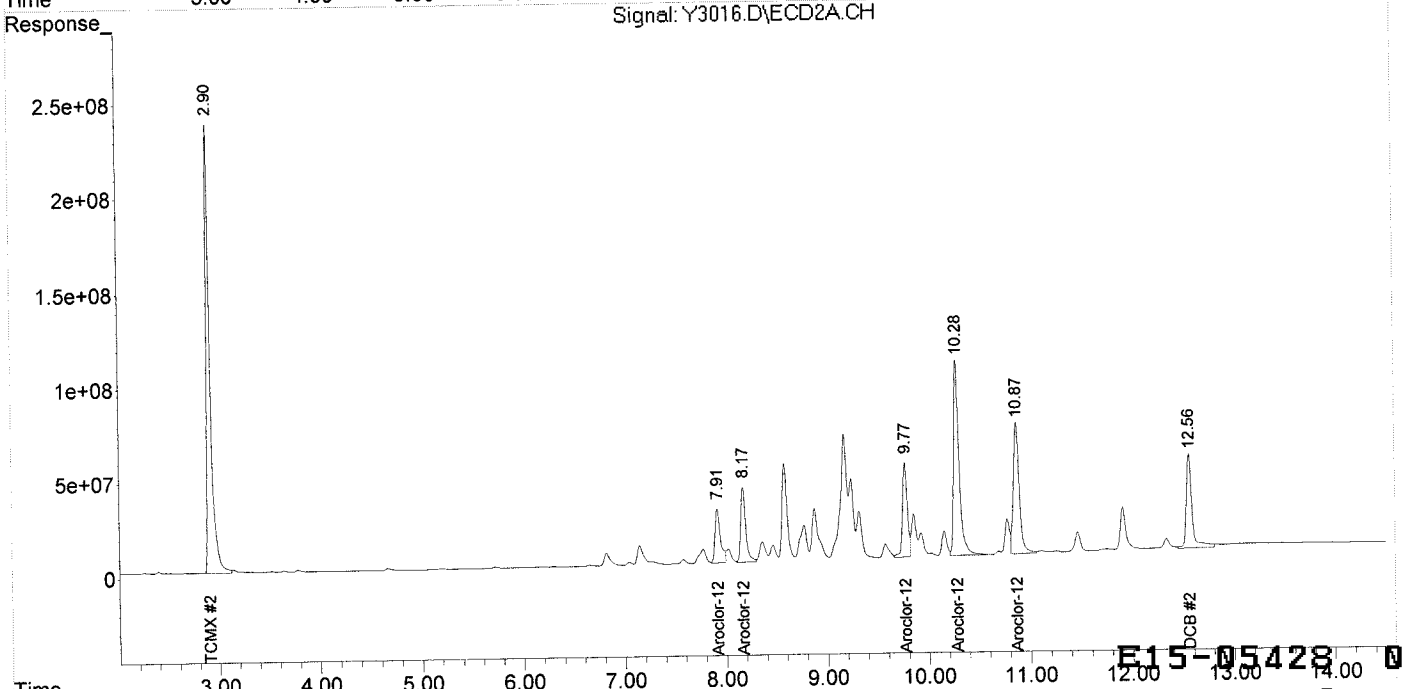
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3016.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:16
Operator : JS
Sample : E-19_(2.,E15-05428-008,S,5.37g,8.80,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:34:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3017.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:34
Operator : JS
Sample : E-27_(0.,E15-05428-009,S,5.28g,17.8,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:35:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	9499.8E6	6060.5E6	142.632	174.870
Spiked Amount 200.000			Recovery	=	71.32%	87.44%
2) S DCB	12.11	12.56	3667.9E6	2176.7E6	179.077	176.108
Spiked Amount 200.000			Recovery	=	89.54%	88.05%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	21772.5E6	4719.4E6	5257.325	4535.951
34) L8 Aroclor-1260 {2}	9.00	8.17	10332.2E6	7998.5E6	4386.721	5257.923
35) L8 Aroclor-1260 {3}	9.48	9.76	29569.7E6	8254.4E6	4964.236	5671.606
36) L8 Aroclor-1260 {4}	9.96	10.27	15124.3E6	21136.3E6	5637.897	6237.166
37) L8 Aroclor-1260 {5}	11.02	10.86	8622.7E6	14989.6E6	5769.743	6212.734
Sum Aroclor-1260			85421.4E6	57098.2E6	26015.922	27915.381
Average Aroclor-1260					5203.184	5583.076
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

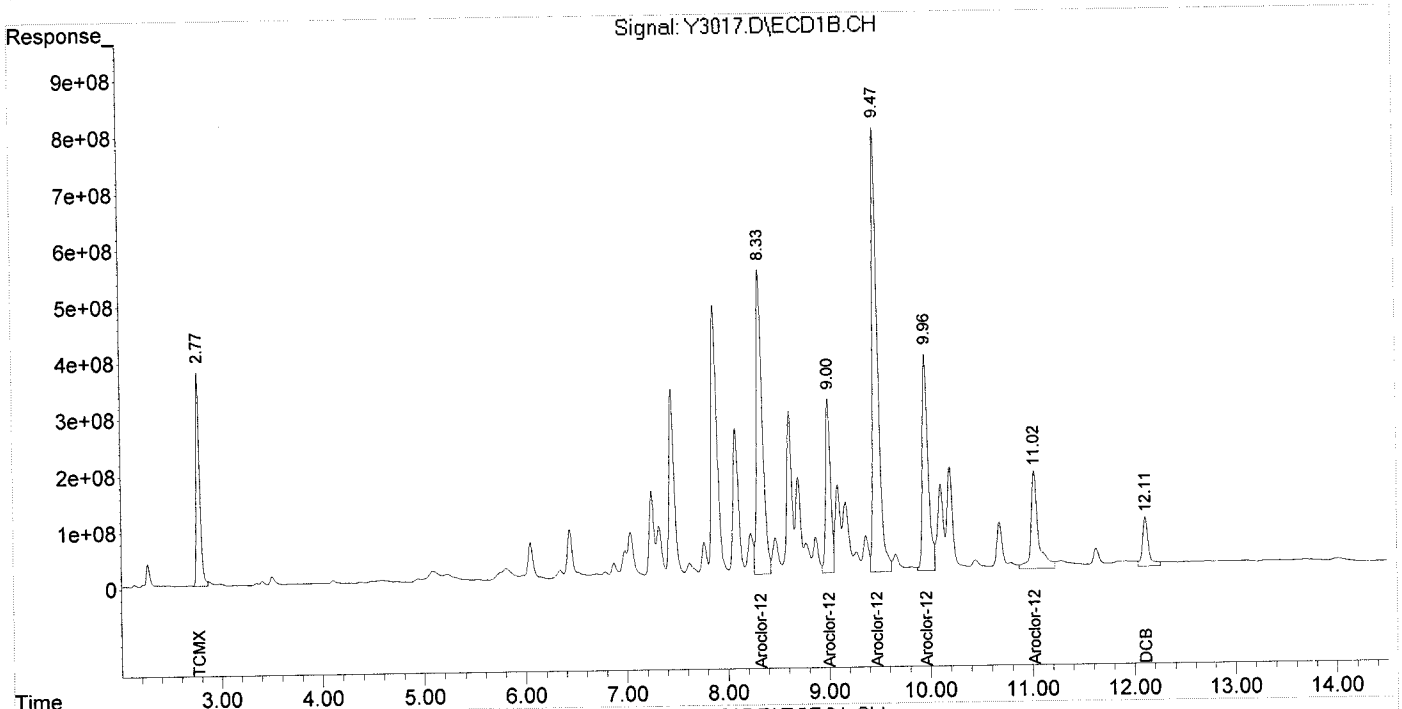
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

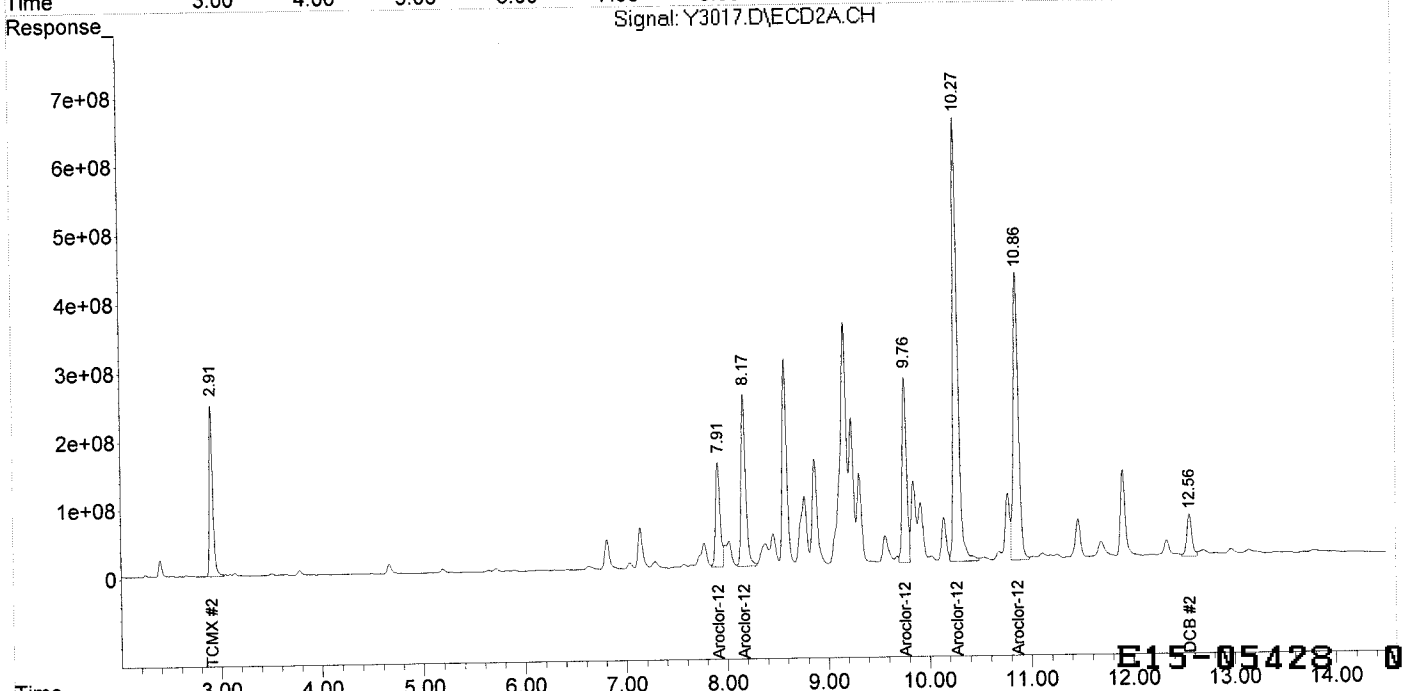
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3017.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:34
Operator : JS
Sample : E-27_(0.,E15-05428-009,S,5.28g,17.8,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:35:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3060.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:28
Operator : JS
Sample : E-27_(0.,E15-05428-009DL,S,5.28g,17.8,20
Misc : 150701-08,07/01/15,06/24/15,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:34:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1297.4E6	698.8E6	19.479	20.165
Spiked Amount 200.000			Recovery =		9.74%	10.08%
2) S DCB	12.11	12.55	352.3E6	256.4E6	17.198m	20.740
Spiked Amount 200.000			Recovery =		8.60%	10.37%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	2918.2E6	620.5E6	704.649	596.338
34) L8 Aroclor-1260 {2}	9.00	8.17	1343.8E6	910.9E6	570.538	598.811
35) L8 Aroclor-1260 {3}	9.48	9.76	3585.4E6	904.3E6	601.934	621.321
36) L8 Aroclor-1260 {4}	9.97	10.28	1709.5E6	2120.9E6	637.239	625.867
37) L8 Aroclor-1260 {5}	11.03	10.86	794.9E6	1536.6E6	531.894	636.863
Sum Aroclor-1260			10351.8E6	6093.1E6	3046.253	3079.200
Average Aroclor-1260					609.251	615.840
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

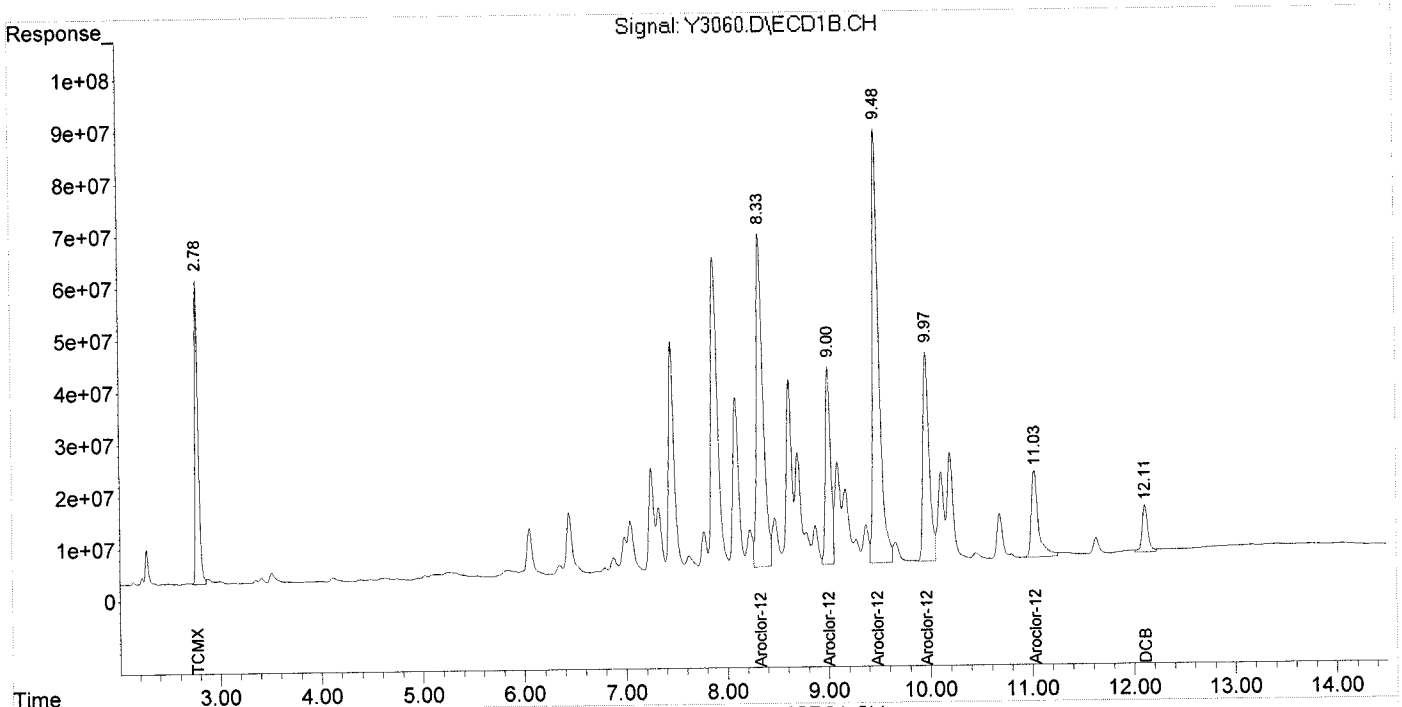
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

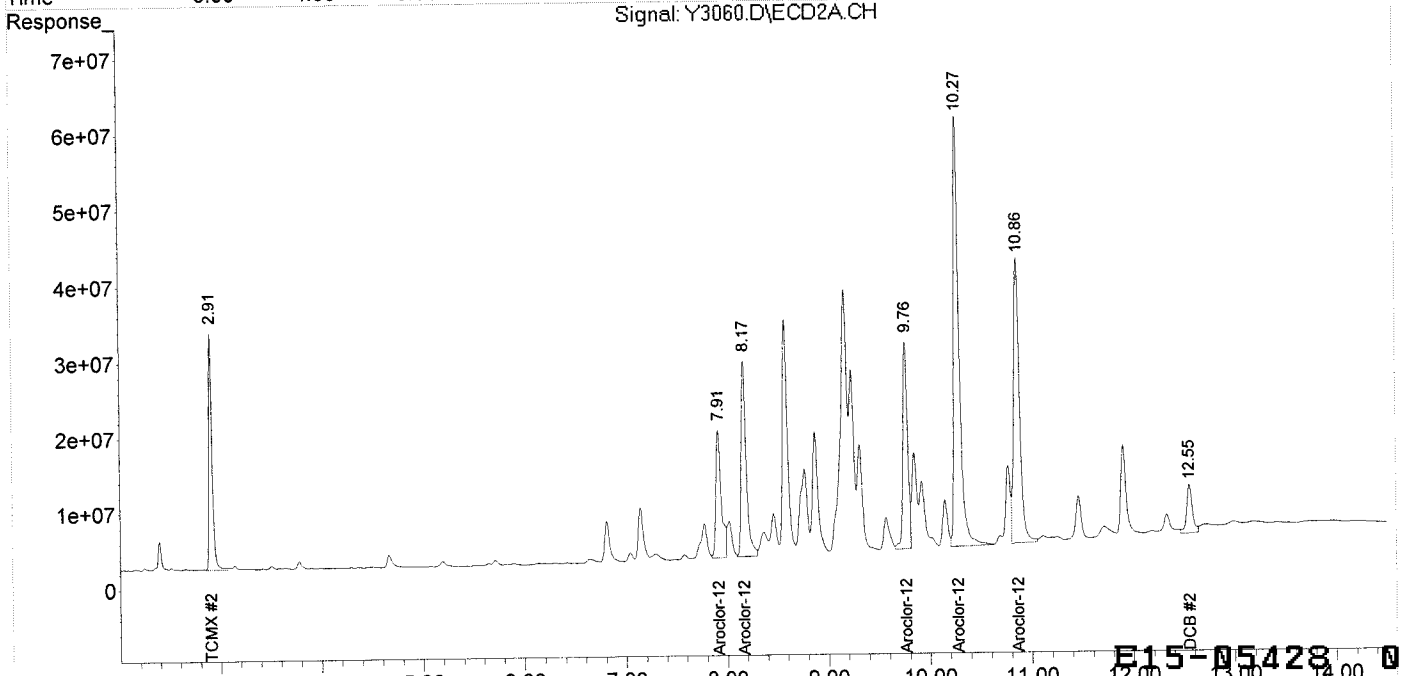
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3060.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:28
Operator : JS
Sample : E-27_(0.,E15-05428-009DL,S,5.28g,17.8,20
Misc : 150701-08,07/01/15,06/24/15,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:34:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3018.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:51
Operator : JS
Sample : E-27_(2.,E15-05428-010,S,5.20g,8.80,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:36:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	11760.7E6	6293.2E6	176.578	181.583
Spiked Amount 200.000			Recovery	=	88.29%	90.79%
2) S DCB	12.11	12.56	3139.7E6	2353.6E6	153.289	190.419m
Spiked Amount 200.000			Recovery	=	76.64%	95.21%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	4579.3E6	972.0E6	1105.747	934.254
34) L8 Aroclor-1260 {2}	9.00	8.17	2102.5E6	1478.0E6	892.656	971.611
35) L8 Aroclor-1260 {3}	9.48	9.77	5650.2E6	1464.3E6	948.577	1006.129
36) L8 Aroclor-1260 {4}	9.96	10.27	2798.6E6	3407.3E6	1043.227	1005.472
37) L8 Aroclor-1260 {5}	11.02	10.87	1757.5E6	2514.2E6	1176.007	1042.047
Sum Aroclor-1260			16888.1E6	9835.9E6	5166.213	4959.514
Average Aroclor-1260					1033.243	991.903
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

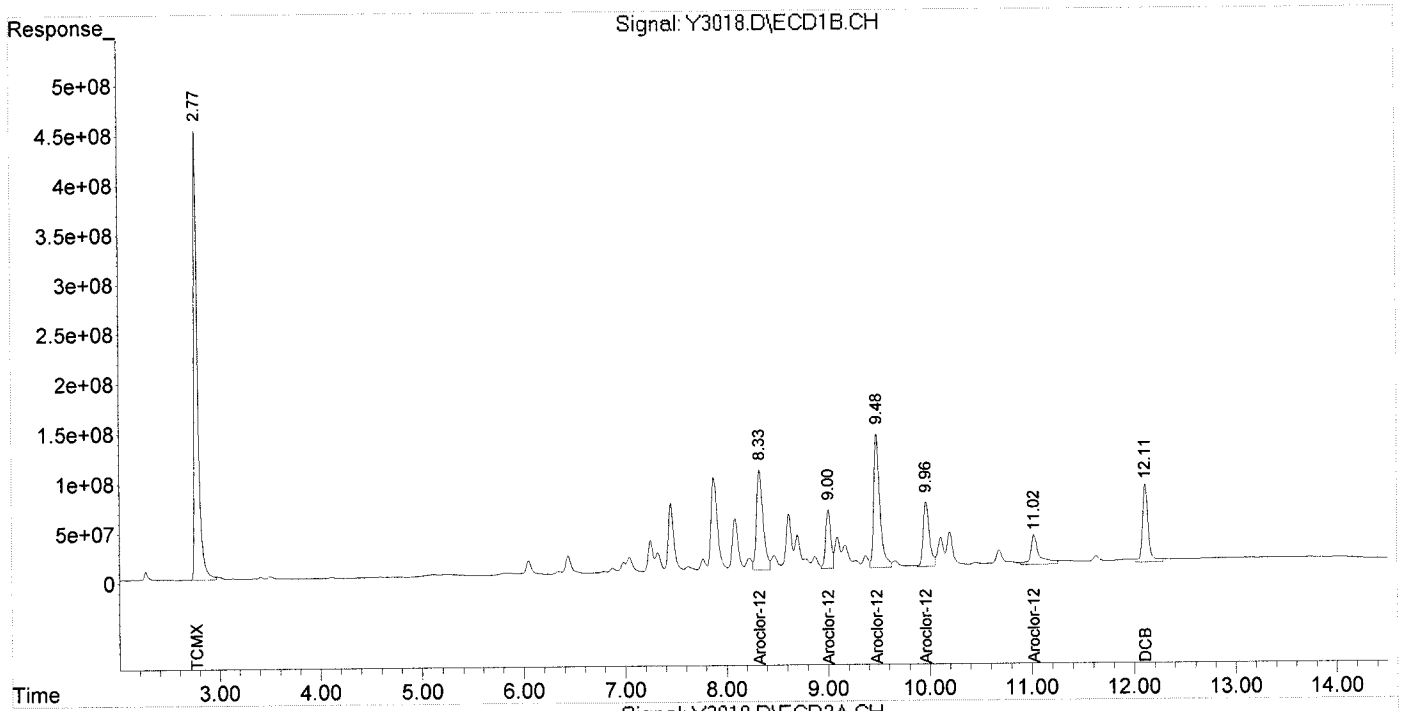
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

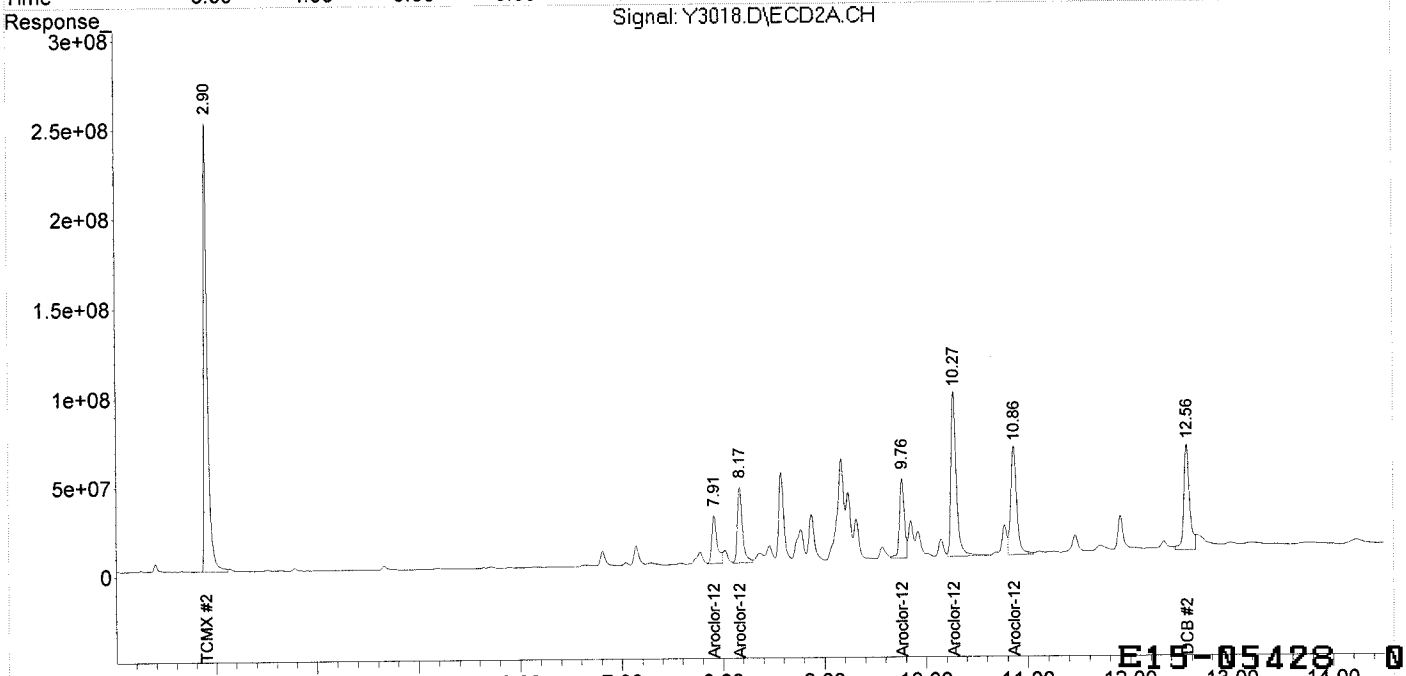
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3018.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 18:51
Operator : JS
Sample : E-27_(2.,E15-05428-010,S,5.20g,8.80,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:36:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0363

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3139.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:01
Operator : JS
Sample : X-3_(0.5,E15-05428-011,S,30.62g,23.3,5
Misc : 150701-07,07/01/15,06/24/15,500
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:33:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	24008515	15132864	0.360	0.437m
Spiked Amount 200.000			Recovery	=	0.18%	0.22%
2) S DCB	12.12	12.57	11837092	6374563	0.578m	0.516m
Spiked Amount 200.000			Recovery	=	0.29%	0.26%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	1312.0E6	193.3E6	316.814	185.833 #
34) L8 Aroclor-1260 {2}	9.01	8.17	681.9E6	269.8E6	289.516	177.363 #
35) L8 Aroclor-1260 {3}	9.49	9.77	2184.4E6	443.9E6	366.726	305.025
36) L8 Aroclor-1260 {4}	9.97	10.28	1088.1E6	1150.8E6	405.616	339.592
37) L8 Aroclor-1260 {5}	11.03	10.87	606.2E6	907.8E6	405.606	376.248
Sum Aroclor-1260			5872.6E6	2965.7E6	1784.277	1384.062
Average Aroclor-1260					356.855	276.812
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

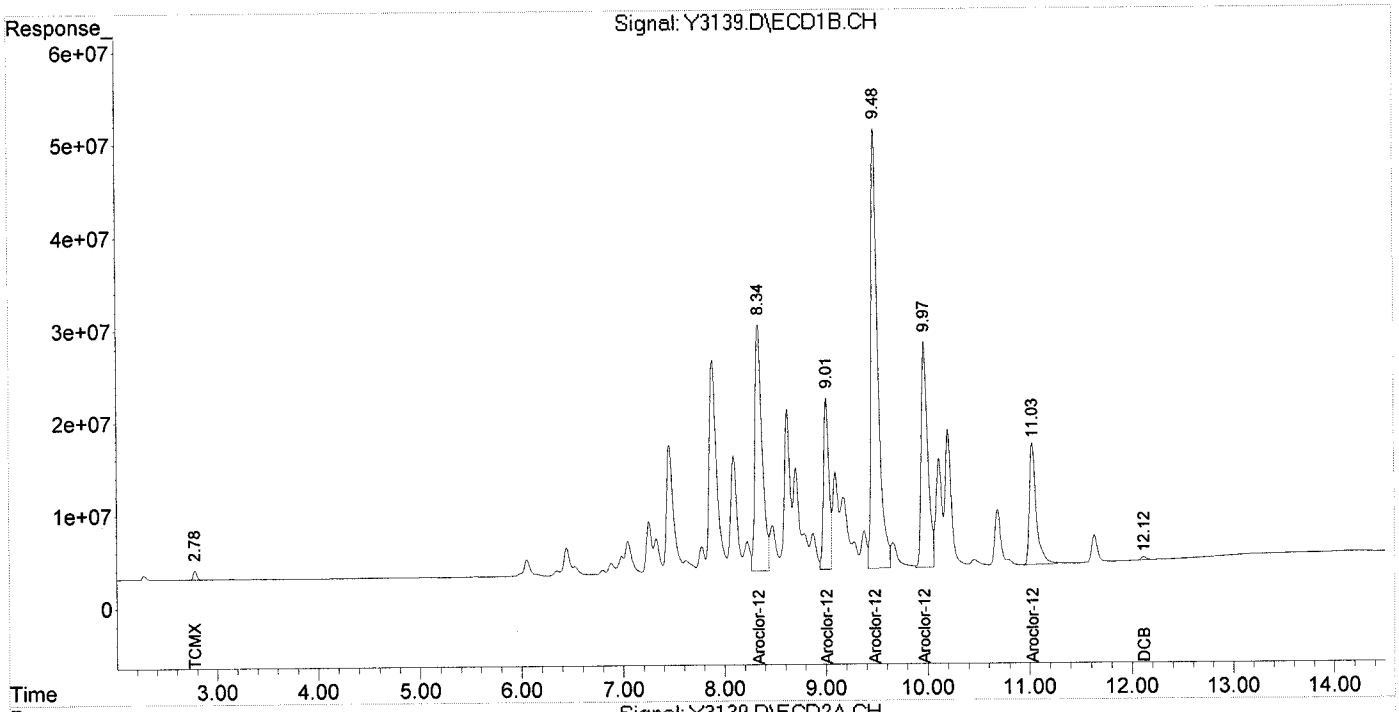
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

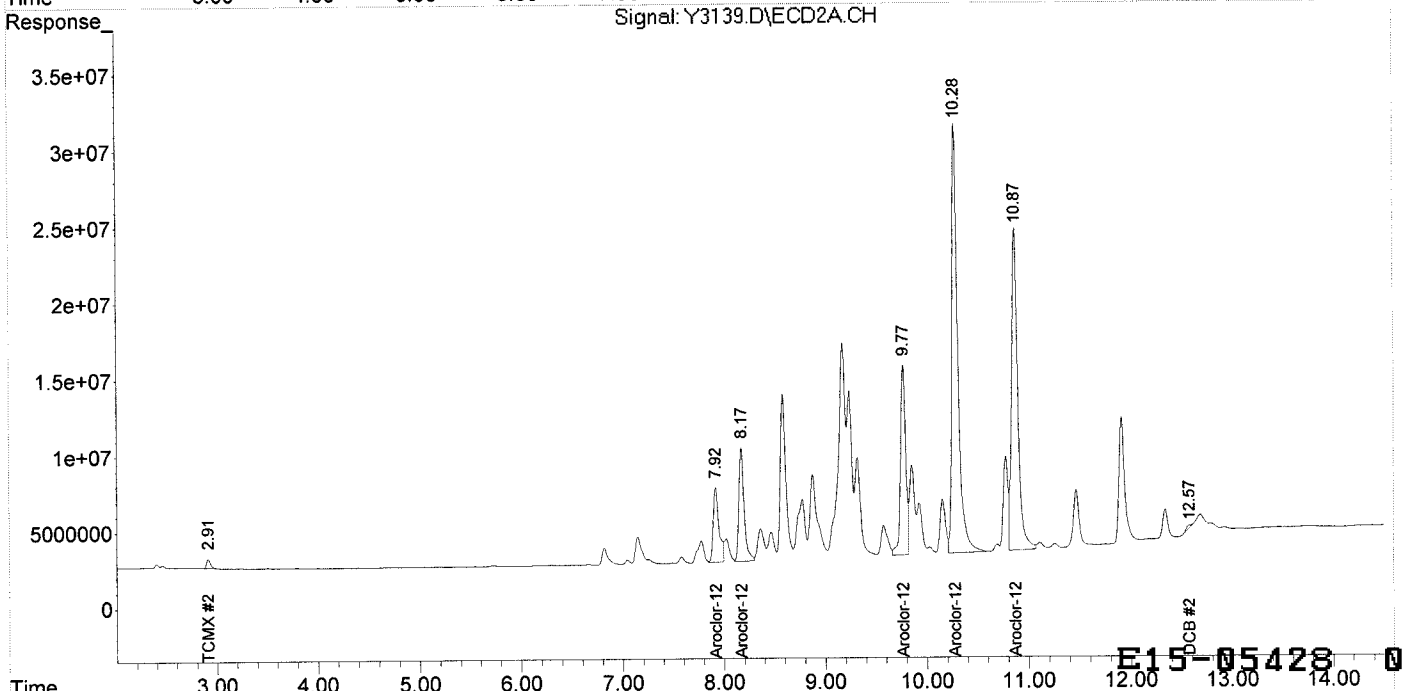
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3139.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:01
Operator : JS
Sample : X-3_(0.5,E15-05428-011,S,30.62g,23.3,5
Misc : 150701-07,07/01/15,06/24/15,500
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:33:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-02-15\
Data File : Y3019.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 19:08
Operator : JS
Sample : E-28_(0.,E15-05428-012,S,5.47g,11.5,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:37:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10394.3E6	5978.4E6	156.062	172.502
Spiked Amount 200.000			Recovery =		78.03%	86.25%
2) S DCB	12.11	12.56	3158.3E6	1952.6E6	154.196	157.976
Spiked Amount 200.000			Recovery =		77.10%	78.99%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	12311.1E6	2492.2E6	2972.719	2395.296
34) L8 Aroclor-1260 {2}	9.00	8.17	5680.3E6	3852.5E6	2411.664	2532.484
35) L8 Aroclor-1260 {3}	9.48	9.77	16501.9E6	4306.8E6	2770.381	2959.230
36) L8 Aroclor-1260 {4}	9.96	10.27	8420.9E6	10835.3E6	3139.055	3197.428
37) L8 Aroclor-1260 {5}	11.02	10.86	5108.4E6	7895.8E6	3418.187	3272.574
Sum Aroclor-1260			48022.5E6	29382.6E6	14712.006	14357.011
Average Aroclor-1260					2942.401	2871.402
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

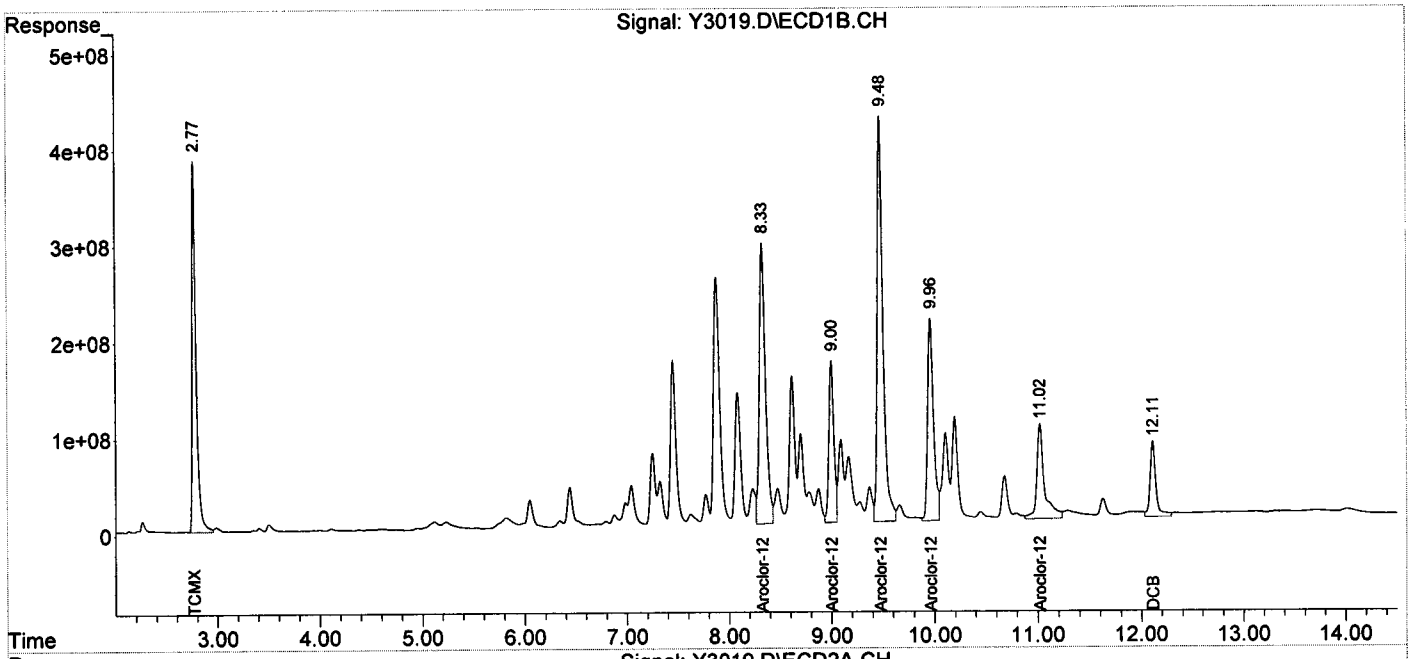
Rev E15-05428 0366

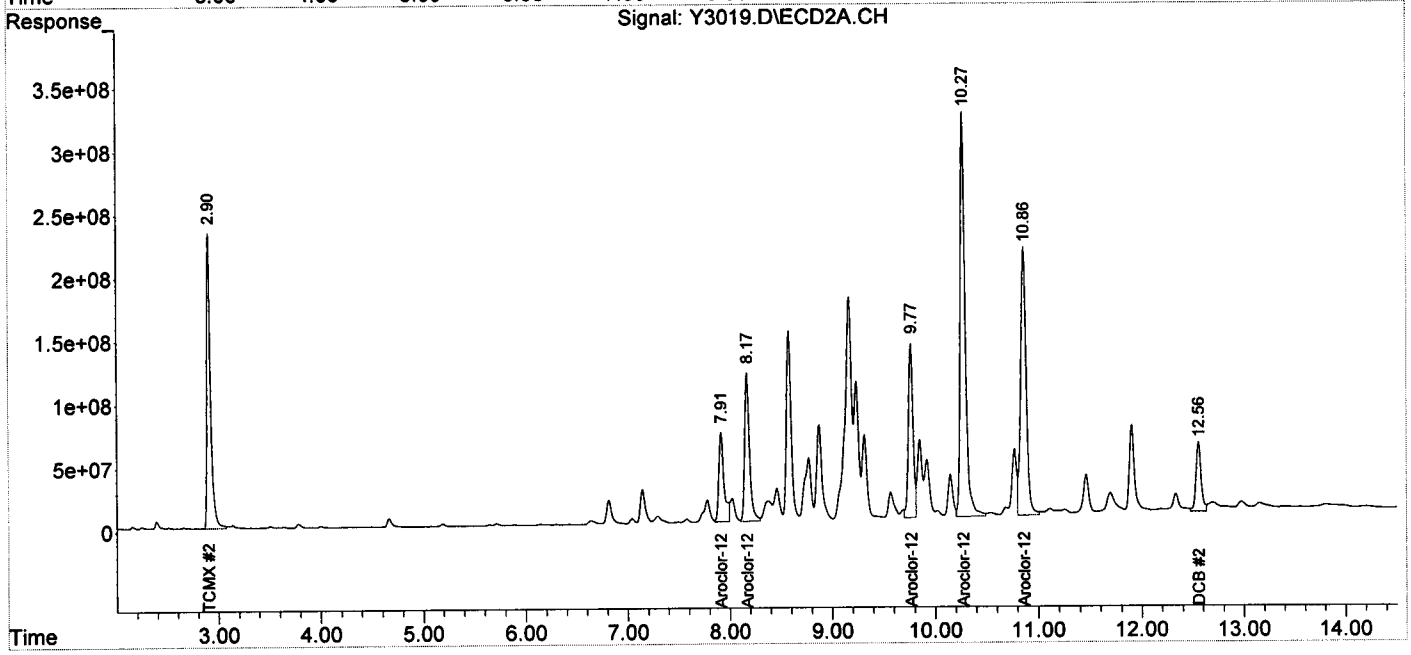
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-02-15\
Data File : Y3019.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 19:08
Operator : JS
Sample : E-28_(0.,E15-05428-012,S,5.47g,11.5,20
Misc : 150701-08,07/01/15,06/24/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 08:37:01 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Rev E15-05428 0367

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-06-15\
Data File : Y3061.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:45
Operator : JS
Sample : E-28_(0.,E15-05428-012DL,S,5.47g,11.5,20
Misc : 150701-08,07/01/15,06/24/15,10
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:35:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	1345.8E6	668.4E6	20.206	19.287
Spiked Amount 200.000			Recovery =		10.10%	9.64%
2) S DCB	12.12	12.55	329.4E6	245.4E6	16.085m	19.853m
Spiked Amount 200.000			Recovery =		8.04%	9.93%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1664.1E6	317.6E6	401.834	305.275
34) L8 Aroclor-1260 {2}	9.01	8.17	776.9E6	472.8E6	329.827	310.785
35) L8 Aroclor-1260 {3}	9.48	9.77	2177.6E6	532.7E6	365.589	366.053
36) L8 Aroclor-1260 {4}	9.97	10.28	1040.1E6	1301.1E6	387.704	383.935
37) L8 Aroclor-1260 {5}	11.03	10.87	515.2E6	971.9E6	344.755	402.836
Sum Aroclor-1260			6173.9E6	3596.1E6	1829.709	1768.882
Average Aroclor-1260					365.942	353.776
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

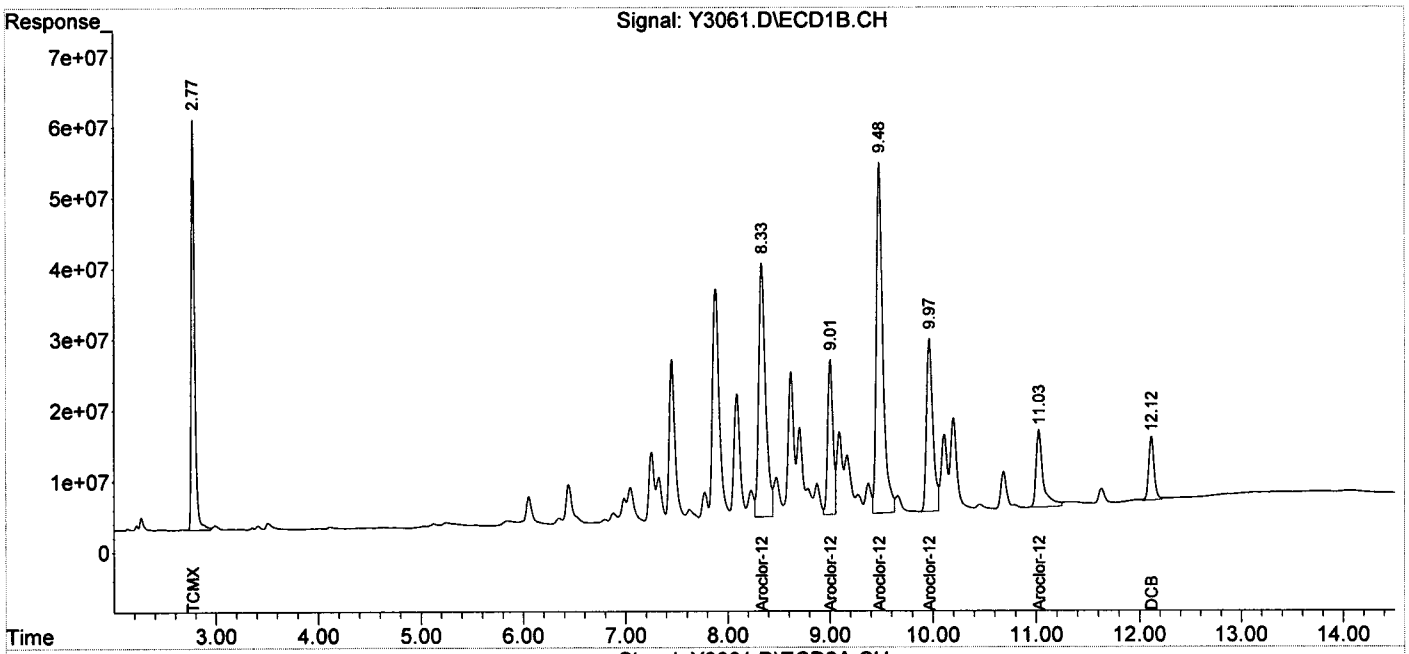
REV E15-05428 0368

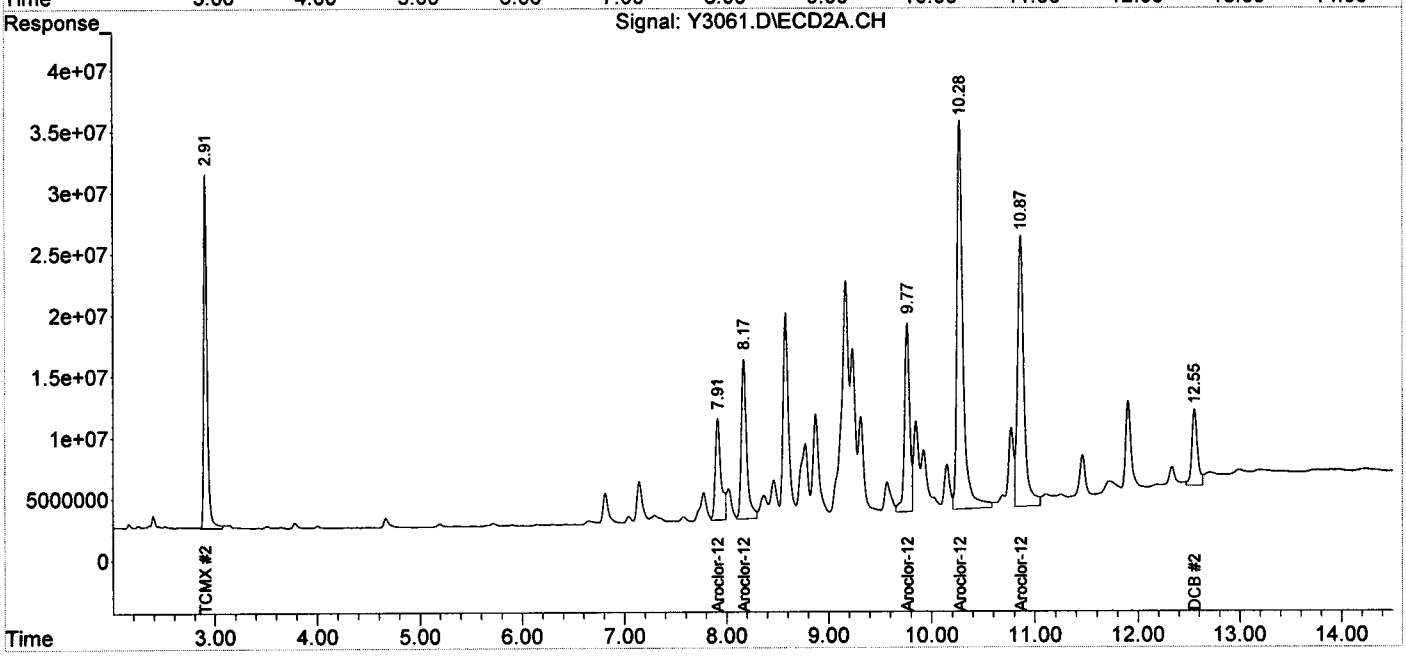
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-06-15\
Data File : Y3061.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 11:45
Operator : JS
Sample : E-28_(0.,E15-05428-012DL,S,5.47g,11.5,20
Misc : 150701-08,07/01/15,06/24/15,10
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:35:21 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Rev E15-05428 0369

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-02-15\
Data File : Y3026.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:19
Operator : JS
Sample : E-28_(2.,E15-05428-013,S,5.77g,12.3,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:39:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11882.8E6	6390.8E6	178.412	184.399
Spiked Amount 200.000			Recovery	=	89.21%	92.20%
2) S DCB	12.12	12.56	3046.8E6	1923.7E6	148.751	155.639
Spiked Amount 200.000			Recovery	=	74.38%	77.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	6628.1E6	1240.3E6	1600.460	1192.127 #
34) L8 Aroclor-1260 {2}	9.00	8.17	2981.6E6	1804.9E6	1265.909	1186.465
35) L8 Aroclor-1260 {3}	9.48	9.77	8515.5E6	2146.1E6	1429.600	1474.587
36) L8 Aroclor-1260 {4}	9.97	10.27	4233.6E6	5004.0E6	1578.151	1476.638
37) L8 Aroclor-1260 {5}	11.02	10.87	2455.4E6	3677.3E6	1643.013	1524.134
Sum Aroclor-1260			24814.2E6	13872.6E6	7517.133	6853.950
Average Aroclor-1260					1503.427	1370.790
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

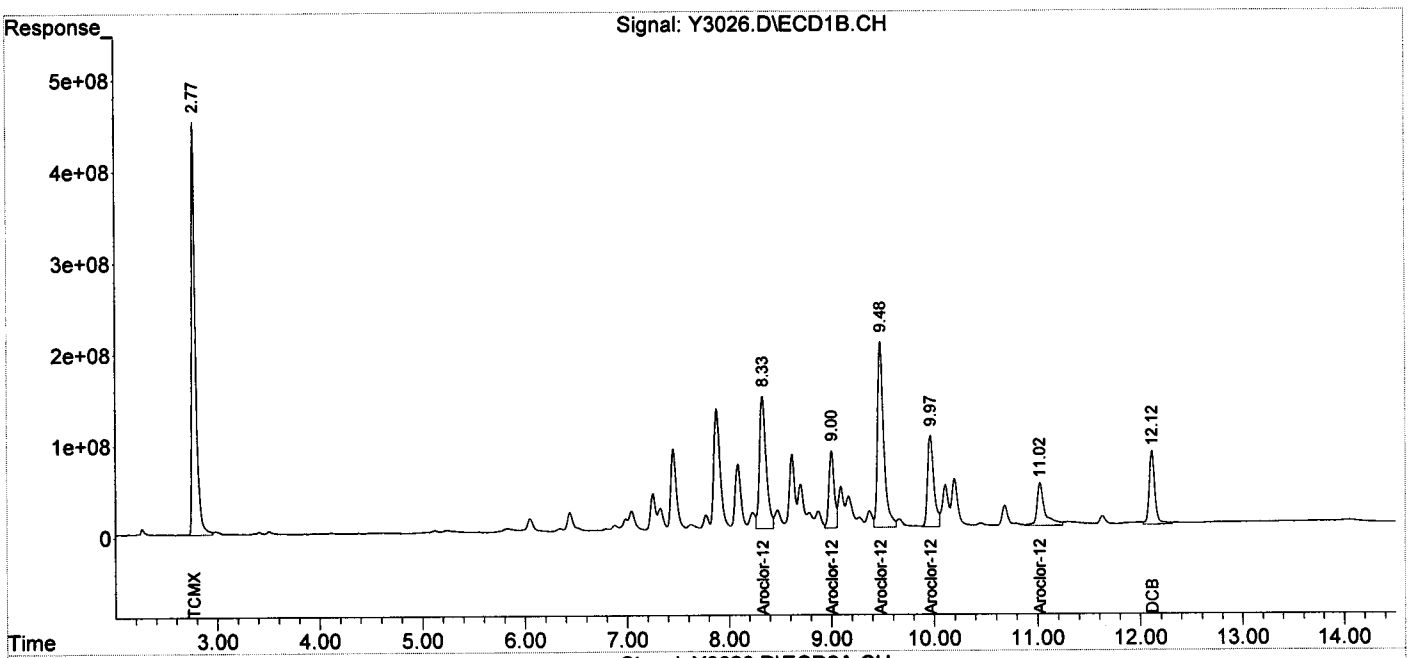
Rev E15-05428 0370

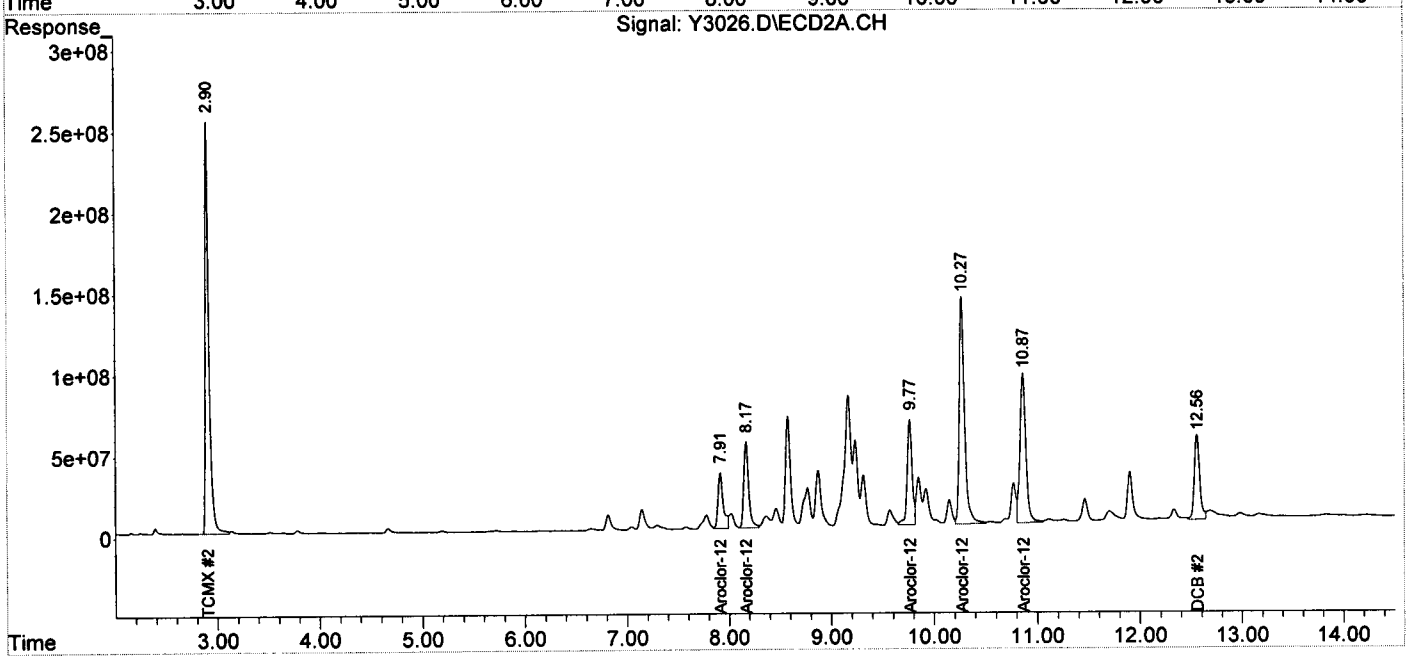
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\Y_2015\Y_Jul_15\07-02-15\
Data File : Y3026.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:19
Operator : JS
Sample : E-28_(2.,E15-05428-013,S,5.77g,12.3,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:39:18 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Rev E15-05478 0371

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3092.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 23:55
Operator : JS
Sample : E-1_(0.5,E15-05428-014,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:19:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	5339.5E6	3513.3E6	80.168	101.372 #
Spiked Amount 200.000			Recovery	=	40.08%	50.69%
2) S DCB	12.11	12.56	1933.0E6	1359.4E6	94.372	109.982
Spiked Amount 200.000			Recovery	=	47.19%	54.99%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	38686.8E6	8663.4E6	9341.577	8326.634
34) L8 Aroclor-1260 {2}	9.00	8.17	16803.8E6	11656.2E6	7134.367	7662.348
35) L8 Aroclor-1260 {3}	9.48	9.76	52466.6E6	15713.0E6	8808.228	10796.410
36) L8 Aroclor-1260 {4}	9.96	10.27	26067.9E6	40776.2E6	9717.337	12032.775
37) L8 Aroclor-1260 {5}	11.02	10.86	11848.6E6	28709.1E6	7928.301	11899.073 #
Sum Aroclor-1260			145873.7E6	105518.0E6	42929.810	50717.241
Average Aroclor-1260					8585.962	10143.448
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

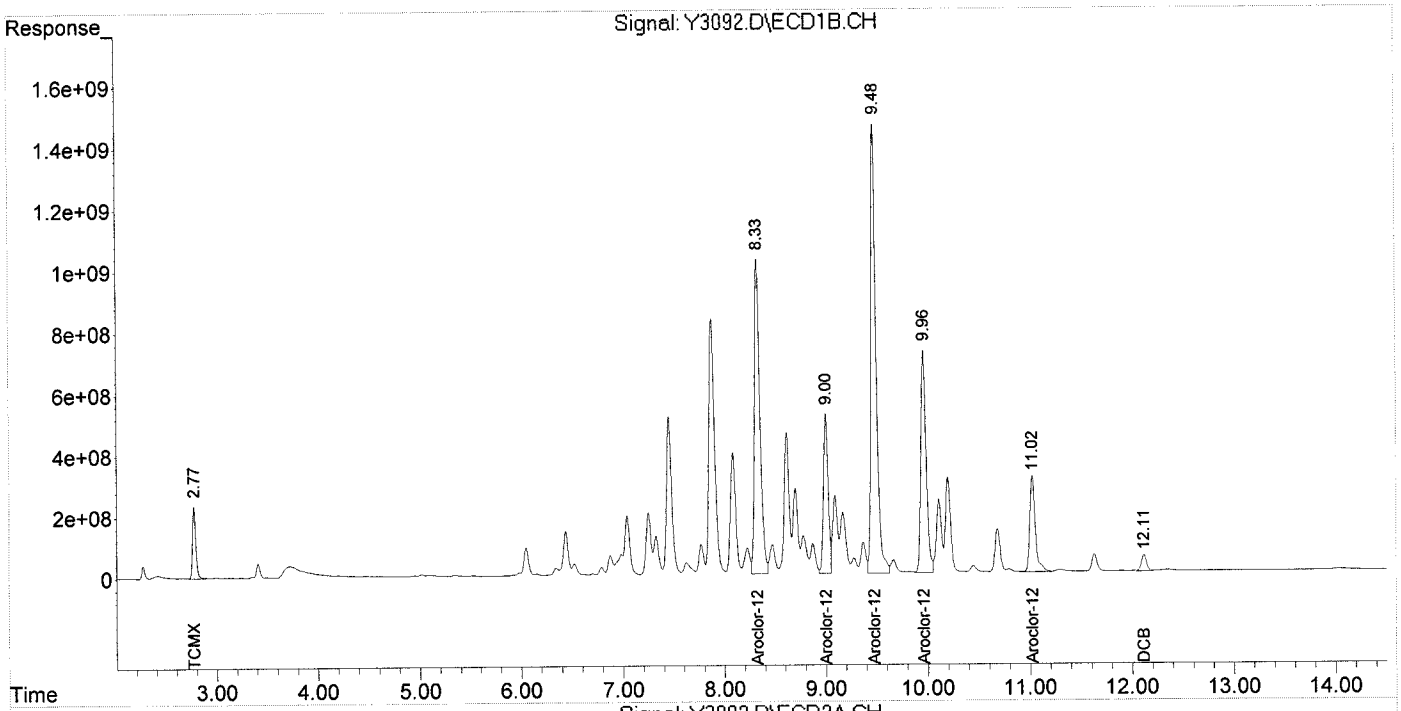
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

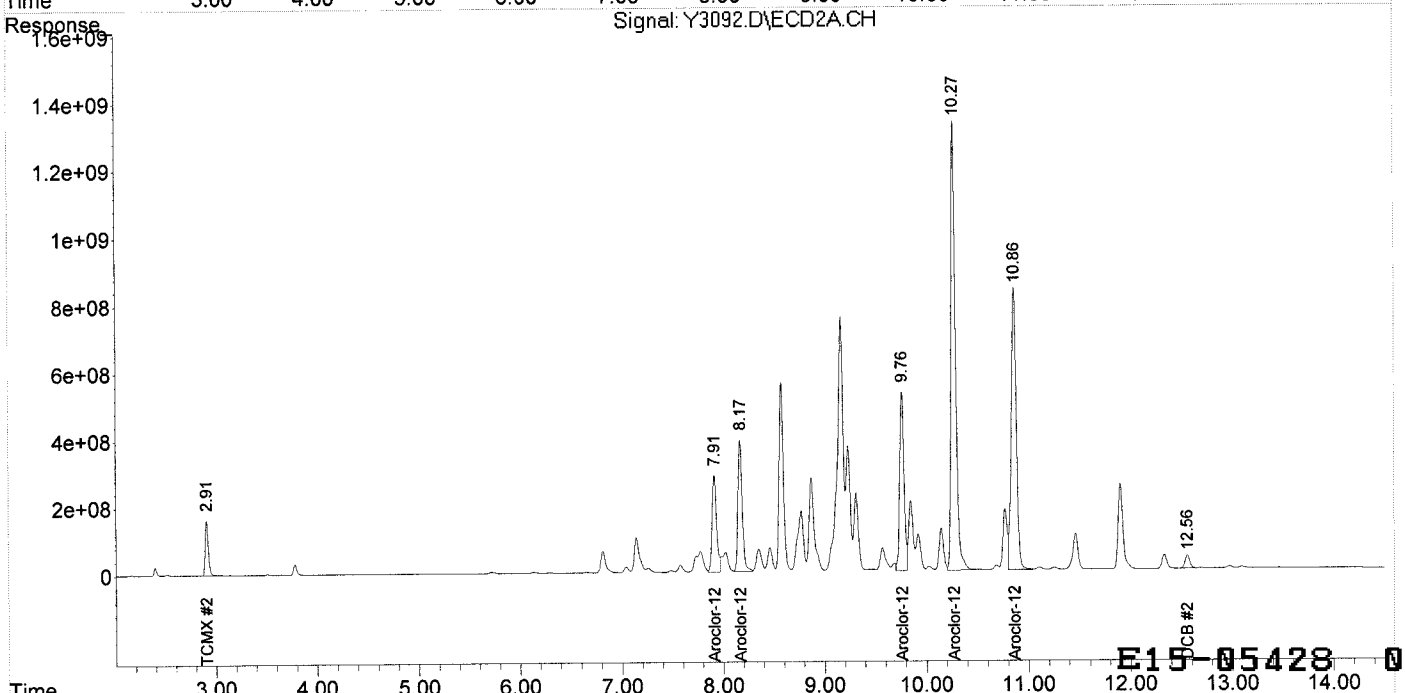
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3092.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 23:55
Operator : JS
Sample : E-1_(0.5,E15-05428-014,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:19:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3140.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:18
Operator : JS
Sample : E-1_(0.5,E15-05428-014DL,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,20
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:34:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.92	409.9E6	219.0E6	6.154	6.319
Spiked Amount 200.000			Recovery =		3.08%	3.16%
2) S DCB	12.11	12.56	218.4E6	141.2E6	10.661	11.420
Spiked Amount 200.000			Recovery =		5.33%	5.71%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	3891.1E6	709.6E6	939.575	681.992 #
34) L8 Aroclor-1260 {2}	9.00	8.17	1681.2E6	868.6E6	713.782	571.008
35) L8 Aroclor-1260 {3}	9.48	9.76	5053.2E6	1183.6E6	848.343	813.284
36) L8 Aroclor-1260 {4}	9.97	10.27	2577.5E6	2826.0E6	960.827	833.931
37) L8 Aroclor-1260 {5}	11.03	10.86	1284.4E6	2138.2E6	859.418	886.228
Sum Aroclor-1260			14487.4E6	7726.1E6	4321.945	3786.443
Average Aroclor-1260					864.389	757.289
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

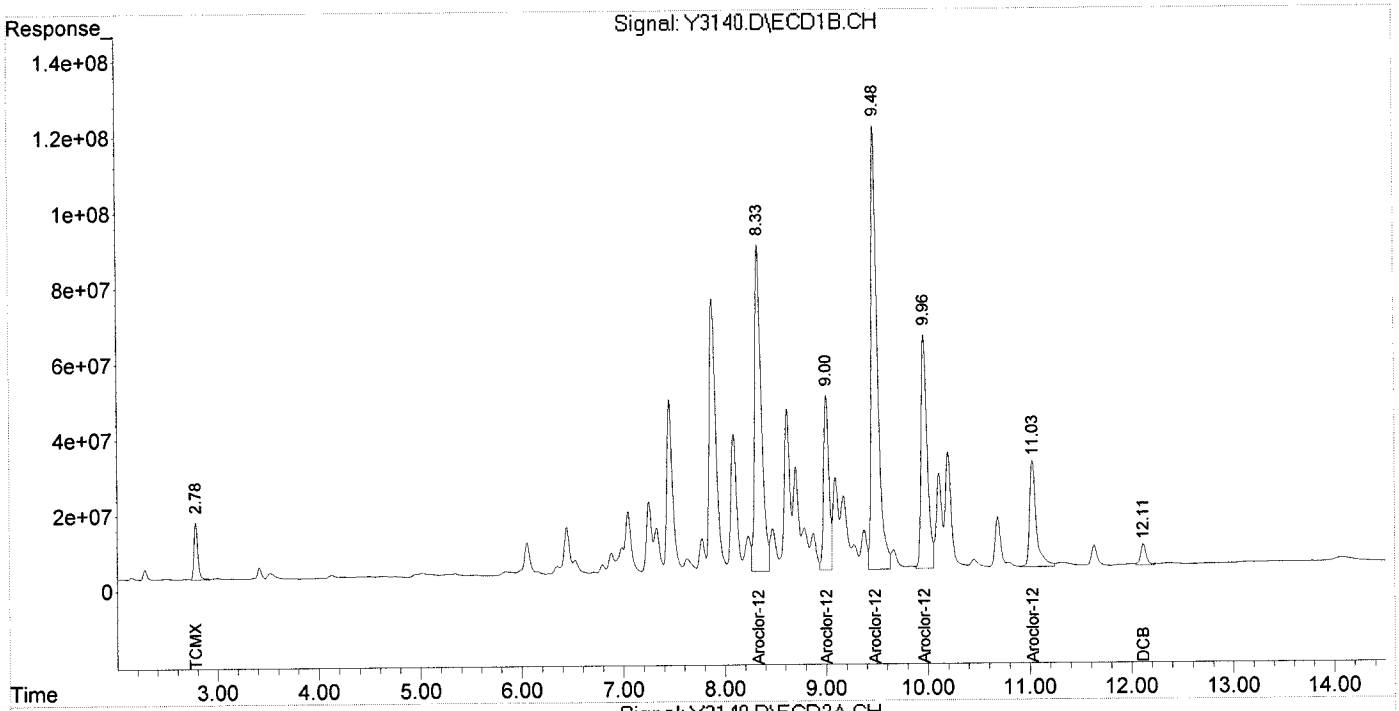
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

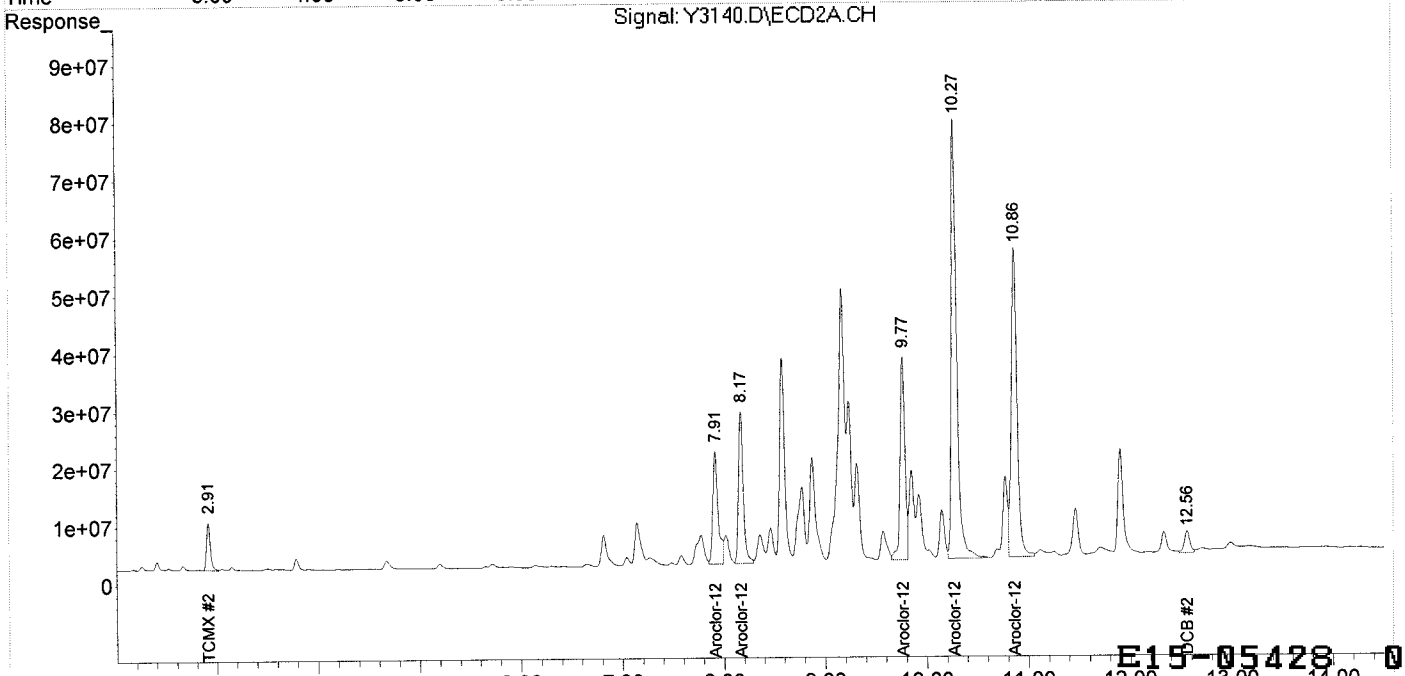
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3140.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:18
Operator : JS
Sample : E-1_(0.5,E15-05428-014DL,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,20
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:34:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0375

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3093.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:12
Operator : JS
Sample : E-1_(2.0,E15-05428-015,S,30.74g,8.90,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:20:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	9936.0E6	4895.8E6	149.182	141.264
Spiked Amount 200.000			Recovery	=	74.59%	70.63%
2) S DCB	12.11	12.56	2944.0E6	2001.2E6	143.733	161.906
Spiked Amount 200.000			Recovery	=	71.87%	80.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.91	465.8E6	103.5E6	112.481	99.453
34) L8 Aroclor-1260 {2}	9.01	8.17	211.1E6	134.4E6	89.638	88.359
35) L8 Aroclor-1260 {3}	9.48	9.77	552.4E6	165.0E6	92.730	113.405
36) L8 Aroclor-1260 {4}	9.97	10.27	284.0E6	347.1E6	105.856	102.428
37) L8 Aroclor-1260 {5}	11.03	10.87	142.3E6	265.1E6	95.212	109.884
Sum Aroclor-1260			1655.6E6	1015.2E6	495.918	513.529
Average Aroclor-1260					99.184	102.706
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

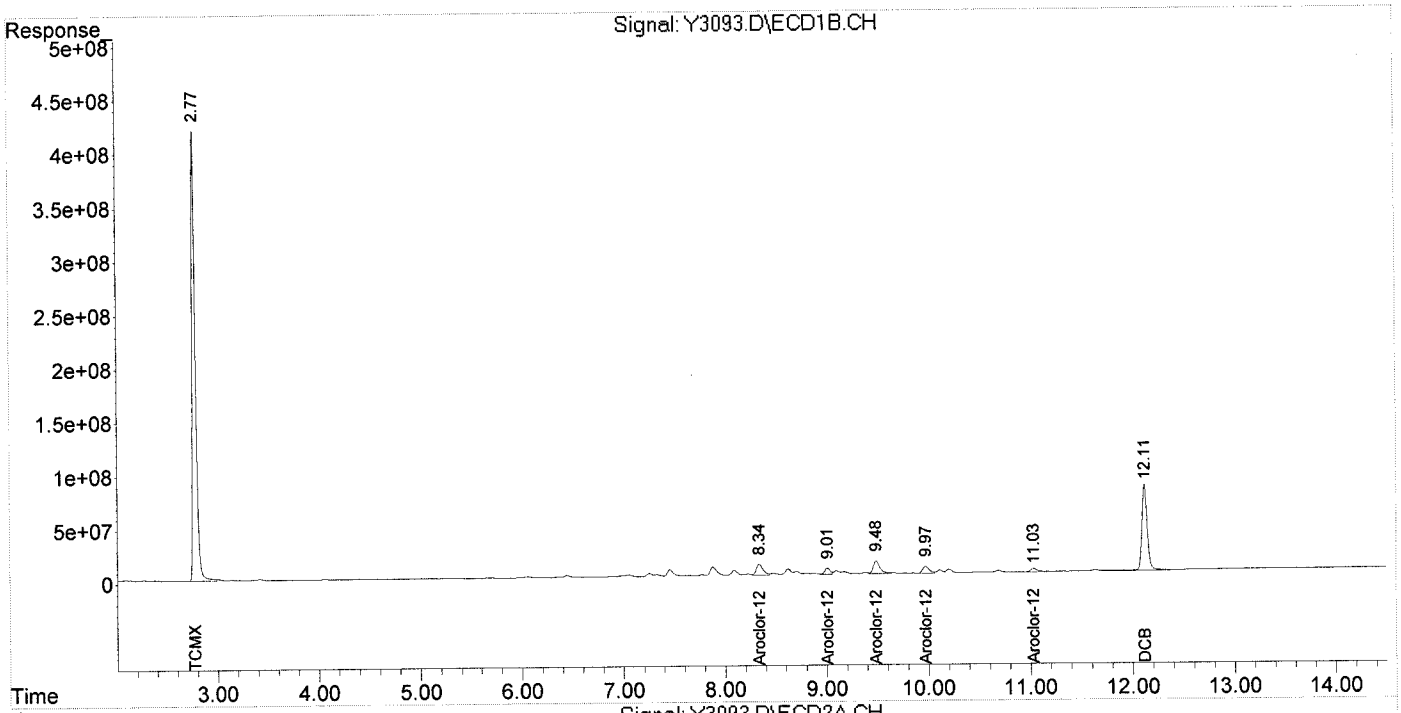
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

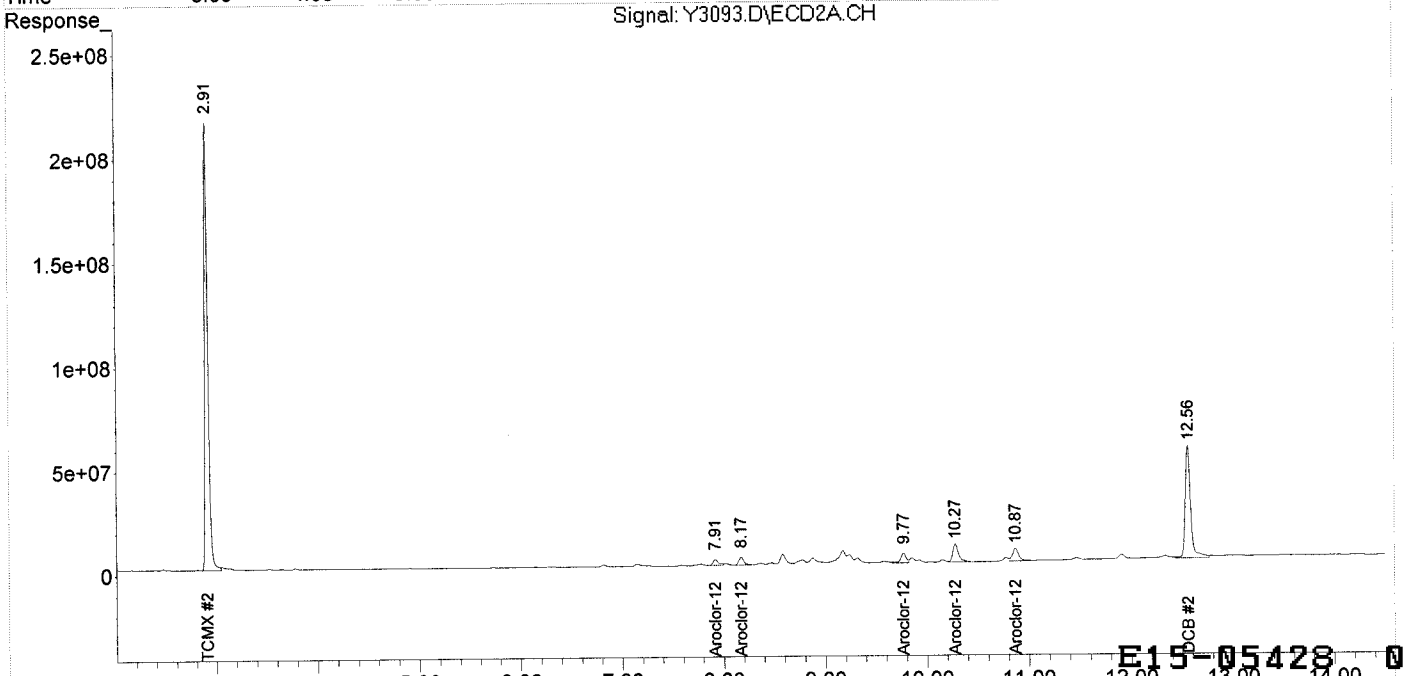
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3093.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:12
Operator : JS
Sample : E-1_(2.0,E15-05428-015,S,30.74g,8.90,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:20:45 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0377

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3094.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:29
Operator : JS
Sample : E-1_(3.0,E15-05428-016,S,30.37g,14.1,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:22:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	9739.4E6	4755.2E6	146.230	137.207
Spiked Amount 200.000			Recovery	=	73.11%	68.60%
2) S DCB	12.12	12.56	2761.0E6	1762.8E6	134.801	142.621
Spiked Amount 200.000			Recovery	=	67.40%	71.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

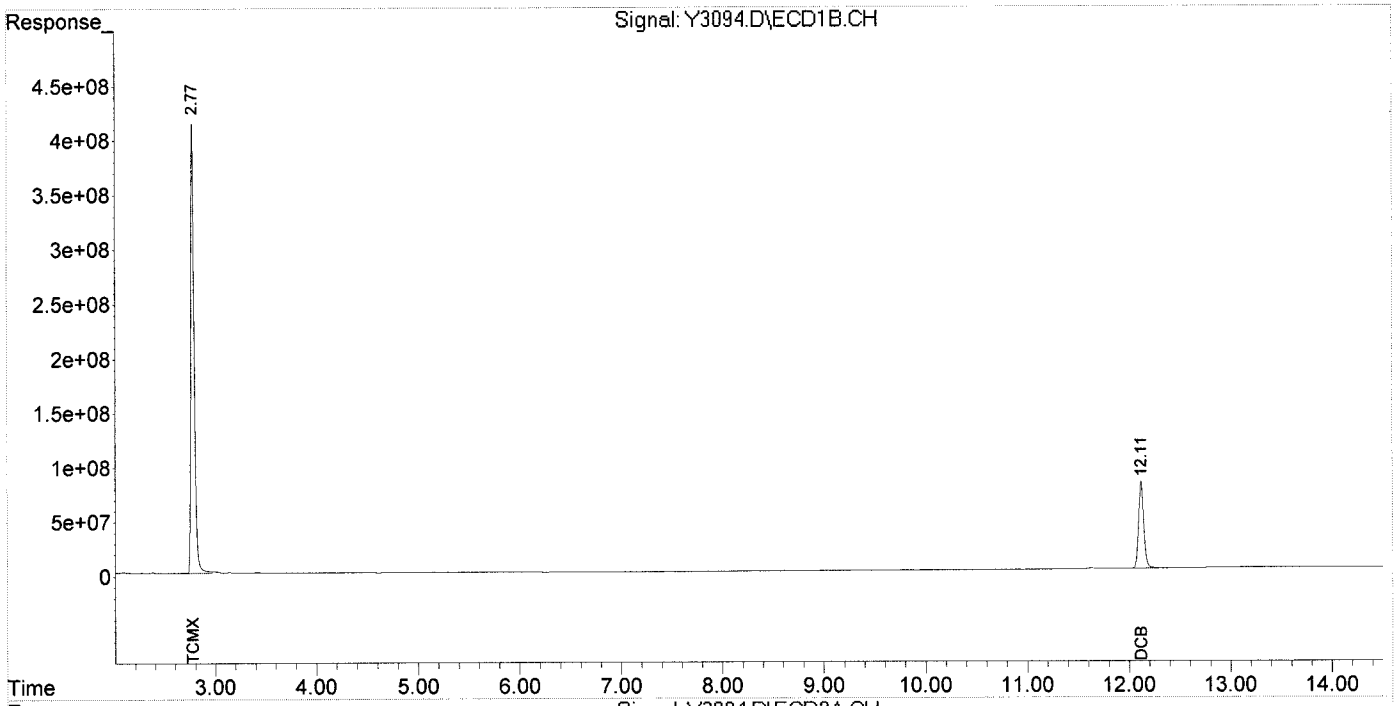
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

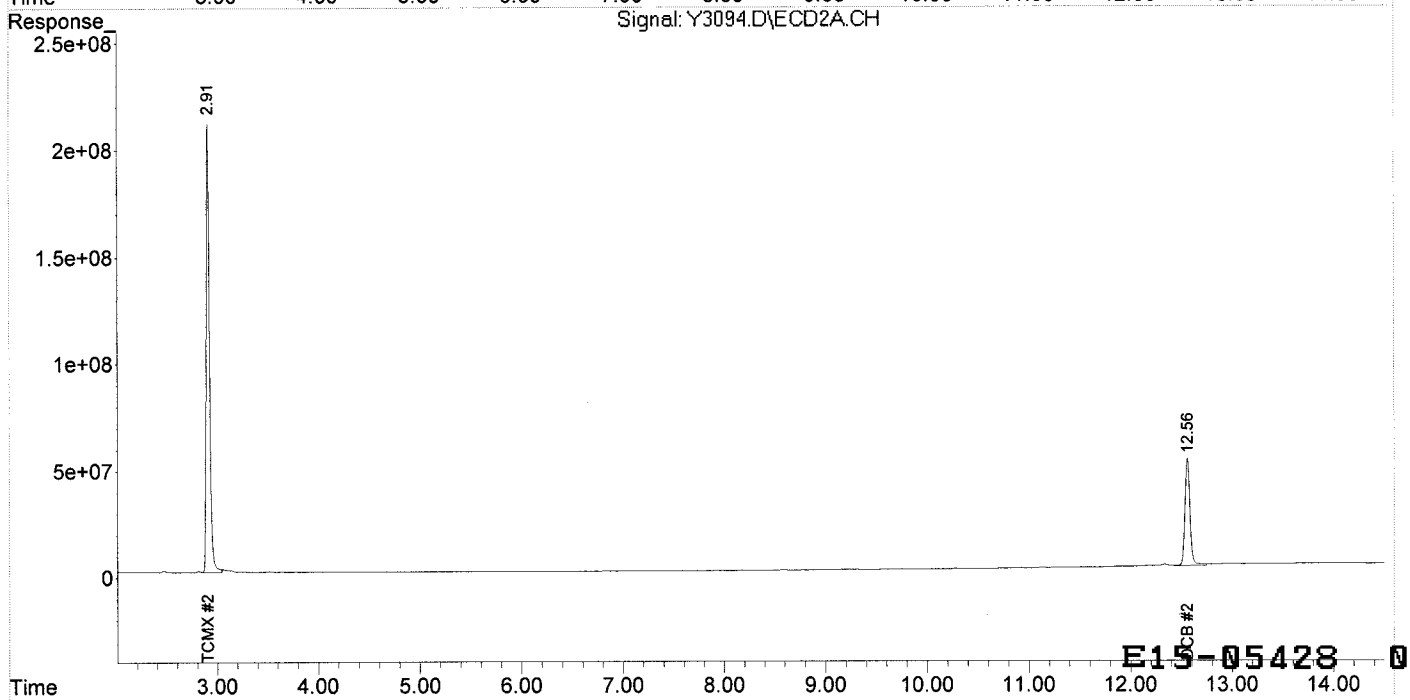
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3094.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:29
Operator : JS
Sample : E-1_(3.0,E15-05428-016,S,30.37g,14.1,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:22:00 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3095.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:47
Operator : JS
Sample : E-1_(4.5,E15-05428-017,S,30.61g,18.6,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:22:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	9875.5E6	4819.4E6	148.272	139.060
Spiked Amount 200.000			Recovery	=	74.14%	69.53%
2) S DCB	12.12	12.56	2990.9E6	1858.4E6	146.027	150.356
Spiked Amount 200.000			Recovery	=	73.01%	75.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

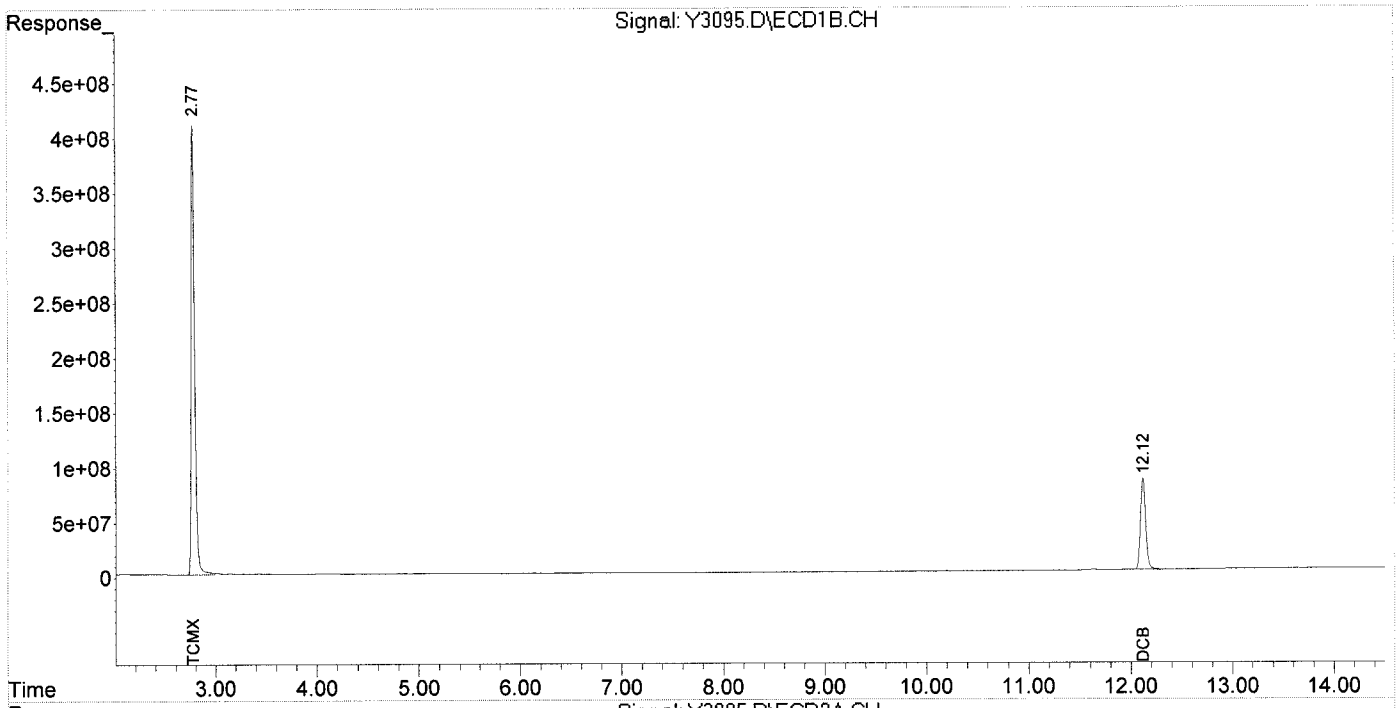
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

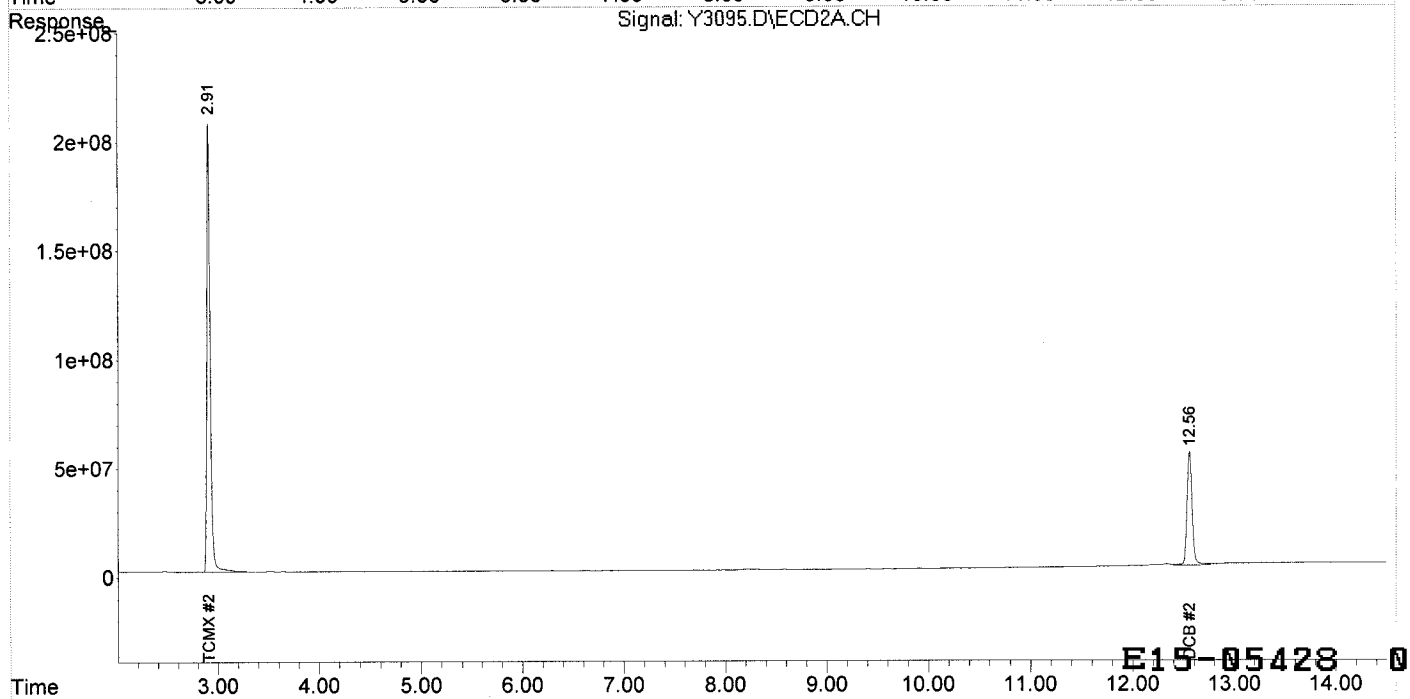
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3095.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 00:47
Operator : JS
Sample : E-1_(4.5,E15-05428-017,S,30.61g,18.6,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:22:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3027.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:37
Operator : JS
Sample : E-15_(0.,E15-05428-018,S,5.61g,20.1,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:41:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.77	2.91	11133.3E6	6441.7E6	167.157	185.870	
Spiked Amount 200.000			Recovery	=	83.58%	92.94%	
2) S DCB	12.11	12.56	3200.5E6	2221.8E6	156.258	179.752	
Spiked Amount 200.000			Recovery	=	78.13%	89.88%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.33	7.91	2123.1E6	340.3E6	512.655	327.079	#
34) L8 Aroclor-1260 {2}	9.00	8.17	943.7E6	821.8E6	400.677	540.234	#
35) L8 Aroclor-1260 {3}	9.48	9.76	2638.8E6	686.3E6	443.004	471.580	
36) L8 Aroclor-1260 {4}	9.96	10.27	1366.9E6	1620.7E6	509.537	478.253	
37) L8 Aroclor-1260 {5}	11.02	10.86	752.9E6	1305.4E6	503.808m	541.043	
Sum Aroclor-1260			7825.4E6	4774.5E6	2369.681	2358.189	
Average Aroclor-1260					473.936	471.638	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

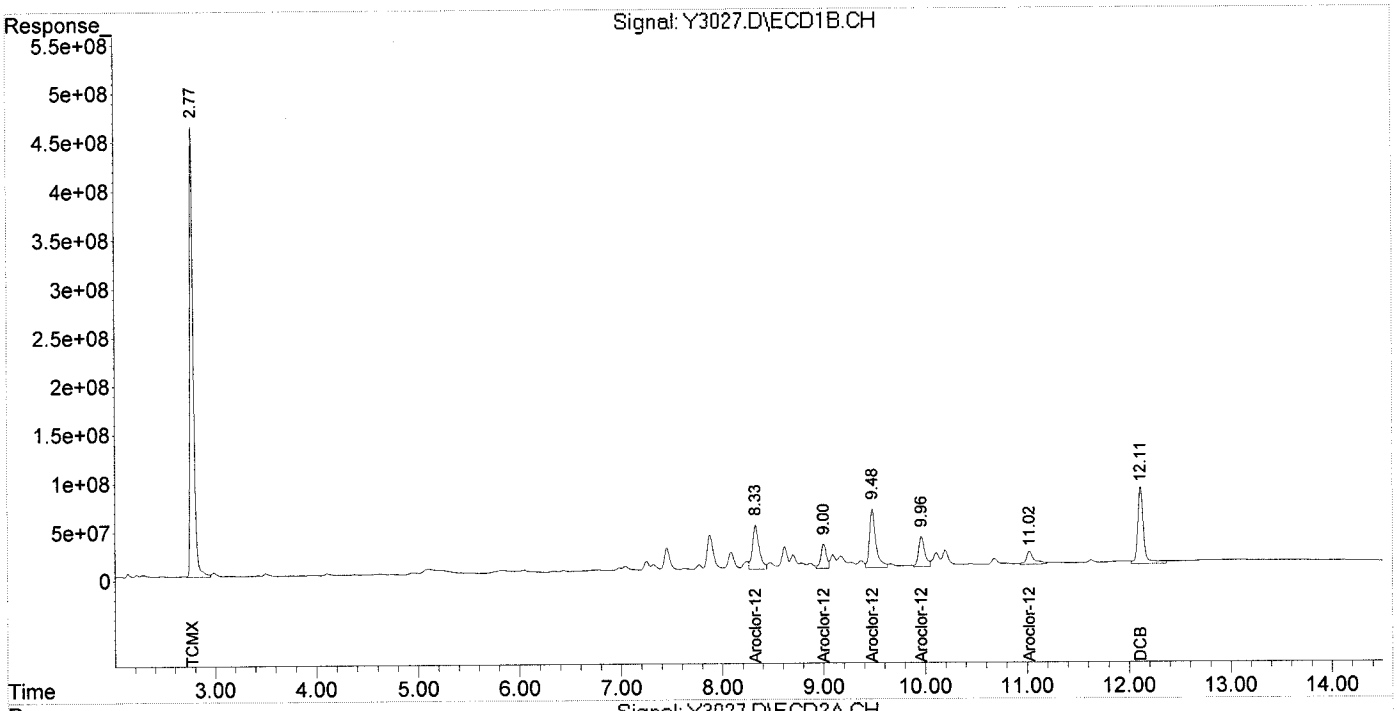
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

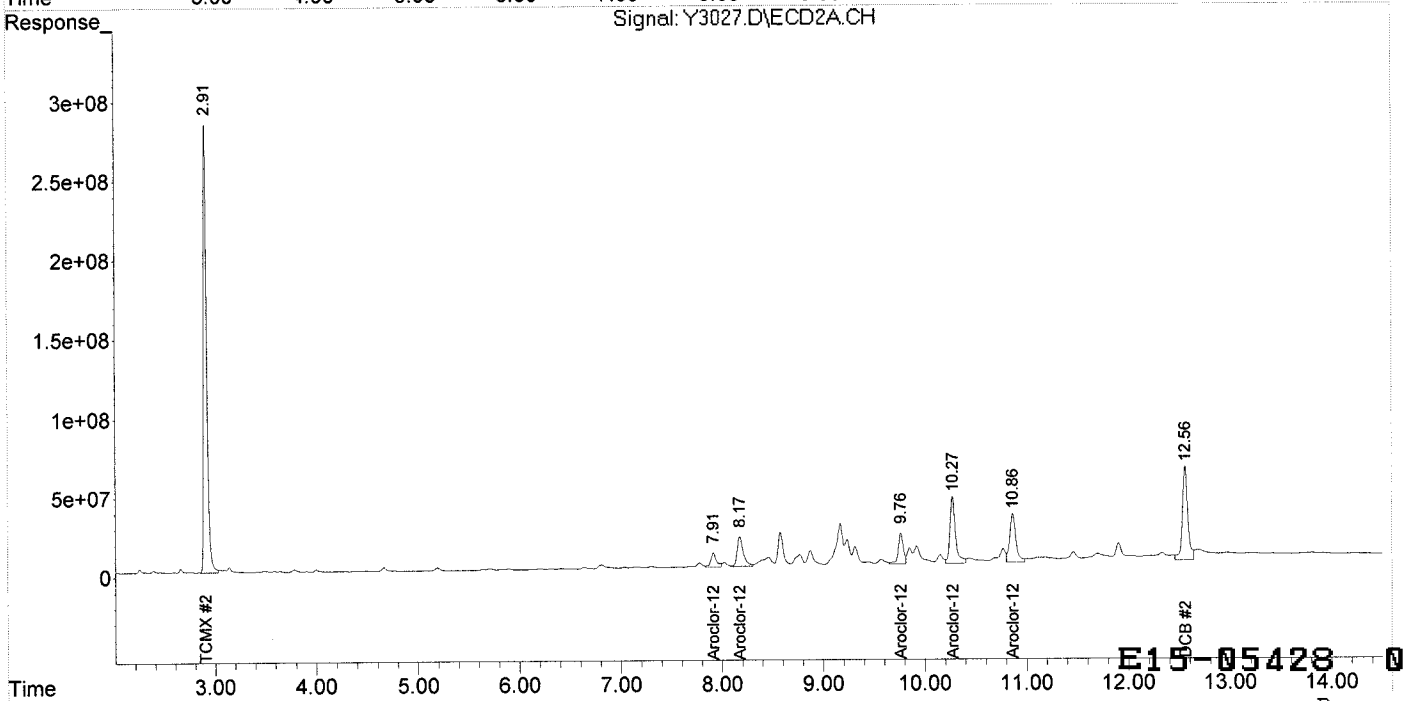
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3027.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:37
Operator : JS
Sample : E-15_(0.,E15-05428-018,S,5.61g,20.1,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:41:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0383

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3028.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:54
Operator : JS
Sample : E-15_(2.,E15-05428-019,S,5.21g,11.7,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:42:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13299.6E6	6730.2E6	199.682	194.193
Spiked Amount 200.000			Recovery	=	99.84%	97.10%
2) S DCB	12.12	12.56	2865.6E6	1997.6E6	139.905	161.617
Spiked Amount 200.000			Recovery	=	69.95%	80.81%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	59212345	10880982	14.298	10.458m#
34) L8 Aroclor-1260 {2}	9.00	8.17	13126720	19185693	5.573	12.612m#
35) L8 Aroclor-1260 {3}	9.48	9.77	85372909	16913979	14.333	11.622m
36) L8 Aroclor-1260 {4}	9.97	10.28	19522563	44293278	7.277	13.071m#
37) L8 Aroclor-1260 {5}	11.03	10.87	14002416	29211560	9.369m	12.107m#
Sum Aroclor-1260			191.2E6	120.5E6	50.851	59.869
Average Aroclor-1260					10.170	11.974
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

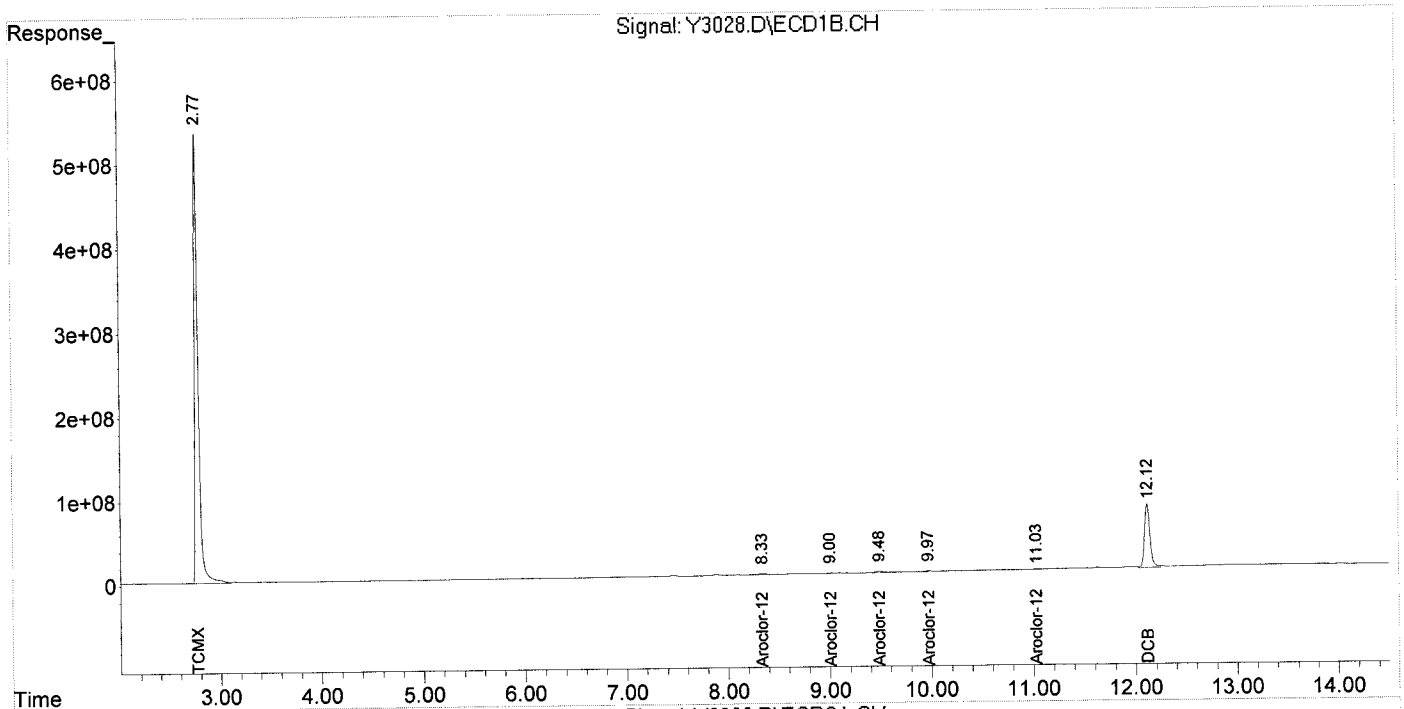
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

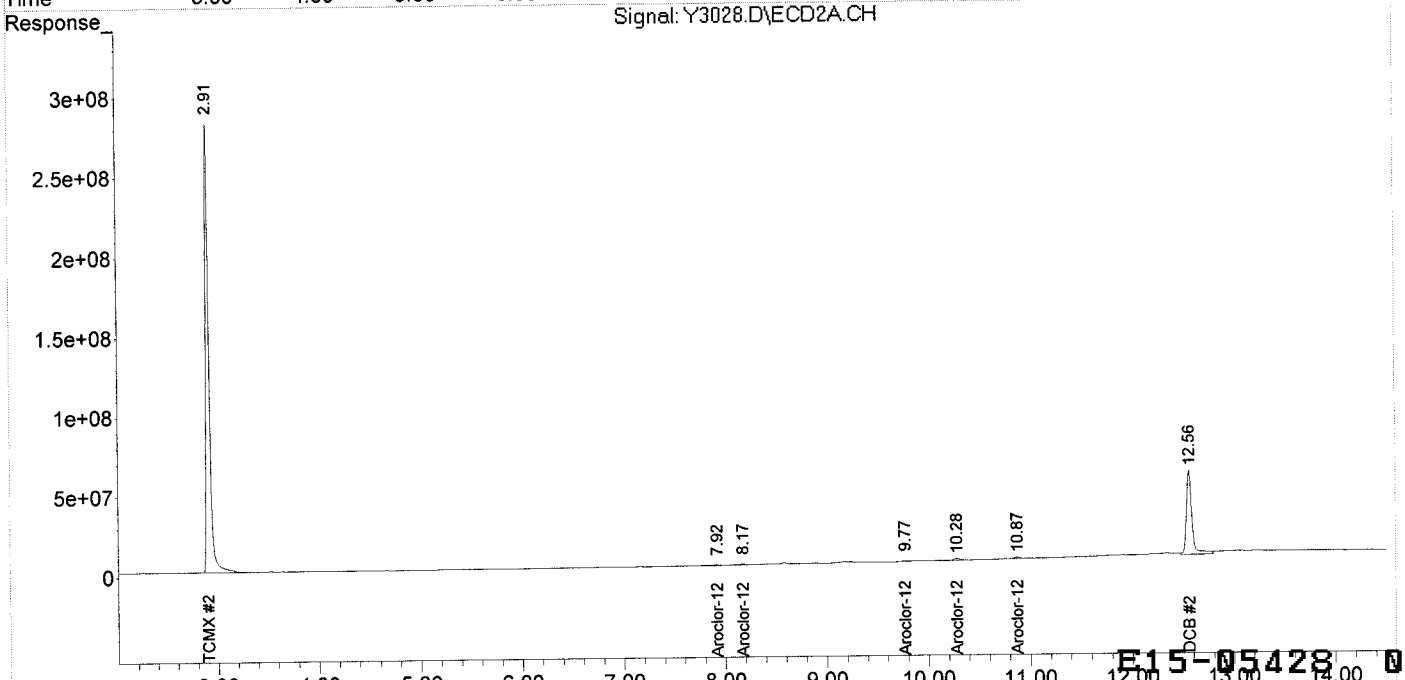
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3028.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 22:54
Operator : JS
Sample : E-15_(2.,E15-05428-019,S,5.21g,11.7,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:42:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3141.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:36
Operator : JS
Sample : E-2_(0.5,E15-05428-020,S,30.08g,23.0,5
Misc : 150701-07,07/01/15,06/24/15,200
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:35:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.92	49859404	35873846	0.749	1.035 #
Spiked Amount 200.000			Recovery	=	0.37%	0.52%
2) S DCB	12.12	12.57	27825363	15672305	1.359	1.268m
Spiked Amount 200.000			Recovery	=	0.68%	0.63%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1291.6E6	242.2E6	311.868	232.818 #
34) L8 Aroclor-1260 {2}	9.01	8.17	627.2E6	329.4E6	266.269	216.563
35) L8 Aroclor-1260 {3}	9.49	9.77	1788.4E6	402.0E6	300.247	276.193
36) L8 Aroclor-1260 {4}	9.97	10.28	870.6E6	947.5E6	324.541	279.598
37) L8 Aroclor-1260 {5}	11.03	10.87	417.4E6	712.5E6	279.310	295.314
Sum Aroclor-1260			4995.2E6	2633.6E6	1482.235	1300.485
Average Aroclor-1260					296.447	260.097
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

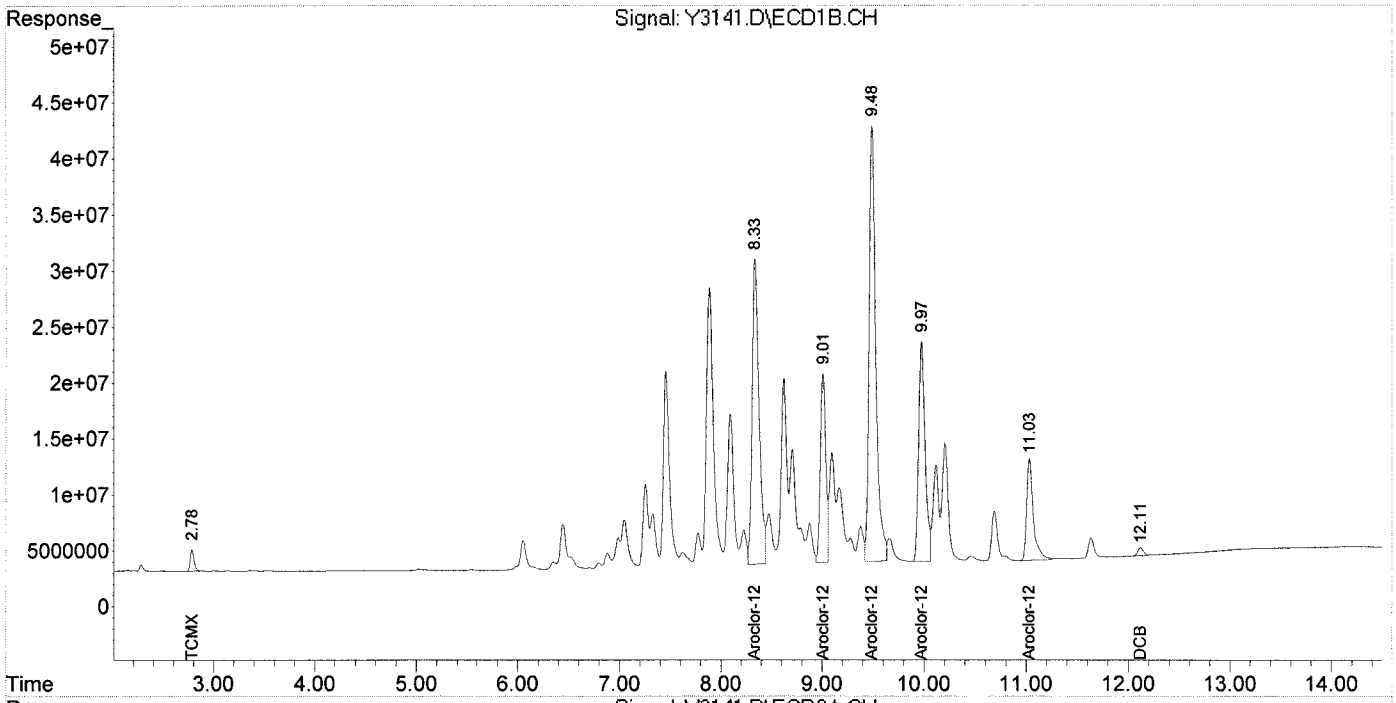
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

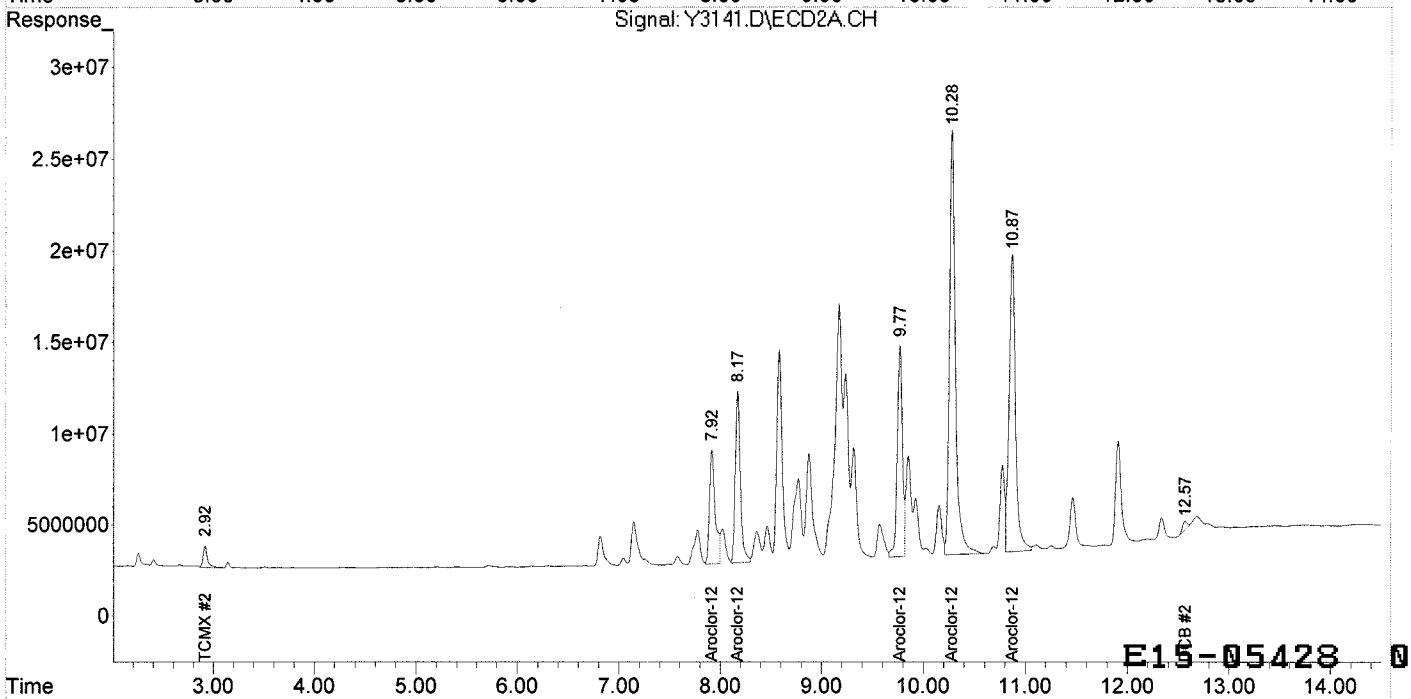
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3141.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:36
Operator : JS
Sample : E-2_(0.5,E15-05428-020,S,30.08g,23.0,5
Misc : 150701-07,07/01/15,06/24/15,200
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:35:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428_0387

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3142.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:53
Operator : JS
Sample : E-2_(2.0,E15-05428-021,S,30.66g,10.9,5
Misc : 150701-07,07/01/15,06/24/15,200
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:57:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.92	60837410	47455144	0.913	1.369 #
Spiked Amount 200.000			Recovery	=	0.46%	0.68%
2) S DCB	12.12	12.56	30595954	17107223	1.494m	1.384m
Spiked Amount 200.000			Recovery	=	0.75%	0.69%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	1062.6E6	201.2E6	256.578	193.393
34) L8 Aroclor-1260 {2}	9.01	8.17	529.7E6	272.1E6	224.893	178.856
35) L8 Aroclor-1260 {3}	9.48	9.77	1508.0E6	324.9E6	253.174	223.258
36) L8 Aroclor-1260 {4}	9.97	10.28	733.7E6	774.7E6	273.497	228.612
37) L8 Aroclor-1260 {5}	11.03	10.87	353.5E6	580.9E6	236.506	240.749
Sum Aroclor-1260			4187.5E6	2153.8E6	1244.648	1064.869
Average Aroclor-1260					248.930	212.974
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

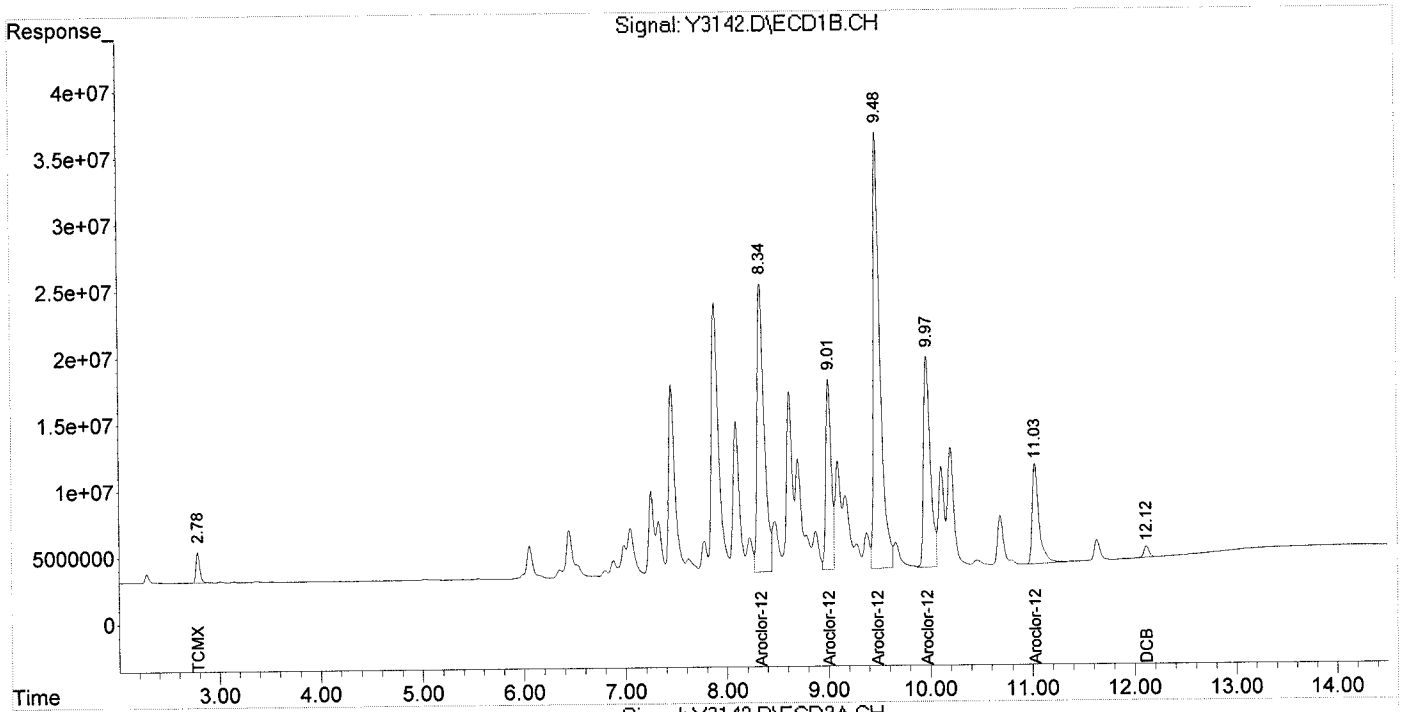
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

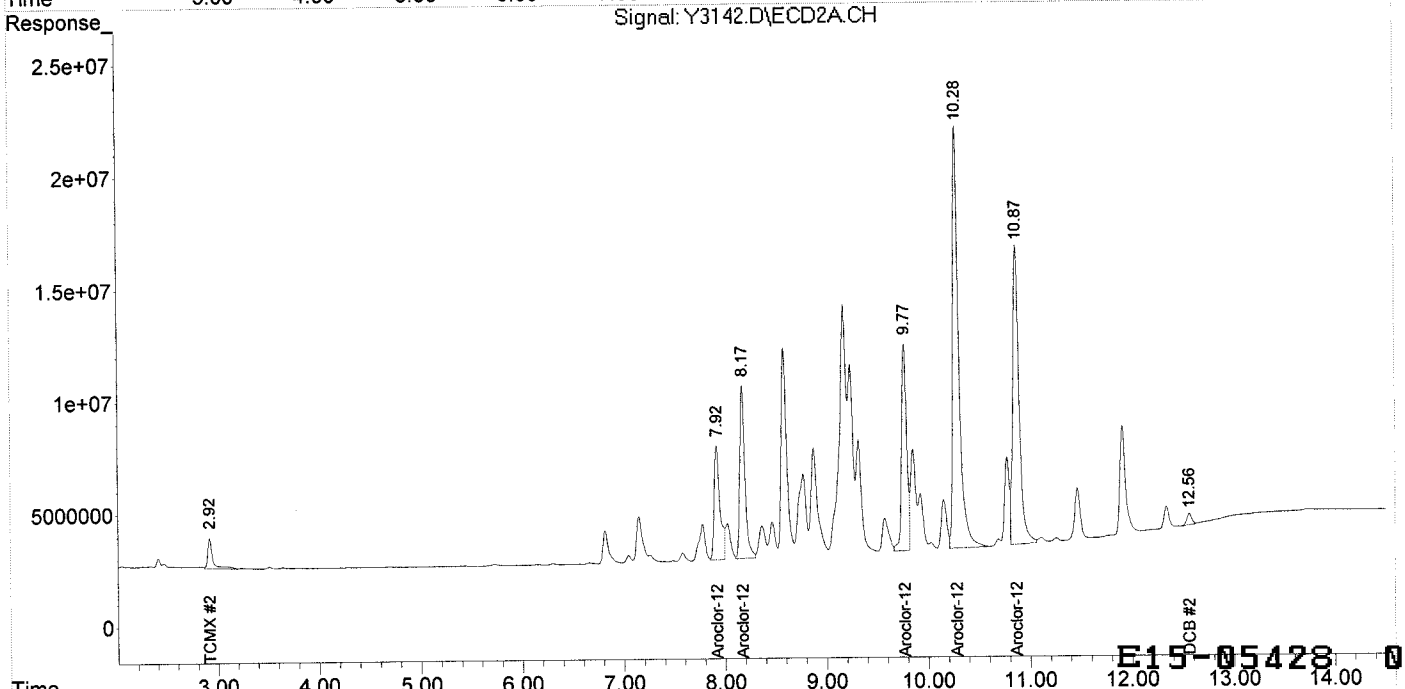
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3142.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 16:53
Operator : JS
Sample : E-2_(2.0,E15-05428-021,S,30.66g,10.9,5
Misc : 150701-07,07/01/15,06/24/15,200
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:57:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3104.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:40
Operator : JS
Sample : E-2_(3.0,E15-05428-022,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:13:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	8922.6E6	4921.9E6	133.966	142.018
Spiked Amount 200.000			Recovery	=	66.98%	71.01%
2) S DCB	12.12	12.56	3436.9E6	2136.0E6	167.799	172.815
Spiked Amount 200.000			Recovery	=	83.90%	86.41%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	24624.0E6	4760.8E6	5945.866	4575.761
34) L8 Aroclor-1260 {2}	9.00	8.17	11796.0E6	6832.4E6	5008.208	4491.373
35) L8 Aroclor-1260 {3}	9.48	9.76	33004.8E6	8777.0E6	5540.940	6030.695
36) L8 Aroclor-1260 {4}	9.96	10.27	17422.5E6	22015.6E6	6494.600	6496.638
37) L8 Aroclor-1260 {5}	11.02	10.86	8178.2E6	16093.6E6	5472.313	6670.304
Sum Aroclor-1260			95025.6E6	58479.4E6	28461.927	28264.771
Average Aroclor-1260					5692.385	5652.954
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

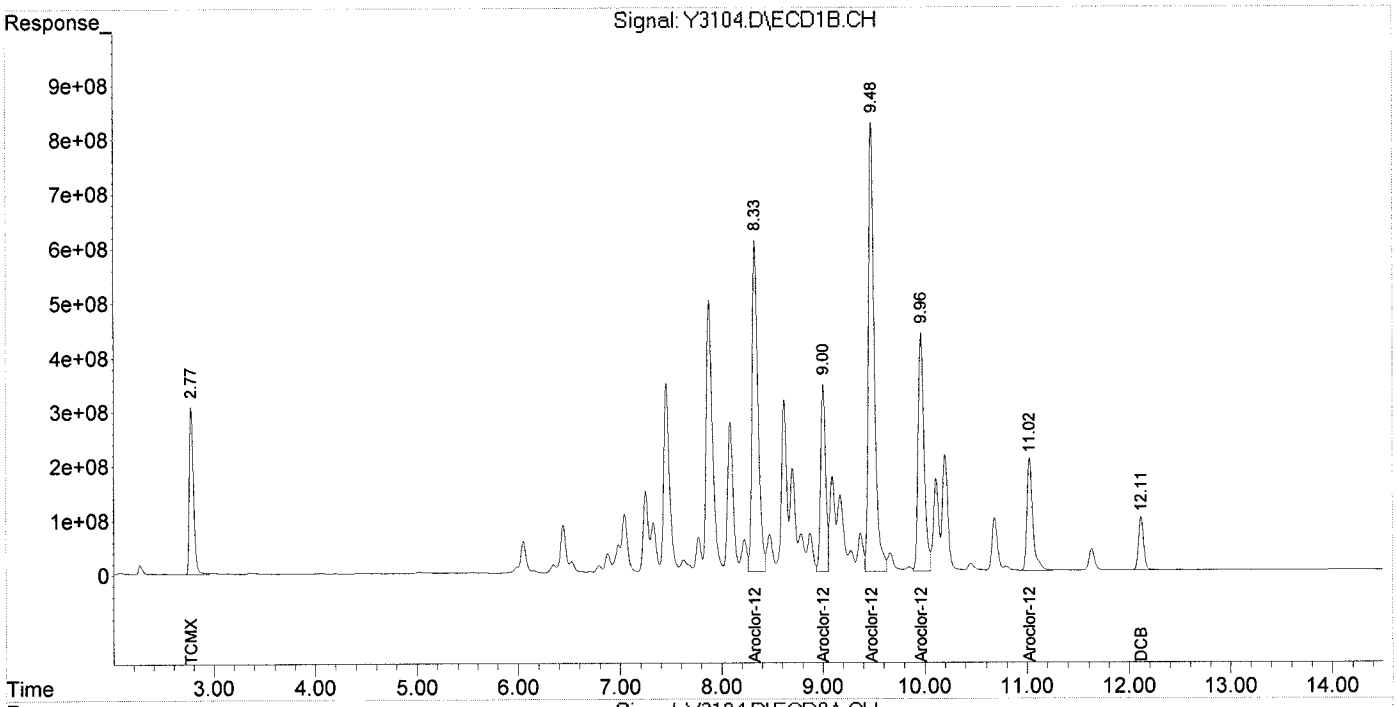
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

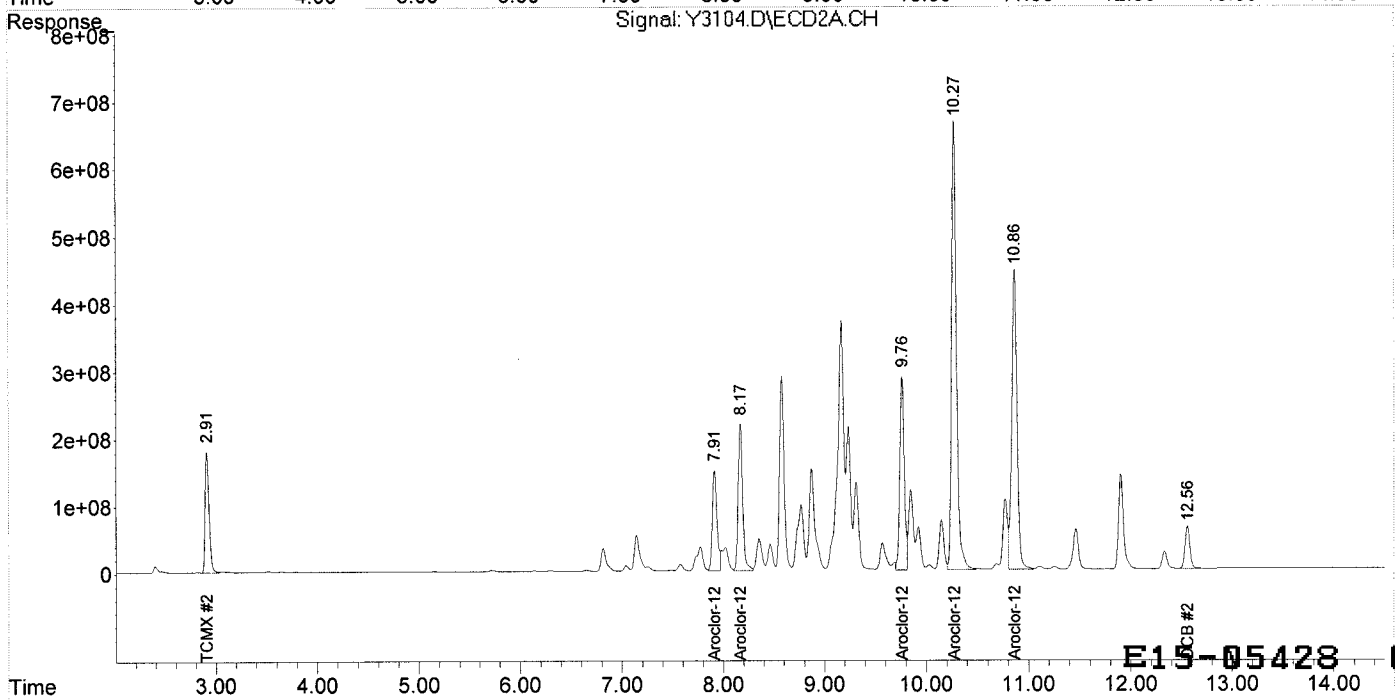
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3104.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:40
Operator : JS
Sample : E-2_(3.0,E15-05428-022,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:13:43 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3143.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:10
Operator : JS
Sample : E-2_(3.0,E15-05428-022DL,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,10
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:39:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1169.2E6	574.1E6	17.554	16.566
Spiked Amount 200.000			Recovery	=	8.78%	8.28%
2) S DCB	12.11	12.56	367.7E6	229.5E6	17.952	18.569
Spiked Amount 200.000			Recovery	=	8.98%	9.28%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.34	7.92	2960.5E6	572.2E6	714.871	549.987
34) L8 Aroclor-1260 {2}	9.01	8.17	1386.6E6	752.4E6	588.723	494.589
35) L8 Aroclor-1260 {3}	9.48	9.77	3860.3E6	883.9E6	648.074	607.351
36) L8 Aroclor-1260 {4}	9.97	10.28	1911.4E6	2033.8E6	712.502	600.154
37) L8 Aroclor-1260 {5}	11.03	10.87	866.8E6	1501.1E6	580.015	622.172
Sum Aroclor-1260			10985.6E6	5743.5E6	3244.186	2874.253
Average Aroclor-1260					648.837	574.851
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

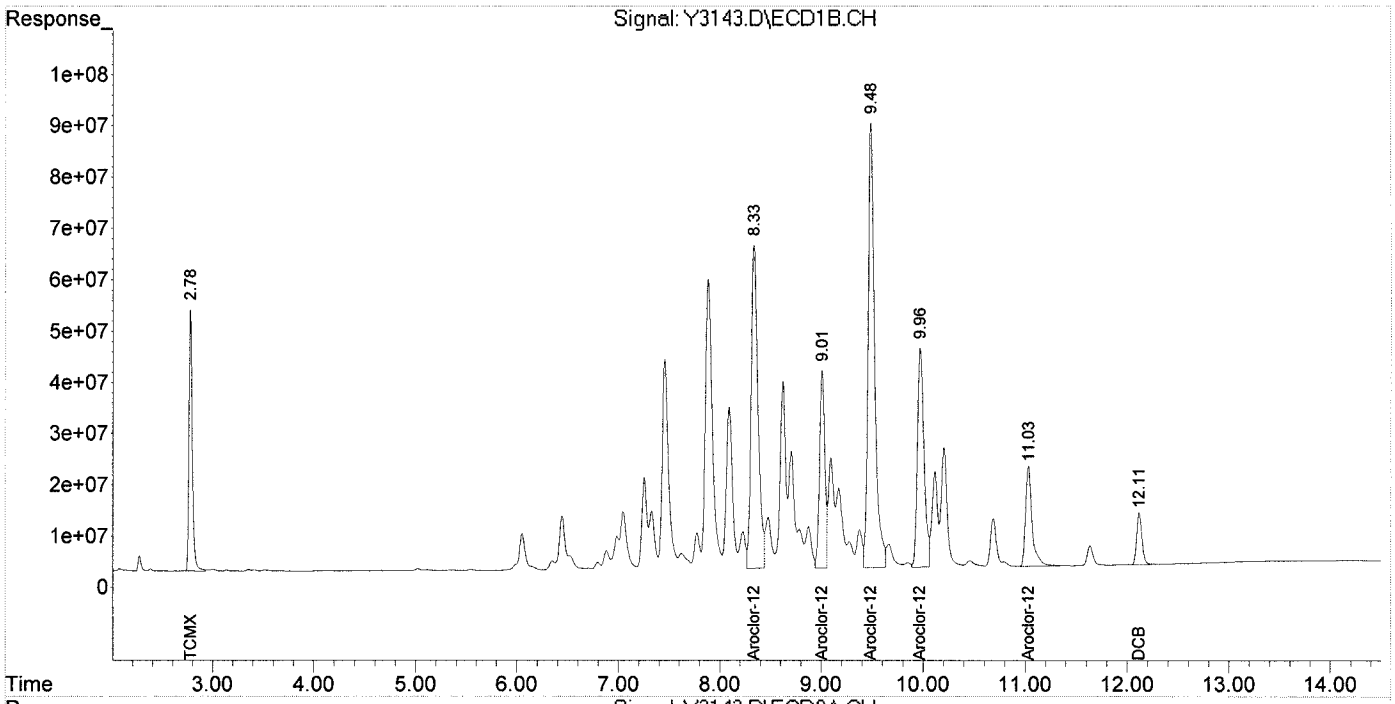
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

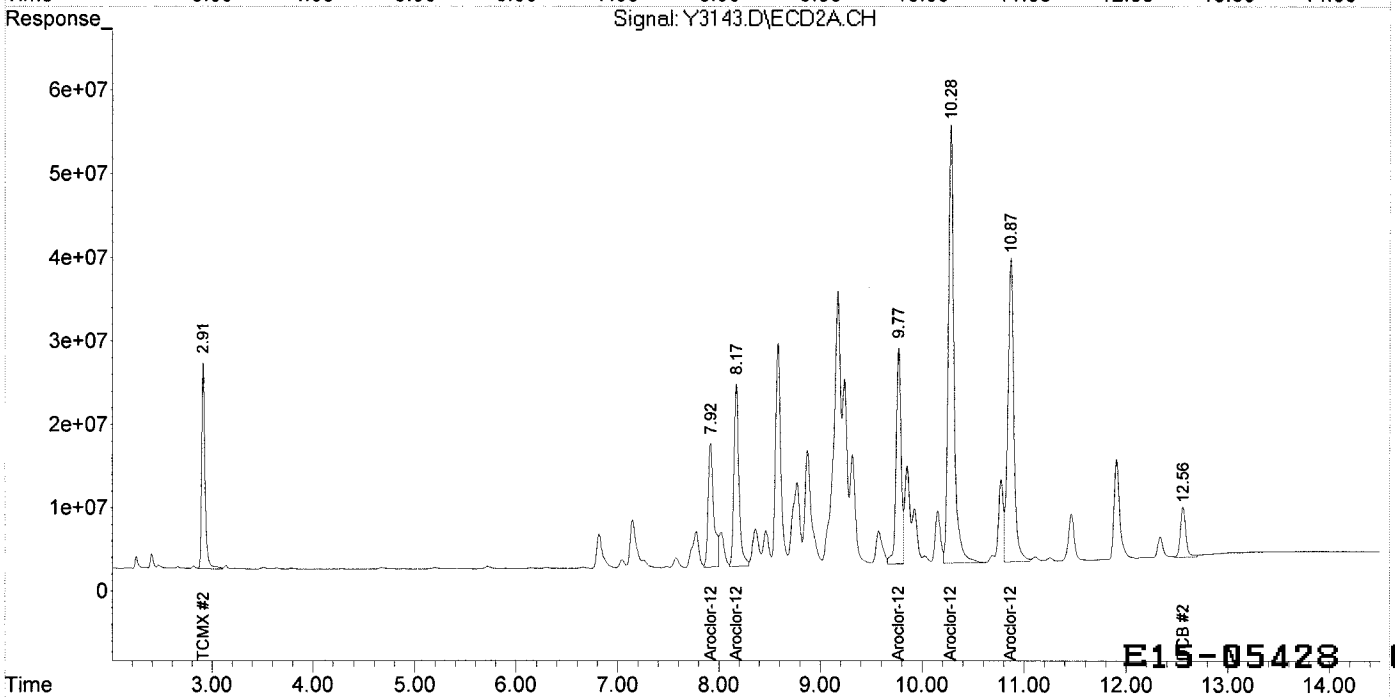
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3143.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:10
Operator : JS
Sample : E-2_(3.0,E15-05428-022DL,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,10
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:39:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0393

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3105.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:57
Operator : JS
Sample : E-2_(4.0,E15-05428-023,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:15:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10067.9E6	5253.2E6	151.162	151.577
Spiked Amount 200.000			Recovery	=	75.58%	75.79%
2) S DCB	12.11	12.56	3258.6E6	2212.1E6	159.096	178.968
Spiked Amount 200.000			Recovery	=	79.55%	89.48%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	43513.3E6	8211.6E6	10507.009	7892.397
34) L8 Aroclor-1260 {2}	9.00	8.17	21088.9E6	12046.9E6	8953.664	7919.200
35) L8 Aroclor-1260 {3}	9.48	9.76	61557.0E6	16286.5E6	10334.361	11190.479
36) L8 Aroclor-1260 {4}	9.96	10.27	31526.3E6	43137.7E6	11752.051	12729.651
37) L8 Aroclor-1260 {5}	11.02	10.86	15438.1E6	30873.0E6	10330.128	12795.931
Sum Aroclor-1260			173123.6E6	110555.8E6	51877.213	52527.658
Average Aroclor-1260					10375.443	10505.532
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

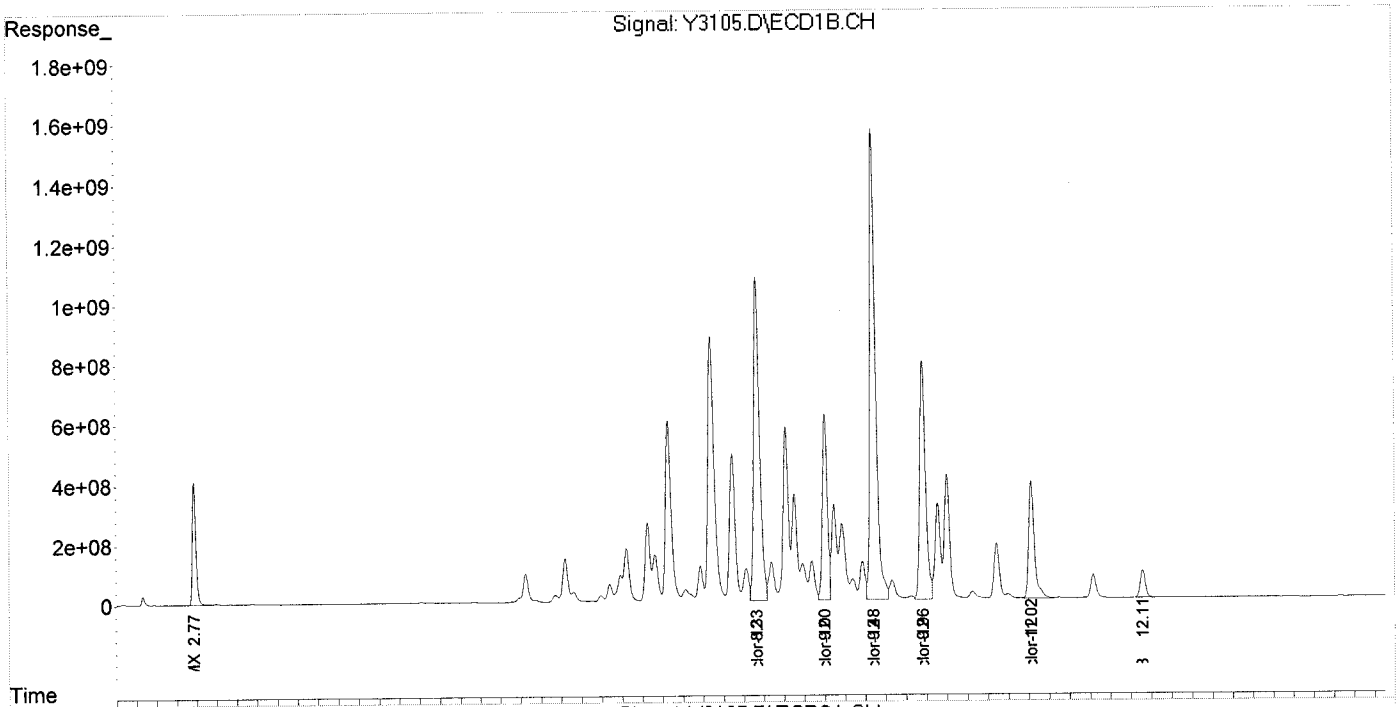
E15-05428 0394

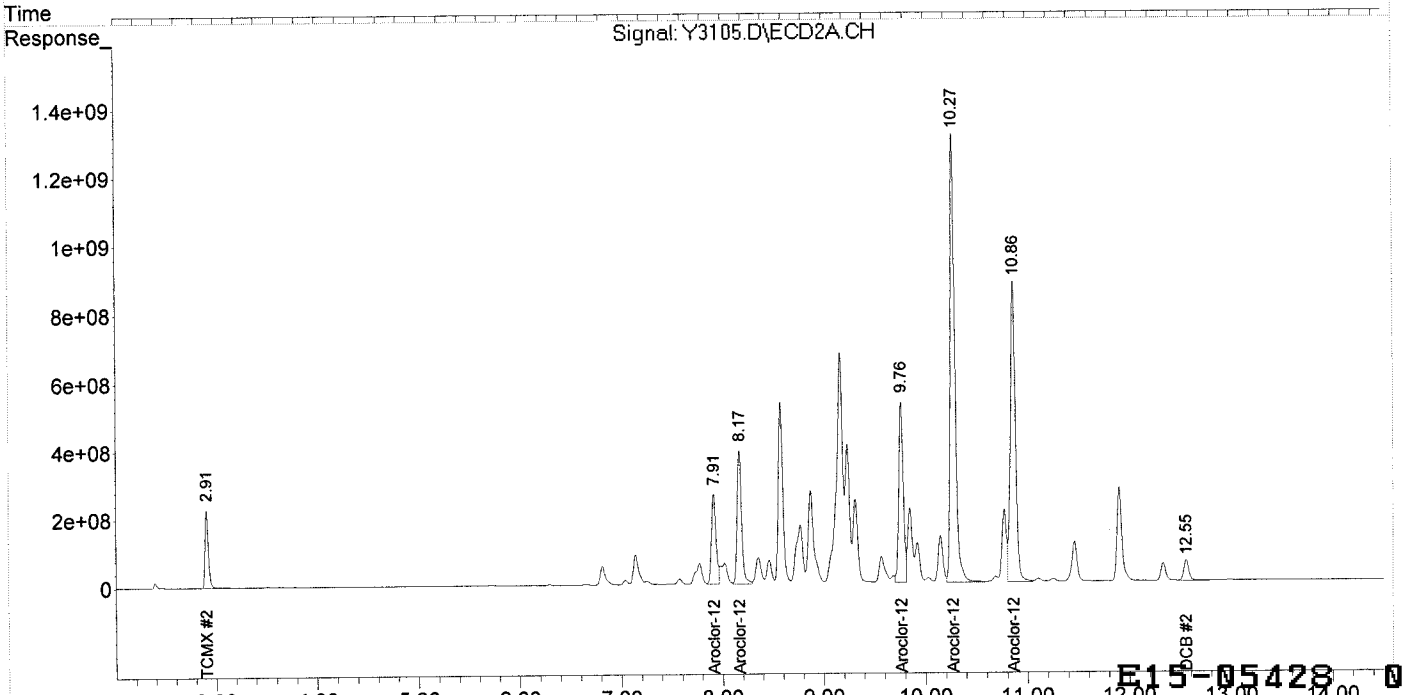
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3105.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:57
Operator : JS
Sample : E-2_(4.0,E15-05428-023,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:15:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3144.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:28
Operator : JS
Sample : E-2_(4.0,E15-05428-023DL,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,20
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:41:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	645.6E6	313.8E6	9.694	9.055
Spiked Amount 200.000			Recovery	=	4.85%	4.53%
2) S DCB	12.12	12.56	198.4E6	129.3E6	9.687	10.457
Spiked Amount 200.000			Recovery	=	4.84%	5.23%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	2854.6E6	528.3E6	689.296	507.789 #
34) L8 Aroclor-1260 {2}	9.01	8.17	1420.5E6	710.9E6	603.118	467.295
35) L8 Aroclor-1260 {3}	9.48	9.77	4023.2E6	872.3E6	675.427	599.358
36) L8 Aroclor-1260 {4}	9.97	10.28	1930.8E6	2046.5E6	719.734	603.908
37) L8 Aroclor-1260 {5}	11.03	10.87	915.1E6	1510.4E6	612.315	626.018
Sum Aroclor-1260			11144.2E6	5668.4E6	3299.890	2804.368
Average Aroclor-1260					659.978	560.874
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

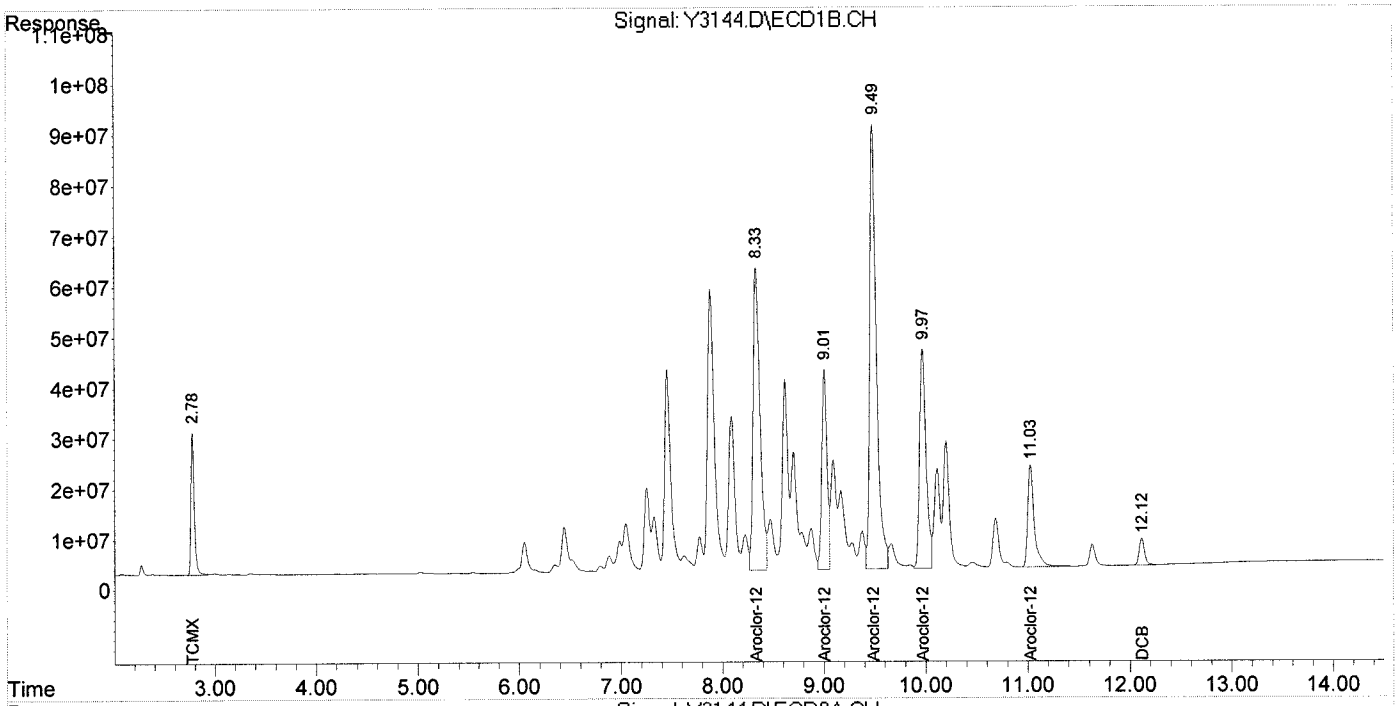
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

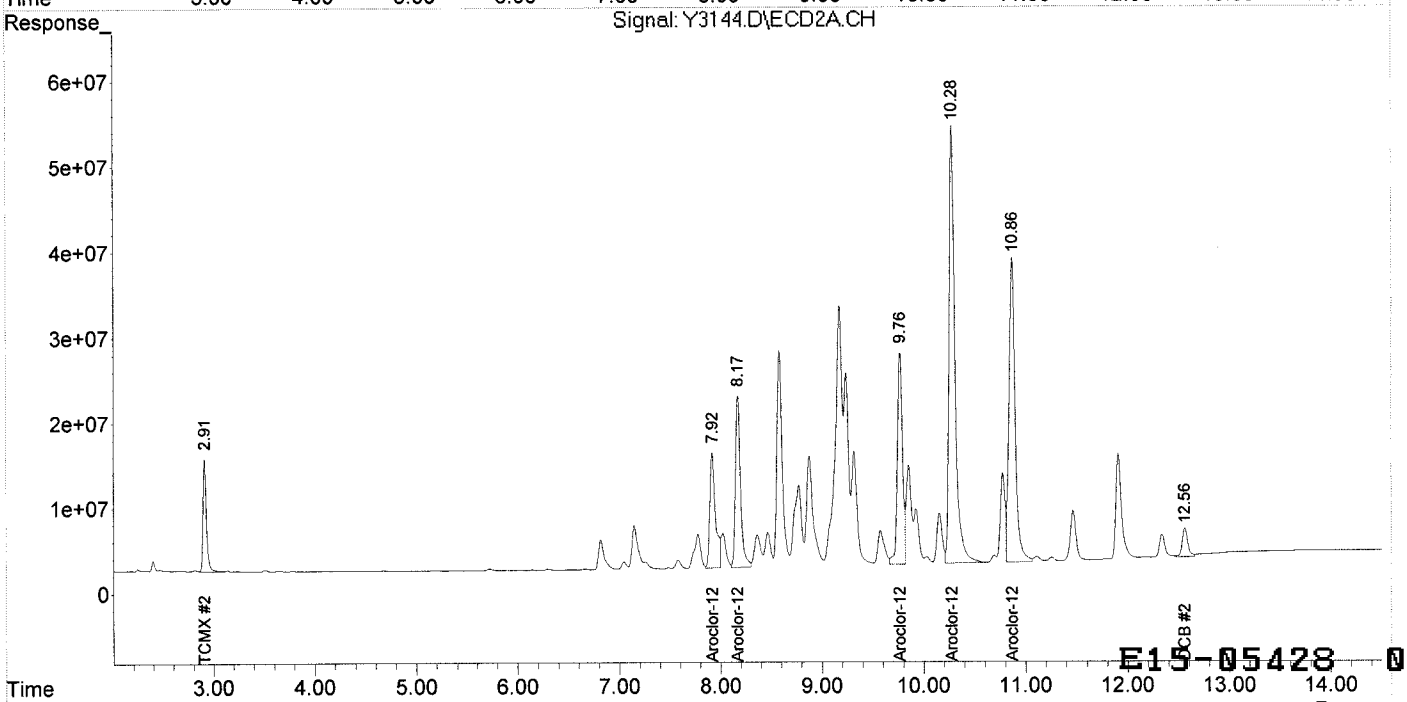
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3144.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:28
Operator : JS
Sample : E-2_(4.0,E15-05428-023DL,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,20
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:41:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3029.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 23:11
Operator : JS
Sample : E-10_(0.,E15-05428-024,S,5.52g,7.20,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:24:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.90	12624.3E6	6528.8E6	189.545	188.383
Spiked Amount 200.000			Recovery	=	94.77%	94.19%
2) S DCB	12.11	12.56	2881.5E6	2198.9E6	140.681	177.901 #
Spiked Amount 200.000			Recovery	=	70.34%	88.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	534.2E6	102.6E6	129.001	98.566
34) L8 Aroclor-1260 {2}	9.01	8.17	215.9E6	216.2E6	91.652	142.143 #
35) L8 Aroclor-1260 {3}	9.48	9.77	682.3E6	190.1E6	114.549	130.643
36) L8 Aroclor-1260 {4}	9.96	10.28	303.2E6	423.6E6	113.006	124.987
37) L8 Aroclor-1260 {5}	11.03	10.87	129.8E6	294.7E6	86.875	122.139m#
Sum Aroclor-1260			1865.4E6	1227.2E6	535.084	618.478
Average Aroclor-1260					107.017	123.696
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

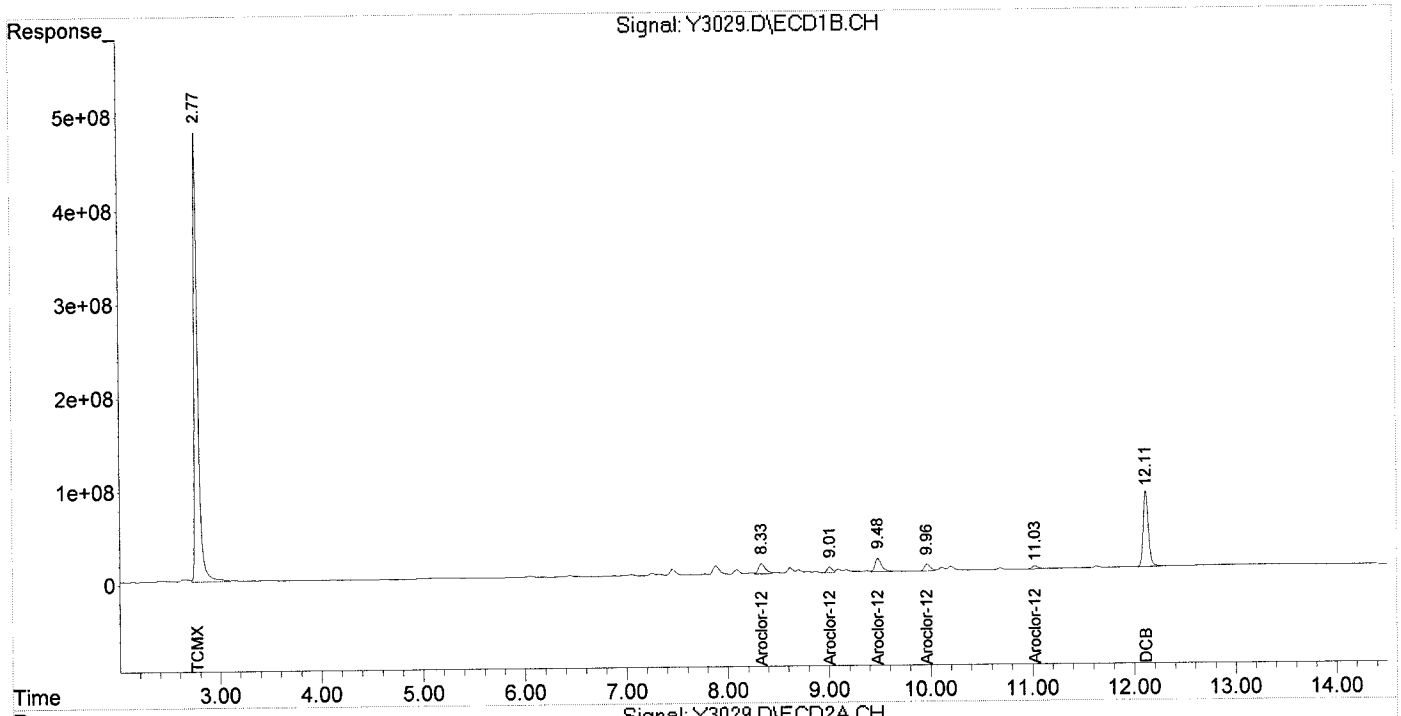
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

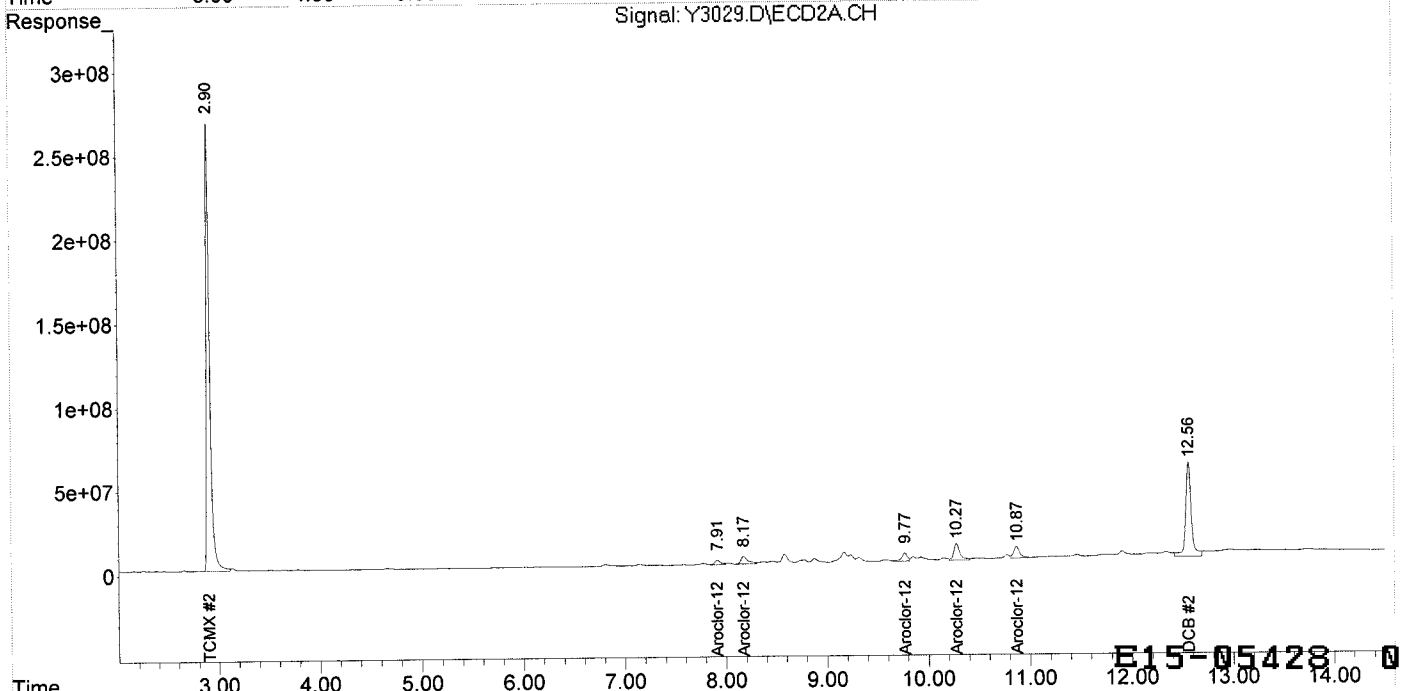
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3029.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 23:11
Operator : JS
Sample : E-10_(0.,E15-05428-024,S,5.52g,7.20,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:24:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3030.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 23:29
Operator : JS
Sample : E-10_(2.,E15-05428-025,S,5.58g,14.5,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:45:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12760.4E6	6650.8E6	191.587	191.904
Spiked Amount 200.000			Recovery	=	95.79%	95.95%
2) S DCB	12.11	12.56	3204.1E6	2104.1E6	156.435	170.231
Spiked Amount 200.000			Recovery	=	78.22%	85.12%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.91	79650434	8504007	19.233m	8.173m#
34) L8 Aroclor-1260 {2}	9.00	8.18	16587687	15202588	7.043	9.994m#
35) L8 Aroclor-1260 {3}	9.48	9.77	74661210	16879224	12.534m	11.598
36) L8 Aroclor-1260 {4}	9.97	10.28	29248610	43123836	10.903m	12.726
37) L8 Aroclor-1260 {5}	11.03	10.87	15105293	32595822	10.107m	13.510m#
Sum Aroclor-1260			215.3E6	116.3E6	59.820	56.000
Average Aroclor-1260					11.964	11.200
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

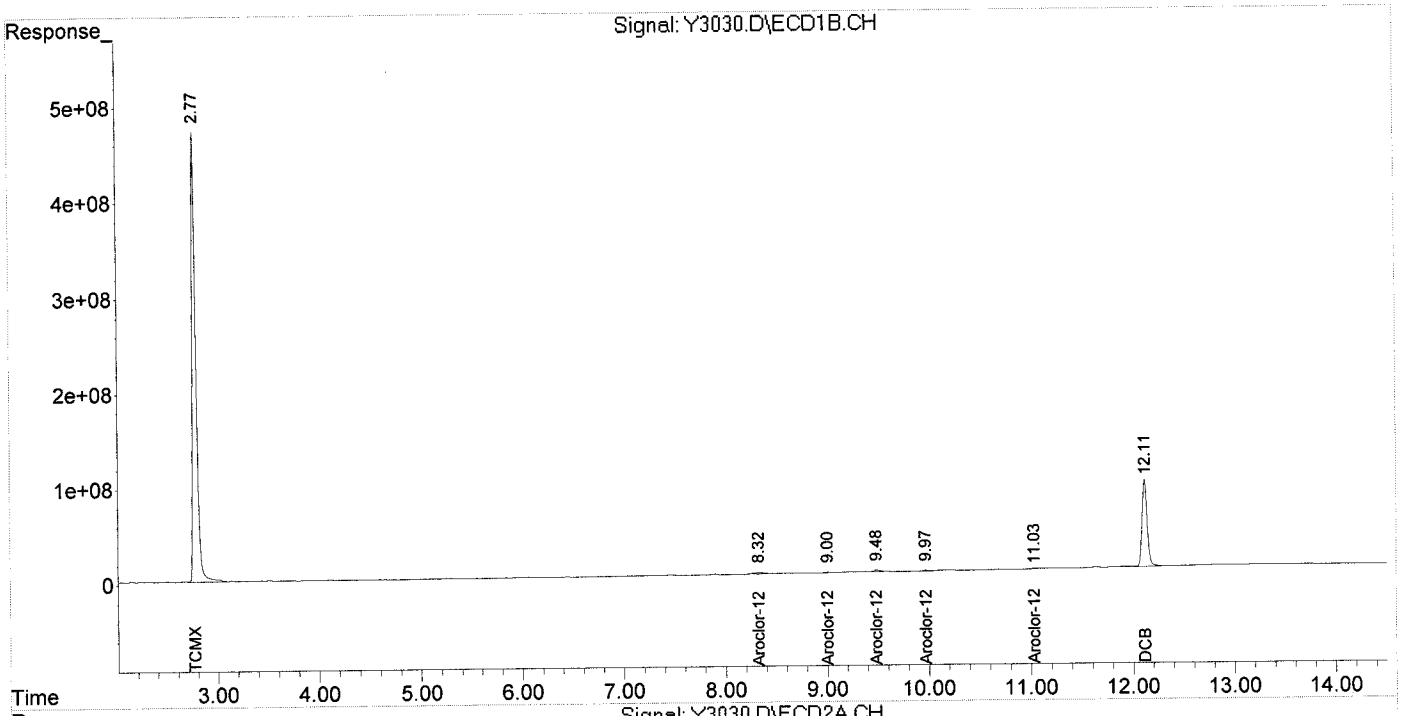
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

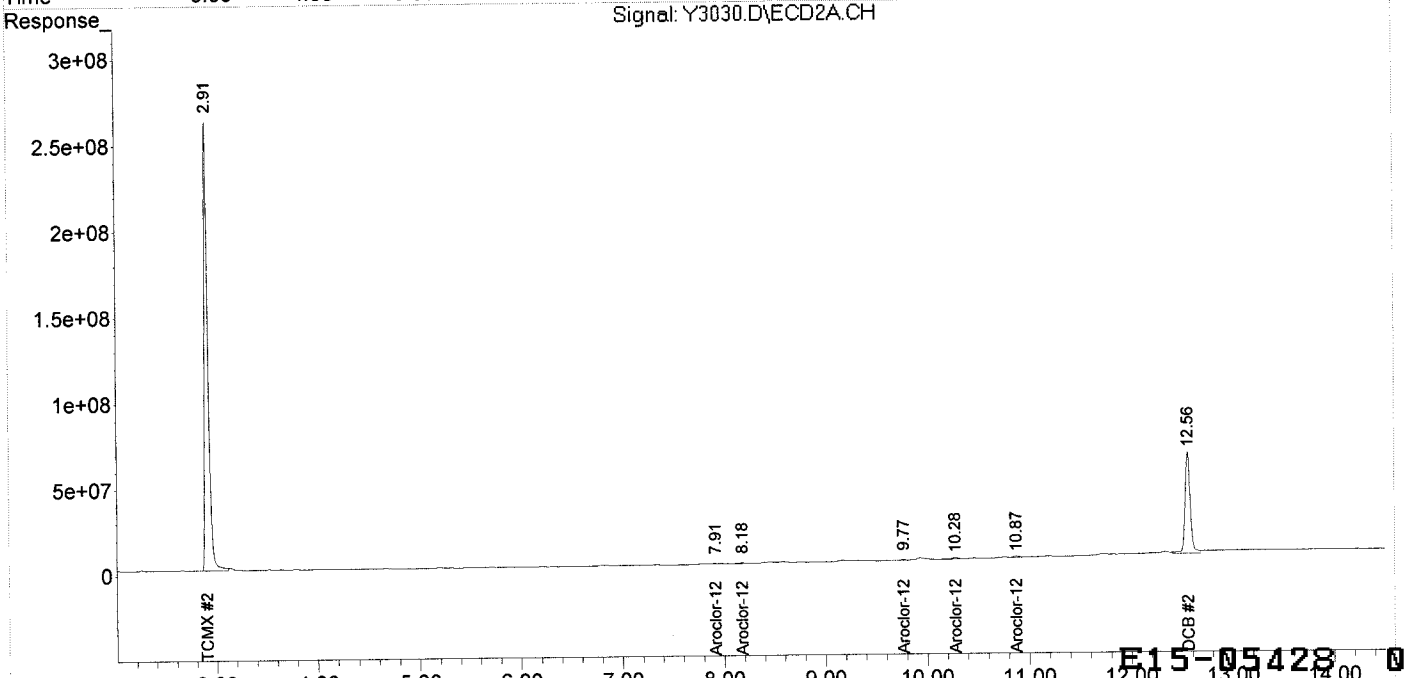
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3030.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 23:29
Operator : JS
Sample : E-10_(2.,E15-05428-025,S,5.58g,14.5,20
Misc : 150701-12,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:45:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3106.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:15
Operator : JS
Sample : E-7_(0.5,E15-05428-026,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	7112.9E6	4763.1E6	106.794	137.435 #
Spiked Amount 200.000			Recovery	=	53.40%	68.72%
2) S DCB	12.11	12.56	2710.3E6	1980.7E6	132.324	160.248
Spiked Amount 200.000			Recovery	=	66.16%	80.12%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	18179.3E6	3337.5E6	4389.691	3207.759 #
34) L8 Aroclor-1260 {2}	9.00	8.17	7042.4E6	4610.6E6	2989.978	3030.851
35) L8 Aroclor-1260 {3}	9.48	9.76	24097.4E6	6511.5E6	4045.530	4474.080
36) L8 Aroclor-1260 {4}	9.96	10.27	12603.3E6	17487.9E6	4698.116	5160.562
37) L8 Aroclor-1260 {5}	11.02	10.86	5672.3E6	12815.2E6	3795.490	5311.519 #
Sum Aroclor-1260			67594.5E6	44762.8E6	19918.804	21184.770
Average Aroclor-1260					3983.761	4236.954
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

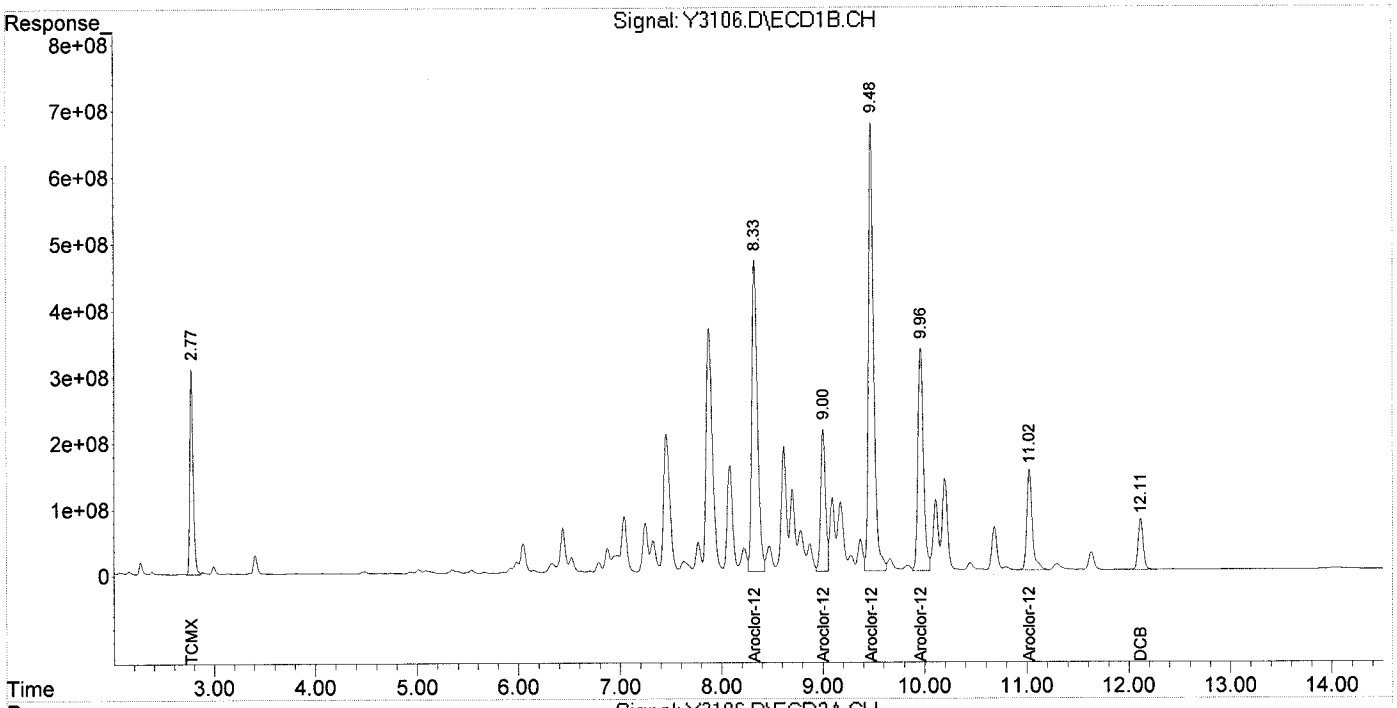
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

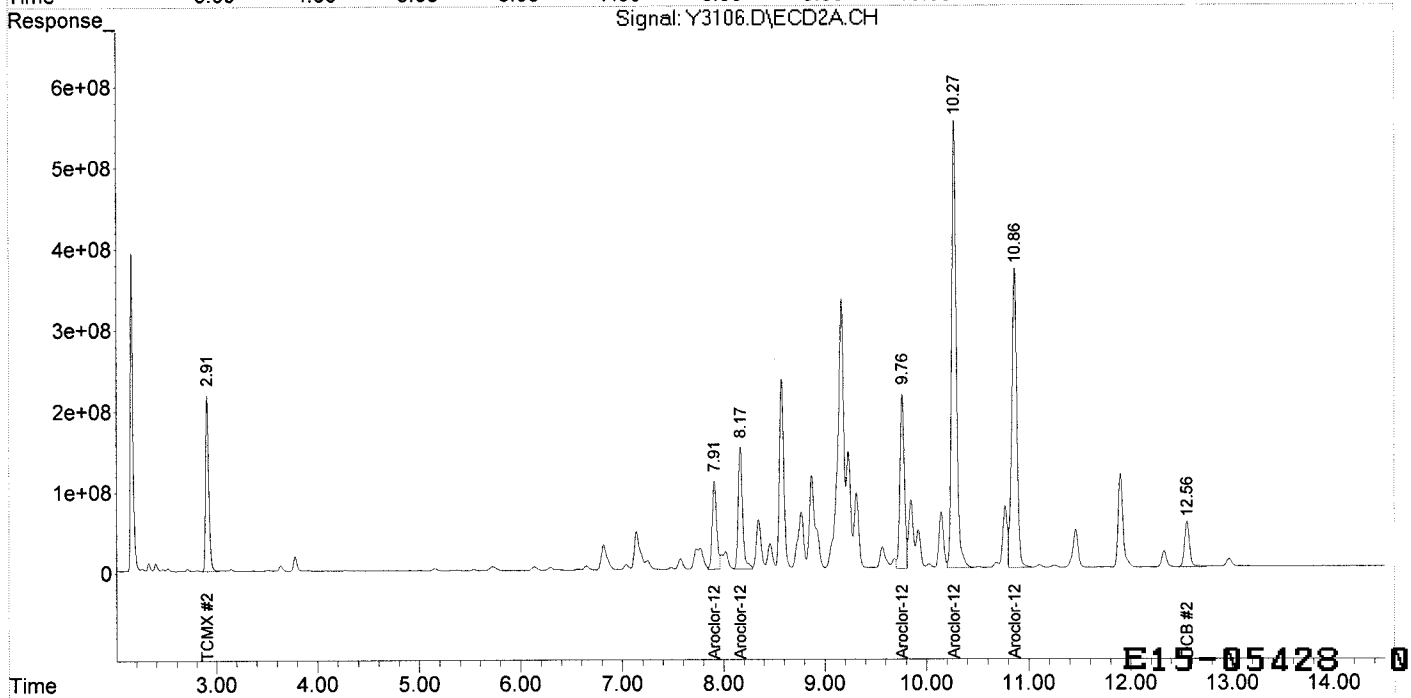
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3106.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:15
Operator : JS
Sample : E-7_(0.5,E15-05428-026,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:16:11 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0403

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3145.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:45
Operator : JS
Sample : E-7_(0.5,E15-05428-026DL,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:43:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	999.7E6	543.1E6	15.010	15.671
Spiked Amount 200.000			Recovery =		7.51%	7.84%
2) S DCB	12.11	12.56	474.5E6	297.0E6	23.168m	24.028m
Spiked Amount 200.000			Recovery =		11.58%	12.01%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	3130.1E6	511.9E6	755.820	492.002 #
34) L8 Aroclor-1260 {2}	9.00	8.17	1109.6E6	656.9E6	471.108	431.813
35) L8 Aroclor-1260 {3}	9.48	9.77	4003.3E6	927.9E6	672.089	637.542
36) L8 Aroclor-1260 {4}	9.97	10.27	2076.0E6	2310.7E6	773.864	681.862
37) L8 Aroclor-1260 {5}	11.03	10.87	1027.6E6	1763.8E6	687.573	731.032
Sum Aroclor-1260			11346.6E6	6171.1E6	3360.455	2974.251
Average Aroclor-1260					672.091	594.850
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

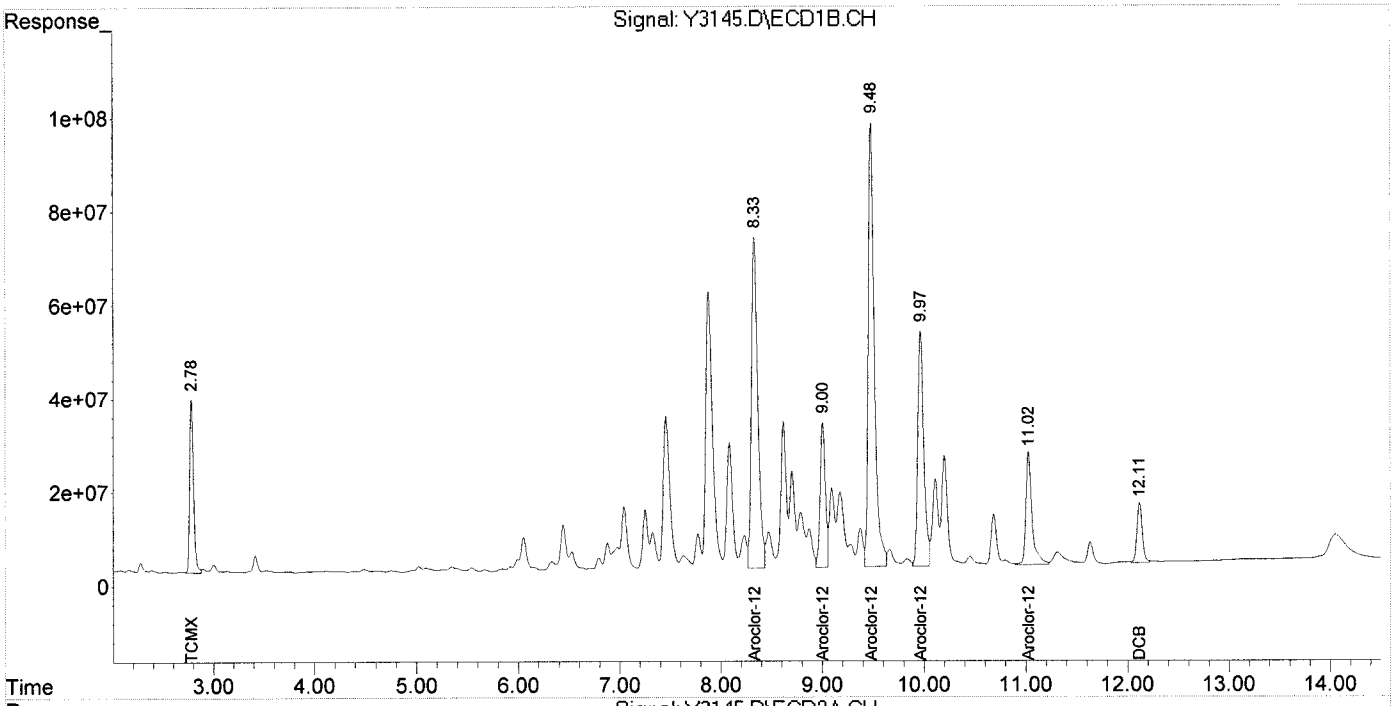
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

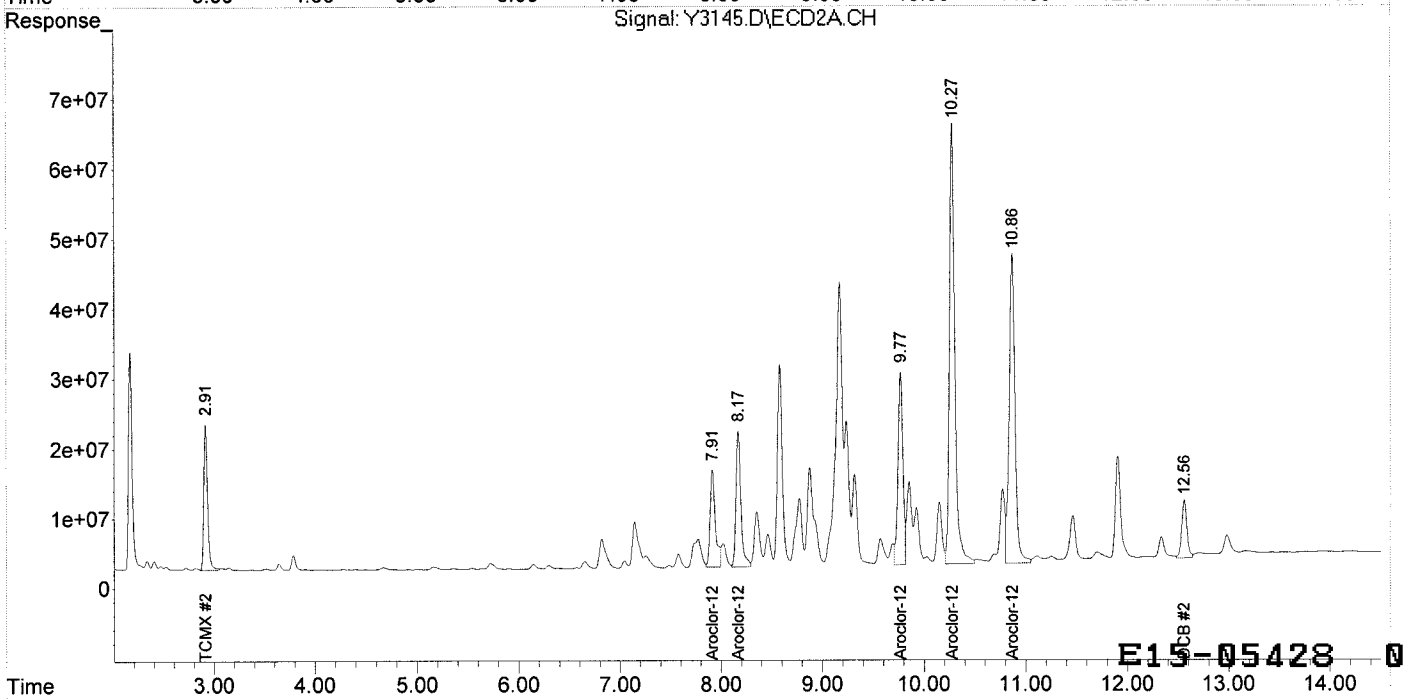
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : Y3145.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 17:45
Operator : JS
Sample : E-7_(0.5,E15-05428-026DL,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,10
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:43:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0405

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3107.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:32
Operator : JS
Sample : E-7_(2.0,E15-05428-027,S,30.39g,4.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:20:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.79	2.92	12048.0E6	5847.6E6	180.891	168.727	
Spiked Amount 200.000			Recovery	=	90.45%	84.36%	
2) S DCB	12.11	12.56	4476.4E6	2964.7E6	218.550	239.859	
Spiked Amount 200.000			Recovery	=	109.28%	119.93%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.34	7.92	39121537	11331323	9.447	10.891	
34) L8 Aroclor-1260 {2}	9.00	8.17	22482277	13356121	9.545m	8.780	
35) L8 Aroclor-1260 {3}	9.49	9.77	50675979	17074305	8.508	11.732	#
36) L8 Aroclor-1260 {4}	9.97	10.28	21690586	30618184	8.086m	9.035	
37) L8 Aroclor-1260 {5}	11.03	10.87	14557012	27261964	9.741m	11.299	
Sum Aroclor-1260			148.5E6	99641897	45.326	51.737	
Average Aroclor-1260					9.065	10.347	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

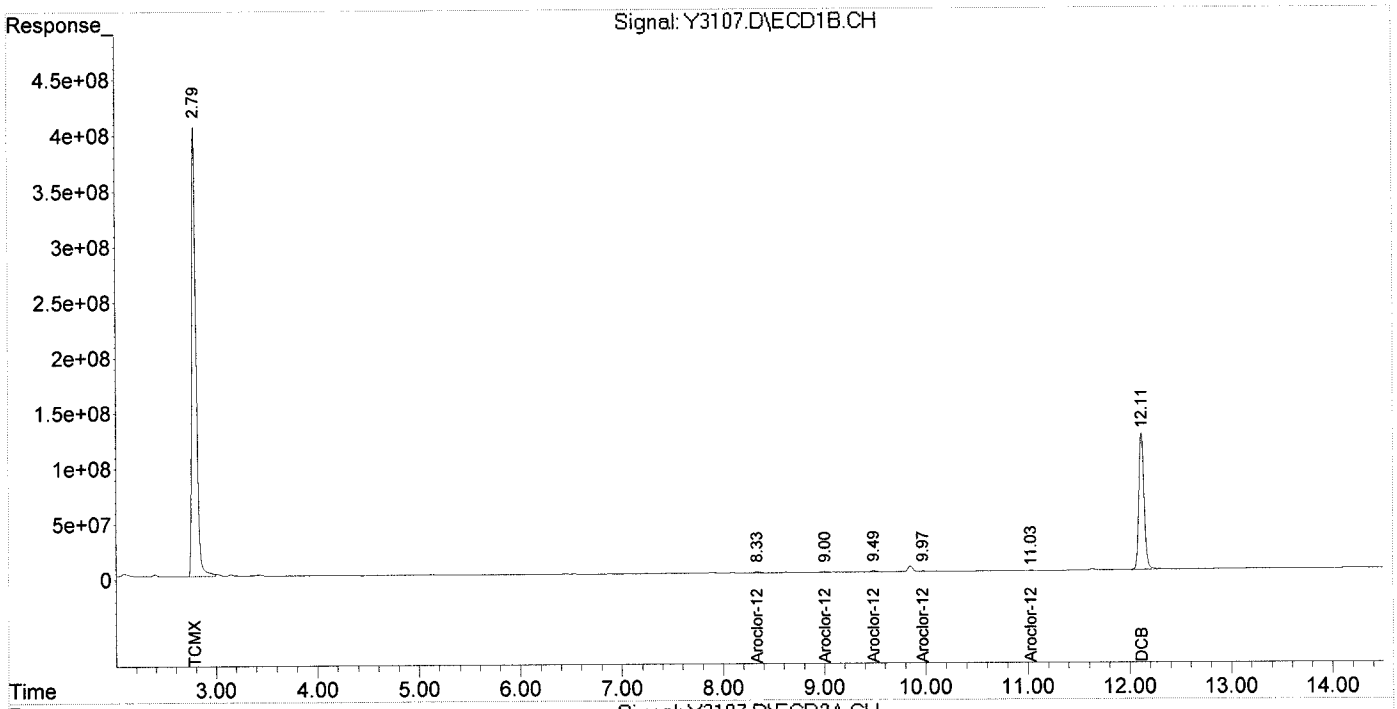
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

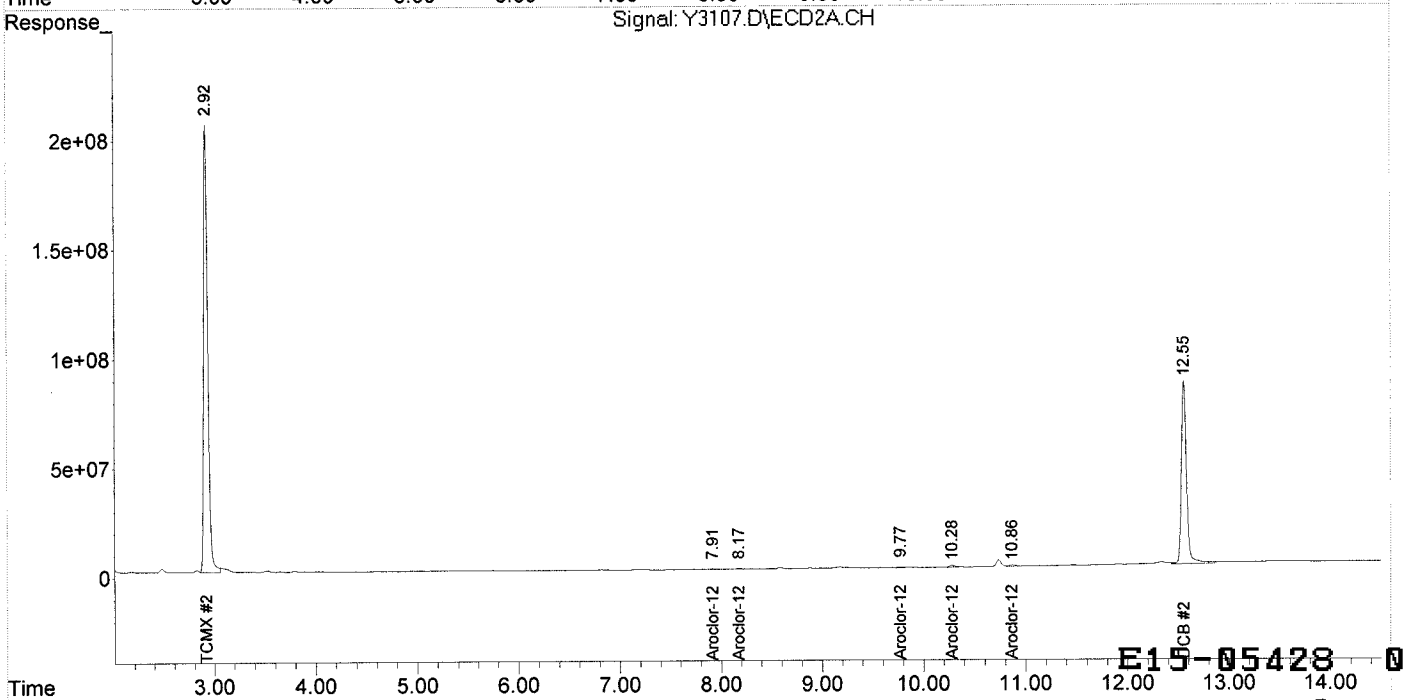
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3107.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:32
Operator : JS
Sample : E-7_(2.0,E15-05428-027,S,30.39g,4.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:20:15 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3108.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:49
Operator : JS
Sample : E-7_(3.0,E15-05428-028,S,30.47g,10.2,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:21:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11128.3E6	5487.7E6	167.083	158.343
Spiked Amount 200.000			Recovery	=	83.54%	79.17%
2) S DCB	12.11	12.56	3503.9E6	2158.2E6	171.068	174.612
Spiked Amount 200.000			Recovery	=	85.53%	87.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

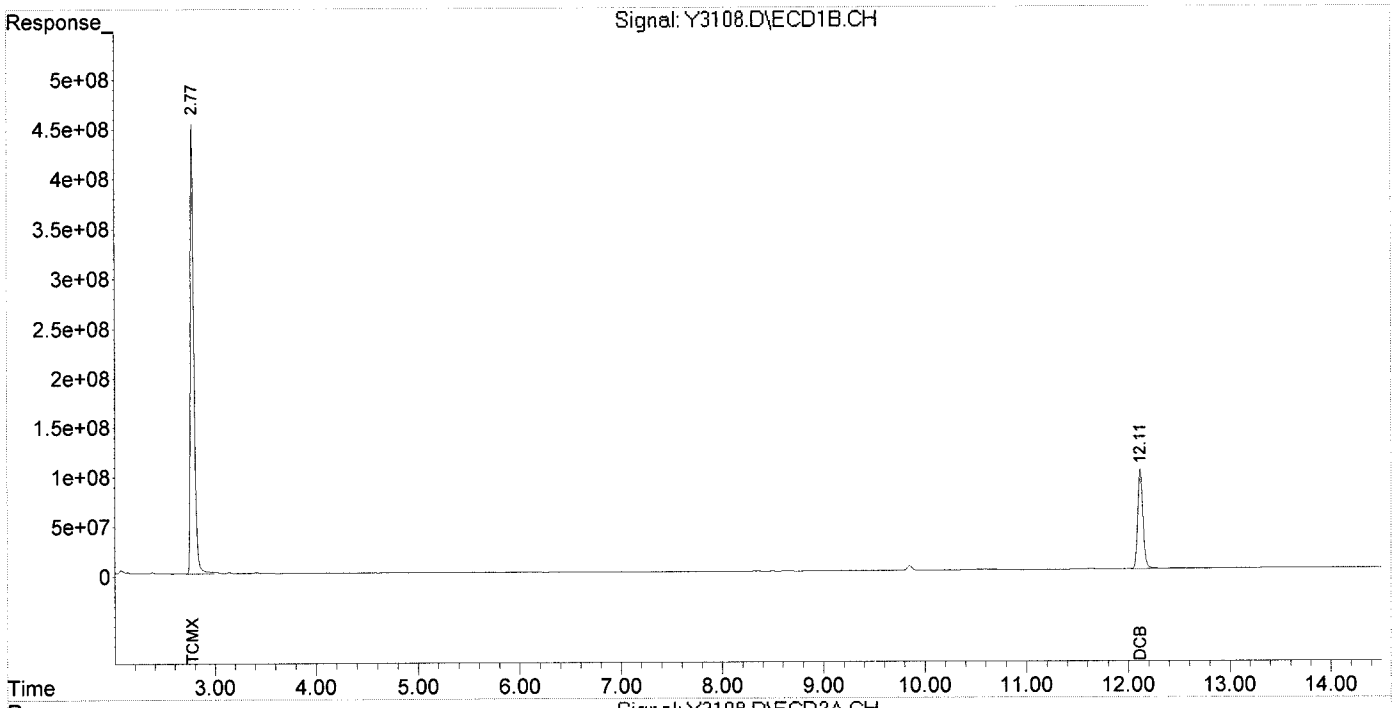
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

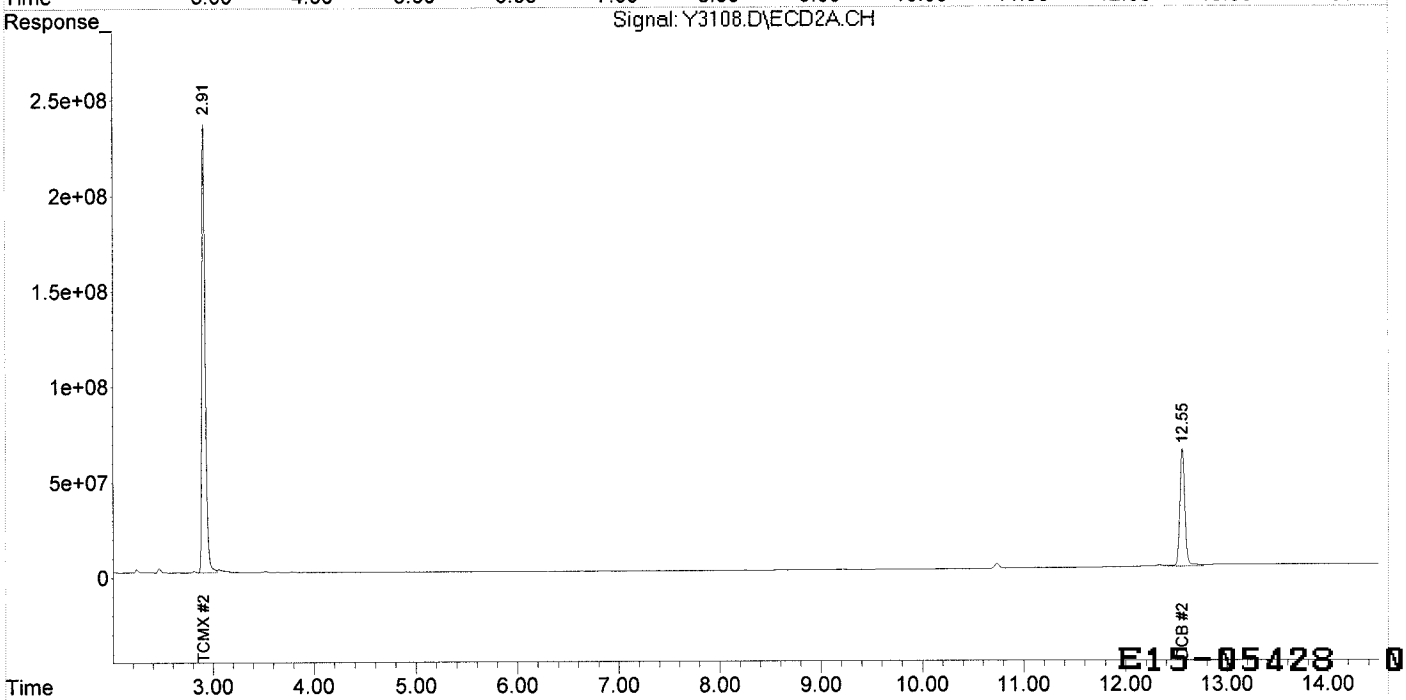
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3108.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 4:49
Operator : JS
Sample : E-7_(3.0,E15-05428-028,S,30.47g,10.2,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:21:46 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3111.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 6:51
Operator : JS
Sample : E-7_(4.5,E15-05428-029,S,30.63g,11.8,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:22:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	11565.5E6	5587.0E6	173.646	161.209
Spiked Amount 200.000			Recovery	=	86.82%	80.60%
2) S DCB	12.11	12.56	4748.6E6	2731.7E6	231.842	221.006
Spiked Amount 200.000			Recovery	=	115.92%	110.50%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

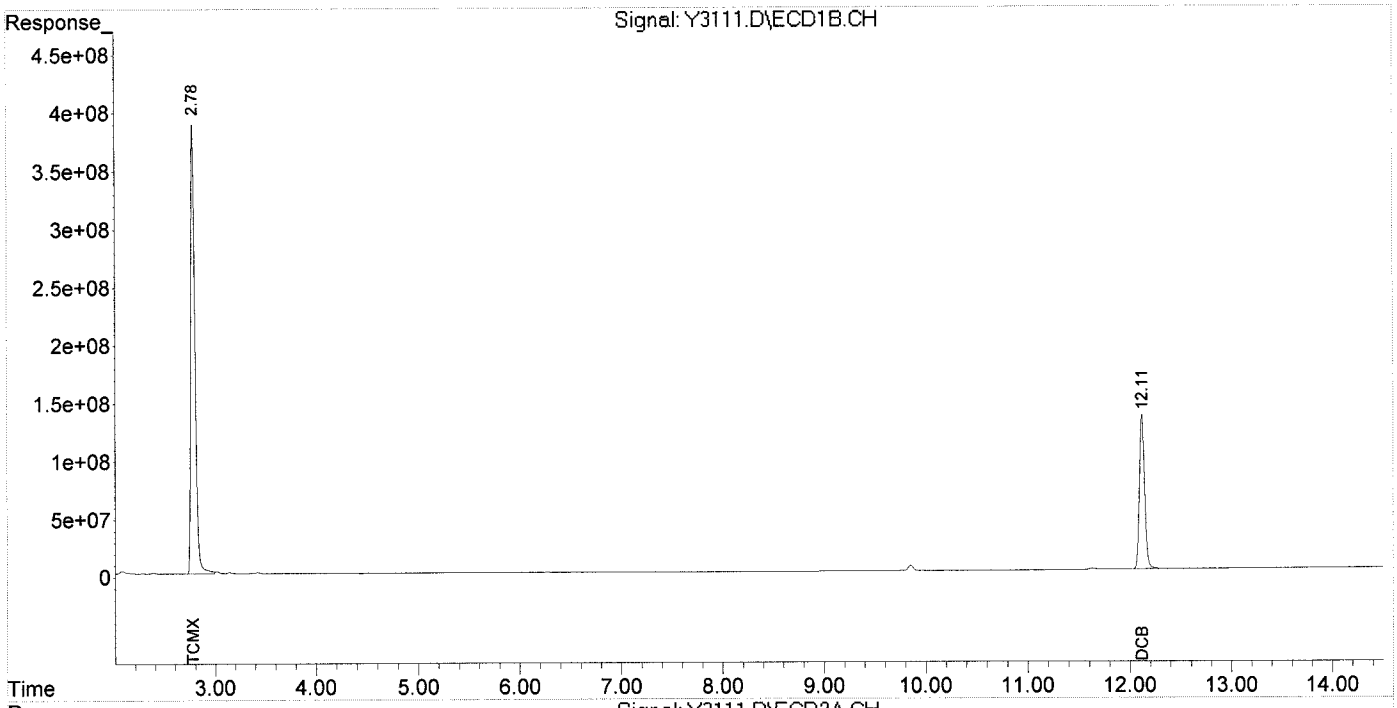
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

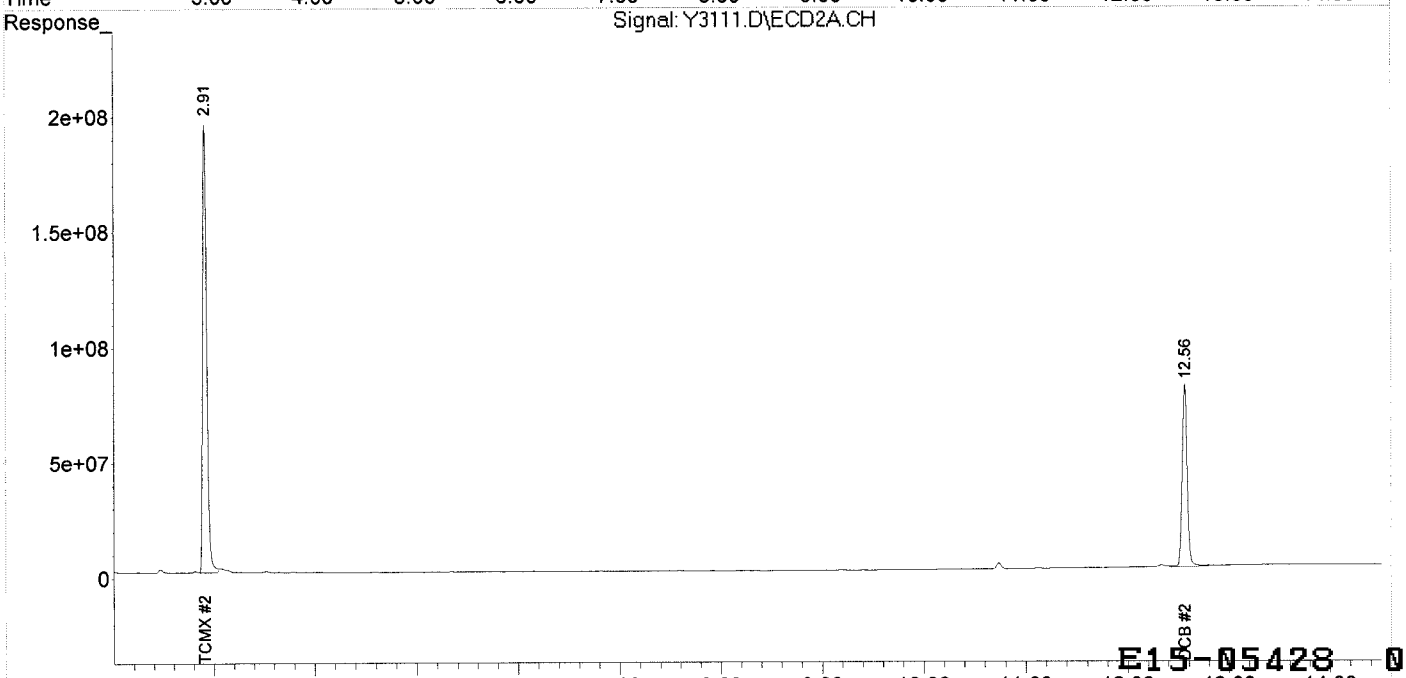
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3111.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 6:51
Operator : JS
Sample : E-7_(4.5,E15-05428-029,S,30.63g,11.8,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:22:53 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 20:44
Operator : JS
Sample : FB-06231,E15-05428-030,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:39:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	3678.4E6	21642.7E6	182.910	177.299
Spiked Amount 200.000			Recovery	=	91.45%	88.65%
2) S DCB	12.07	12.55	1405.5E6	5314.5E6	170.133	154.811
Spiked Amount 200.000			Recovery	=	85.07%	77.41%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

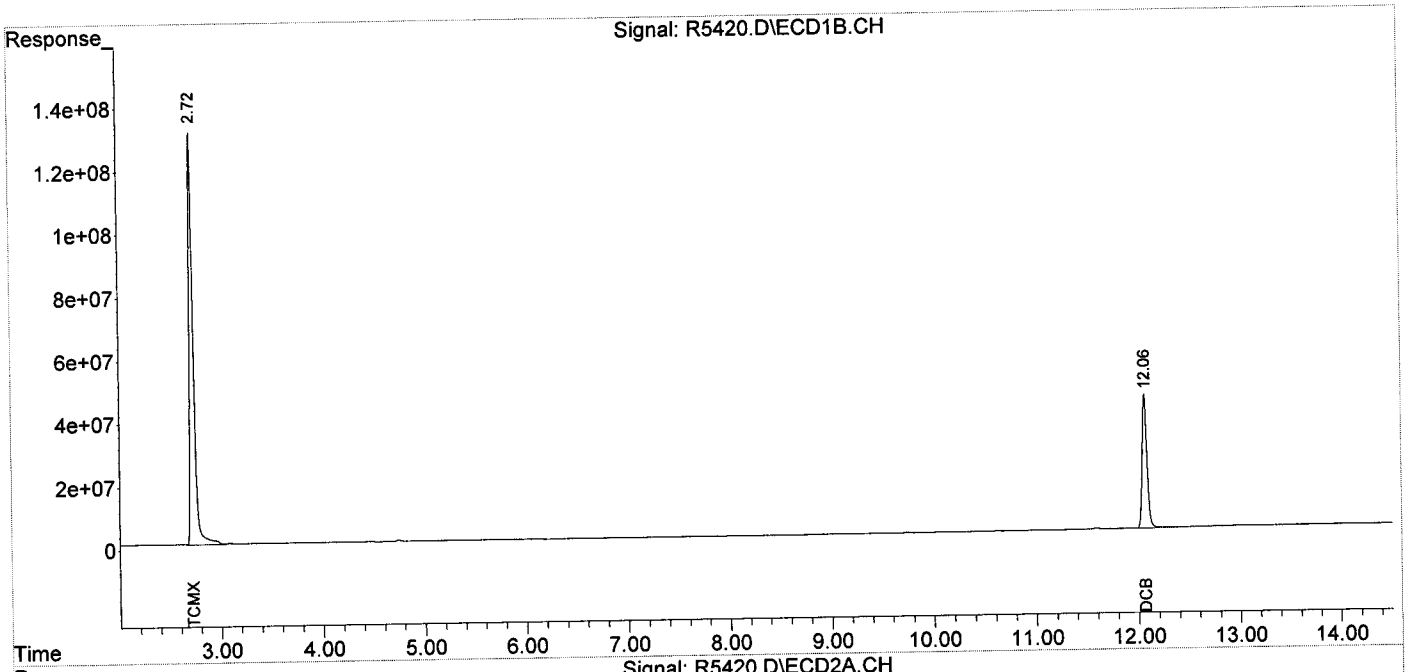
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

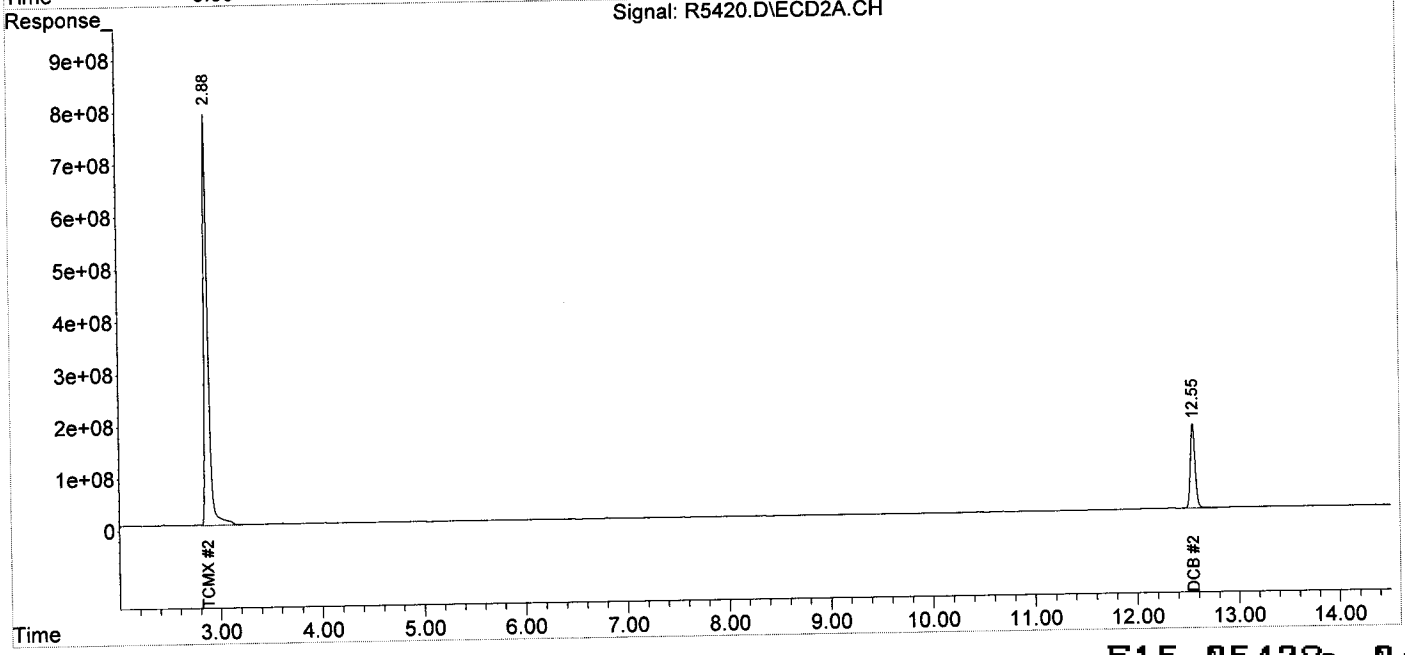
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5420.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 20:44
Operator : JS
Sample : FB-06231,E15-05428-030,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:39:09 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 21:01
Operator : JS
Sample : FB-06241,E15-05428-032,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:39:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.87	3541.4E6	20967.7E6	176.097	171.770
Spiked Amount 200.000			Recovery	=	88.05%	85.89%
2) S DCB	12.06	12.55	1316.4E6	5277.7E6	159.341	153.740
Spiked Amount 200.000			Recovery	=	79.67%	76.87%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

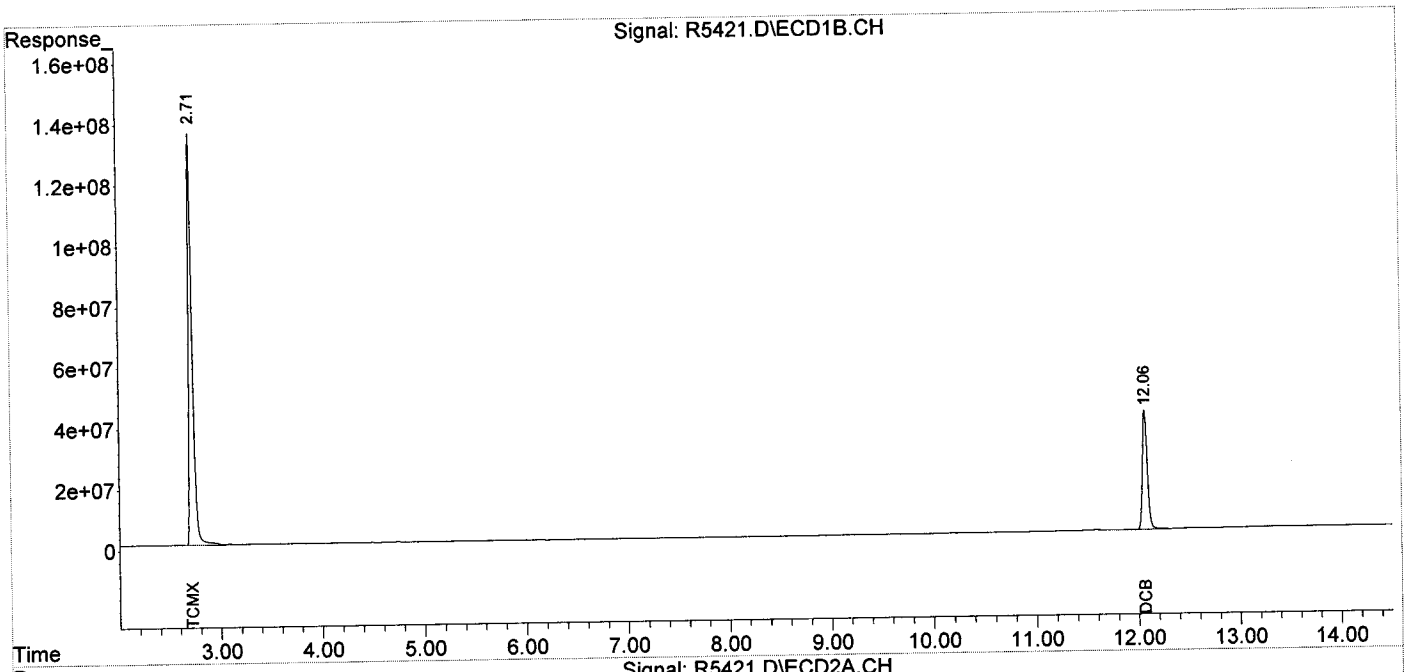
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

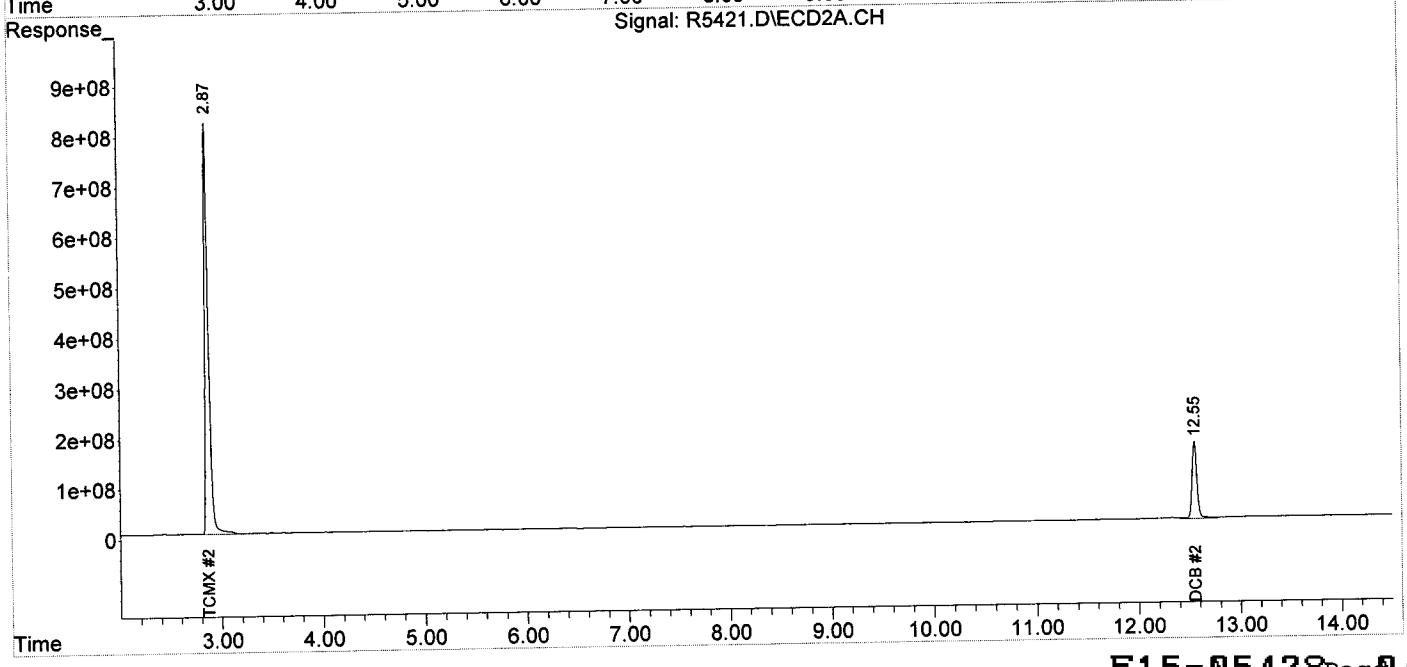
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5421.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 21:01
Operator : JS
Sample : FB-06241,E15-05428-032,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:39:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA150629-16
Client ID: PCB
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5413.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0416

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3162.4E6	18379.5E6	157.252	150.567
Spiked Amount 200.000			Recovery	=	78.63%	75.28%
2) S DCB	12.07	12.55	1005.6E6	3291.9E6	121.721	95.892
Spiked Amount 200.000			Recovery	=	60.86%	47.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

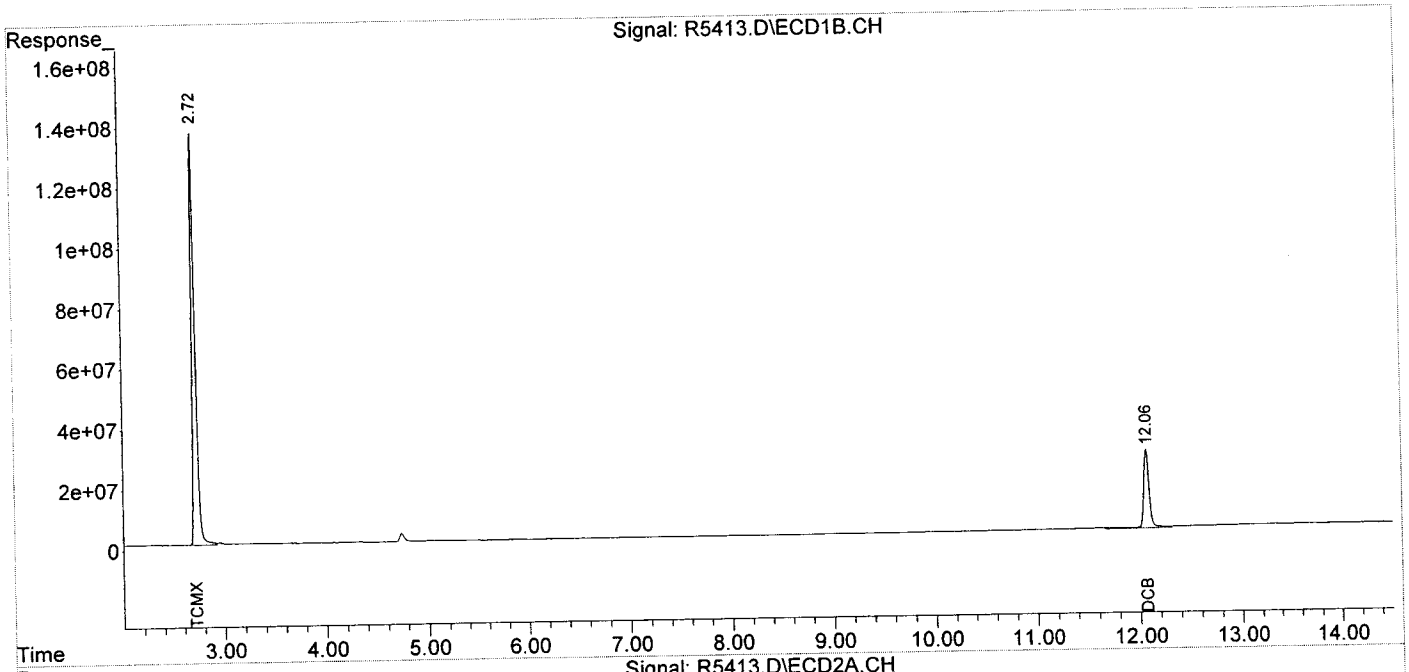
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

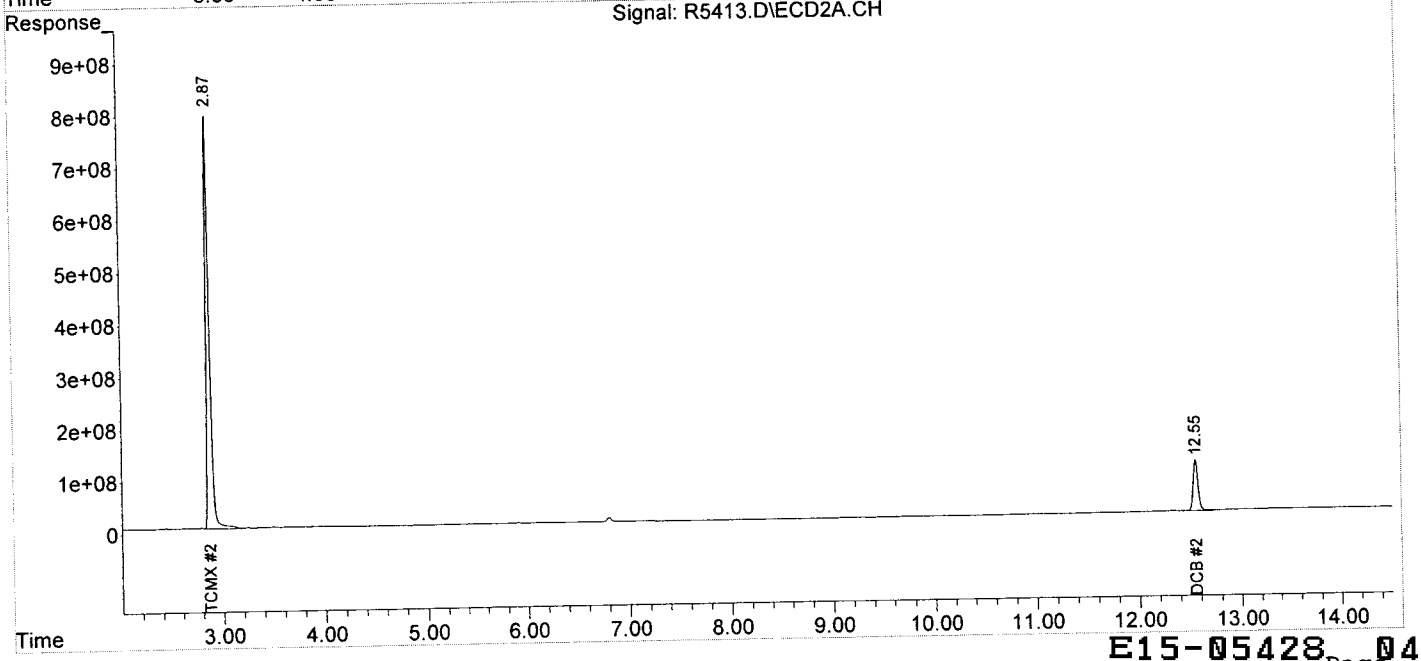
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-12
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3022.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0419

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y3022.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150701-12,S,5.00g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:38:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13575.2E6	6441.9E6	203.822	185.875
Spiked Amount 200.000			Recovery	=	101.91%	92.94%
2) S DCB	12.11	12.56	3185.9E6	1933.9E6	155.545	156.462
Spiked Amount 200.000			Recovery	=	77.77%	78.23%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

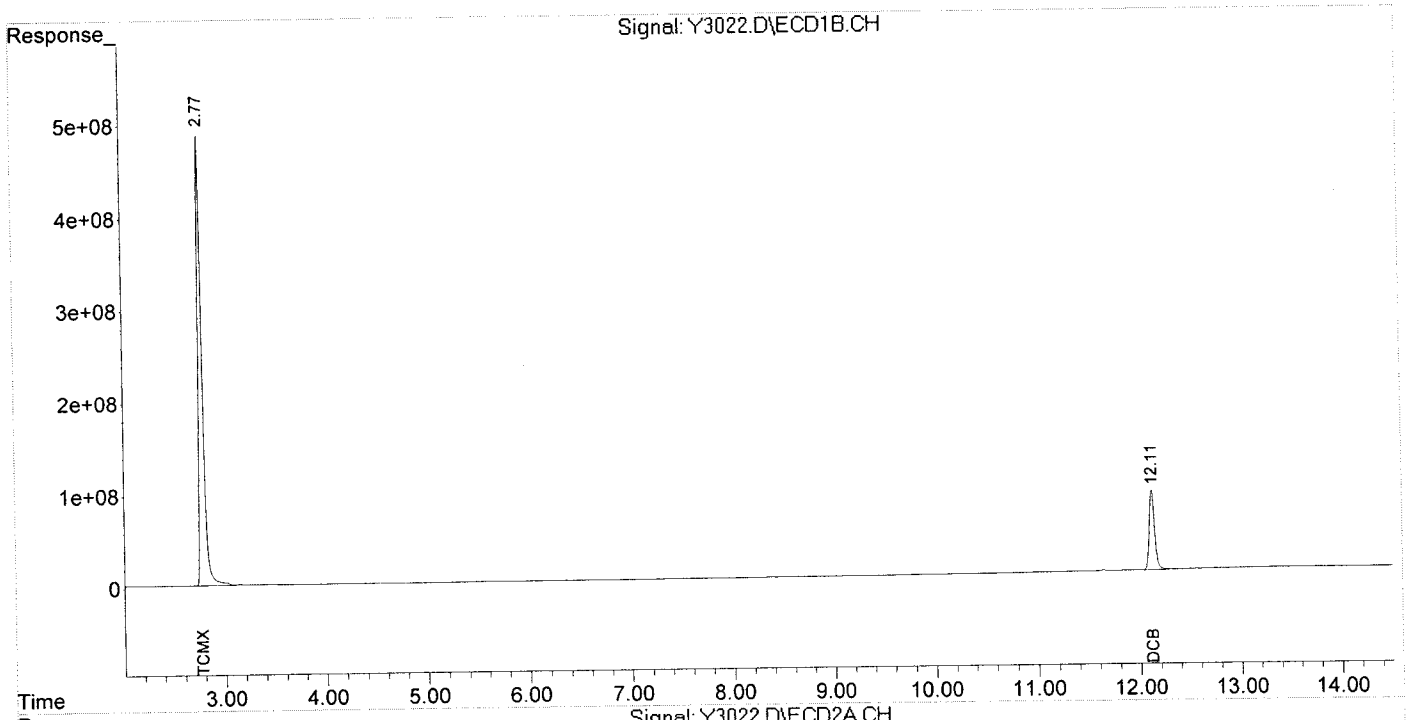
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

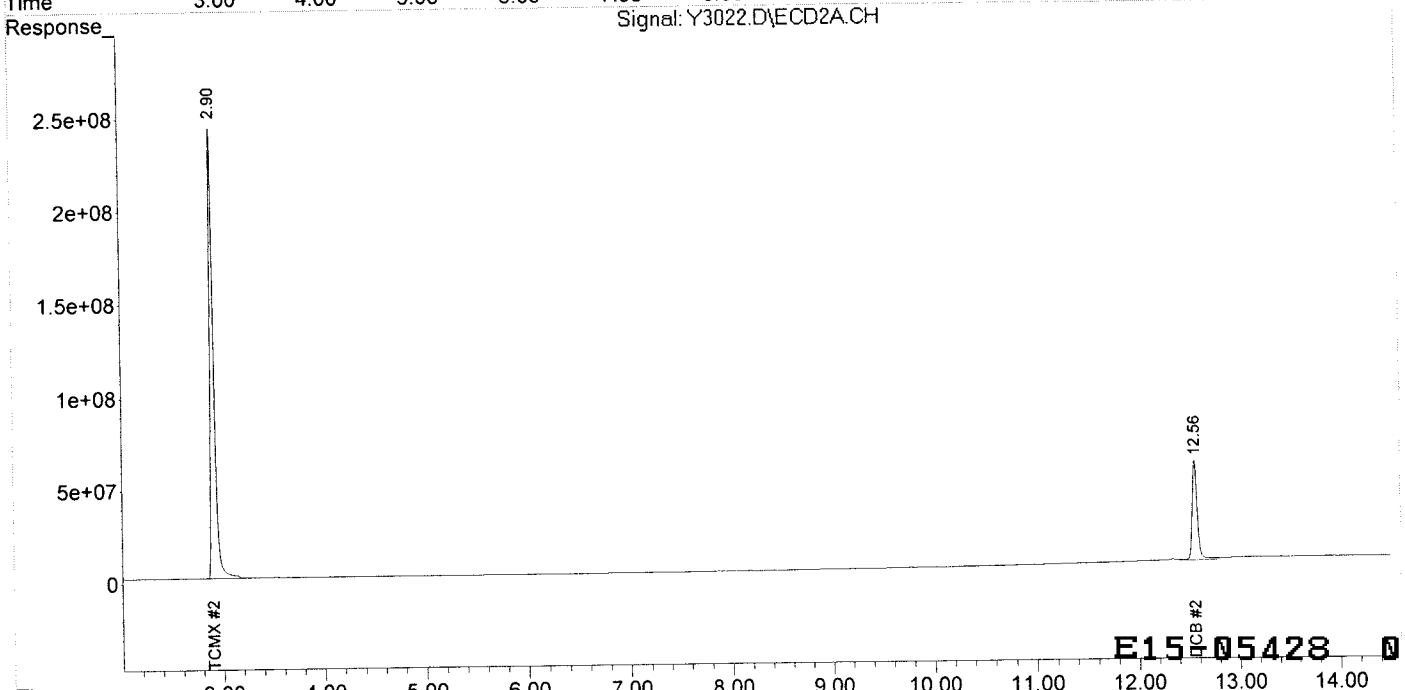
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y3022.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150701-12,S,5.00g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:38:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0421

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-05
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: R5486.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0422

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : R5486.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:11
Operator : JS
Sample : PCB,BLKS150701-05,S,5g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:07:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3862.1E6	23068.6E6	192.048	188.980
Spiked Amount 200.000			Recovery	=	96.02%	94.49%
2) S DCB	12.06	12.55	1718.6E6	7580.4E6	208.027	220.818
Spiked Amount 200.000			Recovery	=	104.01%	110.41%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

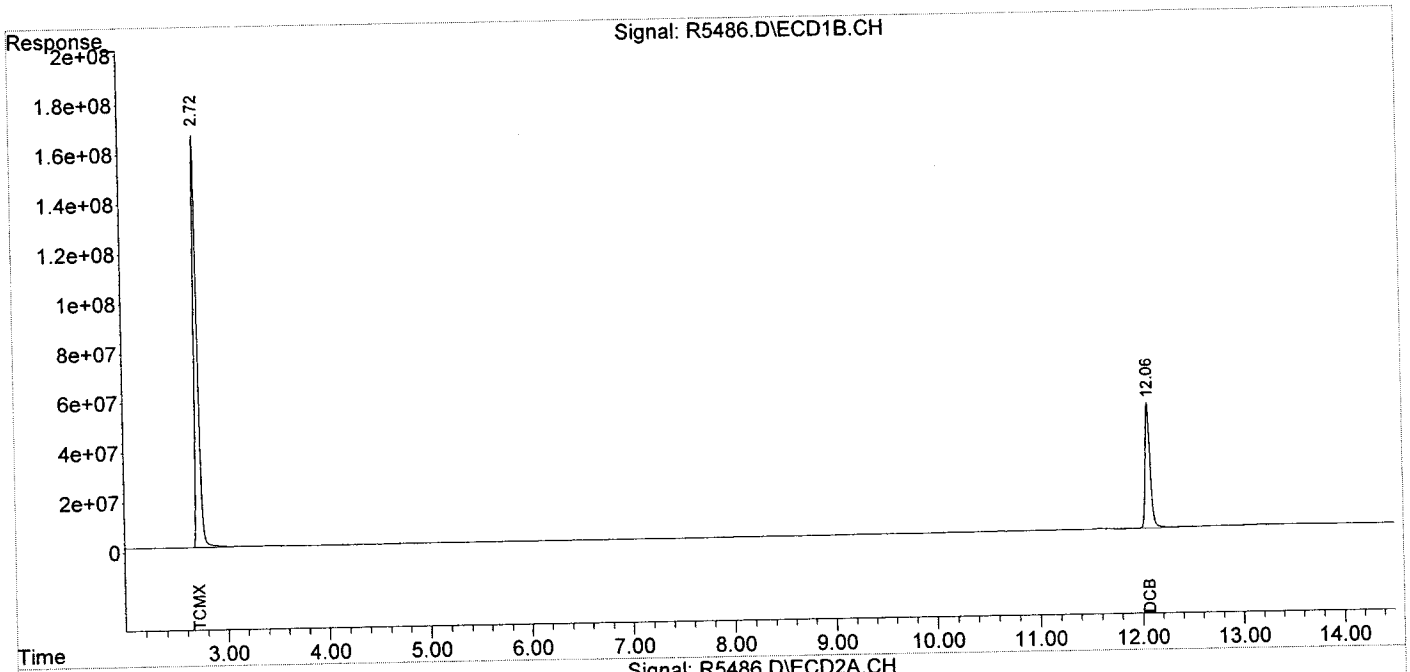
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

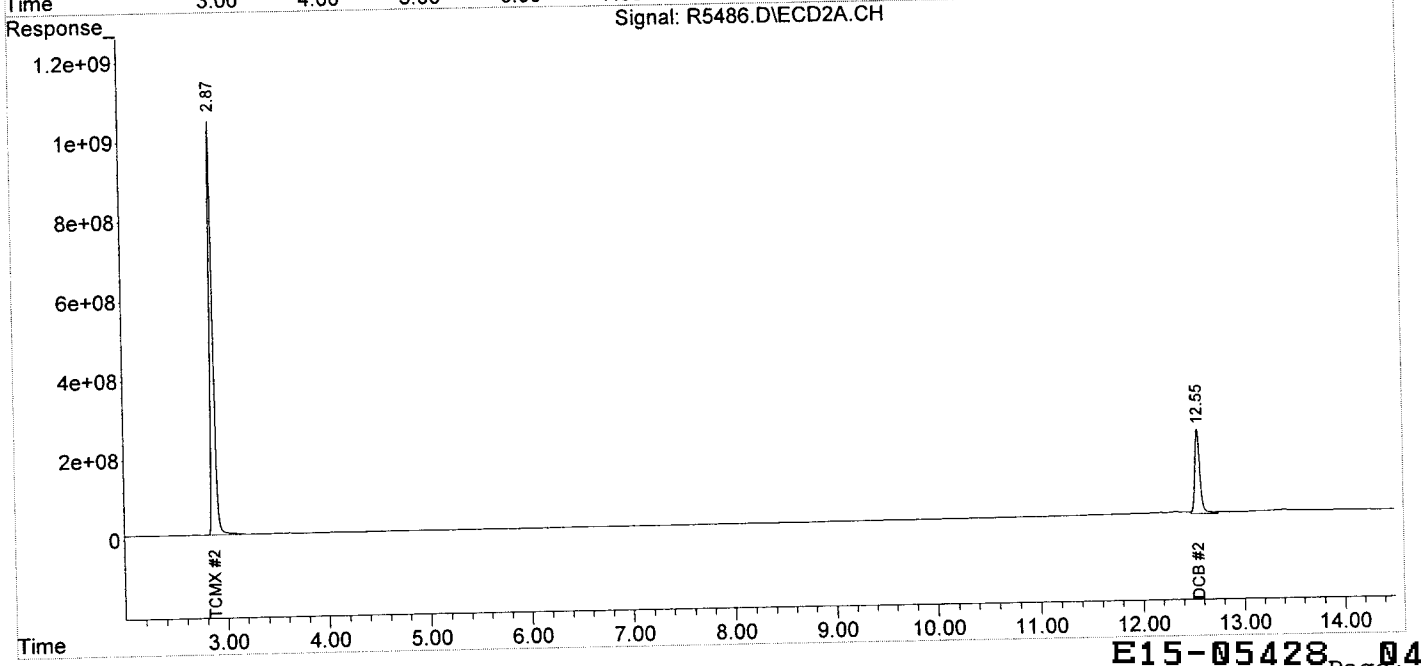
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : R5486.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 13:11
Operator : JS
Sample : PCB,BLKS150701-05,S,5g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:07:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-08
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y2994.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y2994.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 11:21
Operator : JS
Sample : PCB,BLKS150701-08,S,5g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:19:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13772.2E6	6506.8E6	206.780	187.746
Spiked Amount 200.000			Recovery	=	103.39%	93.87%
2) S DCB	12.11	12.56	3193.2E6	1925.2E6	155.903	155.758
Spiked Amount 200.000			Recovery	=	77.95%	77.88%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

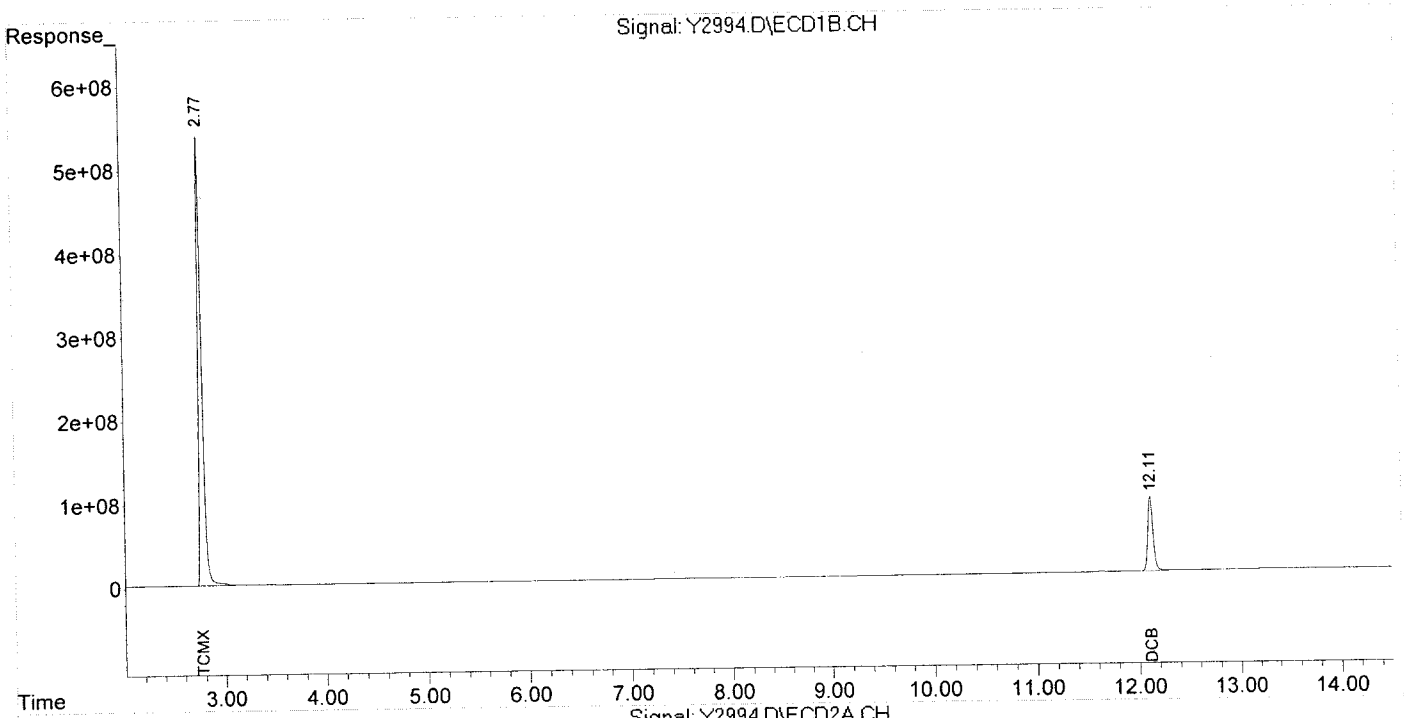
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

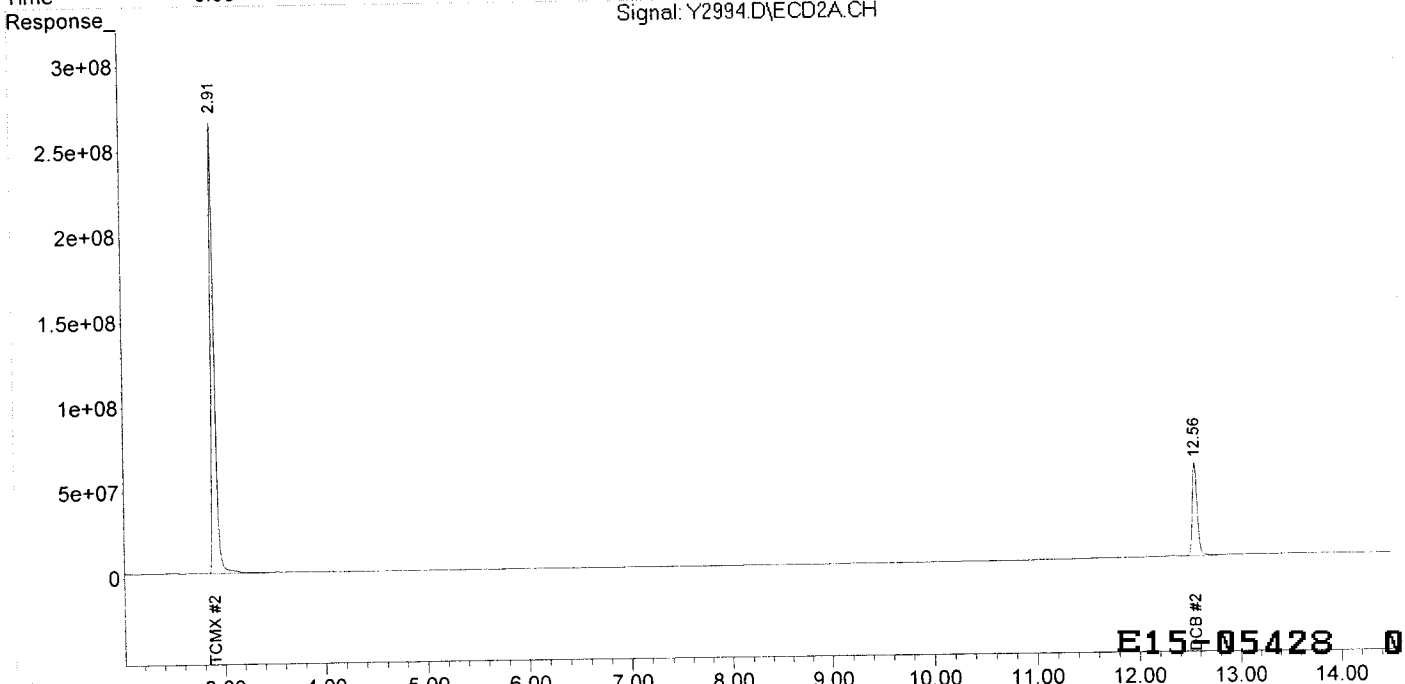
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y2994.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 11:21
Operator : JS
Sample : PCB,BLKS150701-08,S,5g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 02 14:19:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-07
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3074.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0428

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:32
Operator : JS
Sample : PCB,BLKS150701-07,S,30g,0.5
Misc : NA,07/01/15,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:01:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12186.3E6	6044.2E6	182.968	174.399
Spiked Amount 200.000			Recovery	=	91.48%	87.20%
2) S DCB	12.11	12.56	3334.4E6	2107.9E6	162.795	170.539
Spiked Amount 200.000			Recovery	=	81.40%	85.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

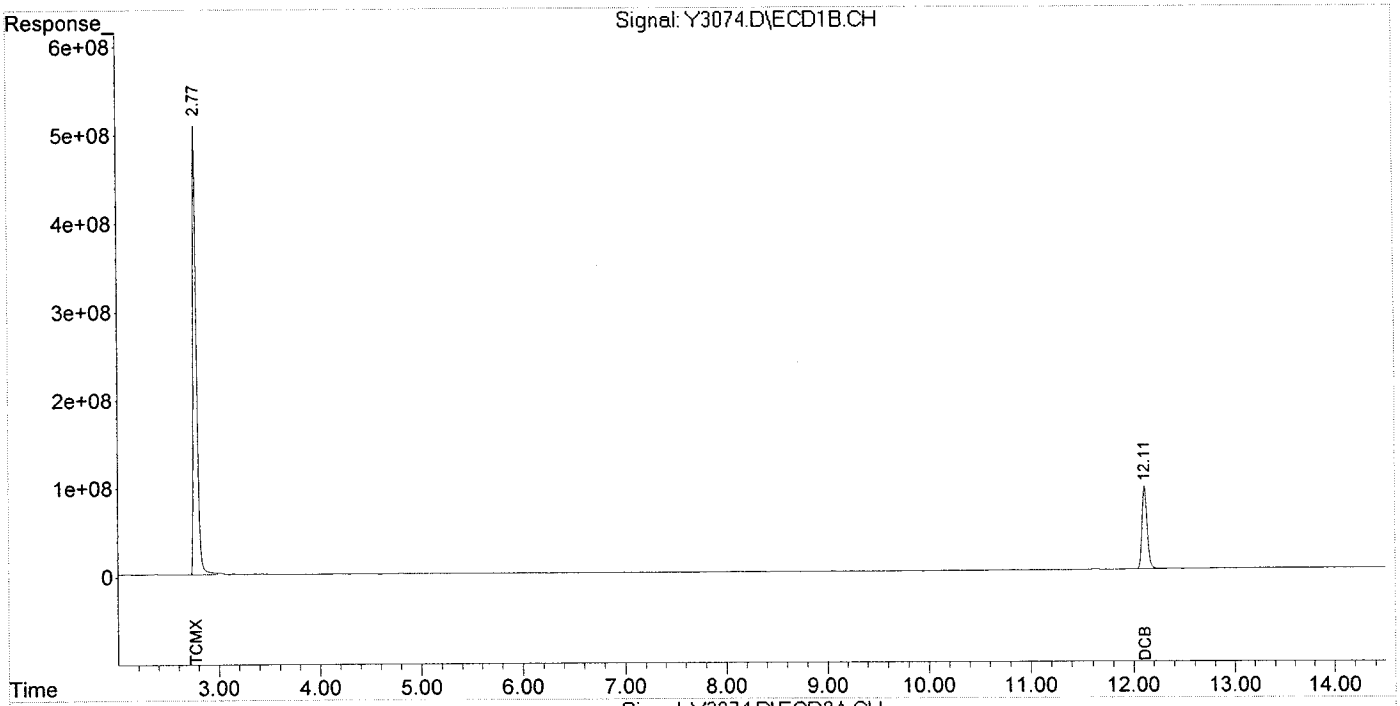
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

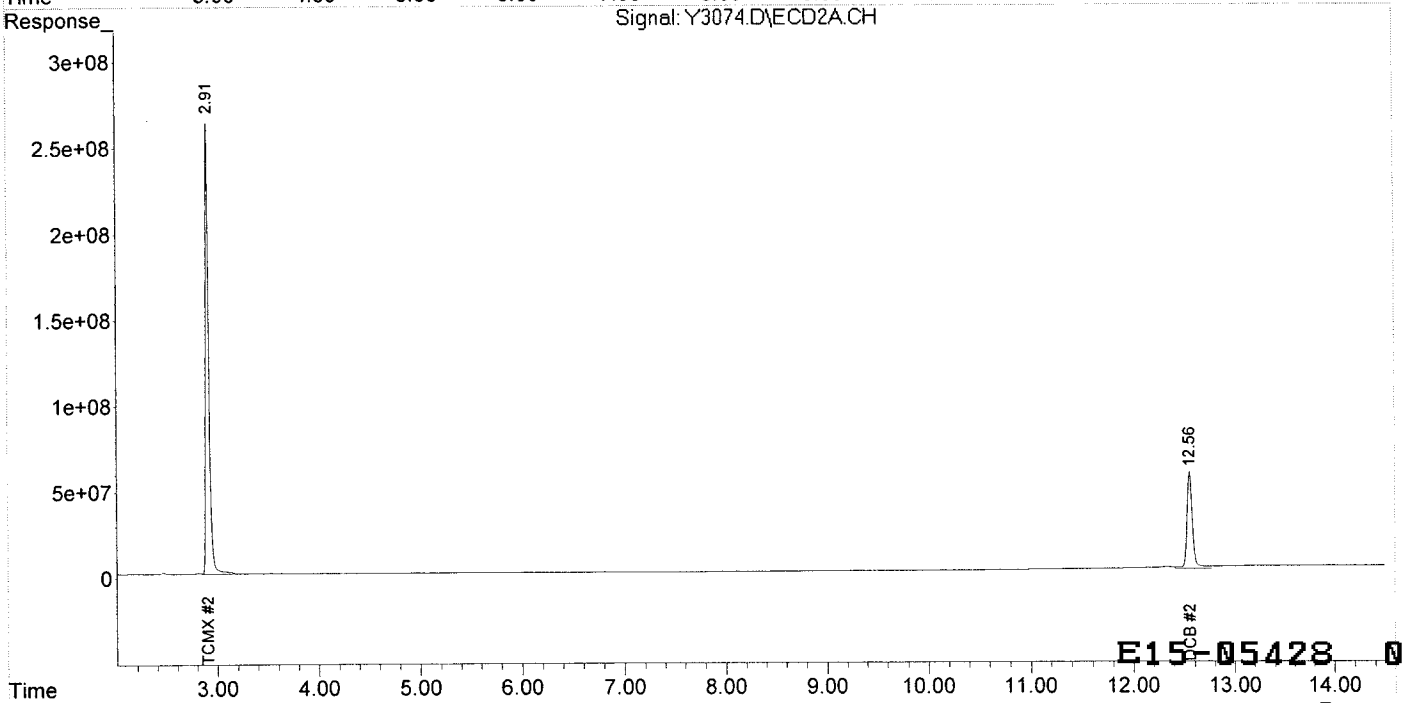
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 17:32
Operator : JS
Sample : PCB,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 09:01:41 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-11
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: Y3100.D

GC Column: DB-5/DB1701P
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00167	0.000668
Aroclor-1221	ND		0.00167	0.000668
Aroclor-1232	ND		0.00167	0.000668
Aroclor-1242	ND		0.00167	0.000668
Aroclor-1248	ND		0.00167	0.000668
Aroclor-1254	ND		0.00167	0.000668
Aroclor-1260	ND		0.00167	0.000668
Aroclor-1262	ND		0.00167	0.000668
Aroclor-1268	ND		0.00167	0.000668
PCBs	ND		0.00167	0.000668

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3100.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 2:30
Operator : JS
Sample : PCB,BLKS150701-11,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:12:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	14150.5E6	7105.3E6	212.459	205.018
Spiked Amount 200.000			Recovery	=	106.23%	102.51%
2) S DCB	12.12	12.56	4152.8E6	2481.7E6	202.753	200.784
Spiked Amount 200.000			Recovery	=	101.38%	100.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

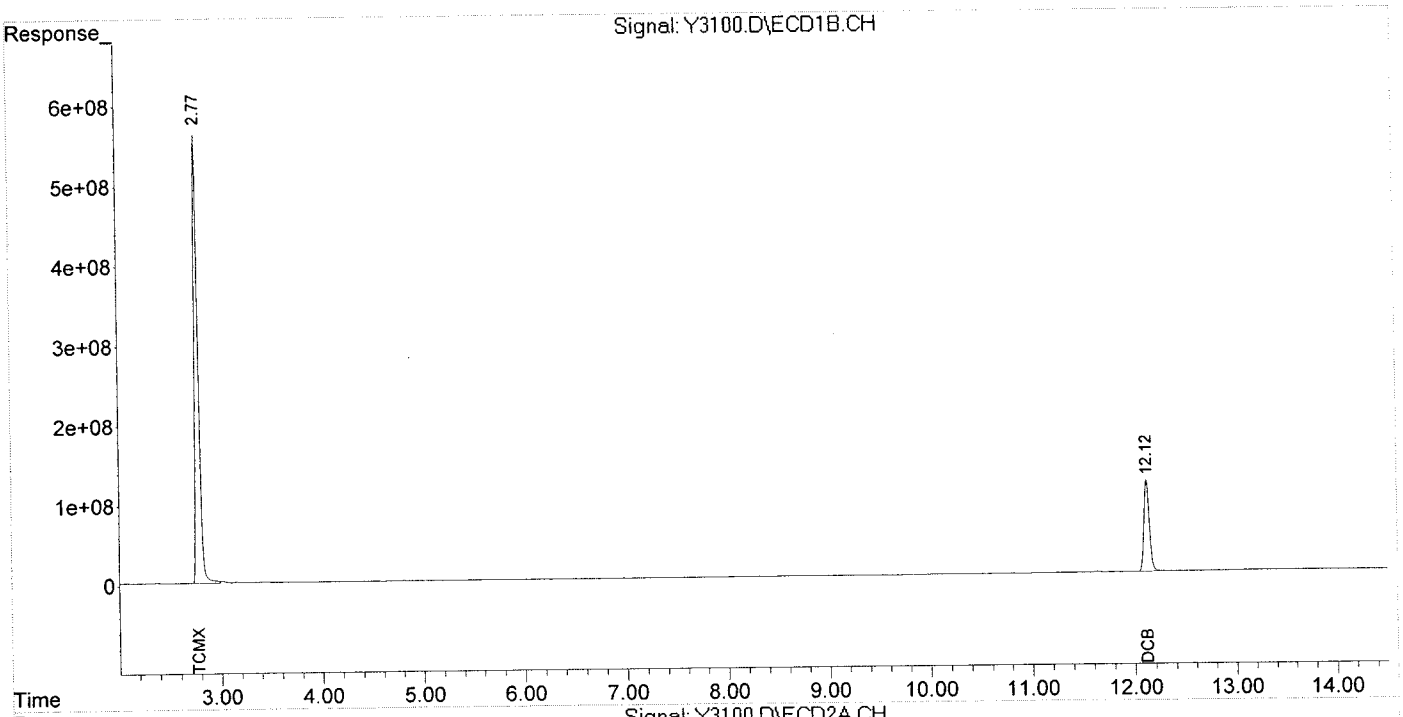
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

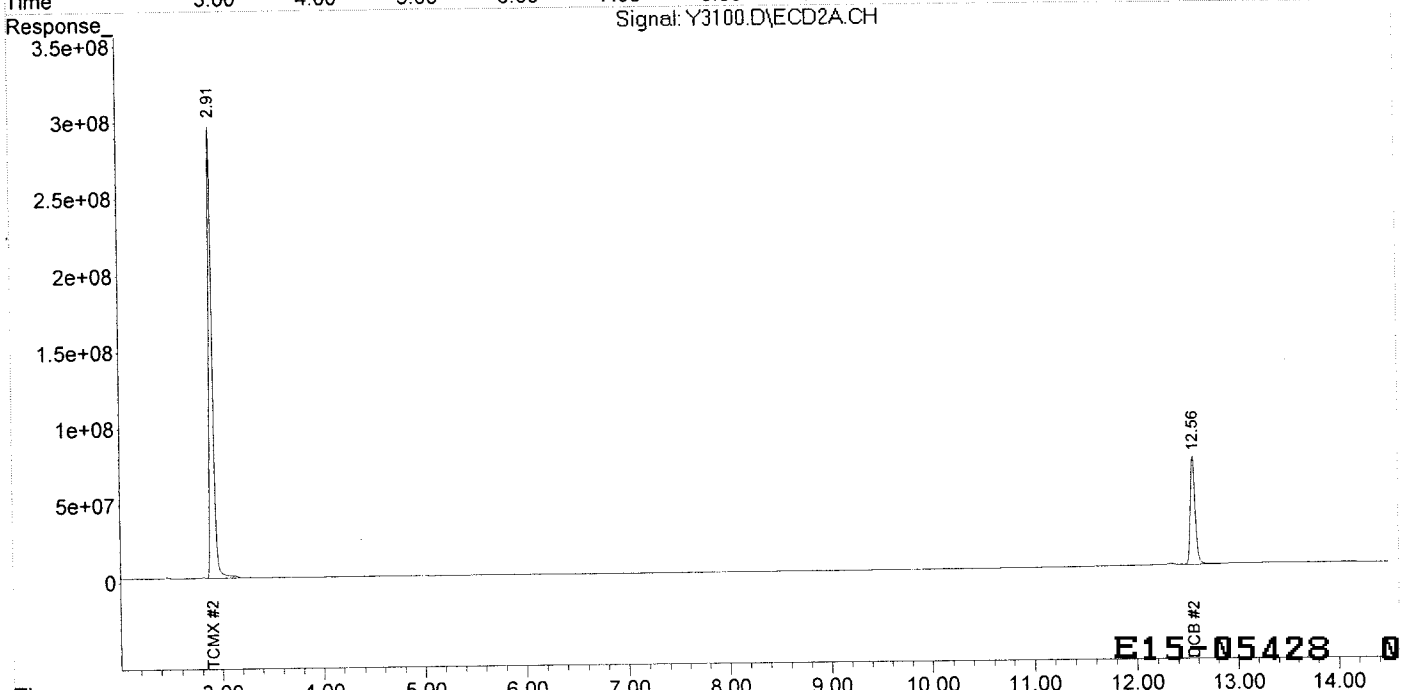
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-06-15\
Data File : Y3100.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 2:30
Operator : JS
Sample : PCB,BLKS150701-11,S,30g,0.5
Misc : NA,07/01/15,NA,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 09 09:12:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05428 0433

PESTICIDE DATA

PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/25/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150625-13	SOIL	63		74		73		73	
Pest	LCSS150625-13	SOIL	67		85		72		79	
Pest	05279-002MS	SOIL	65		86		71		83	
Pest	05279-002MSD	SOIL	63		93		69		81	
PPR-TP1-	E15-05279-002	SOIL	52		68		58		66	
PPR-TP7-	E15-05280-006	SOIL	65		97		69		115	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/07/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150701-11	SOIL	91		96		98		95	
Pest	LCSS150701-11	SOIL	93		94		99		94	
E-2_(3.0	E15-05428-022	SOIL	65		80		71		91	
E-2_(4.0	E15-05428-023	SOIL	70		104		76		98	
E-7_(0.5	E15-05428-026	SOIL	68		93		75		144	
E-7_(2.0	E15-05428-027	SOIL	82		100		90		96	
E-7_(3.0	E15-05428-028	SOIL	81		92		86		103	
E-7_(4.5	E15-05428-029	SOIL	80		94		89		94	
F-2	E15-05470-009	SOIL	70		108		70		266	M
F-1	E15-05470-010	SOIL	112		103		112		120	
F-1D	E15-05470-011	SOIL	102		93		104		110	
F-3	E15-05470-012	SOIL	90		112		94		258	M
F-4	E15-05470-013	SOIL	85		93		93		94	
F-5	E15-05470-014	SOIL	92		91		95		103	
15-109	E15-05589-001	SOIL	64		72		71		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKA150629-16	AQUEOUS	76		44		80		38	
Pest	LCSA150629-16	AQUEOUS	83		55		87		52	
Pest	LCSDA150629-16	AQUEOUS	83		55		86		49	
FB	E15-05346-027	AQUEOUS	83		57		88		51	
FB-06221	E15-05367-040	AQUEOUS	88		57		92		52	
FB-06231	E15-05428-030	AQUEOUS	88		61		91		56	
FB062415	E15-05472-015	AQUEOUS	86		57		91		54	
FB-06241	E15-05428-032	AQUEOUS	85		58		89		52	
FB_06251	E15-05556-022	AQUEOUS	86		61		90		56	
FB	E15-05547-020	AQUEOUS	79		55		83		52	
FIELD_BL	E15-05470-016	AQUEOUS	86		58		91		53	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS150701-07	SOIL	74		80		78		80	
Pest	LCSS150701-07	SOIL	79		80		84		81	
Pest	05367-003MS	SOIL	62		84		67		118	
Pest	05367-003MSD	SOIL	57		81		61		74	
AG-6/0.0	E15-05559-022	SOIL	58		57		60		64	
E-3_(2.0	E15-05367-003	SOIL	59		87		65		91	
E-3_(4.5	E15-05367-004	SOIL	81		95		85		97	
E-4_(0.5	E15-05367-007	SOIL	65		99		76		105	
E-4_(2.0	E15-05367-008	SOIL	62		87		67		83	
E-4_(3.0	E15-05367-009	SOIL	70		80		75		77	
E-4_(4.5	E15-05367-010	SOIL	74		86		78		81	
X-1_(4.5	E15-05367-023	SOIL	64		84		68		69	
E-6_(0.5	E15-05367-039	SOIL	48		70		70		100	
E-6_(2.0	E15-05367-041	SOIL	65		78		68		75	
E-6_(3.0	E15-05367-042	SOIL	60		72		63		69	
E-6_(4.0	E15-05367-043	SOIL	60		62		63		60	
X-3_(0.5	E15-05428-011	SOIL	58		85		65		92	
E-1_(0.5	E15-05428-014	SOIL	49		75		56		107	
E-1_(2.0	E15-05428-015	SOIL	66		59		70		64	
E-1_(3.0	E15-05428-016	SOIL	64		65		67		66	
E-1_(4.5	E15-05428-017	SOIL	68		65		70		70	
E-2_(0.5	E15-05428-020	SOIL	57		74		64		85	
E-2_(2.0	E15-05428-021	SOIL	69		83		75		88	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150701-11
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O0001.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	79.5	80	
beta-BHC	100.0	0.0	68.5	69	
gamma-BHC (Lindane)	100.0	0.0	81.7	82	
delta-BHC	100.0	0.0	78.9	79	
Heptachlor	100.0	0.0	72.9	73	
Aldrin	100.0	0.0	80.8	81	
Heptachlor epoxide	100.0	0.0	80.5	81	
Endosulfan I	100.0	0.0	80.1	80	
4,4'-DDE	100.0	0.0	86.7	87	
Dieldrin	100.0	0.0	73.6	74	
Endrin	100.0	0.0	81.4	81	
Endosulfan II	100.0	0.0	84.1	84	
4,4'-DDD	100.0	0.0	87.6	88	
Endrin aldehyde	100.0	0.0	88.6	89	
Endosulfan sulfate	100.0	0.0	83.1	83	
4,4'-DDT	100.0	0.0	69.8	70	
Endrin ketone	100.0	0.0	83.2	83	
Methoxychlor	100.0	0.0	79.7	80	
alpha-Chlordane	100.0	0.0	81.7	82	
gamma-Chlordane	100.0	0.0	82.8	83	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS/LCSD ACCURACY REPORT

Lab ID: BLKA150629-16
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
MS Data file: O9871.D
MSD Data file: O9872.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	Conc. LCSD	%Rec. LCSD	#	%RPD	#
alpha-BHC	100.0	0.0	84.9	85		83.5	84		2	
beta-BHC	100.0	0.0	70.3	70		69.2	69		2	
gamma-BHC (Lindane)	100.0	0.0	87.8	88		86.4	86		2	
delta-BHC	100.0	0.0	83.0	83		82.0	82		1	
Heptachlor	100.0	0.0	74.7	75		72.9	73		2	
Aldrin	100.0	0.0	82.3	82		81.5	82		1	
Heptachlor epoxide	100.0	0.0	80.3	80		78.3	78		3	
Endosulfan I	100.0	0.0	78.7	79		76.1	76		3	
4,4'-DDE	100.0	0.0	80.0	80		75.6	76		6	
Dieldrin	100.0	0.0	70.1	70		67.2	67		4	
Endrin	100.0	0.0	75.9	76		69.2	69		9	
Endosulfan II	100.0	0.0	78.9	79		74.6	75		6	
4,4'-DDD	100.0	0.0	79.5	80		75.2	75		6	
Endrin aldehyde	100.0	0.0	78.1	78		74.8	75		4	
Endosulfan sulfate	100.0	0.0	75.4	75		71.0	71		6	
4,4'-DDT	100.0	0.0	62.4	62		53.6	54		15	
Endrin ketone	100.0	0.0	77.1	77		73.9	74		4	
Methoxychlor	100.0	0.0	64.5	65		57.7	58		11	
alpha-Chlordane	100.0	0.0	79.4	79		76.5	77		4	
gamma-Chlordane	100.0	0.0	80.7	81		78.3	78		3	

	Aqueous	Soil/Sediment
LCS/LCSD Recovery Limits	30-150	30-150
LCS/LCSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS150701-07
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9954.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	MS Conc.	%Rec.	#
alpha-BHC	100.0	0.0	56.9	57	
beta-BHC	100.0	0.0	51.3	51	
gamma-BHC (Lindane)	100.0	0.0	57.7	58	
delta-BHC	100.0	0.0	54.5	55	
Heptachlor	100.0	0.0	50.3	50	
Aldrin	100.0	0.0	58.7	59	
Heptachlor epoxide	100.0	0.0	57.9	58	
Endosulfan I	100.0	0.0	57.2	57	
4,4'-DDE	100.0	0.0	59.8	60	
Dieldrin	100.0	0.0	52.1	52	
Endrin	100.0	0.0	54.9	55	
Endosulfan II	100.0	0.0	58.1	58	
4,4'-DDD	100.0	0.0	60.5	61	
Endrin aldehyde	100.0	0.0	61.2	61	
Endosulfan sulfate	100.0	0.0	57.2	57	
4,4'-DDT	100.0	0.0	42.9	43	
Endrin ketone	100.0	0.0	58.5	59	
Methoxychlor	100.0	0.0	49.2	49	
alpha-Chlordane	100.0	0.0	58.5	59	
gamma-Chlordane	100.0	0.0	59.3	59	

	Aqueous	Soil/Sediment
LCS Recovery Limits	30-140	30-140
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-05279-002
Date Received: 06/19/2015
Date Extracted: 06/25/2015
Date Analyzed: 06/25/2015
MS Data file: V0883.D
MSD Data file: V0884.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.49g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RPD #
alpha-BHC	100.0	0.0	62.6	63		62.3	62	0
beta-BHC	100.0	0.0	58.3	58		58.3	58	0
gamma-BHC (Lindane)	100.0	0.0	65.9	66		65.7	66	0
delta-BHC	100.0	0.0	65.8	66		65.2	65	1
Heptachlor	100.0	0.0	64.9	65		64.0	64	1
Aldrin	100.0	0.0	67.7	68		68.5	69	1
Heptachlor epoxide	100.0	0.0	69.5	70		70.7	71	2
Endosulfan I	100.0	0.0	69.7	70		70.3	70	1
4,4'-DDE	100.0	0.0	73.9	74		74.5	75	1
Dieldrin	100.0	0.0	64.2	64		65.4	65	2
Endrin	100.0	0.0	75.8	76		76.0	76	0
Endosulfan II	100.0	0.0	76.8	77		76.6	77	0
4,4'-DDD	100.0	0.0	75.2	75		76.5	77	2
Endrin aldehyde	100.0	0.0	78.9	79		79.9	80	1
Endosulfan sulfate	100.0	0.0	75.8	76		76.6	77	1
4,4'-DDT	100.0	0.0	77.0	77		70.0	70	10
Endrin ketone	100.0	0.0	78.5	79		78.7	79	0
Methoxychlor	100.0	0.0	79.0	79		74.9	75	5
alpha-Chlordane	100.0	0.0	71.6	72		72.7	73	2
gamma-Chlordane	100.0	0.0	71.5	72		72.6	73	2

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD ACCURACY REPORT

Lab ID: E15-05367-003
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
MS Data file: O9955.D
MSD Data file: O9956.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 10.00g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.7
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#
alpha-BHC	100.0	0.0	53.9	54		51.8	52		4	
beta-BHC	100.0	0.0	55.2	55		52.8	53		4	
gamma-BHC (Lindane)	100.0	0.0	56.3	56		54.4	54		3	
delta-BHC	100.0	0.0	55.7	56		55.1	55		1	
Heptachlor	100.0	0.0	50.1	50		46.8	47		7	
Aldrin	100.0	0.0	54.4	54		53.9	54		1	
Heptachlor epoxide	100.0	0.0	73.5	74		72.9	73		1	
Endosulfan I	100.0	0.0	60.5	61		60.4	60		0	
4,4'-DDE	100.0	0.0	79.2	79		77.2	77		3	
Dieldrin	100.0	0.0	467.1	467	*$	438.1	438	*$	6	
Endrin	100.0	0.0	214.9	215	*$	207.0	207	*$	4	
Endosulfan II	100.0	0.0	80.7	81		81.3	81		1	
4,4'-DDD	100.0	0.0	107.7	108		112.5	113		4	
Endrin aldehyde	100.0	0.0	102.6	103		105.9	106		3	
Endosulfan sulfate	100.0	0.0	136.1	136		143.9	144		6	
4,4'-DDT	100.0	0.0	506.6	507	*$	556.6	557	*$	9	
Endrin ketone	100.0	0.0	105.5	106		116.7	117		10	
Methoxychlor	100.0	0.0	424.5	425	*$	430.5	431	*$	1	
alpha-Chlordane	100.0	0.0	63.0	63		63.3	63		0	
gamma-Chlordane	100.0	0.0	57.4	57		57.8	58		1	

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	30-150	30-150
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: V0881.D

Instrument ID: GC-V

Date Extracted: 06/25/2015

Matrix: SOIL

Date Analyzed: 06/25/2015

Time Analyzed: 16:01

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150625-13	06/25/2015	16:12
Pest	05279-002MS	06/25/2015	16:28
Pest	05279-002MSD	06/25/2015	16:39
PPR-TP1-	E15-05279-002	06/25/2015	16:50
PPR-TP7-	E15-05280-006	06/25/2015	17:01

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O9999.D

Instrument ID: GC-O

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/07/2015

Time Analyzed: 11:11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150701-11	07/07/2015	11:24
E-2_(3.0	E15-05428-022	07/07/2015	11:37
E-2_(4.0	E15-05428-023	07/07/2015	11:49
E-7_(0.5	E15-05428-026	07/07/2015	12:02
E-7_(2.0	E15-05428-027	07/07/2015	12:15
E-7_(3.0	E15-05428-028	07/07/2015	12:27
E-7_(4.5	E15-05428-029	07/07/2015	12:40
F-2	E15-05470-009	07/07/2015	12:53
F-1	E15-05470-010	07/07/2015	13:05
F-1D	E15-05470-011	07/07/2015	13:18
F-3	E15-05470-012	07/07/2015	13:30
F-4	E15-05470-013	07/07/2015	13:43
F-5	E15-05470-014	07/07/2015	13:55
15-109	E15-05589-001	07/07/2015	14:08

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O9870.D

Instrument ID: GC-O

Date Extracted: 06/29/2015

Matrix: AQUEOUS

Date Analyzed: 06/30/2015

Time Analyzed: 16:11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSA150629-16	06/30/2015	16:24
Pest	LCSDA150629-16	06/30/2015	16:36
FB	E15-05346-027	06/30/2015	16:49
FB-06221	E15-05367-040	06/30/2015	17:02
FB-06231	E15-05428-030	06/30/2015	17:14
FB062415	E15-05472-015	06/30/2015	17:27
FB-06241	E15-05428-032	06/30/2015	17:39
FB_06251	E15-05556-022	06/30/2015	17:52
FB	E15-05547-020	06/30/2015	18:04
FIELD_BL	E15-05470-016	06/30/2015	18:17

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O9953.D

Instrument ID: GC-O

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 10:02

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS150701-07	07/06/2015	10:14
Pest	05367-003MS	07/06/2015	10:27
Pest	05367-003MSD	07/06/2015	10:40
AG-6/0.0	E15-05559-022	07/06/2015	10:52
E-3_(2.0	E15-05367-003	07/06/2015	11:05
E-3_(4.5	E15-05367-004	07/06/2015	11:18
E-4_(0.5	E15-05367-007	07/06/2015	11:30
E-4_(2.0	E15-05367-008	07/06/2015	11:43
E-4_(3.0	E15-05367-009	07/06/2015	11:56
E-4_(4.5	E15-05367-010	07/06/2015	12:08
X-1_(4.5	E15-05367-023	07/06/2015	12:21
E-6_(0.5	E15-05367-039	07/06/2015	12:34
E-6_(2.0	E15-05367-041	07/06/2015	12:46
E-6_(3.0	E15-05367-042	07/06/2015	12:59
E-6_(4.0	E15-05367-043	07/06/2015	13:12
X-3_(0.5	E15-05428-011	07/06/2015	13:38
E-1_(0.5	E15-05428-014	07/06/2015	13:51
E-1_(2.0	E15-05428-015	07/06/2015	14:03
E-1_(3.0	E15-05428-016	07/06/2015	14:16
E-1_(4.5	E15-05428-017	07/06/2015	14:29
E-2_(0.5	E15-05428-020	07/06/2015	14:41
E-2_(2.0	E15-05428-021	07/06/2015	14:54

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0807.D V0806.D V0805.D V0804.D V0803.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.22	2.22	2.22	2.22	2.22	2.22	2.16	2.28
beta-BHC	2.48	2.48	2.48	2.48	2.48	2.48	2.42	2.54
gamma-BHC	2.42	2.42	2.42	2.43	2.43	2.42	2.36	2.48
delta-BHC	2.60	2.60	2.60	2.60	2.60	2.60	2.54	2.66
Heptachlor	2.75	2.75	2.75	2.75	2.75	2.75	2.67	2.83
Aldrin	2.96	2.96	2.96	2.96	2.96	2.96	2.88	3.04
Heptachlor epoxide	3.39	3.39	3.39	3.39	3.39	3.39	3.31	3.47
Endosulfan I	3.67	3.67	3.67	3.67	3.67	3.67	3.59	3.75
4,4'-DDE	3.63	3.63	3.63	3.63	3.63	3.63	3.53	3.73
Dieldrin	3.85	3.85	3.85	3.85	3.85	3.85	3.75	3.95
Endrin	4.02	4.02	4.02	4.02	4.02	4.02	3.92	4.12
Endosulfan II	4.19	4.19	4.19	4.19	4.19	4.19	4.09	4.29
4,4'-DDD	4.07	4.07	4.07	4.07	4.07	4.07	3.97	4.17
Endrin aldehyde	4.52	4.52	4.52	4.52	4.52	4.52	4.40	4.64
Endosulfan sulfate	4.88	4.88	4.88	4.88	4.88	4.88	4.76	5.00
4,4'-DDT	4.29	4.29	4.29	4.29	4.29	4.29	4.17	4.41
Endrin ketone	5.13	5.13	5.13	5.13	5.13	5.13	5.01	5.25
Methoxychlor	4.68	4.68	4.68	4.68	4.68	4.68	4.56	4.80
alpha-Chlordane	3.57	3.57	3.57	3.57	3.57	3.57	3.49	3.65
gamma-Chlordane	3.48	3.48	3.48	3.48	3.48	3.48	3.40	3.56
Chlordane 500 ppb			2.69				2.61	2.77
Chlordane {2}			3.05				2.97	3.13
Chlordane {3}			3.48				3.40	3.56
Chlordane {4}			3.57				3.49	3.65
Chlordane {5}			4.14				4.06	4.22
Toxaphene 500 ppb			4.24				4.16	4.32
Toxaphene {2}			4.61				4.53	4.69
Toxaphene {3}			4.80				4.72	4.88
Toxaphene {4}			5.11				5.03	5.19
Toxaphene {5}			5.24				5.16	5.32

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V0807.D V0806.D V0805.D V0804.D V0803.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	1841269	1732914	1607193	1863496	1840505	1777075	6.06
beta-BHC	872628	612843	567694	623307	590074	653309	19.05
gamma-BHC	1785344	1513903	1382557	1615086	1562113	1571800	9.37
delta-BHC	1718781	1445542	1328635	1547119	1484523	1504920	9.55
Heptachlor	1779454	1391257	1266842	1395408	1296106	1425813	14.43
Aldrin	1694875	1403388	1285410	1423526	1330721	1427584	11.17
Heptachlor epoxide	1580495	1176947	1058164	1141981	1046819	1200881	18.26
Endosulfan I	1566029	1137079	1020182	1119403	1023988	1173336	19.26
4,4'-DDE	1404358	1075602	973861	1106930	1034938	1119137	14.92
Dieldrin	1514618	1154664	1043011	1151990	1056084	1184073	16.21
Endrin	1109874	966507	856569	975695	898517	961432	10.03
Endosulfan II	1161351	930628	827174	929070	852815	940208	14.02
4,4'-DDD	1069635	898246	807051	923797	859579	911662	10.82
Endrin aldehyde	898622	682581	607749	680198	624518	698734	16.68
Endosulfan sulfate	1087187	826966	725297	820484	756868	843360	16.94
4,4'-DDT	828577	770832	701446	853719	799611	790837	7.44
Endrin ketone	1110385	896293	792584	897313	828234	904962	13.63
Methoxychlor	443934	352717	305453	372513	348691	364661	13.88
alpha-Chlordane	1507692	1142872	1038187	1166115	1087729	1188519	15.58
gamma-Chlordane	1571899	1220473	1104166	1243240	1159016	1259759	14.51
Chlordane 500 ppb			36747				
Chlordane {2}			40974				
Chlordane {3}			119650				
Chlordane {4}			185034				
Chlordane {5}			30334				
Toxaphene 500 ppb			23750				
Toxaphene {2}			25259				
Toxaphene {3}			32053				
Toxaphene {4}			29545				
Toxaphene {5}			12985				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0807.C V0806.C V0805.C V0804.C V0803.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.44	2.44	2.44	2.44	2.44	2.44	2.38	2.50
beta-BHC	2.74	2.74	2.74	2.74	2.74	2.74	2.68	2.80
gamma-BHC	2.69	2.69	2.69	2.69	2.69	2.69	2.63	2.75
delta-BHC	2.96	2.96	2.96	2.96	2.96	2.96	2.90	3.02
Heptachlor	3.02	3.02	3.02	3.03	3.03	3.02	2.94	3.10
Aldrin	3.27	3.27	3.27	3.27	3.27	3.27	3.19	3.35
Heptachlor epoxide	3.69	3.69	3.69	3.69	3.69	3.69	3.61	3.77
Endosulfan I	3.99	3.99	3.99	3.99	3.99	3.99	3.91	4.07
4,4'-DDE	4.06	4.06	4.06	4.06	4.06	4.06	3.96	4.16
Dieldrin	4.20	4.20	4.20	4.20	4.20	4.20	4.10	4.30
Endrin	4.44	4.44	4.44	4.44	4.44	4.44	4.34	4.54
Endosulfan II	4.61	4.61	4.61	4.61	4.61	4.61	4.51	4.71
4,4'-DDD	4.52	4.52	4.52	4.52	4.52	4.52	4.42	4.62
Endrin aldehyde	4.90	4.90	4.90	4.90	4.90	4.90	4.78	5.02
Endosulfan sulfate	5.14	5.14	5.14	5.14	5.14	5.14	5.02	5.26
4,4'-DDT	4.79	4.79	4.79	4.79	4.79	4.79	4.67	4.91
Endrin ketone	5.63	5.63	5.63	5.63	5.63	5.63	5.51	5.75
Methoxychlor	5.39	5.39	5.39	5.40	5.39	5.39	5.27	5.51
alpha-Chlordane	3.94	3.94	3.94	3.94	3.94	3.94	3.86	4.02
gamma-Chlordane	3.83	3.83	3.83	3.83	3.83	3.83	3.75	3.91
Chlordane 500 ppb			2.92				2.84	3.00
Chlordane {2}			3.37				3.29	3.45
Chlordane {3}			3.83				3.75	3.91
Chlordane {4}			3.94				3.86	4.02
Chlordane {5}			3.94				3.86	4.02
Toxaphene 500 ppb			4.69				4.61	4.77
Toxaphene {2}			4.91				4.83	4.99
Toxaphene {3}			5.14				5.06	5.22
Toxaphene {4}			5.37				5.29	5.45
Toxaphene {5}			5.74				5.66	5.82

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V0807.C V0806.C V0805.C V0804.C V0803.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	449298	410431	383093	445325	422934	422216	6.42
beta-BHC	205676	141749	131004	147260	138205	152779	19.74
gamma-BHC	422013	352794	326380	382789	363130	369421	9.68
delta-BHC	401770	330519	307139	364047	347792	350254	10.19
Heptachlor	443197	340082	316444	368672	349197	363518	13.30
Aldrin	445829	334186	309893	359417	339705	357806	14.61
Heptachlor epoxide	391510	289801	266555	308936	294106	310182	15.46
Endosulfan I	366993	261922	240745	279721	264538	282784	17.36
4,4'-DDE	351385	256480	236121	280507	267291	278357	15.79
Dieldrin	356723	280983	259793	307476	292127	299420	12.17
Endrin	298966	237672	217542	267641	256782	255721	12.05
Endosulfan II	300049	228384	209394	247476	235735	244208	13.98
4,4'-DDD	266492	209687	192960	230036	219176	223670	12.31
Endrin aldehyde	232806	161142	148191	172803	163331	175655	18.86
Endosulfan sulfate	277353	204856	186812	224626	212935	221316	15.46
4,4'-DDT	216457	172726	160085	204551	198847	190533	12.26
Endrin ketone	267962	218863	203235	243160	233209	233286	10.52
Methoxychlor	118968	87221	79292	100929	97014	96685	15.57
alpha-Chlordane	350146	264847	243217	284763	270095	282614	14.36
gamma-Chlordane	365116	285104	262214	307065	291149	302130	12.81
Chlordane 500 ppb			8988				
Chlordane {2}			8516				
Chlordane {3}			26271				
Chlordane {4}			22371				
Chlordane {5}			22371				
Toxaphene 500 ppb			5025				
Toxaphene {2}			5243				
Toxaphene {3}			3647				
Toxaphene {4}			5538				
Toxaphene {5}			4073				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015

Instrument ID: GC-O

GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.12	2.12	2.12	2.12	2.12	2.12	2.06	2.18
beta-BHC	2.37	2.37	2.37	2.37	2.37	2.37	2.31	2.43
gamma-BHC	2.32	2.32	2.32	2.32	2.32	2.32	2.26	2.38
delta-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
Heptachlor	2.65	2.65	2.65	2.65	2.65	2.65	2.57	2.73
Aldrin	2.88	2.88	2.88	2.88	2.88	2.88	2.80	2.96
Heptachlor epoxide	3.37	3.37	3.37	3.37	3.37	3.37	3.29	3.45
Endosulfan I	3.71	3.71	3.71	3.71	3.71	3.71	3.63	3.79
4,4'-DDE	3.65	3.65	3.65	3.65	3.66	3.65	3.55	3.75
Dieldrin	3.93	3.93	3.93	3.93	3.93	3.93	3.83	4.03
Endrin	4.14	4.14	4.14	4.14	4.14	4.14	4.04	4.24
Endosulfan II	4.35	4.35	4.35	4.35	4.35	4.35	4.25	4.45
4,4'-DDD	4.21	4.21	4.21	4.21	4.21	4.21	4.11	4.31
Endrin aldehyde	4.76	4.76	4.76	4.76	4.76	4.76	4.64	4.88
Endosulfan sulfate	5.19	5.19	5.20	5.19	5.20	5.19	5.07	5.31
4,4'-DDT	4.47	4.47	4.47	4.47	4.47	4.47	4.35	4.59
Endrin ketone	5.48	5.48	5.48	5.48	5.48	5.48	5.36	5.60
Methoxychlor	4.96	4.96	4.96	4.96	4.96	4.96	4.84	5.08
alpha-Chlordane	3.59	3.59	3.59	3.59	3.59	3.59	3.51	3.67
gamma-Chlordane	3.47	3.47	3.47	3.47	3.48	3.47	3.39	3.55
Chlordane 500 ppb			2.59				2.51	2.67
Chlordane {2}			2.98				2.90	3.06
Chlordane {3}			3.47				3.39	3.55
Chlordane {4}			3.58				3.50	3.66
Chlordane {5}			4.29				4.21	4.37
Toxaphene 500 ppb			4.46				4.38	4.54
Toxaphene {2}			4.74				4.66	4.82
Toxaphene {3}			5.09				5.01	5.17
Toxaphene {4}			5.46				5.38	5.54
Toxaphene {5}			5.62				5.54	5.70

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	206327	205097	222739	224748	186050	208992	7.51
beta-BHC	97562	77048	81279	82400	68545	81367	12.98
gamma-BHC	182487	181730	197051	197139	159797	183641	8.33
delta-BHC	174148	176223	195659	198161	161485	181135	8.55
Heptachlor	188526	169464	181586	181372	149409	174071	8.84
Aldrin	186485	174053	187152	186403	152536	177326	8.40
Heptachlor epoxide	174606	153583	163639	161686	131220	156947	10.33
Endosulfan I	175277	152097	162913	159362	129428	155815	10.89
4,4'-DDE	133111	131014	144691	147722	119696	135247	8.34
Dieldrin	165101	153489	167858	164777	133255	156896	9.13
Endrin	127237	123923	133232	136115	109917	126085	8.12
Endosulfan II	147291	128398	138493	136982	109889	132211	10.71
4,4'-DDD	129711	117173	129193	129471	105297	122169	8.86
Endrin aldehyde	118395	94498	103072	101187	81283	99687	13.55
Endosulfan sulfate	133861	113841	123483	122640	97899	118345	11.37
4,4'-DDT	87273	92178	109315	116176	93447	99678	12.43
Endrin ketone	171560	141806	156487	151786	121001	148528	12.63
Methoxychlor	38290	44486	50946	53061	42316	45820	13.34
alpha-Chlordane	169721	149626	160470	160282	130058	154032	9.85
gamma-Chlordane	169403	154924	167000	167383	136063	158954	8.81
Chlordane 500 ppb			4308				
Chlordane {2}			5184				
Chlordane {3}			14875				
Chlordane {4}			23443				
Chlordane {5}			3649				
Toxaphene 500 ppb			2365				
Toxaphene {2}			4156				
Toxaphene {3}			4406				
Toxaphene {4}			4145				
Toxaphene {5}			1923				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015

Instrument ID: GC-O

GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
beta-BHC	2.84	2.84	2.85	2.84	2.85	2.85	2.79	2.91
gamma-BHC	2.79	2.79	2.79	2.79	2.79	2.79	2.73	2.85
delta-BHC	3.10	3.10	3.11	3.11	3.11	3.11	3.05	3.17
Heptachlor	3.17	3.17	3.17	3.17	3.17	3.17	3.09	3.25
Aldrin	3.47	3.47	3.47	3.47	3.47	3.47	3.39	3.55
Heptachlor epoxide	4.00	4.00	4.00	4.00	4.00	4.00	3.92	4.08
Endosulfan I	4.39	4.39	4.39	4.40	4.40	4.39	4.31	4.47
4,4'-DDE	4.49	4.49	4.49	4.49	4.49	4.49	4.39	4.59
Dieldrin	4.67	4.67	4.67	4.67	4.67	4.67	4.57	4.77
Endrin	4.99	4.99	4.99	4.99	4.99	4.99	4.89	5.09
Endosulfan II	5.21	5.21	5.21	5.21	5.21	5.21	5.11	5.31
4,4'-DDD	5.09	5.09	5.09	5.09	5.09	5.09	4.99	5.19
Endrin aldehyde	5.57	5.57	5.57	5.57	5.57	5.57	5.45	5.69
Endosulfan sulfate	5.87	5.87	5.87	5.87	5.87	5.87	5.75	5.99
4,4'-DDT	5.43	5.43	5.43	5.43	5.43	5.43	5.31	5.55
Endrin ketone	6.47	6.47	6.47	6.47	6.47	6.47	6.35	6.59
Methoxychlor	6.18	6.18	6.18	6.18	6.18	6.18	6.06	6.30
alpha-Chlordane	4.33	4.33	4.33	4.33	4.33	4.33	4.25	4.41
gamma-Chlordane	4.19	4.18	4.19	4.19	4.19	4.19	4.11	4.27
Chlordane 500 ppb			3.04				2.96	3.12
Chlordane {2}			3.59				3.51	3.67
Chlordane {3}			4.18				4.10	4.26
Chlordane {4}			4.27				4.19	4.35
Chlordane {5}			4.33				4.25	4.41
Toxaphene 500 ppb			5.30				5.22	5.38
Toxaphene {2}			5.58				5.50	5.66
Toxaphene {3}			5.86				5.78	5.94
Toxaphene {4}			6.14				6.06	6.22
Toxaphene {5}			6.58				6.50	6.66

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	244758	271593	299889	307238	257349	276165	9.73
beta-BHC	118462	102387	110420	111130	91000	106680	9.80
gamma-BHC	222711	247243	274095	281683	230703	251287	10.34
delta-BHC	194643	225984	258112	266905	217965	232722	12.76
Heptachlor	205967	219902	246710	251981	207578	226428	9.58
Aldrin	214872	225860	249593	255492	209283	231020	8.93
Heptachlor epoxide	203504	198514	217591	220537	180374	204104	7.93
Endosulfan I	181874	180274	198289	201420	164399	185251	8.11
4,4'-DDE	173133	178548	201419	208019	170364	186297	9.25
Dieldrin	183133	194270	216929	222616	181785	199747	9.52
Endrin	133124	147966	164908	175366	143102	152893	11.14
Endosulfan II	178397	171897	189698	190453	153746	176838	8.53
4,4'-DDD	142146	140854	158920	165472	136362	148751	8.52
Endrin aldehyde	135821	118434	131424	131682	106716	124815	9.65
Endosulfan sulfate	145820	141006	156221	160163	128920	146426	8.51
4,4'-DDT	84059	101253	126051	136275	115620	112651	18.27
Endrin ketone	199566	191460	209044	207770	166595	194887	8.89
Methoxychlor	46490	54077	62461	66762	53605	56679	14.09
alpha-Chlordane	194515	191231	210152	214267	175385	197110	7.93
gamma-Chlordane	196178	196456	217815	223471	183151	203414	8.23
Chlordane 500 ppb			5890				
Chlordane {2}			5949				
Chlordane {3}			18148				
Chlordane {4}			14051				
Chlordane {5}			15044				
Toxaphene 500 ppb			4986				
Toxaphene {2}			4123				
Toxaphene {3}			2585				
Toxaphene {4}			5461				
Toxaphene {5}			3738				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/25/2015 **Instrument ID:** GC-V

Data File: V0855.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.22	2.16	2.28	1777075	1623367	8.65
beta-BHC	2.48	2.42	2.54	653309	557600	14.65
gamma-BHC	2.43	2.36	2.48	1571800	1482018	5.71
delta-BHC	2.60	2.54	2.66	1504920	1442198	4.17
Heptachlor	2.75	2.67	2.83	1425813	1326734	6.95
Aldrin	2.96	2.88	3.04	1427584	1362717	4.54
Heptachlor epoxide	3.39	3.31	3.47	1200881	1148271	4.38
Endosulfan I	3.68	3.59	3.75	1173336	1124392	4.17
4,4'-DDE	3.63	3.53	3.73	1119137	1136879	1.59
Dieldrin	3.85	3.75	3.95	1184073	1029815	13.03
Endrin	4.02	3.92	4.12	961432	905846	5.78
Endosulfan II	4.19	4.09	4.29	940208	992067	5.52
4,4'-DDD	4.07	3.97	4.17	911662	905614	0.66
Endrin aldehyde	4.53	4.40	4.64	698734	789487	12.99
Endosulfan sulfate	4.89	4.76	5.00	843360	898688	6.56
4,4'-DDT	4.29	4.17	4.41	790837	896451	13.35
Endrin ketone	5.13	5.01	5.25	904962	983119	8.64
Methoxychlor	4.68	4.56	4.80	364661	382267	4.83
alpha-Chlordane	3.58	3.49	3.65	1188519	1175956	1.06
gamma-Chlordane	3.48	3.40	3.56	1259759	1237161	1.79
Chlordane 500 ppb	2.69	2.61	2.77	36747	39803	8.32
Chlordane {2}	3.06	2.97	3.13	40974	45428	10.87
Chlordane {3}	3.48	3.40	3.56	119650	133692	11.74
Chlordane {4}	3.57	3.49	3.65	185034	207418	12.10
Chlordane {5}	4.14	4.06	4.22	30334	35092	15.68
Toxaphene 500 ppb	4.24	4.16	4.32	23750	27027	13.80
Toxaphene {2}	4.61	4.53	4.69	25259	29832	18.10
Toxaphene {3}	4.81	4.72	4.88	32053	37810	17.96
Toxaphene {4}	5.12	5.03	5.19	29545	31417	6.34
Toxaphene {5}	5.25	5.16	5.32	12985	15002	15.54

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/25/2015 **Instrument ID:** GC-V

Data File: V0855.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.43	2.38	2.50	422216	399330	5.42
beta-BHC	2.74	2.68	2.80	152779	134326	12.08
gamma-BHC	2.69	2.63	2.75	369421	357310	3.28
delta-BHC	2.96	2.90	3.02	350254	338221	3.44
Heptachlor	3.02	2.94	3.10	363518	337023	7.29
Aldrin	3.27	3.19	3.35	357806	328739	8.12
Heptachlor epoxide	3.69	3.61	3.77	310182	287038	7.46
Endosulfan I	3.98	3.91	4.07	282784	264127	6.60
4,4'-DDE	4.06	3.96	4.16	278357	274790	1.28
Dieldrin	4.20	4.10	4.30	299420	254746	14.92
Endrin	4.44	4.34	4.54	255721	242105	5.32
Endosulfan II	4.61	4.51	4.71	244208	241699	1.03
4,4'-DDD	4.52	4.42	4.62	223670	218750	2.20
Endrin aldehyde	4.90	4.78	5.02	175655	187171	6.56
Endosulfan sulfate	5.14	5.02	5.26	221316	217587	1.69
4,4'-DDT	4.79	4.67	4.91	190533	210628	10.55
Endrin ketone	5.63	5.51	5.75	233286	242886	4.12
Methoxychlor	5.39	5.27	5.51	96685	105439	9.05
alpha-Chlordane	3.94	3.86	4.02	282614	270313	4.35
gamma-Chlordane	3.83	3.75	3.91	302130	289173	4.29
Chlordane 500 ppb	2.92	2.84	3.00	8988	9820	9.26
Chlordane {2}	3.37	3.29	3.45	8516	9451	10.98
Chlordane {3}	3.83	3.75	3.91	26271	29268	11.41
Chlordane {4}	3.94	3.86	4.02	22371	24945	11.51
Chlordane {5}	3.94	3.86	4.02	22371	24945	11.51
Toxaphene 500 ppb	4.69	4.61	4.77	5025	5517	9.80
Toxaphene {2}	4.91	4.83	4.99	5243	5963	13.73
Toxaphene {3}	5.14	5.06	5.22	3647	3722	2.04
Toxaphene {4}	5.37	5.29	5.45	5538	5803	4.78
Toxaphene {5}	5.74	5.66	5.82	4073	4310	5.82

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/25/2015 **Instrument ID:** GC-V

Data File: V0887.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.22	2.16	2.28	1777075	1607512	9.54
beta-BHC	2.48	2.42	2.54	653309	552815	15.38
gamma-BHC	2.43	2.36	2.48	1571800	1465491	6.76
delta-BHC	2.60	2.54	2.66	1504920	1436849	4.52
Heptachlor	2.75	2.67	2.83	1425813	1295916	9.11
Aldrin	2.96	2.88	3.04	1427584	1346030	5.71
Heptachlor epoxide	3.39	3.31	3.47	1200881	1135837	5.42
Endosulfan I	3.68	3.59	3.75	1173336	1104148	5.90
4,4'-DDE	3.63	3.53	3.73	1119137	1127775	0.77
Dieldrin	3.85	3.75	3.95	1184073	1016375	14.16
Endrin	4.02	3.92	4.12	961432	936134	2.63
Endosulfan II	4.19	4.09	4.29	940208	955130	1.59
4,4'-DDD	4.07	3.97	4.17	911662	924626	1.42
Endrin aldehyde	4.53	4.40	4.64	698734	763180	9.22
Endosulfan sulfate	4.89	4.76	5.00	843360	870180	3.18
4,4'-DDT	4.29	4.17	4.41	790837	816608	3.26
Endrin ketone	5.13	5.01	5.25	904962	951506	5.14
Methoxychlor	4.68	4.56	4.80	364661	375998	3.11
alpha-Chlordane	3.58	3.49	3.65	1188519	1156056	2.73
gamma-Chlordane	3.48	3.40	3.56	1259759	1219246	3.22

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/25/2015 **Instrument ID:** GC-V

Data File: V0887.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.43	2.38	2.50	422216	406073	3.82
beta-BHC	2.74	2.68	2.80	152779	137618	9.92
gamma-BHC	2.69	2.63	2.75	369421	363773	1.53
delta-BHC	2.96	2.90	3.02	350254	346591	1.05
Heptachlor	3.02	2.94	3.10	363518	337157	7.25
Aldrin	3.27	3.19	3.35	357806	331959	7.22
Heptachlor epoxide	3.69	3.61	3.77	310182	291330	6.08
Endosulfan I	3.98	3.91	4.07	282784	272404	3.67
4,4'-DDE	4.06	3.96	4.16	278357	281460	1.12
Dieldrin	4.20	4.10	4.30	299420	264539	11.65
Endrin	4.44	4.34	4.54	255721	261962	2.44
Endosulfan II	4.61	4.51	4.71	244208	247904	1.51
4,4'-DDD	4.52	4.42	4.62	223670	231458	3.48
Endrin aldehyde	4.89	4.78	5.02	175655	189185	7.70
Endosulfan sulfate	5.14	5.02	5.26	221316	220081	0.56
4,4'-DDT	4.79	4.67	4.91	190533	197638	3.73
Endrin ketone	5.63	5.51	5.75	233286	244992	5.02
Methoxychlor	5.39	5.27	5.51	96685	101428	4.91
alpha-Chlordane	3.94	3.86	4.02	282614	279236	1.20
gamma-Chlordane	3.83	3.75	3.91	302130	296617	1.82

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-O

Data File: O9996.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	202312	3.20
beta-BHC	2.37	2.31	2.43	81367	71376	12.28
gamma-BHC	2.32	2.26	2.38	183641	179361	2.33
delta-BHC	2.50	2.44	2.56	181135	176867	2.36
Heptachlor	2.65	2.57	2.73	174071	163928	5.83
Aldrin	2.88	2.80	2.96	177326	171252	3.43
Heptachlor epoxide	3.36	3.29	3.45	156947	150045	4.40
Endosulfan I	3.71	3.63	3.79	155815	147921	5.07
4,4'-DDE	3.65	3.55	3.75	135247	132159	2.28
Dieldrin	3.92	3.83	4.03	156896	152041	3.09
Endrin	4.14	4.04	4.24	126085	126580	0.39
Endosulfan II	4.35	4.25	4.45	132211	125476	5.09
4,4'-DDD	4.20	4.11	4.31	122169	115261	5.65
Endrin aldehyde	4.76	4.64	4.88	99687	91713	8.00
Endosulfan sulfate	5.19	5.07	5.31	118345	112087	5.29
4,4'-DDT	4.47	4.35	4.59	99678	92127	7.57
Endrin ketone	5.48	5.36	5.60	148528	138672	6.64
Methoxychlor	4.96	4.84	5.08	45820	44889	2.03
alpha-Chlordane	3.59	3.51	3.67	154032	147317	4.36
gamma-Chlordane	3.47	3.39	3.55	158954	153221	3.61
Chlordane 500 ppb	2.59	2.51	2.67	4308	3691	14.34
Chlordane {2}	2.98	2.90	3.06	5184	4640	10.50
Chlordane {3}	3.48	3.39	3.55	14875	13080	12.06
Chlordane {4}	3.59	3.50	3.66	23443	20684	11.77
Chlordane {5}	4.29	4.21	4.37	3649	3248	11.01
Toxaphene 500 ppb	4.46	4.38	4.54	2365	2713	14.71
Toxaphene {2}	4.74	4.66	4.82	4156	4398	5.84
Toxaphene {3}	5.09	5.01	5.17	4406	5050	14.60
Toxaphene {4}	5.46	5.38	5.54	4145	4691	13.18
Toxaphene {5}	5.62	5.54	5.70	1923	1789	6.97

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-O

Data File: O9996.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	285578	3.41
beta-BHC	2.85	2.79	2.91	106680	104360	2.18
gamma-BHC	2.79	2.73	2.85	251287	264838	5.39
delta-BHC	3.11	3.05	3.17	232722	247751	6.46
Heptachlor	3.17	3.09	3.25	226428	237547	4.91
Aldrin	3.47	3.39	3.55	231020	243834	5.55
Heptachlor epoxide	4.00	3.92	4.08	204104	212311	4.02
Endosulfan I	4.40	4.31	4.47	185251	193281	4.33
4,4'-DDE	4.49	4.39	4.59	186297	193780	4.02
Dieldrin	4.67	4.57	4.77	199747	210904	5.59
Endrin	4.99	4.89	5.09	152893	173293	13.34
Endosulfan II	5.21	5.11	5.31	176838	184563	4.37
4,4'-DDD	5.09	4.99	5.19	148751	158488	6.55
Endrin aldehyde	5.57	5.45	5.69	124815	125425	0.49
Endosulfan sulfate	5.87	5.75	5.99	146426	156671	7.00
4,4'-DDT	5.43	5.31	5.55	112651	117677	4.46
Endrin ketone	6.47	6.35	6.59	194887	205126	5.25
Methoxychlor	6.18	6.06	6.30	56679	64033	12.97
alpha-Chlordane	4.33	4.25	4.41	197110	205003	4.00
gamma-Chlordane	4.19	4.11	4.27	203414	212051	4.25
Chlordane 500 ppb	3.04	2.96	3.12	5890	5398	8.36
Chlordane {2}	3.59	3.51	3.67	5949	5633	5.31
Chlordane {3}	4.19	4.10	4.26	18148	17290	4.72
Chlordane {4}	4.27	4.19	4.35	14051	13488	4.00
Chlordane {5}	4.33	4.25	4.41	15044	14351	4.61
Toxaphene 500 ppb	5.30	5.22	5.38	4986	5353	7.37
Toxaphene {2}	5.58	5.50	5.66	4123	4699	13.96
Toxaphene {3}	5.86	5.78	5.94	2585	2919	12.94
Toxaphene {4}	6.13	6.06	6.22	5461	6363	16.52
Toxaphene {5}	6.58	6.50	6.66	3738	4343	16.21

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-O

Data File: O0016.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	192170	8.05
beta-BHC	2.37	2.31	2.43	81367	68971	15.23
gamma-BHC	2.32	2.26	2.38	183641	169825	7.52
delta-BHC	2.50	2.44	2.56	181135	167260	7.66
Heptachlor	2.65	2.57	2.73	174071	156442	10.13
Aldrin	2.88	2.80	2.96	177326	161669	8.83
Heptachlor epoxide	3.37	3.29	3.45	156947	141920	9.57
Endosulfan I	3.71	3.63	3.79	155815	137789	11.57
4,4'-DDE	3.65	3.55	3.75	135247	125166	7.45
Dieldrin	3.92	3.83	4.03	156896	143320	8.65
Endrin	4.14	4.04	4.24	126085	120374	4.53
Endosulfan II	4.35	4.25	4.45	132211	116280	12.05
4,4'-DDD	4.20	4.11	4.31	122169	109324	10.51
Endrin aldehyde	4.76	4.64	4.88	99687	85049	14.68
Endosulfan sulfate	5.19	5.07	5.31	118345	103207	12.79
4,4'-DDT	4.47	4.35	4.59	99678	85498	14.23
Endrin ketone	5.48	5.36	5.60	148528	127138	14.40
Methoxychlor	4.96	4.84	5.08	45820	42210	7.88
alpha-Chlordane	3.59	3.51	3.67	154032	138508	10.08
gamma-Chlordane	3.47	3.39	3.55	158954	143772	9.55

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/07/2015 **Instrument ID:** GC-O

Data File: O0016.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	274862	0.47
beta-BHC	2.84	2.79	2.91	106680	100521	5.77
gamma-BHC	2.79	2.73	2.85	251287	253898	1.04
delta-BHC	3.10	3.05	3.17	232722	239029	2.71
Heptachlor	3.17	3.09	3.25	226428	227491	0.47
Aldrin	3.47	3.39	3.55	231020	232822	0.78
Heptachlor epoxide	4.00	3.92	4.08	204104	202589	0.74
Endosulfan I	4.39	4.31	4.47	185251	183412	0.99
4,4'-DDE	4.49	4.39	4.59	186297	185777	0.28
Dieldrin	4.67	4.57	4.77	199747	199244	0.25
Endrin	4.99	4.89	5.09	152893	166226	8.72
Endosulfan II	5.21	5.11	5.31	176838	170243	3.73
4,4'-DDD	5.09	4.99	5.19	148751	153941	3.49
Endrin aldehyde	5.57	5.45	5.69	124815	116250	6.86
Endosulfan sulfate	5.86	5.75	5.99	146426	148080	1.13
4,4'-DDT	5.42	5.31	5.55	112651	113759	0.98
Endrin ketone	6.46	6.35	6.59	194887	190323	2.34
Methoxychlor	6.18	6.06	6.30	56679	62021	9.42
alpha-Chlordane	4.33	4.25	4.41	197110	194573	1.29
gamma-Chlordane	4.18	4.11	4.27	203414	201570	0.91

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015

Instrument ID: GC-O

GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.12	2.12	2.12	2.12	2.12	2.12	2.06	2.18
beta-BHC	2.37	2.37	2.37	2.37	2.37	2.37	2.31	2.43
gamma-BHC	2.32	2.32	2.32	2.32	2.32	2.32	2.26	2.38
delta-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
Heptachlor	2.65	2.65	2.65	2.65	2.65	2.65	2.57	2.73
Aldrin	2.88	2.88	2.88	2.88	2.88	2.88	2.80	2.96
Heptachlor epoxide	3.37	3.37	3.37	3.37	3.37	3.37	3.29	3.45
Endosulfan I	3.71	3.71	3.71	3.71	3.71	3.71	3.63	3.79
4,4'-DDE	3.65	3.65	3.65	3.65	3.66	3.65	3.55	3.75
Dieldrin	3.93	3.93	3.93	3.93	3.93	3.93	3.83	4.03
Endrin	4.14	4.14	4.14	4.14	4.14	4.14	4.04	4.24
Endosulfan II	4.35	4.35	4.35	4.35	4.35	4.35	4.25	4.45
4,4'-DDD	4.21	4.21	4.21	4.21	4.21	4.21	4.11	4.31
Endrin aldehyde	4.76	4.76	4.76	4.76	4.76	4.76	4.64	4.88
Endosulfan sulfate	5.19	5.19	5.20	5.19	5.20	5.19	5.07	5.31
4,4'-DDT	4.47	4.47	4.47	4.47	4.47	4.47	4.35	4.59
Endrin ketone	5.48	5.48	5.48	5.48	5.48	5.48	5.36	5.60
Methoxychlor	4.96	4.96	4.96	4.96	4.96	4.96	4.84	5.08
alpha-Chlordane	3.59	3.59	3.59	3.59	3.59	3.59	3.51	3.67
gamma-Chlordane	3.47	3.47	3.47	3.47	3.48	3.47	3.39	3.55
Chlordane 500 ppb			2.59				2.51	2.67
Chlordane {2}			2.98				2.90	3.06
Chlordane {3}			3.47				3.39	3.55
Chlordane {4}			3.58				3.50	3.66
Chlordane {5}			4.29				4.21	4.37
Toxaphene 500 ppb			4.46				4.38	4.54
Toxaphene {2}			4.74				4.66	4.82
Toxaphene {3}			5.09				5.01	5.17
Toxaphene {4}			5.46				5.38	5.54
Toxaphene {5}			5.62				5.54	5.70

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O9685.D O9684.D O9683.D O9682.D O9681.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	206327	205097	222739	224748	186050	208992	7.51
beta-BHC	97562	77048	81279	82400	68545	81367	12.98
gamma-BHC	182487	181730	197051	197139	159797	183641	8.33
delta-BHC	174148	176223	195659	198161	161485	181135	8.55
Heptachlor	188526	169464	181586	181372	149409	174071	8.84
Aldrin	186485	174053	187152	186403	152536	177326	8.40
Heptachlor epoxide	174606	153583	163639	161686	131220	156947	10.33
Endosulfan I	175277	152097	162913	159362	129428	155815	10.89
4,4'-DDE	133111	131014	144691	147722	119696	135247	8.34
Dieldrin	165101	153489	167858	164777	133255	156896	9.13
Endrin	127237	123923	133232	136115	109917	126085	8.12
Endosulfan II	147291	128398	138493	136982	109889	132211	10.71
4,4'-DDD	129711	117173	129193	129471	105297	122169	8.86
Endrin aldehyde	118395	94498	103072	101187	81283	99687	13.55
Endosulfan sulfate	133861	113841	123483	122640	97899	118345	11.37
4,4'-DDT	87273	92178	109315	116176	93447	99678	12.43
Endrin ketone	171560	141806	156487	151786	121001	148528	12.63
Methoxychlor	38290	44486	50946	53061	42316	45820	13.34
alpha-Chlordane	169721	149626	160470	160282	130058	154032	9.85
gamma-Chlordane	169403	154924	167000	167383	136063	158954	8.81
Chlordane 500 ppb			4308				
Chlordane {2}			5184				
Chlordane {3}			14875				
Chlordane {4}			23443				
Chlordane {5}			3649				
Toxaphene 500 ppb			2365				
Toxaphene {2}			4156				
Toxaphene {3}			4406				
Toxaphene {4}			4145				
Toxaphene {5}			1923				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015

Instrument ID: GC-O

GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.50	2.50	2.50	2.50	2.50	2.50	2.44	2.56
beta-BHC	2.84	2.84	2.85	2.84	2.85	2.85	2.79	2.91
gamma-BHC	2.79	2.79	2.79	2.79	2.79	2.79	2.73	2.85
delta-BHC	3.10	3.10	3.11	3.11	3.11	3.11	3.05	3.17
Heptachlor	3.17	3.17	3.17	3.17	3.17	3.17	3.09	3.25
Aldrin	3.47	3.47	3.47	3.47	3.47	3.47	3.39	3.55
Heptachlor epoxide	4.00	4.00	4.00	4.00	4.00	4.00	3.92	4.08
Endosulfan I	4.39	4.39	4.39	4.40	4.40	4.39	4.31	4.47
4,4'-DDE	4.49	4.49	4.49	4.49	4.49	4.49	4.39	4.59
Dieldrin	4.67	4.67	4.67	4.67	4.67	4.67	4.57	4.77
Endrin	4.99	4.99	4.99	4.99	4.99	4.99	4.89	5.09
Endosulfan II	5.21	5.21	5.21	5.21	5.21	5.21	5.11	5.31
4,4'-DDD	5.09	5.09	5.09	5.09	5.09	5.09	4.99	5.19
Endrin aldehyde	5.57	5.57	5.57	5.57	5.57	5.57	5.45	5.69
Endosulfan sulfate	5.87	5.87	5.87	5.87	5.87	5.87	5.75	5.99
4,4'-DDT	5.43	5.43	5.43	5.43	5.43	5.43	5.31	5.55
Endrin ketone	6.47	6.47	6.47	6.47	6.47	6.47	6.35	6.59
Methoxychlor	6.18	6.18	6.18	6.18	6.18	6.18	6.06	6.30
alpha-Chlordane	4.33	4.33	4.33	4.33	4.33	4.33	4.25	4.41
gamma-Chlordane	4.19	4.18	4.19	4.19	4.19	4.19	4.11	4.27
Chlordane 500 ppb			3.04				2.96	3.12
Chlordane {2}			3.59				3.51	3.67
Chlordane {3}			4.18				4.10	4.26
Chlordane {4}			4.27				4.19	4.35
Chlordane {5}			4.33				4.25	4.41
Toxaphene 500 ppb			5.30				5.22	5.38
Toxaphene {2}			5.58				5.50	5.66
Toxaphene {3}			5.86				5.78	5.94
Toxaphene {4}			6.14				6.06	6.22
Toxaphene {5}			6.58				6.50	6.66

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/11/2015 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O9685.C O9684.C O9683.C O9682.C O9681.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	244758	271593	299889	307238	257349	276165	9.73
beta-BHC	118462	102387	110420	111130	91000	106680	9.80
gamma-BHC	222711	247243	274095	281683	230703	251287	10.34
delta-BHC	194643	225984	258112	266905	217965	232722	12.76
Heptachlor	205967	219902	246710	251981	207578	226428	9.58
Aldrin	214872	225860	249593	255492	209283	231020	8.93
Heptachlor epoxide	203504	198514	217591	220537	180374	204104	7.93
Endosulfan I	181874	180274	198289	201420	164399	185251	8.11
4,4'-DDE	173133	178548	201419	208019	170364	186297	9.25
Dieldrin	183133	194270	216929	222616	181785	199747	9.52
Endrin	133124	147966	164908	175366	143102	152893	11.14
Endosulfan II	178397	171897	189698	190453	153746	176838	8.53
4,4'-DDD	142146	140854	158920	165472	136362	148751	8.52
Endrin aldehyde	135821	118434	131424	131682	106716	124815	9.65
Endosulfan sulfate	145820	141006	156221	160163	128920	146426	8.51
4,4'-DDT	84059	101253	126051	136275	115620	112651	18.27
Endrin ketone	199566	191460	209044	207770	166595	194887	8.89
Methoxychlor	46490	54077	62461	66762	53605	56679	14.09
alpha-Chlordane	194515	191231	210152	214267	175385	197110	7.93
gamma-Chlordane	196178	196456	217815	223471	183151	203414	8.23
Chlordane 500 ppb			5890				
Chlordane {2}			5949				
Chlordane {3}			18148				
Chlordane {4}			14051				
Chlordane {5}			15044				
Toxaphene 500 ppb			4986				
Toxaphene {2}			4123				
Toxaphene {3}			2585				
Toxaphene {4}			5461				
Toxaphene {5}			3738				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9840.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	227058	8.64
beta-BHC	2.37	2.31	2.43	81367	75939	6.67
gamma-BHC	2.32	2.26	2.38	183641	206738	12.58
delta-BHC	2.50	2.44	2.56	181135	194573	7.42
Heptachlor	2.65	2.57	2.73	174071	168798	3.03
Aldrin	2.88	2.80	2.96	177326	191968	8.26
Heptachlor epoxide	3.37	3.29	3.45	156947	167453	6.69
Endosulfan I	3.71	3.63	3.79	155815	170951	9.71
4,4'-DDE	3.66	3.55	3.75	135247	146298	8.17
Dieldrin	3.93	3.83	4.03	156896	148657	5.25
Endrin	4.14	4.04	4.24	126085	115124	8.69
Endosulfan II	4.35	4.25	4.45	132211	146375	10.71
4,4'-DDD	4.21	4.11	4.31	122169	118659	2.87
Endrin aldehyde	4.76	4.64	4.88	99687	113813	14.17
Endosulfan sulfate	5.20	5.07	5.31	118345	124693	5.36
4,4'-DDT	4.47	4.35	4.59	99678	95789	3.90
Endrin ketone	5.48	5.36	5.60	148528	164195	10.55
Methoxychlor	4.97	4.84	5.08	45820	39435	13.93
alpha-Chlordane	3.59	3.51	3.67	154032	167047	8.45
gamma-Chlordane	3.48	3.39	3.55	158954	172975	8.82
Chlordane 500 ppb	2.59	2.51	2.67	4308	4625	7.36
Chlordane {2}	2.98	2.90	3.06	5184	5562	7.30
Chlordane {3}	3.47	3.39	3.55	14875	16020	7.70
Chlordane {4}	3.58	3.50	3.66	23443	25342	8.10
Chlordane {5}	4.29	4.21	4.37	3649	3892	6.64
Toxaphene 500 ppb	4.46	4.38	4.54	2365	2604	10.12
Toxaphene {2}	4.74	4.66	4.82	4156	4603	10.77
Toxaphene {3}	5.09	5.01	5.17	4406	4822	9.43
Toxaphene {4}	5.46	5.38	5.54	4145	4523	9.11
Toxaphene {5}	5.62	5.54	5.70	1923	1983	3.11

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9840.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	317072	14.81
beta-BHC	2.85	2.79	2.91	106680	107361	0.64
gamma-BHC	2.79	2.73	2.85	251287	295439	17.57
delta-BHC	3.11	3.05	3.17	232722	262443	12.77
Heptachlor	3.17	3.09	3.25	226428	239887	5.94
Aldrin	3.47	3.39	3.55	231020	268658	16.29
Heptachlor epoxide	4.00	3.92	4.08	204104	230959	13.16
Endosulfan I	4.39	4.31	4.47	185251	212149	14.52
4,4'-DDE	4.49	4.39	4.59	186297	220879	18.56
Dieldrin	4.67	4.57	4.77	199747	202687	1.47
Endrin	4.99	4.89	5.09	152893	155035	1.40
Endosulfan II	5.21	5.11	5.31	176838	206238	16.63
4,4'-DDD	5.10	4.99	5.19	148751	158809	6.76
Endrin aldehyde	5.57	5.45	5.69	124815	148510	18.98
Endosulfan sulfate	5.87	5.75	5.99	146426	163741	11.83
4,4'-DDT	5.43	5.31	5.55	112651	116632	3.53
Endrin ketone	6.47	6.35	6.59	194887	218249	11.99
Methoxychlor	6.19	6.06	6.30	56679	46723	17.57
alpha-Chlordane	4.33	4.25	4.41	197110	229451	16.41
gamma-Chlordane	4.19	4.11	4.27	203414	237136	16.58
Chlordane 500 ppb	3.04	2.96	3.12	5890	6540	11.02
Chlordane {2}	3.60	3.51	3.67	5949	6652	11.82
Chlordane {3}	4.19	4.10	4.26	18148	20734	14.25
Chlordane {4}	4.27	4.19	4.35	14051	15884	13.05
Chlordane {5}	4.33	4.25	4.41	15044	17518	16.44
Toxaphene 500 ppb	5.30	5.22	5.38	4986	5701	14.35
Toxaphene {2}	5.58	5.50	5.66	4123	4816	16.79
Toxaphene {3}	5.87	5.78	5.94	2585	3046	17.82
Toxaphene {4}	6.14	6.06	6.22	5461	6522	19.43
Toxaphene {5}	6.59	6.50	6.66	3738	4332	15.89

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9881.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	236366	13.10
beta-BHC	2.37	2.31	2.43	81367	78527	3.49
gamma-BHC	2.32	2.26	2.38	183641	212649	15.80
delta-BHC	2.50	2.44	2.56	181135	202284	11.68
Heptachlor	2.65	2.57	2.73	174071	164244	5.65
Aldrin	2.88	2.80	2.96	177326	188989	6.58
Heptachlor epoxide	3.37	3.29	3.45	156947	163484	4.17
Endosulfan I	3.71	3.63	3.79	155815	163493	4.93
4,4'-DDE	3.66	3.55	3.75	135247	138467	2.38
Dieldrin	3.93	3.83	4.03	156896	145818	7.06
Endrin	4.14	4.04	4.24	126085	110341	12.49
Endosulfan II	4.35	4.25	4.45	132211	142144	7.51
4,4'-DDD	4.21	4.11	4.31	122169	127508	4.37
Endrin aldehyde	4.76	4.64	4.88	99687	118246	18.62
Endosulfan sulfate	5.20	5.07	5.31	118345	123734	4.55
4,4'-DDT	4.47	4.35	4.59	99678	83587	16.14
Endrin ketone	5.48	5.36	5.60	148528	163716	10.23
Methoxychlor	4.97	4.84	5.08	45820	38128	16.79
alpha-Chlordane	3.59	3.51	3.67	154032	160235	4.03
gamma-Chlordane	3.48	3.39	3.55	158954	167007	5.07

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 06/30/2015 **Instrument ID:** GC-O

Data File: O9881.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	318774	15.43
beta-BHC	2.84	2.79	2.91	106680	112091	5.07
gamma-BHC	2.79	2.73	2.85	251287	300523	19.59
delta-BHC	3.10	3.05	3.17	232722	276483	18.80
Heptachlor	3.17	3.09	3.25	226428	228013	0.70
Aldrin	3.47	3.39	3.55	231020	264197	14.36
Heptachlor epoxide	4.00	3.92	4.08	204104	225908	10.68
Endosulfan I	4.39	4.31	4.47	185251	205838	11.11
4,4'-DDE	4.49	4.39	4.59	186297	209563	12.49
Dieldrin	4.67	4.57	4.77	199747	200168	0.21
Endrin	4.99	4.89	5.09	152893	147879	3.28
Endosulfan II	5.21	5.11	5.31	176838	206643	16.85
4,4'-DDD	5.09	4.99	5.19	148751	168986	13.60
Endrin aldehyde	5.57	5.45	5.69	124815	148968	19.35
Endosulfan sulfate	5.87	5.75	5.99	146426	166113	13.44
4,4'-DDT	5.43	5.31	5.55	112651	95157	15.53
Endrin ketone	6.47	6.35	6.59	194887	231932	19.01
Methoxychlor	6.18	6.06	6.30	56679	47749	15.76
alpha-Chlordane	4.33	4.25	4.41	197110	219553	11.39
gamma-Chlordane	4.18	4.11	4.27	203414	228163	12.17

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9950.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	219675	5.11
beta-BHC	2.37	2.31	2.43	81367	73486	9.69
gamma-BHC	2.32	2.26	2.38	183641	199369	8.56
delta-BHC	2.50	2.44	2.56	181135	190806	5.34
Heptachlor	2.65	2.57	2.73	174071	161383	7.29
Aldrin	2.88	2.80	2.96	177326	184898	4.27
Heptachlor epoxide	3.37	3.29	3.45	156947	162055	3.25
Endosulfan I	3.71	3.63	3.79	155815	157866	1.32
4,4'-DDE	3.65	3.55	3.75	135247	144436	6.79
Dieldrin	3.93	3.83	4.03	156896	145172	7.47
Endrin	4.14	4.04	4.24	126085	126572	0.39
Endosulfan II	4.35	4.25	4.45	132211	136204	3.02
4,4'-DDD	4.21	4.11	4.31	122169	124367	1.80
Endrin aldehyde	4.76	4.64	4.88	99687	105404	5.74
Endosulfan sulfate	5.19	5.07	5.31	118345	118073	0.23
4,4'-DDT	4.47	4.35	4.59	99678	86423	13.30
Endrin ketone	5.48	5.36	5.60	148528	147499	0.69
Methoxychlor	4.96	4.84	5.08	45820	40599	11.39
alpha-Chlordane	3.59	3.51	3.67	154032	161140	4.61
gamma-Chlordane	3.47	3.39	3.55	158954	166611	4.82
Chlordane 500 ppb	2.59	2.51	2.67	4308	4780	10.95
Chlordane {2}	2.98	2.90	3.06	5184	5791	11.71
Chlordane {3}	3.47	3.39	3.55	14875	16795	12.91
Chlordane {4}	3.58	3.50	3.66	23443	26417	12.68
Chlordane {5}	4.29	4.21	4.37	3649	4022	10.23
Toxaphene 500 ppb	4.46	4.38	4.54	2365	2322	1.79
Toxaphene {2}	4.74	4.66	4.82	4156	3440	17.23
Toxaphene {3}	5.09	5.01	5.17	4406	3797	13.83
Toxaphene {4}	5.46	5.38	5.54	4145	3827	7.67
Toxaphene {5}	5.62	5.54	5.70	1923	1674	12.97

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9950.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	305278	10.54
beta-BHC	2.84	2.79	2.91	106680	106073	0.57
gamma-BHC	2.79	2.73	2.85	251287	292269	16.31
delta-BHC	3.10	3.05	3.17	232722	266348	14.45
Heptachlor	3.17	3.09	3.25	226428	227346	0.41
Aldrin	3.47	3.39	3.55	231020	263174	13.92
Heptachlor epoxide	4.00	3.92	4.08	204104	226655	11.05
Endosulfan I	4.39	4.31	4.47	185251	206909	11.69
4,4'-DDE	4.49	4.39	4.59	186297	215335	15.59
Dieldrin	4.67	4.57	4.77	199747	197181	1.28
Endrin	4.99	4.89	5.09	152893	170929	11.80
Endosulfan II	5.21	5.11	5.31	176838	194735	10.12
4,4'-DDD	5.09	4.99	5.19	148751	169073	13.66
Endrin aldehyde	5.57	5.45	5.69	124815	141012	12.98
Endosulfan sulfate	5.87	5.75	5.99	146426	160079	9.32
4,4'-DDT	5.42	5.31	5.55	112651	104135	7.56
Endrin ketone	6.46	6.35	6.59	194887	208001	6.73
Methoxychlor	6.18	6.06	6.30	56679	53643	5.36
alpha-Chlordane	4.33	4.25	4.41	197110	223175	13.22
gamma-Chlordane	4.18	4.11	4.27	203414	230501	13.32
Chlordane 500 ppb	3.04	2.96	3.12	5890	6970	18.33
Chlordane {2}	3.59	3.51	3.67	5949	7021	18.01
Chlordane {3}	4.18	4.10	4.26	18148	20681	13.96
Chlordane {4}	4.27	4.19	4.35	14051	16725	19.03
Chlordane {5}	4.33	4.25	4.41	15044	18001	19.66
Toxaphene 500 ppb	5.29	5.22	5.38	4986	4628	7.18
Toxaphene {2}	5.57	5.50	5.66	4123	3819	7.38
Toxaphene {3}	5.86	5.78	5.94	2585	2178	15.75
Toxaphene {4}	6.13	6.06	6.22	5461	4628	15.26
Toxaphene {5}	6.58	6.50	6.66	3738	3246	13.14

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9969.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	228778	9.47
beta-BHC	2.37	2.31	2.43	81367	76863	5.54
gamma-BHC	2.32	2.26	2.38	183641	206809	12.62
delta-BHC	2.50	2.44	2.56	181135	201502	11.24
Heptachlor	2.65	2.57	2.73	174071	168591	3.15
Aldrin	2.88	2.80	2.96	177326	188740	6.44
Heptachlor epoxide	3.37	3.29	3.45	156947	165697	5.58
Endosulfan I	3.71	3.63	3.79	155815	161211	3.46
4,4'-DDE	3.66	3.55	3.75	135247	148167	9.55
Dieldrin	3.93	3.83	4.03	156896	148998	5.03
Endrin	4.14	4.04	4.24	126085	113333	10.11
Endosulfan II	4.35	4.25	4.45	132211	142010	7.41
4,4'-DDD	4.21	4.11	4.31	122169	133944	9.64
Endrin aldehyde	4.76	4.64	4.88	99687	119339	19.71
Endosulfan sulfate	5.19	5.07	5.31	118345	124285	5.02
4,4'-DDT	4.47	4.35	4.59	99678	84929	14.80
Endrin ketone	5.48	5.36	5.60	148528	164381	10.67
Methoxychlor	4.96	4.84	5.08	45820	43452	5.17
alpha-Chlordane	3.59	3.51	3.67	154032	163265	5.99
gamma-Chlordane	3.47	3.39	3.55	158954	169478	6.62

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9969.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	320864	16.19
beta-BHC	2.84	2.79	2.91	106680	110930	3.98
gamma-BHC	2.79	2.73	2.85	251287	301390	19.94
delta-BHC	3.10	3.05	3.17	232722	279257	20.00
Heptachlor	3.17	3.09	3.25	226428	236904	4.63
Aldrin	3.47	3.39	3.55	231020	268928	16.41
Heptachlor epoxide	4.00	3.92	4.08	204104	232531	13.93
Endosulfan I	4.39	4.31	4.47	185251	211798	14.33
4,4'-DDE	4.49	4.39	4.59	186297	219956	18.07
Dieldrin	4.67	4.57	4.77	199747	204633	2.45
Endrin	4.99	4.89	5.09	152893	154358	0.96
Endosulfan II	5.21	5.11	5.31	176838	207005	17.06
4,4'-DDD	5.09	4.99	5.19	148751	176541	18.68
Endrin aldehyde	5.57	5.45	5.69	124815	155147	24.30
Endosulfan sulfate	5.86	5.75	5.99	146426	171449	17.09
4,4'-DDT	5.42	5.31	5.55	112651	101075	10.28
Endrin ketone	6.46	6.35	6.59	194887	224155	15.02
Methoxychlor	6.18	6.06	6.30	56679	58025	2.37
alpha-Chlordane	4.33	4.25	4.41	197110	226820	15.07
gamma-Chlordane	4.18	4.11	4.27	203414	234810	15.43

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9977.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.12	2.06	2.18	208992	224176	7.27
beta-BHC	2.37	2.31	2.43	81367	80350	1.25
gamma-BHC	2.32	2.26	2.38	183641	196693	7.11
delta-BHC	2.50	2.44	2.56	181135	197471	9.02
Heptachlor	2.65	2.57	2.73	174071	171603	1.42
Aldrin	2.88	2.80	2.96	177326	183997	3.76
Heptachlor epoxide	3.37	3.29	3.45	156947	159819	1.83
Endosulfan I	3.71	3.63	3.79	155815	156416	0.39
4,4'-DDE	3.65	3.55	3.75	135247	142331	5.24
Dieldrin	3.93	3.83	4.03	156896	161385	2.86
Endrin	4.14	4.04	4.24	126085	113407	10.06
Endosulfan II	4.35	4.25	4.45	132211	135548	2.52
4,4'-DDD	4.21	4.11	4.31	122169	131326	7.50
Endrin aldehyde	4.76	4.64	4.88	99687	104478	4.81
Endosulfan sulfate	5.19	5.07	5.31	118345	122124	3.19
4,4'-DDT	4.47	4.35	4.59	99678	88744	10.97
Endrin ketone	5.48	5.36	5.60	148528	157733	6.20
Methoxychlor	4.96	4.84	5.08	45820	46107	0.63
alpha-Chlordane	3.59	3.51	3.67	154032	155768	1.13
gamma-Chlordane	3.47	3.39	3.55	158954	162014	1.92

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 07/06/2015 **Instrument ID:** GC-O

Data File: O9977.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.50	2.44	2.56	276165	316756	14.70
beta-BHC	2.84	2.79	2.91	106680	115222	8.01
gamma-BHC	2.79	2.73	2.85	251287	287391	14.37
delta-BHC	3.10	3.05	3.17	232722	276684	18.89
Heptachlor	3.17	3.09	3.25	226428	239933	5.96
Aldrin	3.47	3.39	3.55	231020	258121	11.73
Heptachlor epoxide	4.00	3.92	4.08	204104	223659	9.58
Endosulfan I	4.39	4.31	4.47	185251	203514	9.86
4,4'-DDE	4.49	4.39	4.59	186297	208364	11.84
Dieldrin	4.67	4.57	4.77	199747	223951	12.12
Endrin	4.99	4.89	5.09	152893	155706	1.84
Endosulfan II	5.21	5.11	5.31	176838	200757	13.53
4,4'-DDD	5.09	4.99	5.19	148751	173682	16.76
Endrin aldehyde	5.57	5.45	5.69	124815	136536	9.39
Endosulfan sulfate	5.86	5.75	5.99	146426	162924	11.27
4,4'-DDT	5.42	5.31	5.55	112651	117727	4.51
Endrin ketone	6.46	6.35	6.59	194887	219925	12.85
Methoxychlor	6.18	6.06	6.30	56679	56637	0.08
alpha-Chlordane	4.33	4.25	4.41	197110	215464	9.31
gamma-Chlordane	4.18	4.11	4.27	203414	223884	10.06

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-V **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.88 **DCB 1** 6.05 **TCMX 2** 2.03 **DCB 2** 6.67

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150625-13	06/25/2015	16:01	1.88		6.05		2.03		6.67	
Pest	LCSS150625-13	06/25/2015	16:12	1.88		6.04		2.03		6.66	
Pest	05279-002MS	06/25/2015	16:28	1.88		6.05		2.03		6.67	
Pest	05279-002MSD	06/25/2015	16:39	1.88		6.04		2.03		6.66	
PPR-TP1-	E15-05279-002	06/25/2015	16:50	1.88		6.04		2.03		6.66	
PPR-TP7-	E15-05280-006	06/25/2015	17:01	1.88		6.04		2.03		6.66	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.80 **DCB 1** 6.57 **TCMX 2** 2.07 **DCB 2** 8.12

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150701-11	07/07/2015	11:11	1.80		6.57		2.07		8.12	
Pest	LCSS150701-11	07/07/2015	11:24	1.80		6.57		2.07		8.12	
E-2_(3.0	E15-05428-022	07/07/2015	11:37	1.80		6.57		2.07		8.12	
E-2_(4.0	E15-05428-023	07/07/2015	11:49	1.80		6.57		2.07		8.12	
E-7_(0.5	E15-05428-026	07/07/2015	12:02	1.80		6.57		2.07		8.12	
E-7_(2.0	E15-05428-027	07/07/2015	12:15	1.80		6.57		2.07		8.11	
E-7_(3.0	E15-05428-028	07/07/2015	12:27	1.80		6.57		2.07		8.12	
E-7_(4.5	E15-05428-029	07/07/2015	12:40	1.80		6.57		2.07		8.12	
F-2	E15-05470-009	07/07/2015	12:53	1.80		6.57		2.07		8.12	
F-1	E15-05470-010	07/07/2015	13:05	1.80		6.57		2.07		8.12	
F-1D	E15-05470-011	07/07/2015	13:18	1.80		6.57		2.07		8.12	
F-3	E15-05470-012	07/07/2015	13:30	1.80		6.57		2.07		8.12	
F-4	E15-05470-013	07/07/2015	13:43	1.80		6.57		2.07		8.12	
F-5	E15-05470-014	07/07/2015	13:55	1.80		6.57		2.07		8.12	
15-109	E15-05589-001	07/07/2015	14:08	1.80		6.57		2.07		8.12	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.80 **DCB 1** 6.58 **TCMX 2** 2.07 **DCB 2** 8.13

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKA150629-16	06/30/2015	16:11	1.80		6.58		2.07		8.13	
Pest	LCSA150629-16	06/30/2015	16:24	1.80		6.58		2.07		8.12	
Pest	LCSDA150629-16	06/30/2015	16:36	1.80		6.58		2.07		8.12	
FB	E15-05346-027	06/30/2015	16:49	1.80		6.58		2.07		8.12	
FB-06221	E15-05367-040	06/30/2015	17:02	1.80		6.58		2.07		8.12	
FB-06231	E15-05428-030	06/30/2015	17:14	1.80		6.58		2.07		8.12	
FB062415	E15-05472-015	06/30/2015	17:27	1.80		6.58		2.07		8.12	
FB-06241	E15-05428-032	06/30/2015	17:39	1.80		6.58		2.07		8.12	
FB_06251	E15-05556-022	06/30/2015	17:52	1.80		6.58		2.07		8.12	
FB	E15-05547-020	06/30/2015	18:04	1.80		6.58		2.07		8.12	
FIELD_BL	E15-05470-016	06/30/2015	18:17	1.80		6.58		2.07		8.12	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 1.80 **DCB 1** 6.57 **TCMX 2** 2.07 **DCB 2** 8.13

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS150701-07	07/06/2015	10:02	1.80		6.57		2.07		8.13	
Pest	LCSS150701-07	07/06/2015	10:14	1.80		6.57		2.07		8.12	
Pest	05367-003MS	07/06/2015	10:27	1.80		6.57		2.07		8.12	
Pest	05367-003MSD	07/06/2015	10:40	1.80		6.57		2.07		8.12	
AG-6/0.0	E15-05559-022	07/06/2015	10:52	1.80		6.57		2.07		8.12	
E-3_(2.0	E15-05367-003	07/06/2015	11:05	1.80		6.57		2.07		8.12	
E-3_(4.5	E15-05367-004	07/06/2015	11:18	1.80		6.57		2.07		8.11	
E-4_(0.5	E15-05367-007	07/06/2015	11:30	1.80		6.57		2.07		8.12	
E-4_(2.0	E15-05367-008	07/06/2015	11:43	1.80		6.57		2.07		8.12	
E-4_(3.0	E15-05367-009	07/06/2015	11:56	1.80		6.57		2.07		8.12	
E-4_(4.5	E15-05367-010	07/06/2015	12:08	1.80		6.57		2.07		8.12	
X-1_(4.5	E15-05367-023	07/06/2015	12:21	1.80		6.57		2.07		8.12	
E-6_(0.5	E15-05367-039	07/06/2015	12:34	1.80		6.57		2.07		8.12	
E-6_(2.0	E15-05367-041	07/06/2015	12:46	1.80		6.57		2.07		8.12	
E-6_(3.0	E15-05367-042	07/06/2015	12:59	1.80		6.57		2.07		8.12	
E-6_(4.0	E15-05367-043	07/06/2015	13:12	1.80		6.57		2.07		8.12	
X-3_(0.5	E15-05428-011	07/06/2015	13:38	1.80		6.57		2.07		8.12	
E-1_(0.5	E15-05428-014	07/06/2015	13:51	1.80		6.57		2.07		8.12	
E-1_(2.0	E15-05428-015	07/06/2015	14:03	1.80		6.57		2.07		8.12	
E-1_(3.0	E15-05428-016	07/06/2015	14:16	1.80		6.57		2.07		8.12	
E-1_(4.5	E15-05428-017	07/06/2015	14:29	1.80		6.57		2.07		8.12	
E-2_(0.5	E15-05428-020	07/06/2015	14:41	1.80		6.57		2.07		8.12	
E-2_(2.0	E15-05428-021	07/06/2015	14:54	1.80		6.57		2.07		8.12	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

M Matrix interference

Date Analyzed: 06/25/2015

Data file: V0853.D Thu Jun 25 08:39:28 2015

1st Column

DDT (1)	74336404	Endrin (1)	77989128
DDD	4402914	Endrin ketone	2811802
DDE	3695332	Endrin aldehyde	3075431

2nd Column

DDT (2)	18930100	Endrin (2)	22431579
DDD	499588	Endrin ketone	431962
DDE	582437	Endrin aldehyde	368919

% Breakdown

DDT (1)	Endrin (1)
9.82	7.02

DDT (2)	Endrin (2)
5.41	3.45

Date Analyzed: 07/07/2015

Data file: O9994.D Tue Jul 07 09:58:24 2015

1st Column

DDT (1)	7462920	Endrin (1)	11087273
DDD	967630	Endrin ketone	835408
DDE	155595	Endrin aldehyde	108790

2nd Column

DDT (2)	9515917	Endrin (2)	15343432
DDD	1243369	Endrin ketone	1073056
DDE	233806	Endrin aldehyde	152999

% Breakdown

DDT (1)	Endrin (1)
13.08	7.85

DDT (2)	Endrin (2)
13.44	7.40

Date Analyzed: 06/30/2015

Data file: O9838.D Tue Jun 30 09:41:11 2015

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	8357523	Endrin (1)	10230019	8.61	8.62
DDD	623504	Endrin ketone	712538		
DDE	163510	Endrin aldehyde	252173		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	10600280	Endrin (2)	13239743	8.21	7.72
DDD	742448	Endrin ketone	789325		
DDE	205290	Endrin aldehyde	318637		

Date Analyzed: 07/06/2015

Data file: O9948.D Mon Jul 06 10:01:55 2015

1st Column

DDT (1)	8066321	Endrin (1)	10572621
DDD	632625	Endrin ketone	469033
DDE	142262	Endrin aldehyde	0

2nd Column

DDT (2)	9824109	Endrin (2)	13614736
DDD	770963	Endrin ketone	567404
DDE	205434	Endrin aldehyde	0

% Breakdown

DDT (1)	Endrin (1)
8.76	4.25

DDT (2)	Endrin (2)
9.04	4.00

PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9970.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:38
Operator : IB
Sample : X-3_(0.5,E15-05428-011,S,30.62g,23.3,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:03:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	11508886	18503136	116.693	130.769
Spiked Amount 200.000	Range 10 - 180		Recovery =		58.35%	65.38%
2) S DCB	6.57	8.12	7889744	11124064	169.175m	183.984
Spiked Amount 200.000	Range 10 - 180		Recovery =		84.59%	91.99%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

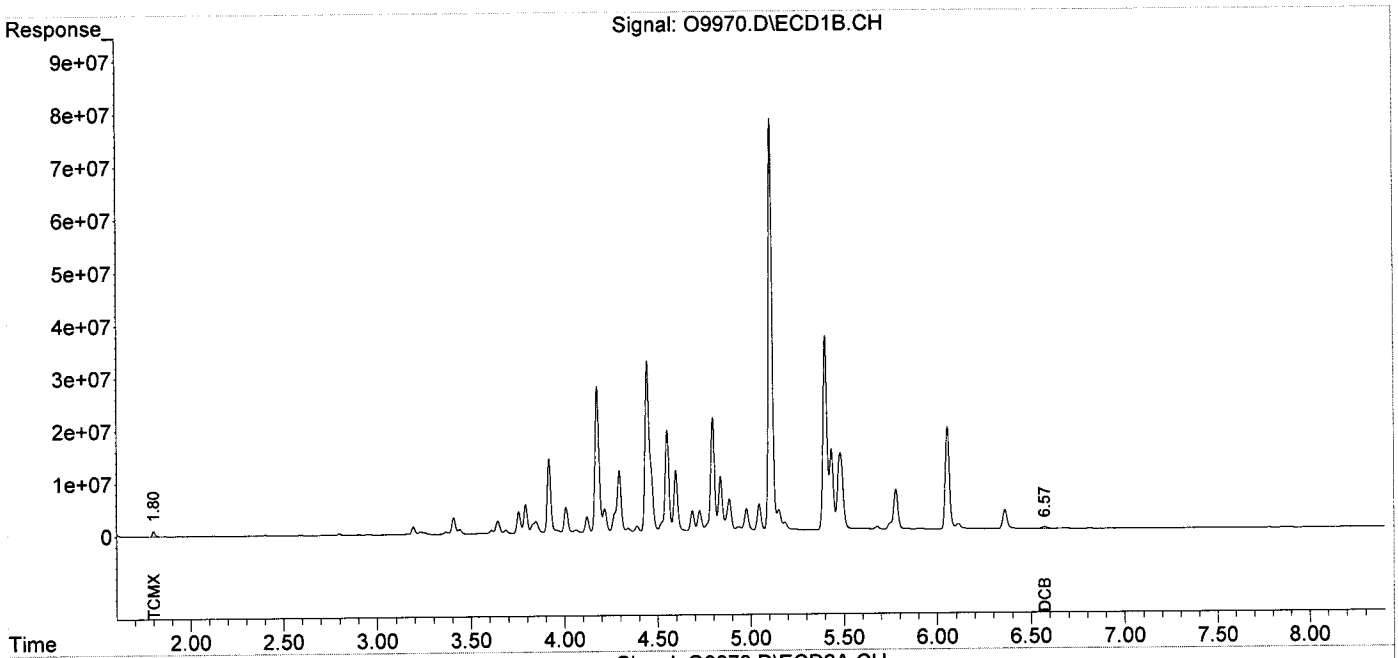
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

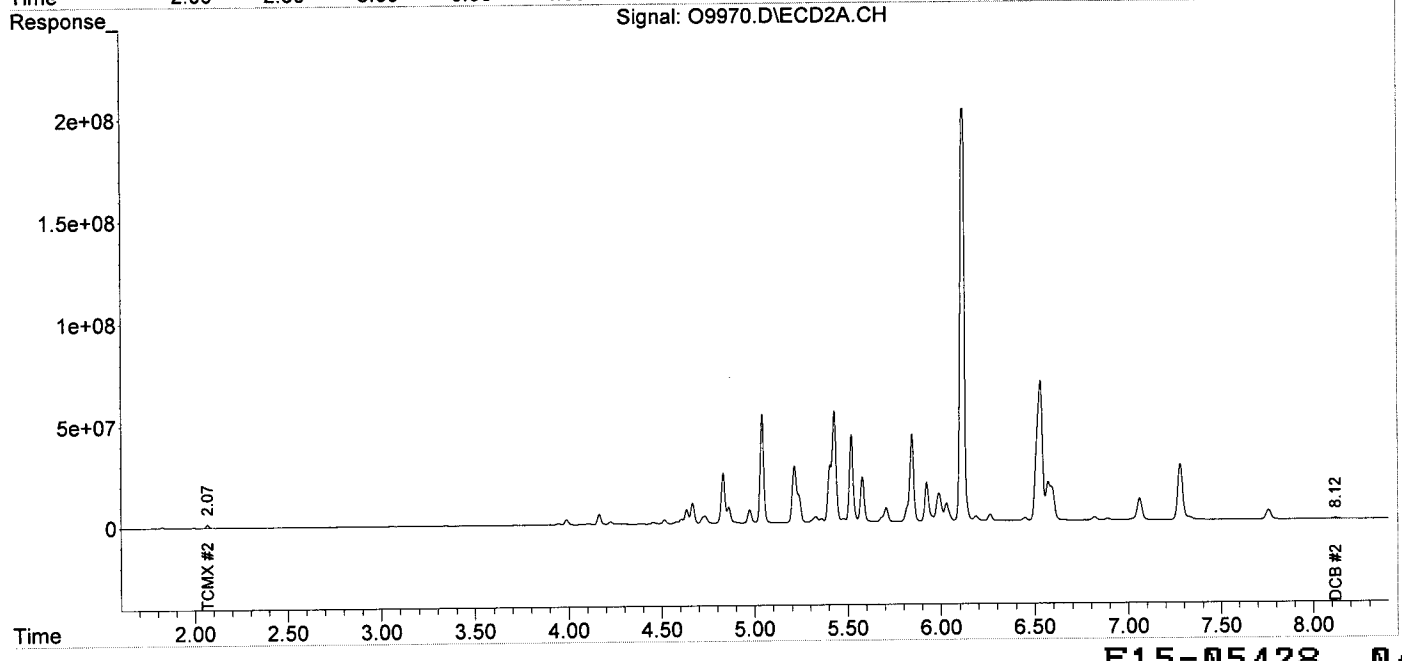
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9970.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:38
Operator : IB
Sample : X-3_(0.5,E15-05428-011,S,30.62g,23.3,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:03:28 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : 09971.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:51
Operator : IB
Sample : E-1_(0.5,E15-05428-014,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:04:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	9592961	15953694	97.266	112.751
Spiked Amount 200.000	Range 10 - 180		Recovery =		48.63%	56.38%
2) S DCB	6.57	8.12	7015199	12971555	150.423m	214.540 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		75.21%	107.27%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

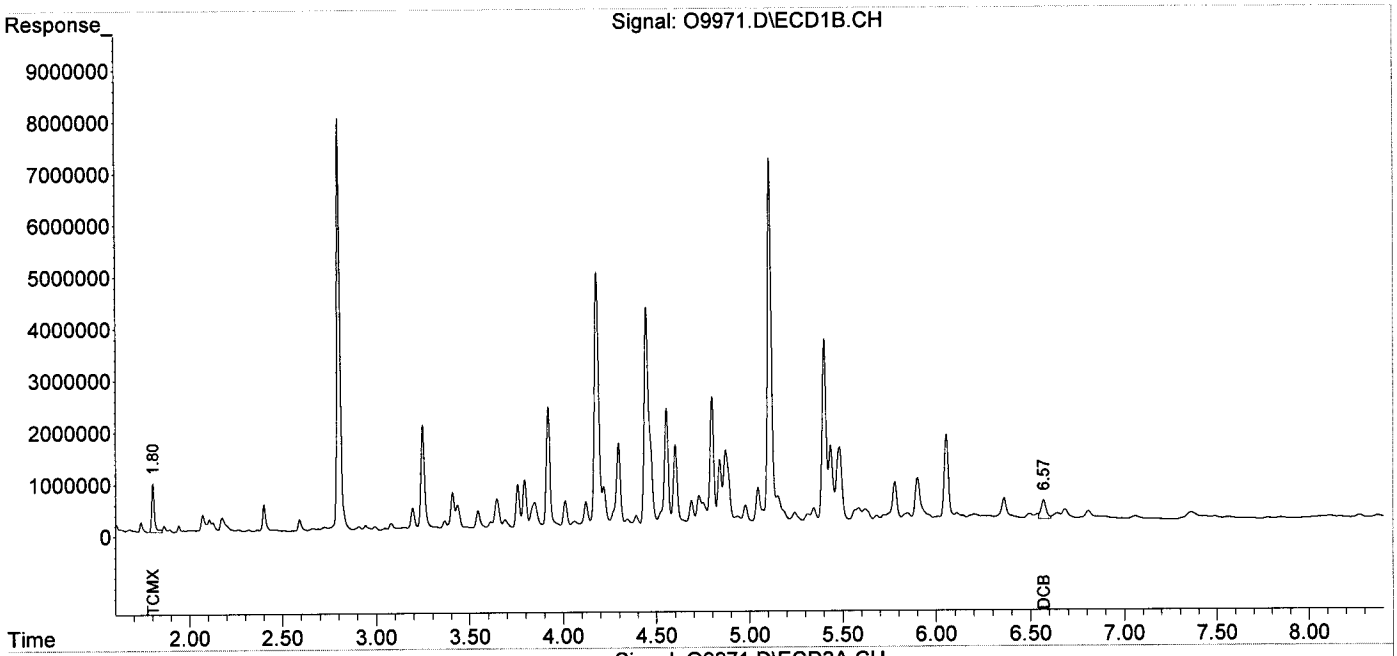
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

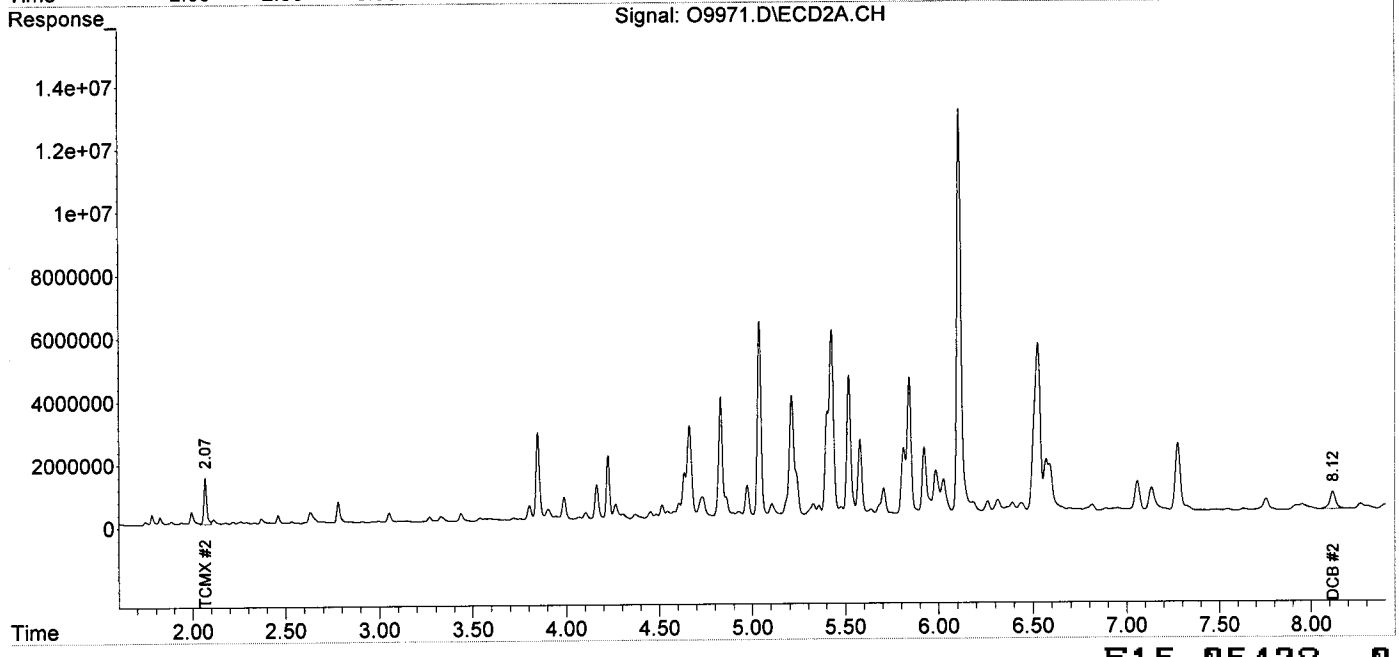
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9971.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 13:51
Operator : IB
Sample : E-1_(0.5,E15-05428-014,S,30.37g,17.5,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 14:04:22 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428 0491

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9972.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:03
Operator : IB
Sample : E-1_(2.0,E15-05428-015,S,30.74g,8.90,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:12:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13095812	19697915	132.783	139.213
Spiked Amount 200.000	Range 10 - 180		Recovery =		66.39%	69.61%
2) S DCB	6.57	8.12	5496062	7690767	117.849m	127.200m
Spiked Amount 200.000	Range 10 - 180		Recovery =		58.92%	63.60%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

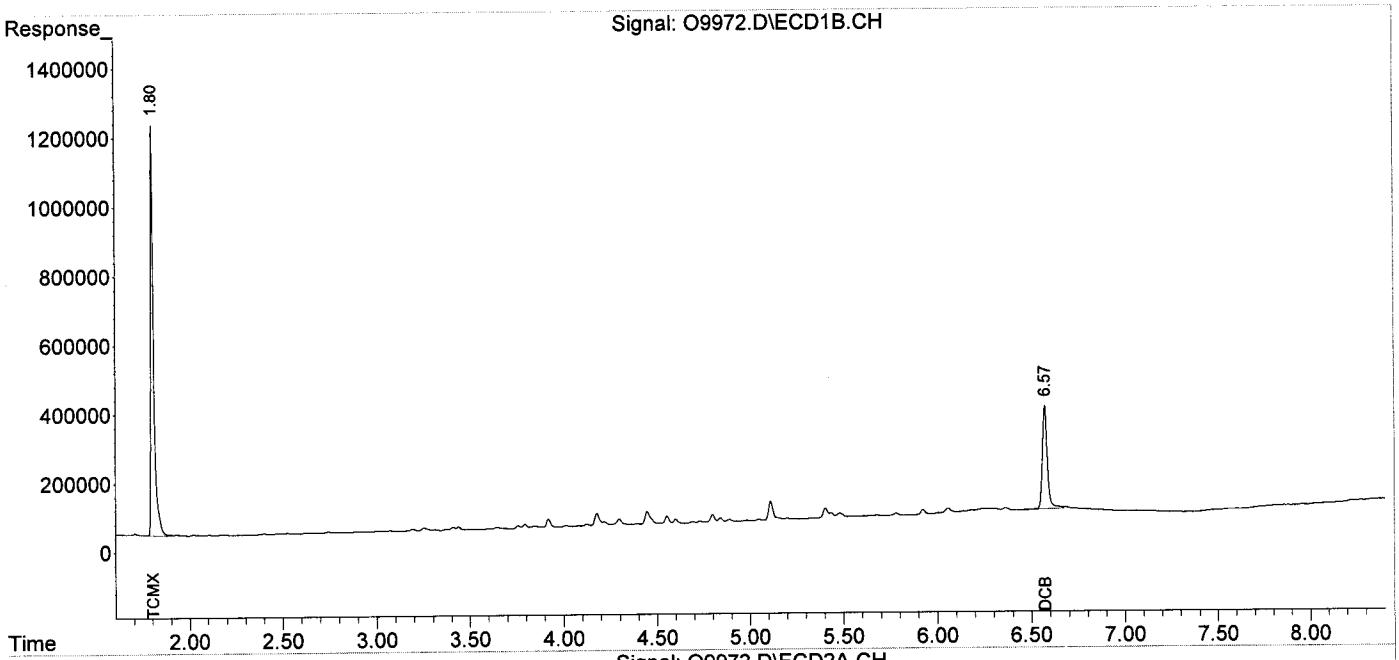
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

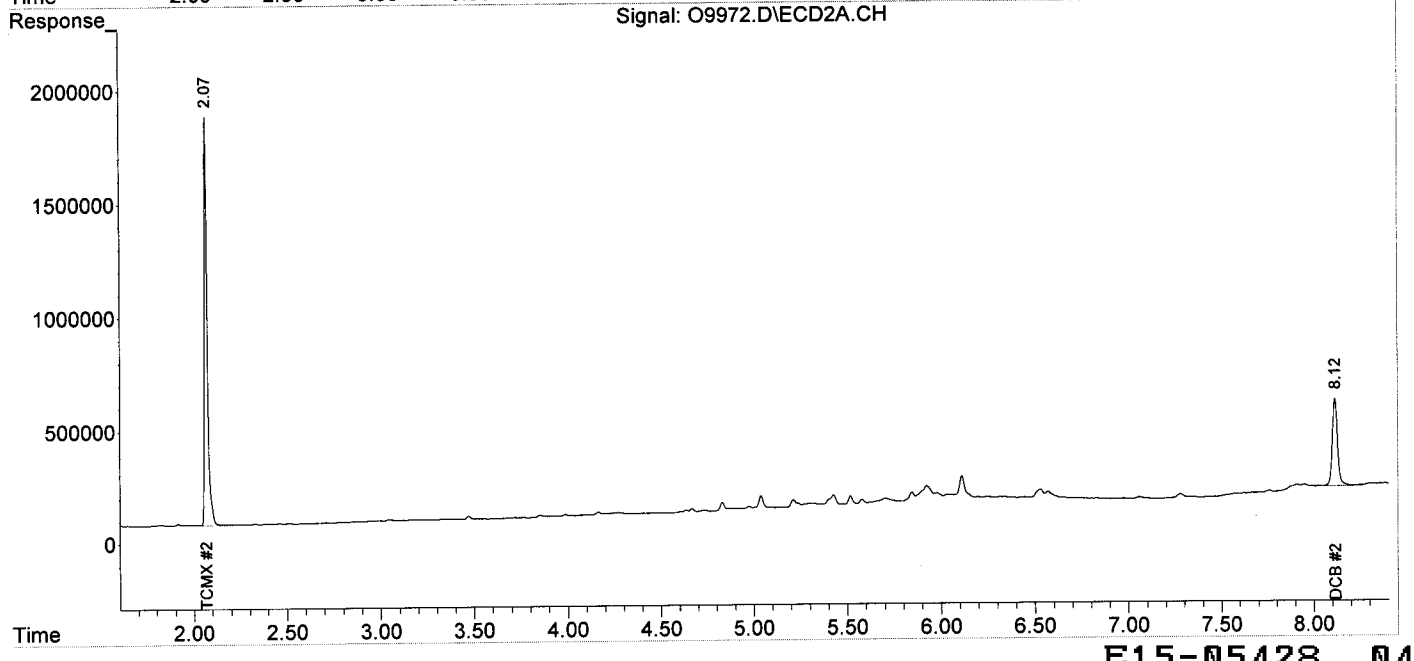
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9972.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:03
Operator : IB
Sample : E-1_(2.0,E15-05428-015,S,30.74g,8.90,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:12:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0493

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9973.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:16
Operator : IB
Sample : E-1_(3.0,E15-05428-016,S,30.37g,14.1,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:12:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12569996	18915278	127.452	133.682
Spiked Amount 200.000	Range 10 - 180		Recovery =		63.73%	66.84%
2) S DCB	6.57	8.12	6040934	7965927	129.532	131.751
Spiked Amount 200.000	Range 10 - 180		Recovery =		64.77%	65.88%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

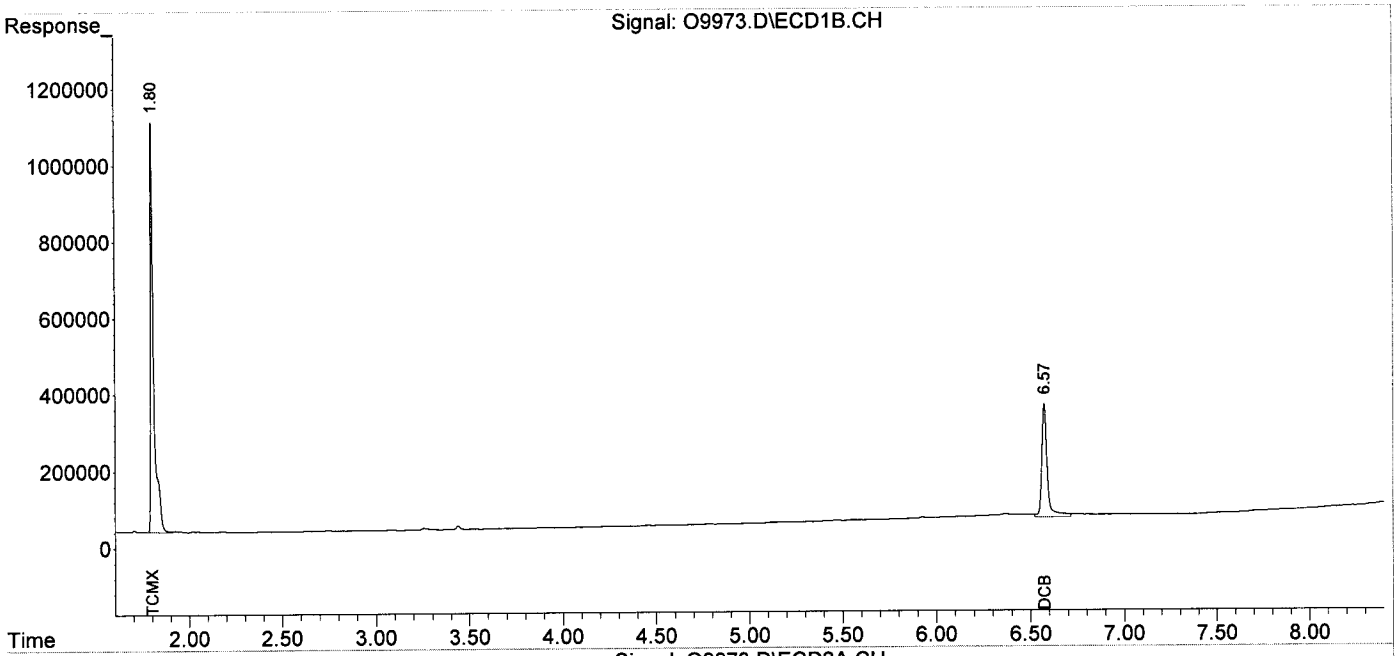
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

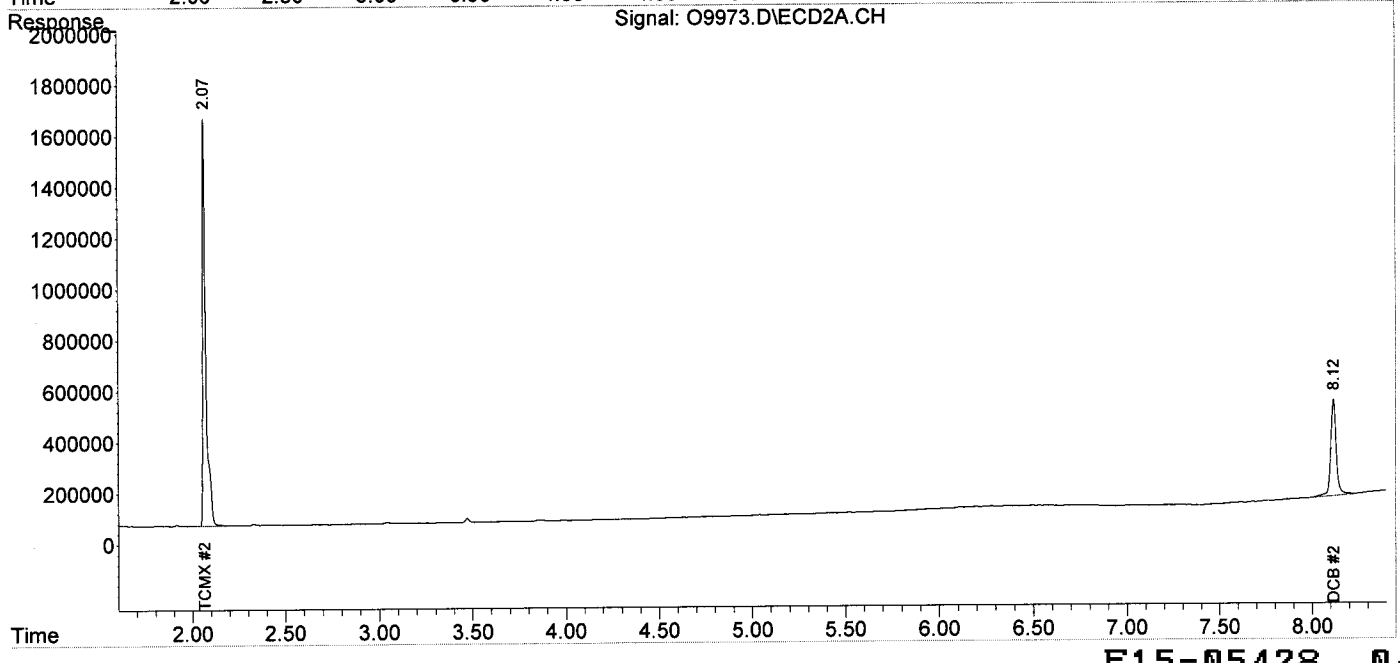
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9973.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:16
Operator : IB
Sample : E-1_(3.0,E15-05428-016,S,30.37g,14.1,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:12:36 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428 0495

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9974.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:29
Operator : IB
Sample : E-1_(4.5,E15-05428-017,S,30.61g,18.6,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:13:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13317511	19885167	135.031	140.536
Spiked Amount 200.000	Range 10 - 180		Recovery =		67.52%	70.27%
2) S DCB	6.57	8.12	6080081	8433115	130.372m	139.478
Spiked Amount 200.000	Range 10 - 180		Recovery =		65.19%	69.74%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

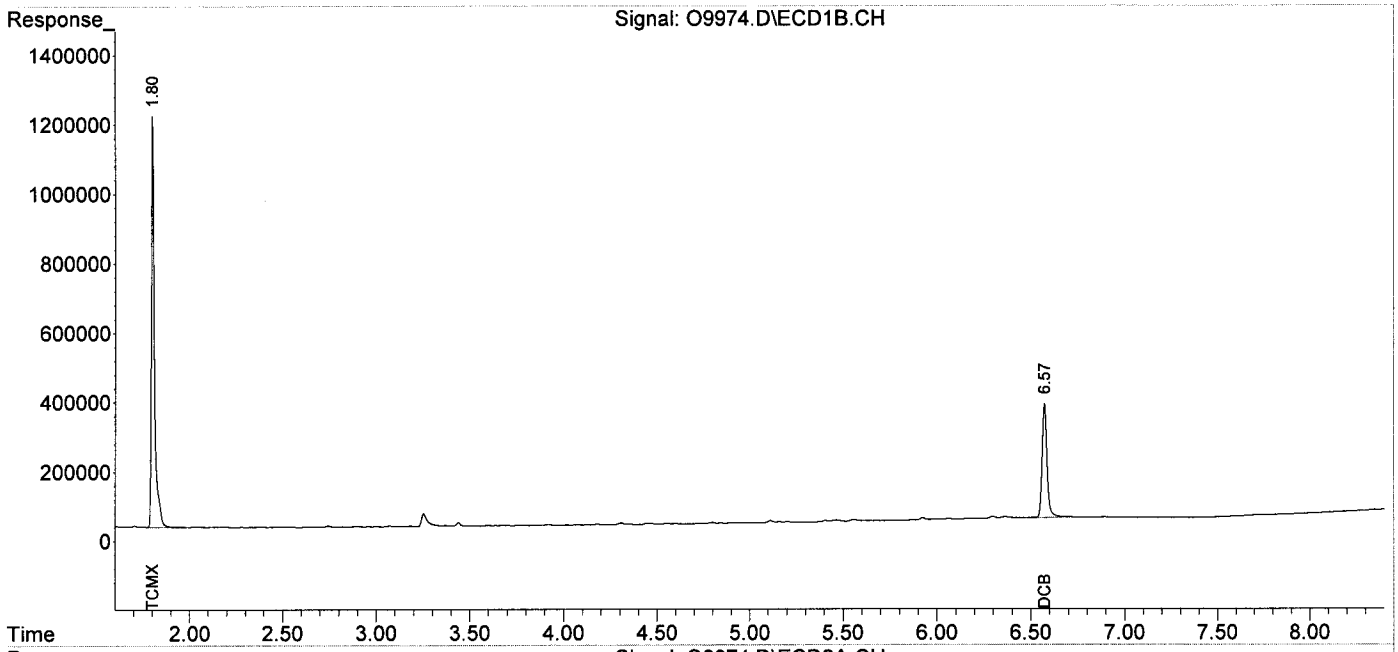
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

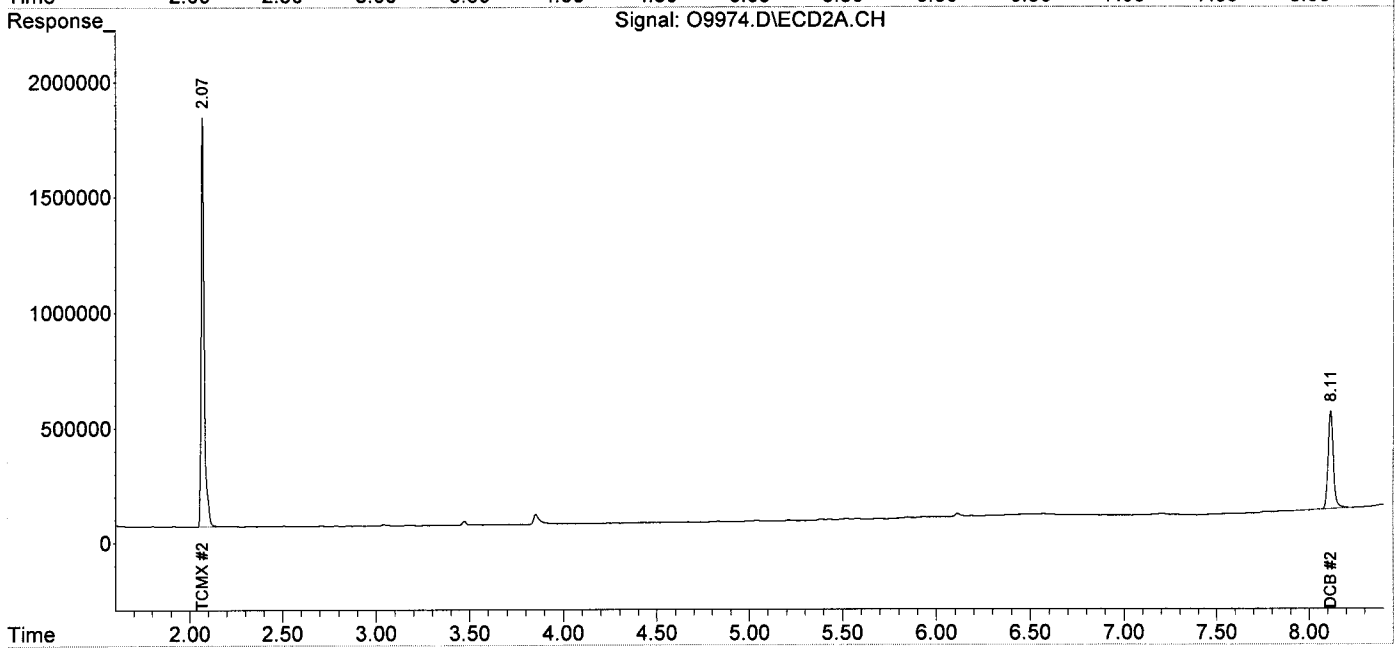
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9974.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:29
Operator : IB
Sample : E-1_(4.5,E15-05428-017,S,30.61g,18.6,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:13:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9975.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:41
Operator : IB
Sample : E-2_(0.5,E15-05428-020,S,30.08g,23.0,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:13:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	11253152	18156800	114.100	128.321
Spiked Amount 200.000	Range 10 - 180		Recovery =		57.05%	64.16%
2) S DCB	6.57	8.12	6883713	10230048	147.604m	169.197
Spiked Amount 200.000	Range 10 - 180		Recovery =		73.80%	84.60%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

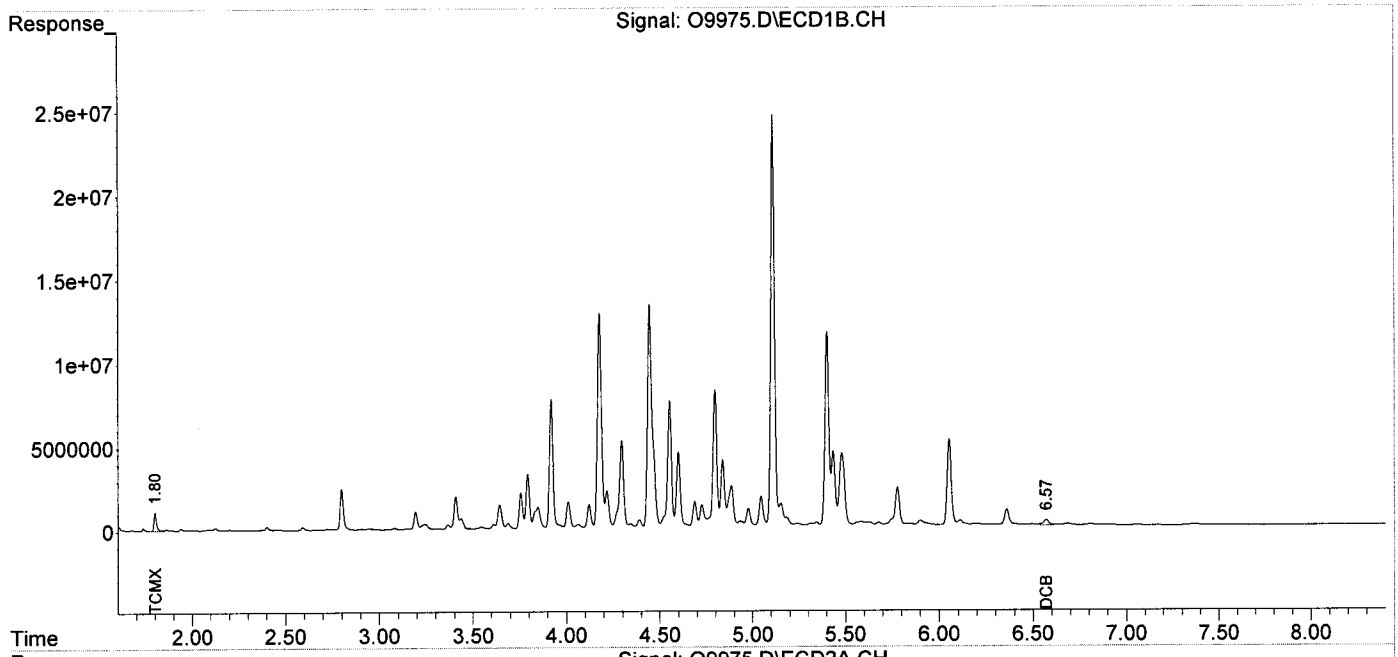
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

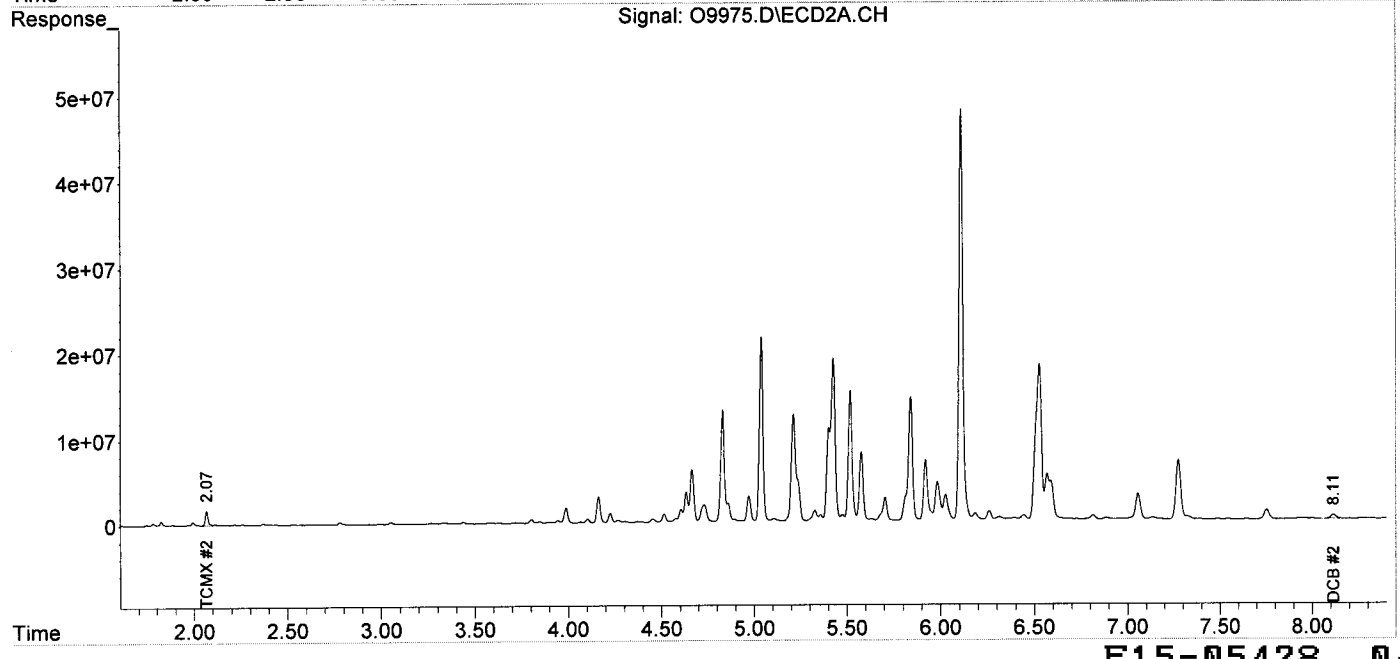
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9975.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:41
Operator : IB
Sample : E-2_(0.5,E15-05428-020,S,30.08g,23.0,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:13:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0499

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9976.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:54
Operator : IB
Sample : E-2_(2.0,E15-05428-021,S,30.66g,10.9,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:14:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13667131	21326106	138.576	150.720
Spiked Amount 200.000	Range 10 - 180		Recovery =		69.29%	75.36%
2) S DCB	6.57	8.12	7717447	10683233	165.481	176.693
Spiked Amount 200.000	Range 10 - 180		Recovery =		82.74%	88.35%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

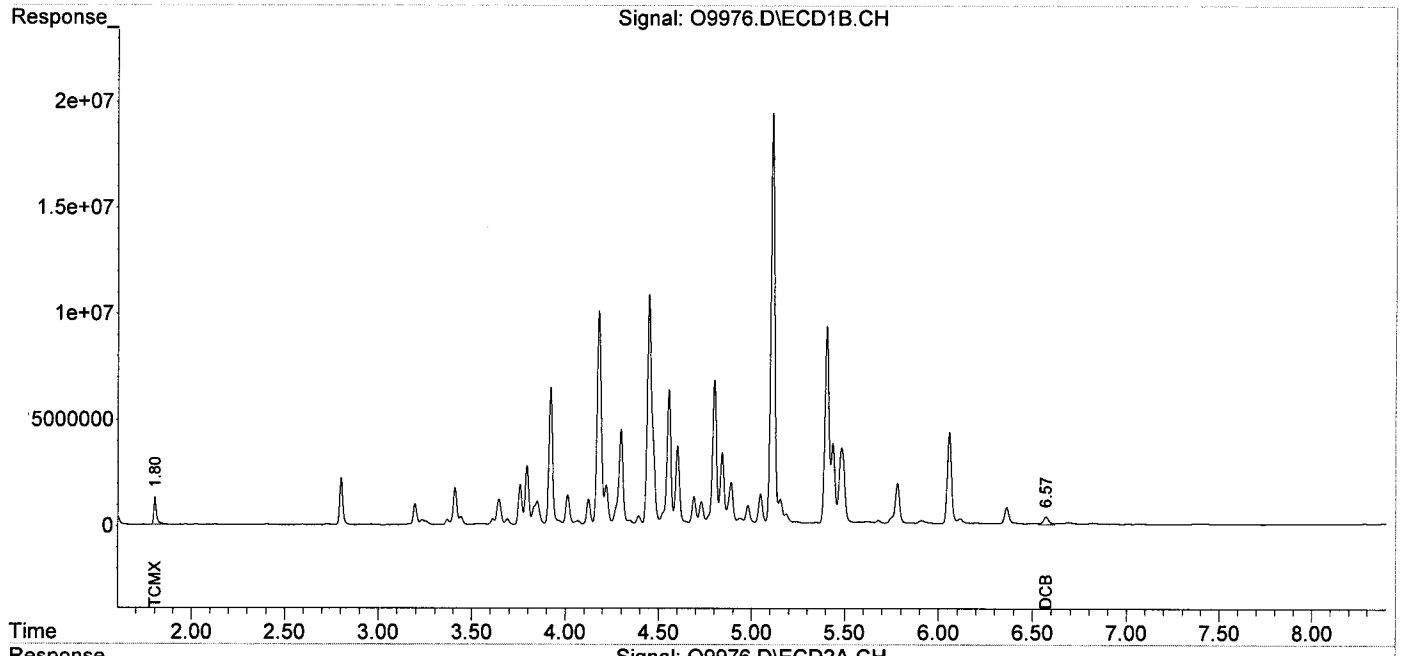
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

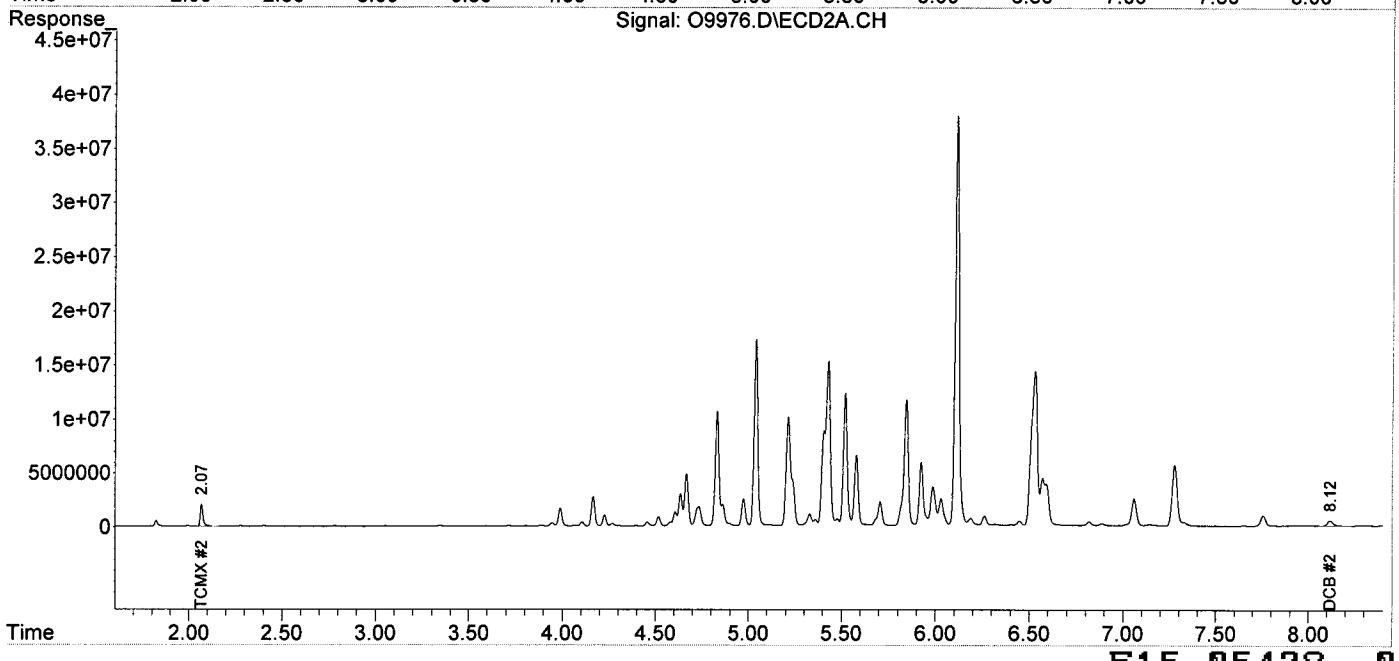
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9976.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 14:54
Operator : IB
Sample : E-2_(2.0,E15-05428-021,S,30.66g,10.9,5
Misc : 150701-07,07/01/15,06/24/15,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 15:14:30 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0002.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:37
Operator : IB
Sample : E-2_(3.0,E15-05428-022,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:51:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	12883045	20100632	130.626	142.059
Spiked Amount 200.000	Range 10 - 180		Recovery =		65.31%	71.03%
2) S DCB	6.57	8.12	7497449	11057517	160.764	182.883
Spiked Amount 200.000	Range 10 - 180		Recovery =		80.38%	91.44%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

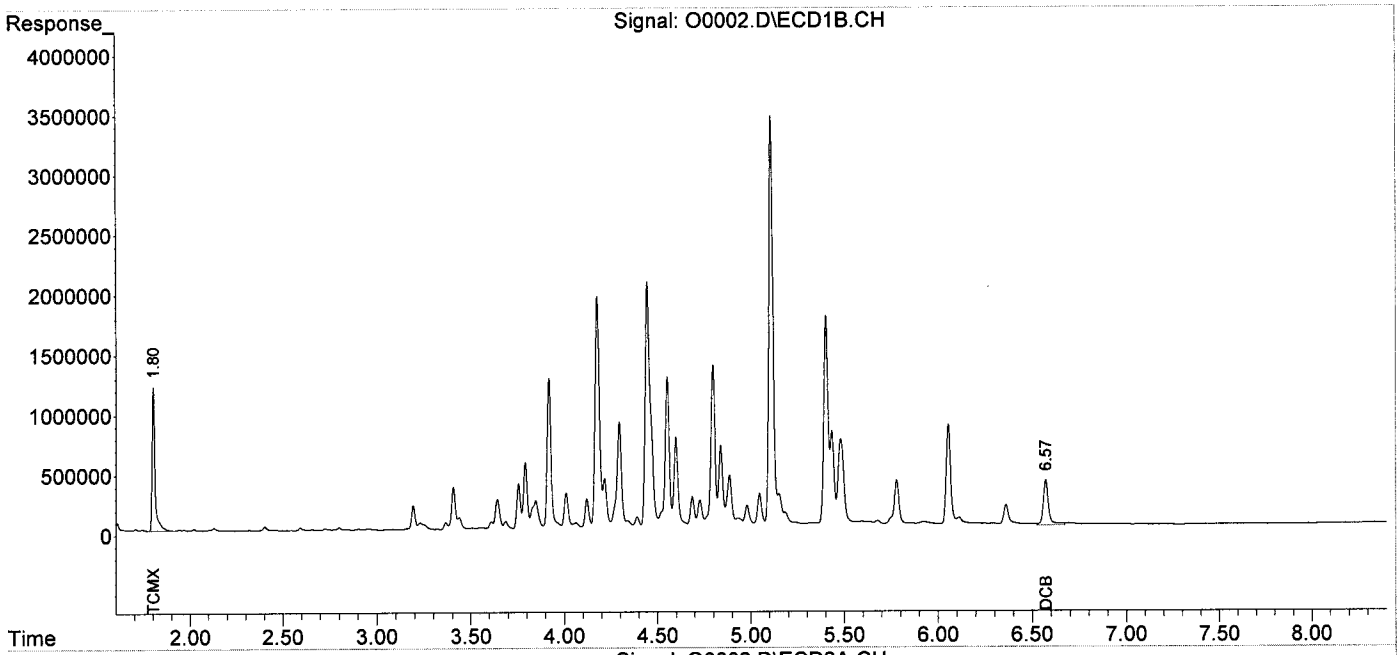
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

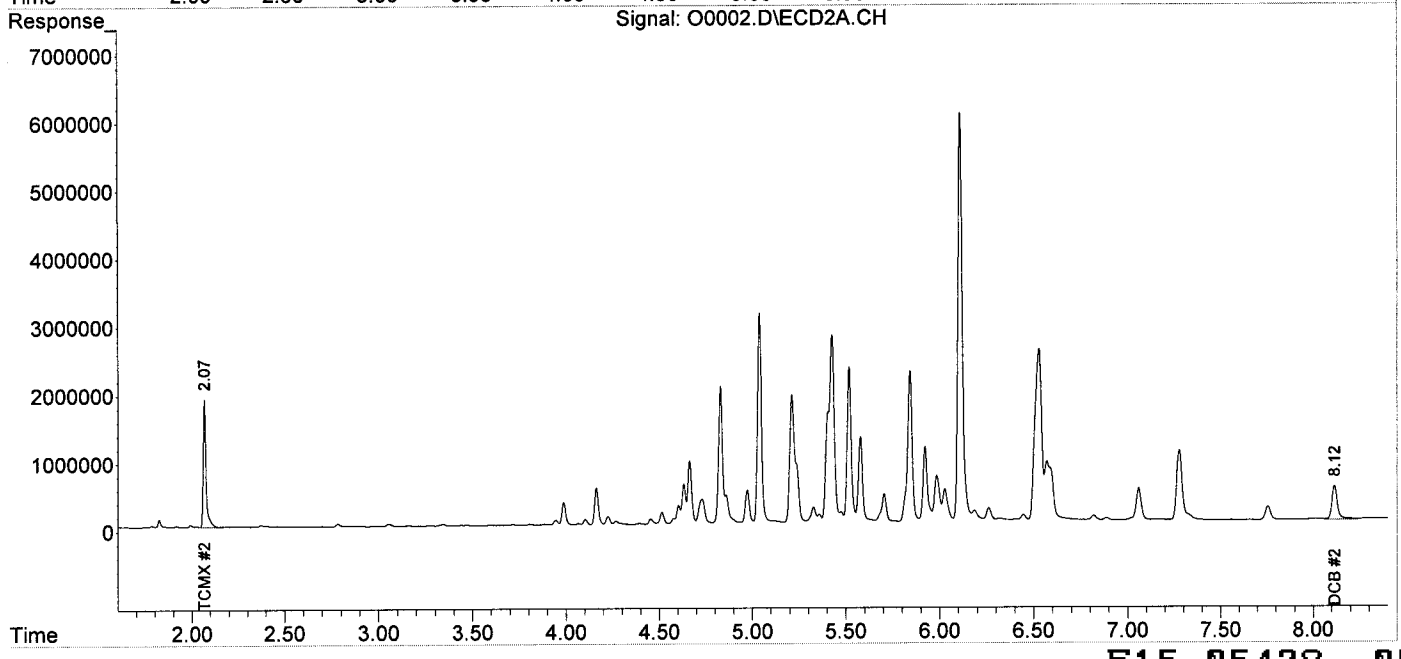
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0002.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:37
Operator : IB
Sample : E-2_(3.0,E15-05428-022,S,30.13g,7.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:51:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428 0503

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : 00003.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:49
Operator : IB
Sample : E-2_(4.0,E15-05428-023,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:52:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13809222	21543718	140.017	152.258
Spiked Amount 200.000	Range 10 - 180		Recovery =		70.01%	76.13%
2) S DCB	6.57	8.12	9663719	11877081	207.214	196.438
Spiked Amount 200.000	Range 10 - 180		Recovery =		103.61%	98.22%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

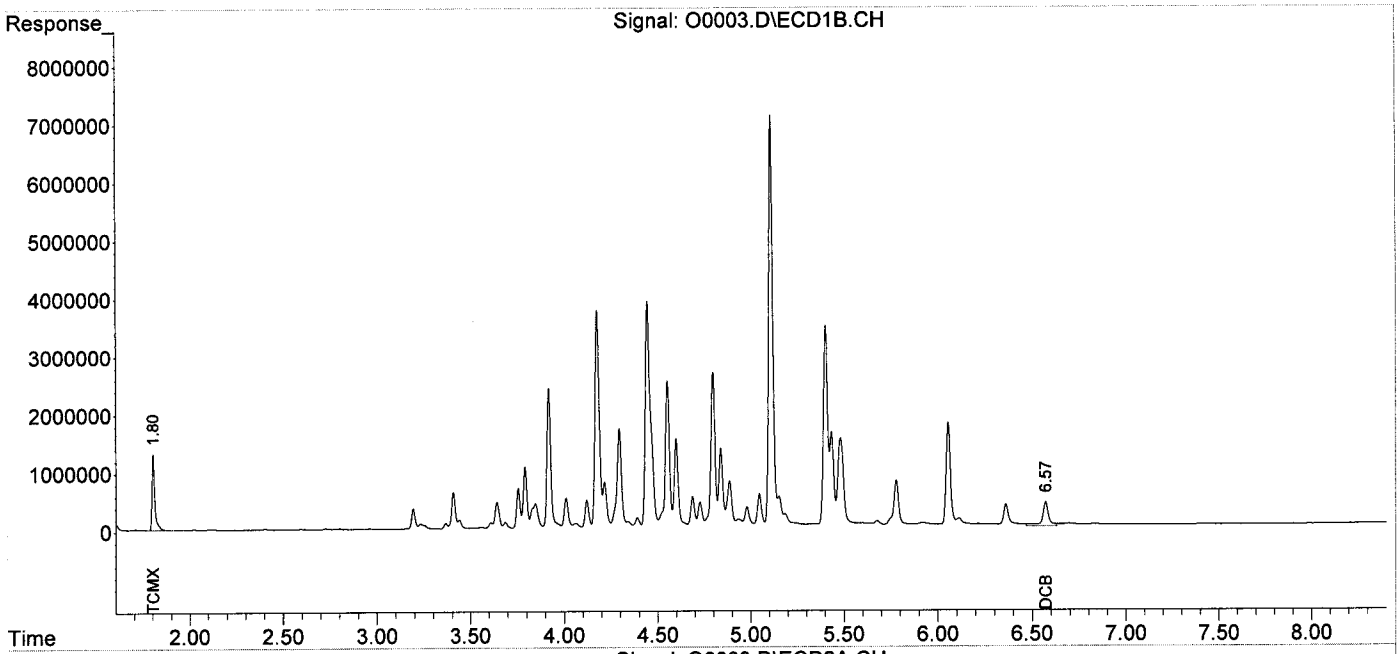
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

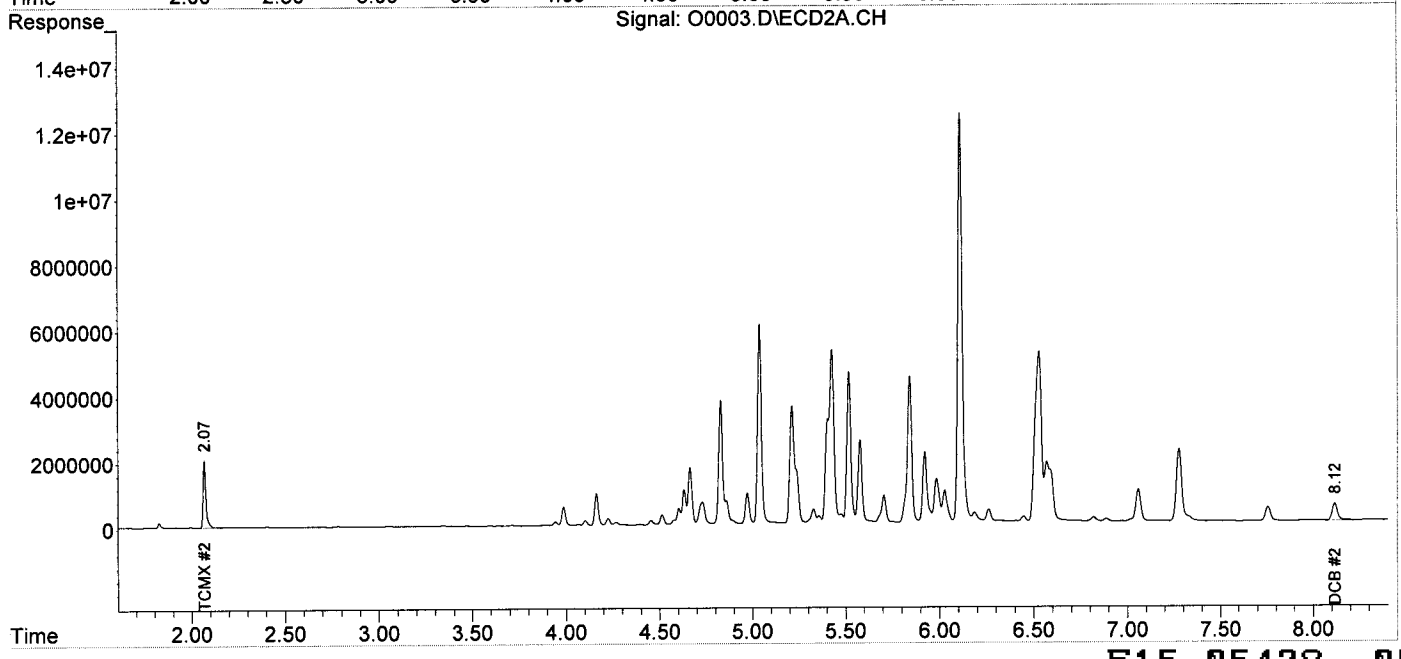
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0003.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:49
Operator : IB
Sample : E-2_(4.0,E15-05428-023,S,30.70g,8.40,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:52:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0505

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : 00004.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:02
Operator : IB
Sample : E-7_(0.5,E15-05428-026,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:53:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	13340581	21084158	135.265	149.010
Spiked Amount 200.000	Range 10 - 180		Recovery =		67.63%	74.50%
2) S DCB	6.57	8.12	8704604	17407342	186.648m	287.905 #
Spiked Amount 200.000	Range 10 - 180		Recovery =		93.32%	143.95%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

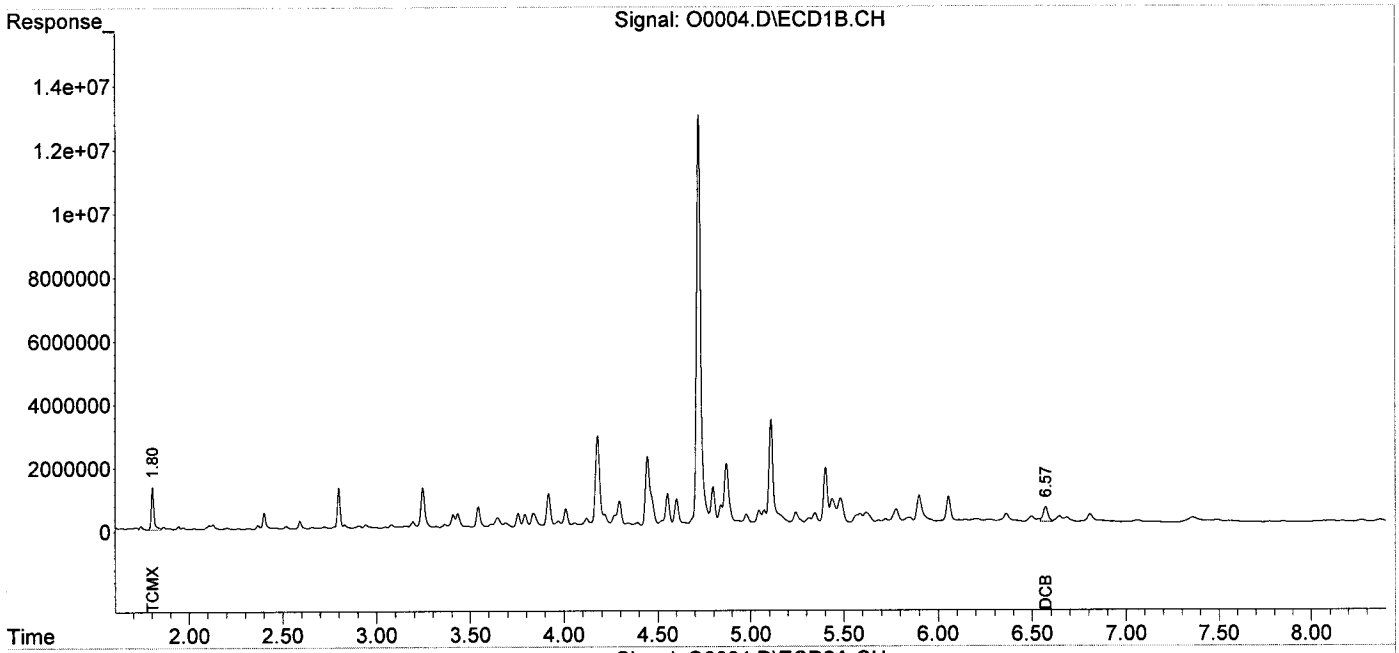
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

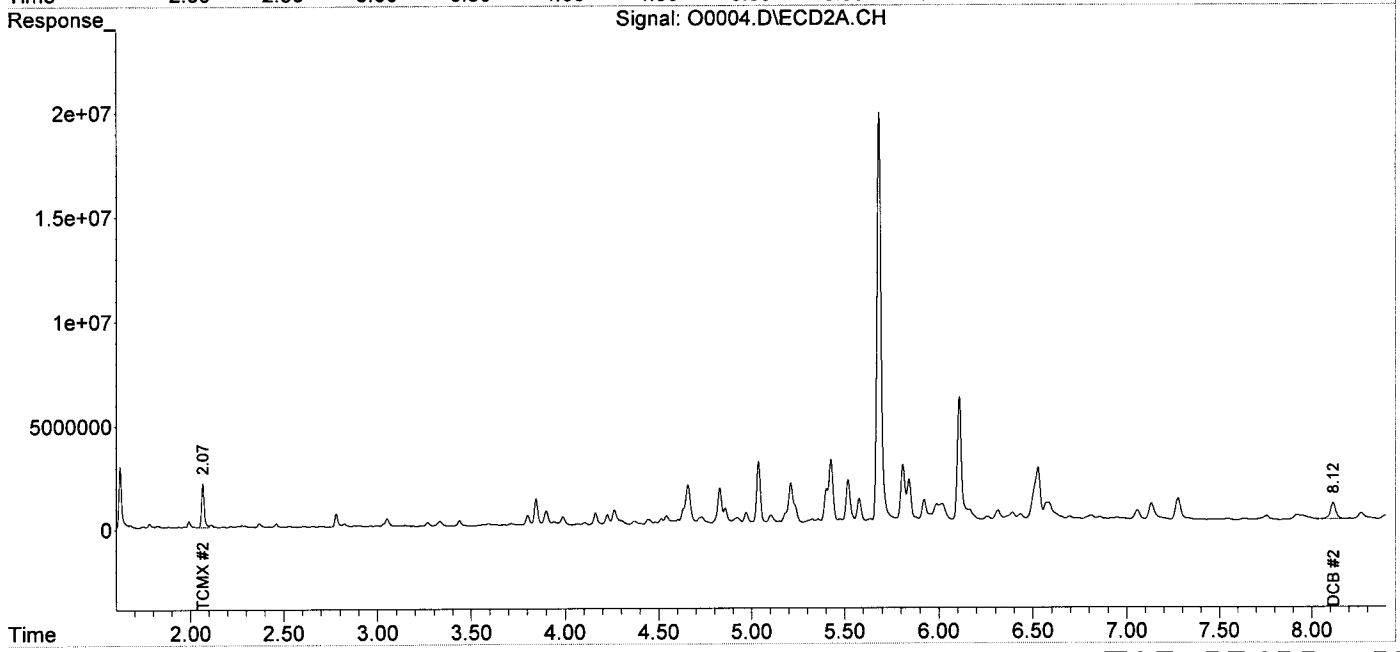
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0004.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:02
Operator : IB
Sample : E-7_(0.5,E15-05428-026,S,30.58g,12.5,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:53:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0507

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0005.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:15
Operator : IB
Sample : E-7_(2.0,E15-05428-027,S,30.39g,4.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:54:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	16253531	25579999	164.800	180.784
Spiked Amount 200.000	Range 10 - 180		Recovery =		82.40%	90.39%
2) S DCB	6.57	8.11	9282401	11594384	199.037m	191.763m
Spiked Amount 200.000	Range 10 - 180		Recovery =		99.52%	95.88%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

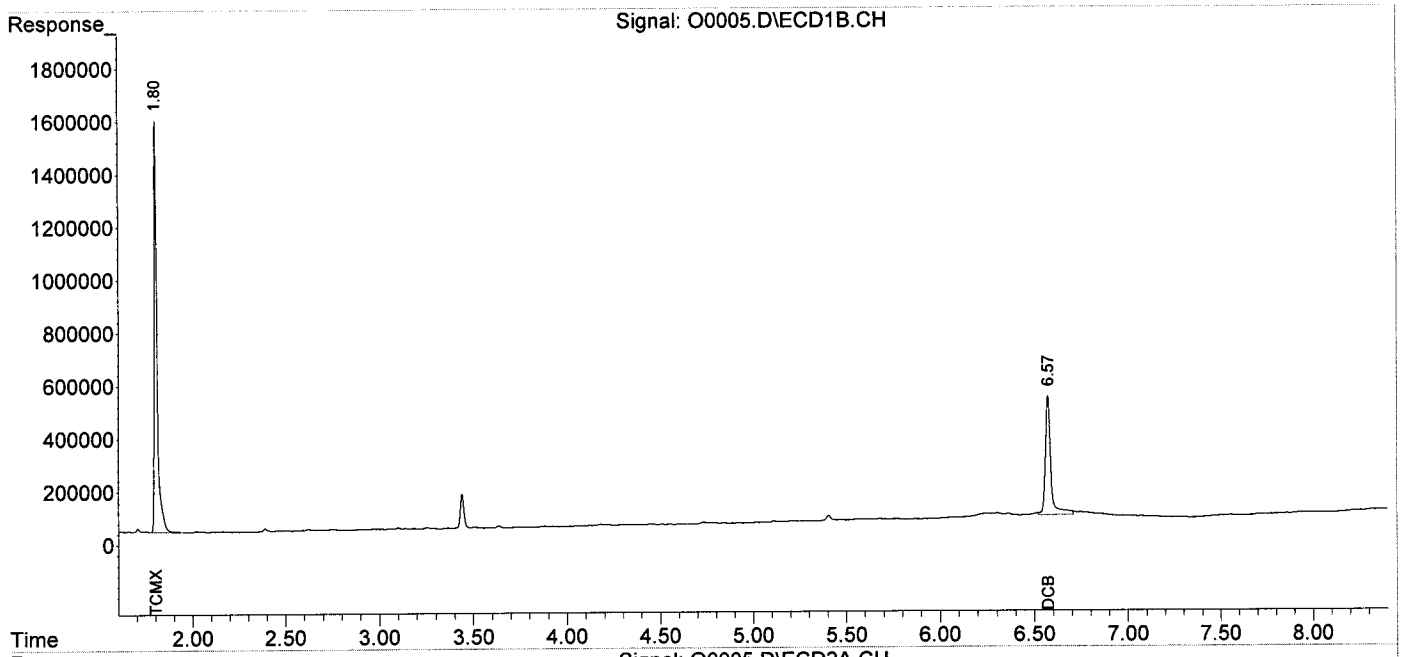
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

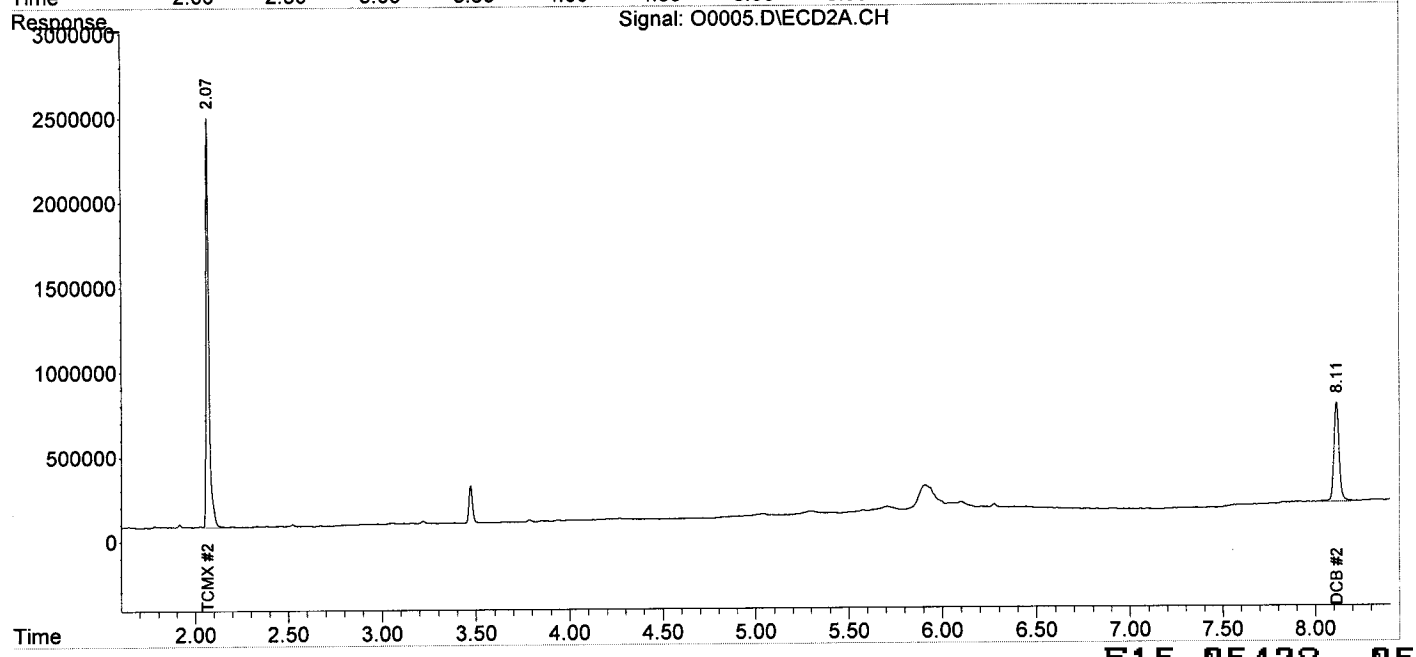
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0005.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:15
Operator : IB
Sample : E-7_(2.0,E15-05428-027,S,30.39g,4.90,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:54:07 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : 00006.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:27
Operator : IB
Sample : E-7_(3.0,E15-05428-028,S,30.47g,10.2,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:54:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	15869518	24389758	160.907	172.372
Spiked Amount 200.000	Range 10 - 180		Recovery =		80.45%	86.19%
2) S DCB	6.57	8.12	8618048	12484954	184.792	206.492m
Spiked Amount 200.000	Range 10 - 180		Recovery =		92.40%	103.25%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

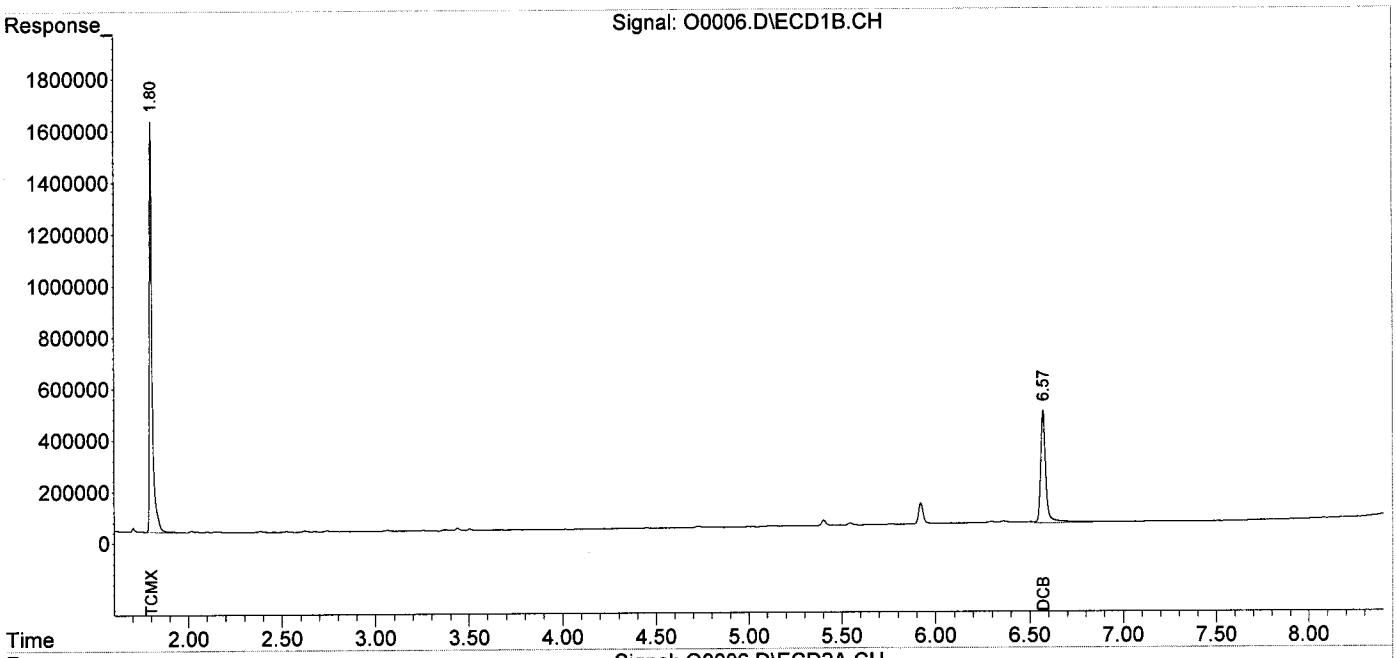
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

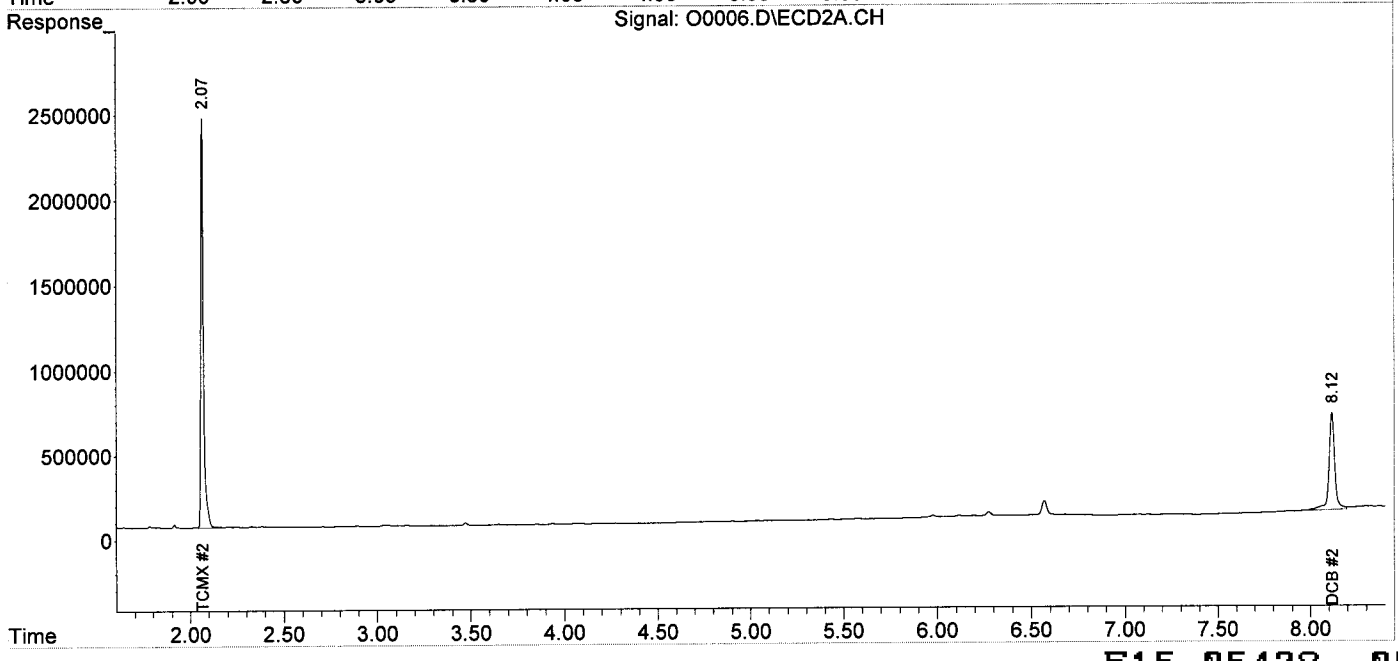
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0006.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:27
Operator : IB
Sample : E-7_(3.0,E15-05428-028,S,30.47g,10.2,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:54:42 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0511

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0007.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:40
Operator : IB
Sample : E-7_(4.5,E15-05428-029,S,30.63g,11.8,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:55:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	15799055	25030936	160.192	176.903
Spiked Amount 200.000	Range 10 - 180		Recovery =		80.10%	88.45%
2) S DCB	6.57	8.12	8787775	11374523	188.431	188.126
Spiked Amount 200.000	Range 10 - 180		Recovery =		94.22%	94.06%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

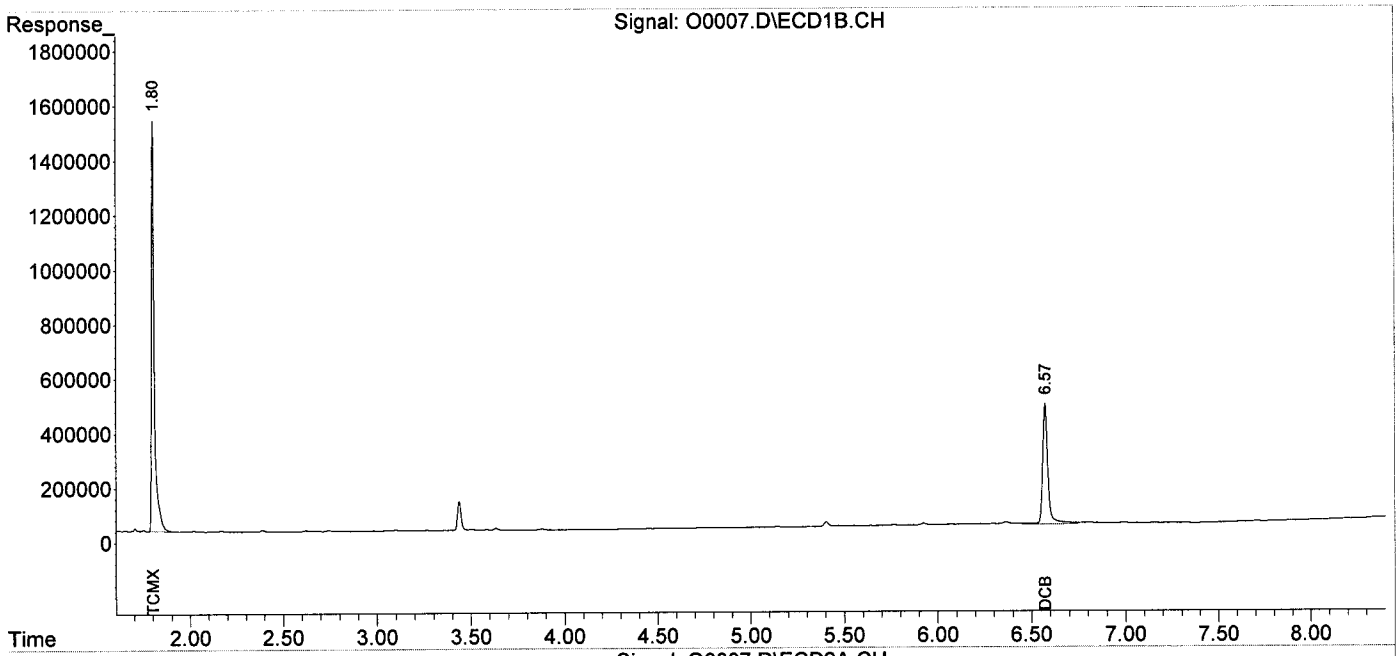
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

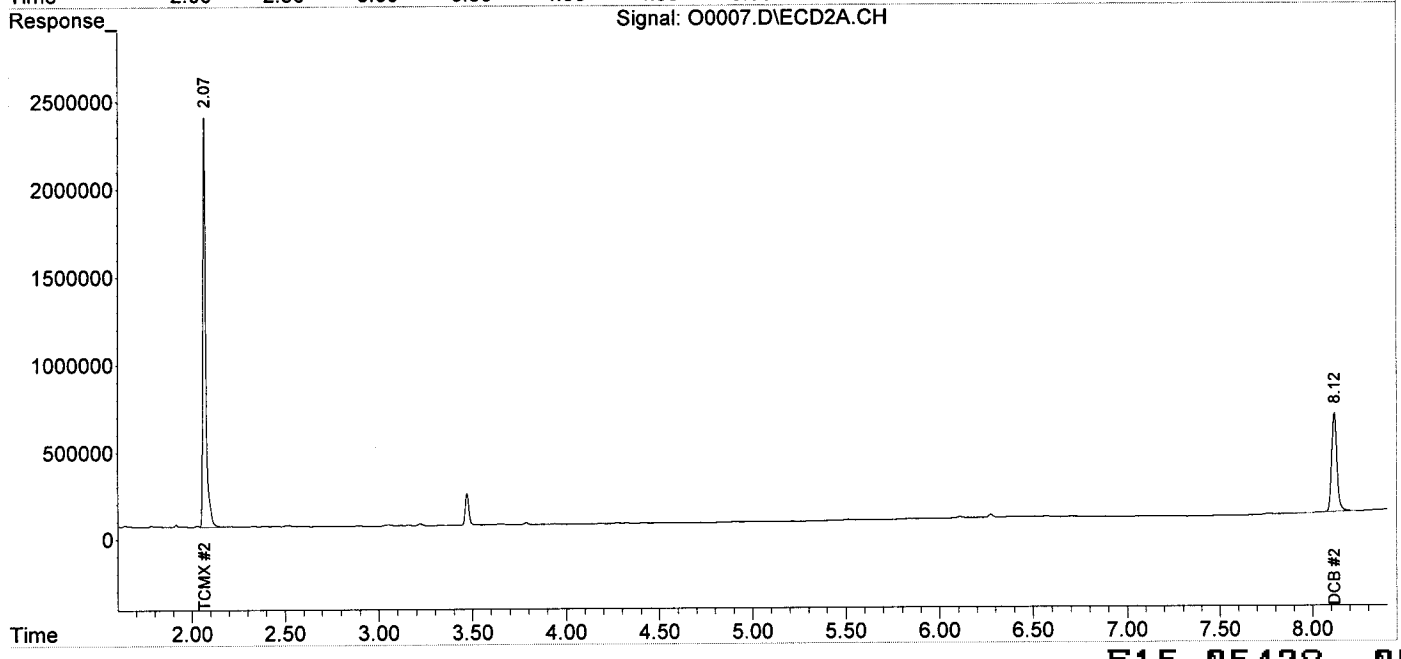
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O0007.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 12:40
Operator : IB
Sample : E-7_(4.5,E15-05428-029,S,30.63g,11.8,5
Misc : 150701-11,07/01/15,06/24/15,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 13:55:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





E15-05428_0513

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : 09875.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:14
Operator : IB
Sample : FB-06231,E15-05428-030,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:46:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	17254096	25832459	174.945	182.568
Spiked Amount 200.000	Range 10 - 180		Recovery =		87.47%	91.28%
2) S DCB	6.58	8.12	5677427	6771845	121.738	112.001
Spiked Amount 200.000	Range 10 - 180		Recovery =		60.87%	56.00%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

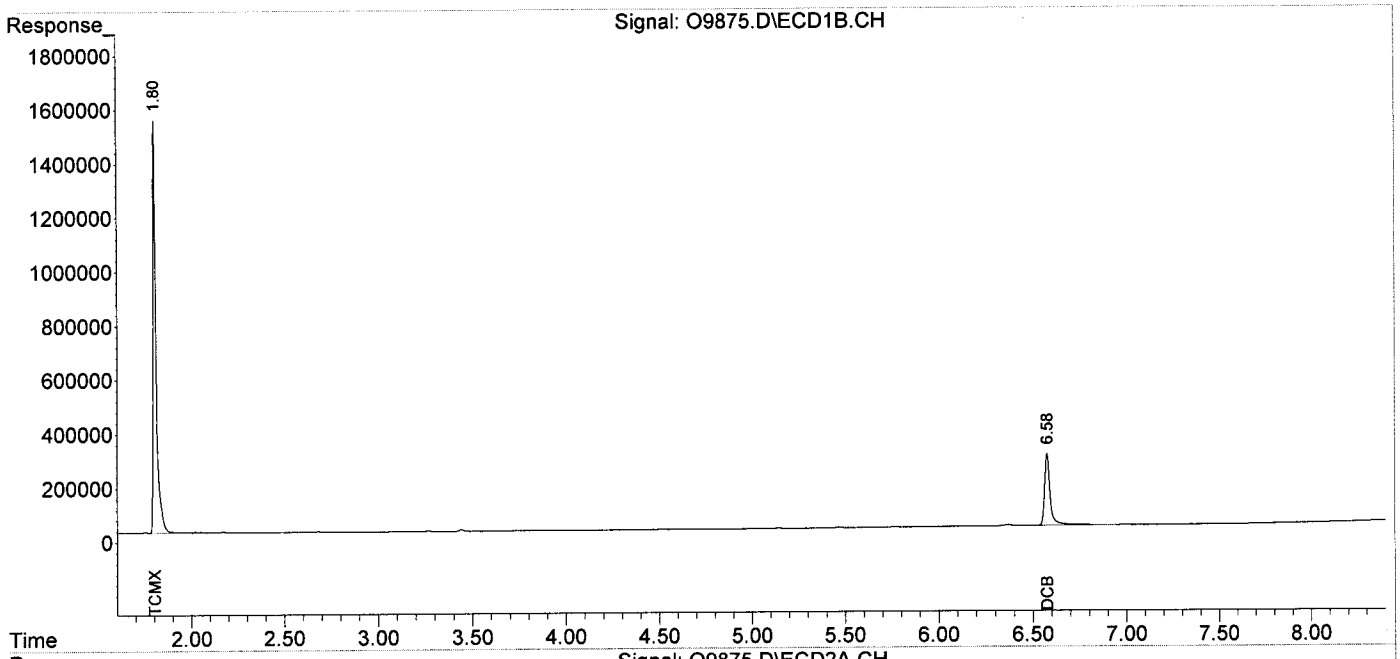
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

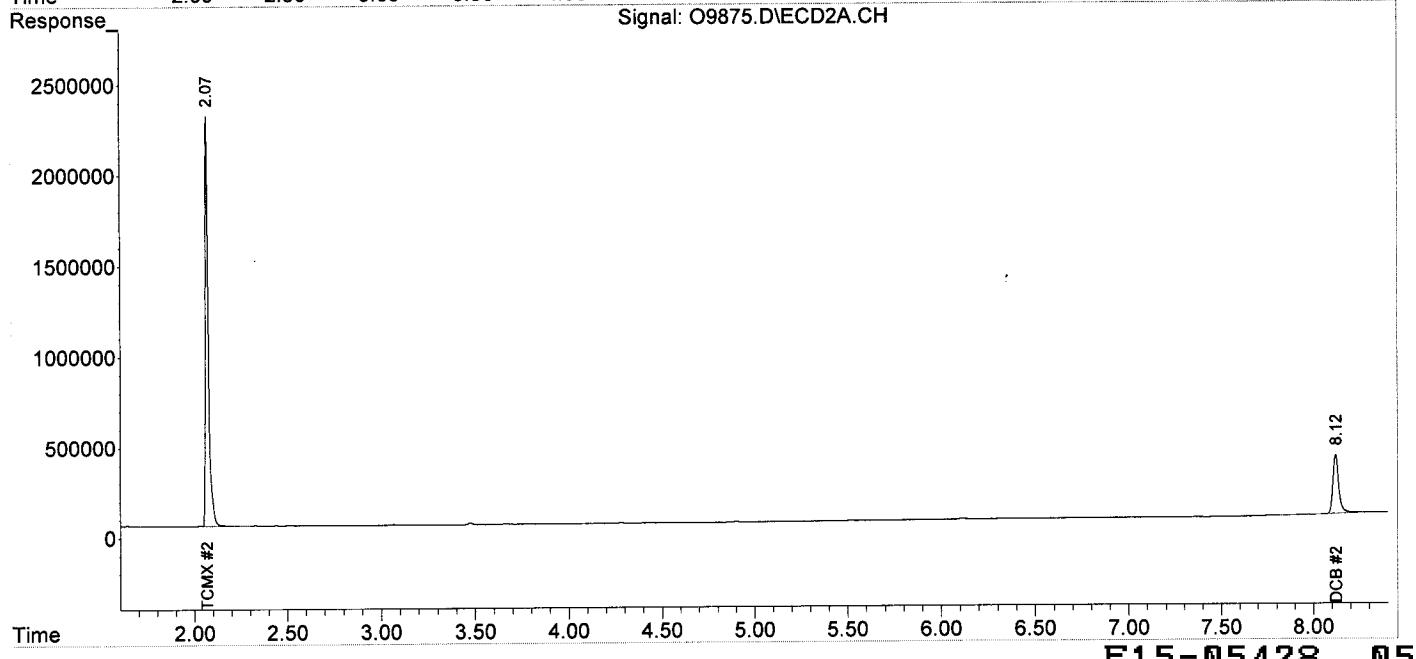
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9875.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:14
Operator : IB
Sample : FB-06231,E15-05428-030,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:46:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9877.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:39
Operator : IB
Sample : FB-06241,E15-05428-032,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:47:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	16809998	25073526	170.443	177.204
Spiked Amount 200.000	Range 10 - 180		Recovery =		85.22%	88.60%
2) S DCB	6.58	8.12	5394478	6247020	115.671	103.321
Spiked Amount 200.000	Range 10 - 180		Recovery =		57.84%	51.66%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

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

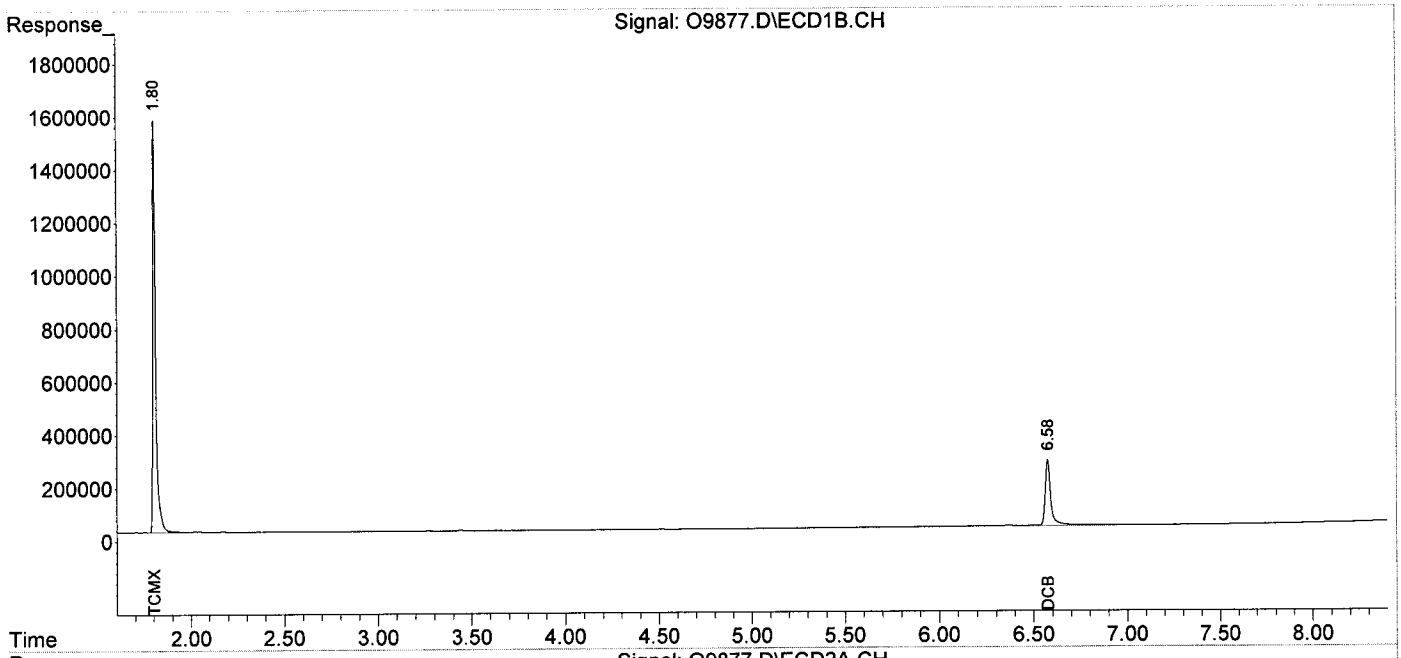
E15-05428_0516

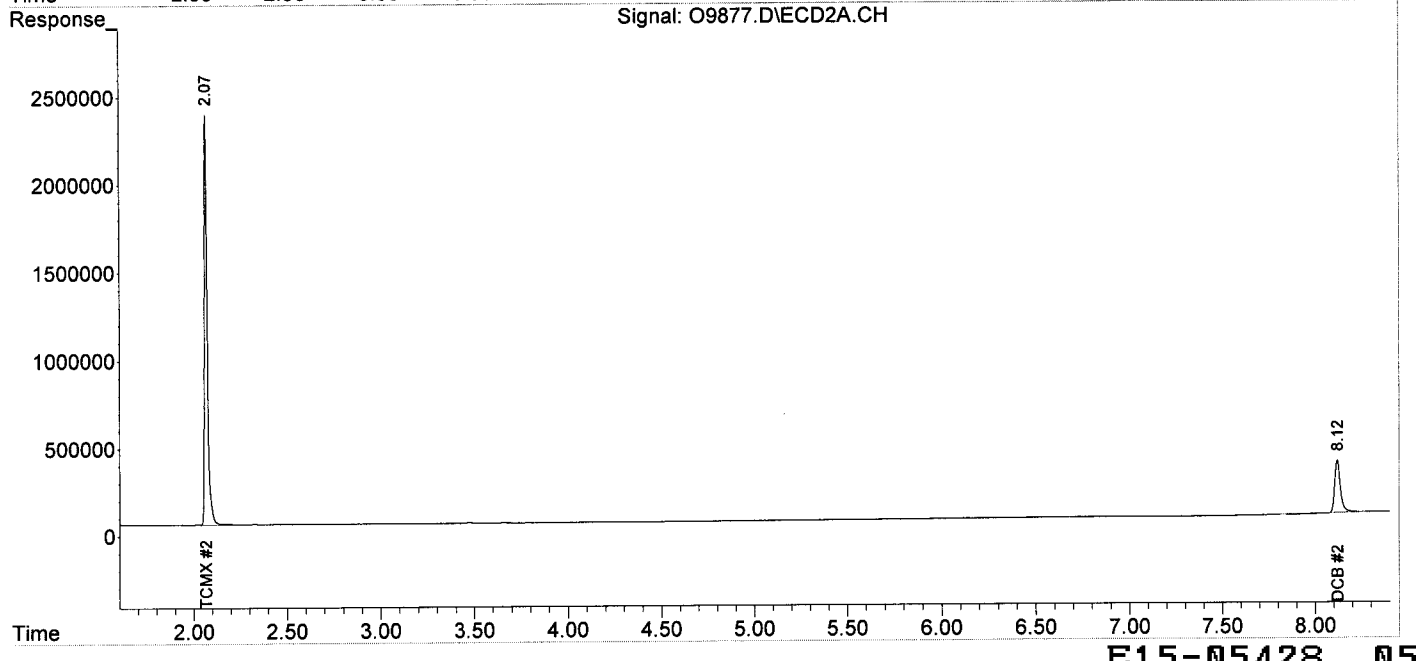
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9877.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 17:39
Operator : IB
Sample : FB-06241,E15-05428-032,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/24/15,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:47:25 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150625-13
Client ID: Pest
Date Received: NA
Date Extracted: 06/25/2015
Date Analyzed: 06/25/2015
Data file: V0881.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05428 0518

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150701-11
Client ID: Pest
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/07/2015
Data file: O9999.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-25-15\
Data File : V0881.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jun 2015 16:01
Operator : IB
Sample : Pest,BLKS150625-13,S,30g,0,5
Misc : NA,06/25/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 26 08:44:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0611.M
Quant Title :
QLast Update : Thu Jun 25 09:04:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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

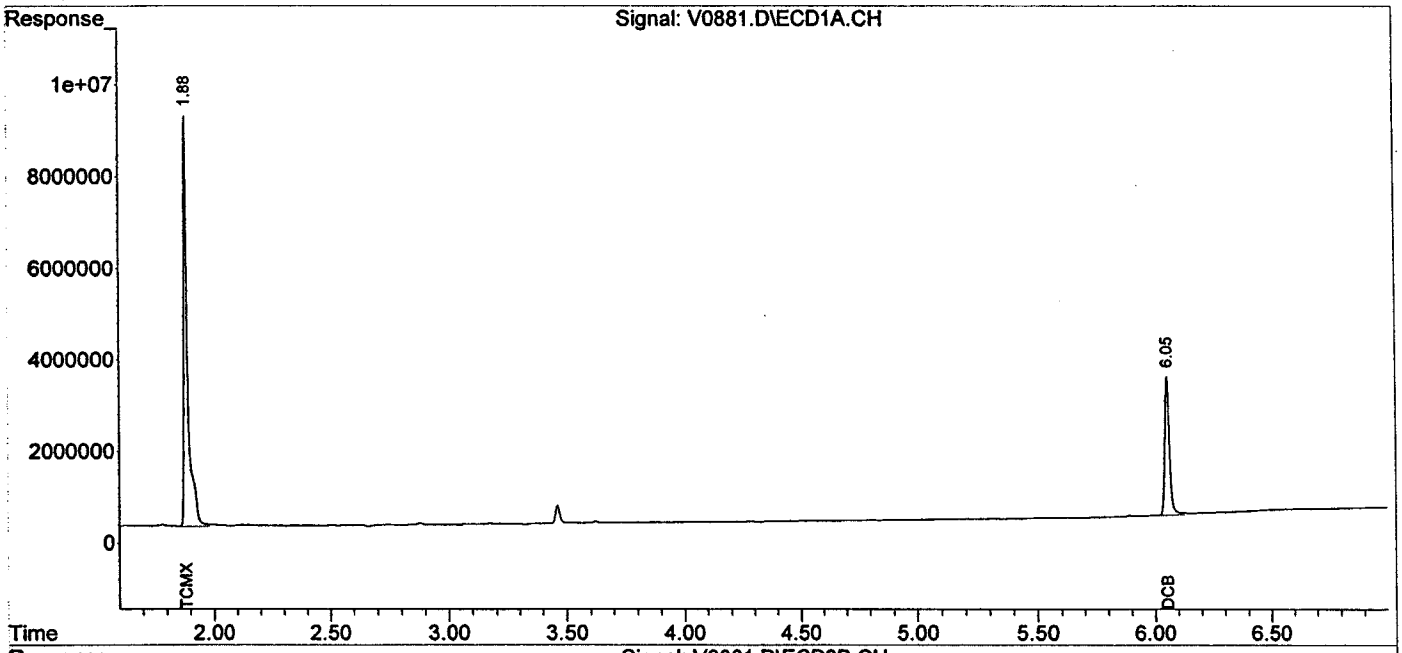
Compound		RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds							
1) S TCMX		1.88	2.03	103.5E6	29942753	126.812	145.699
Spiked Amount	200.000			Recovery	=	63.41%	72.85%
2) S DCB		6.05	6.67	42530742	12240973	148.628	145.241
Spiked Amount	200.000			Recovery	=	74.31%	72.62%
Target Compounds							
Sum Chlordane				0	0	N.D.	N.D.
Average Chlordane						0.000	0.000
Sum Toxaphene				0	0	N.D.	N.D.
Average Toxaphene						0.000	0.000

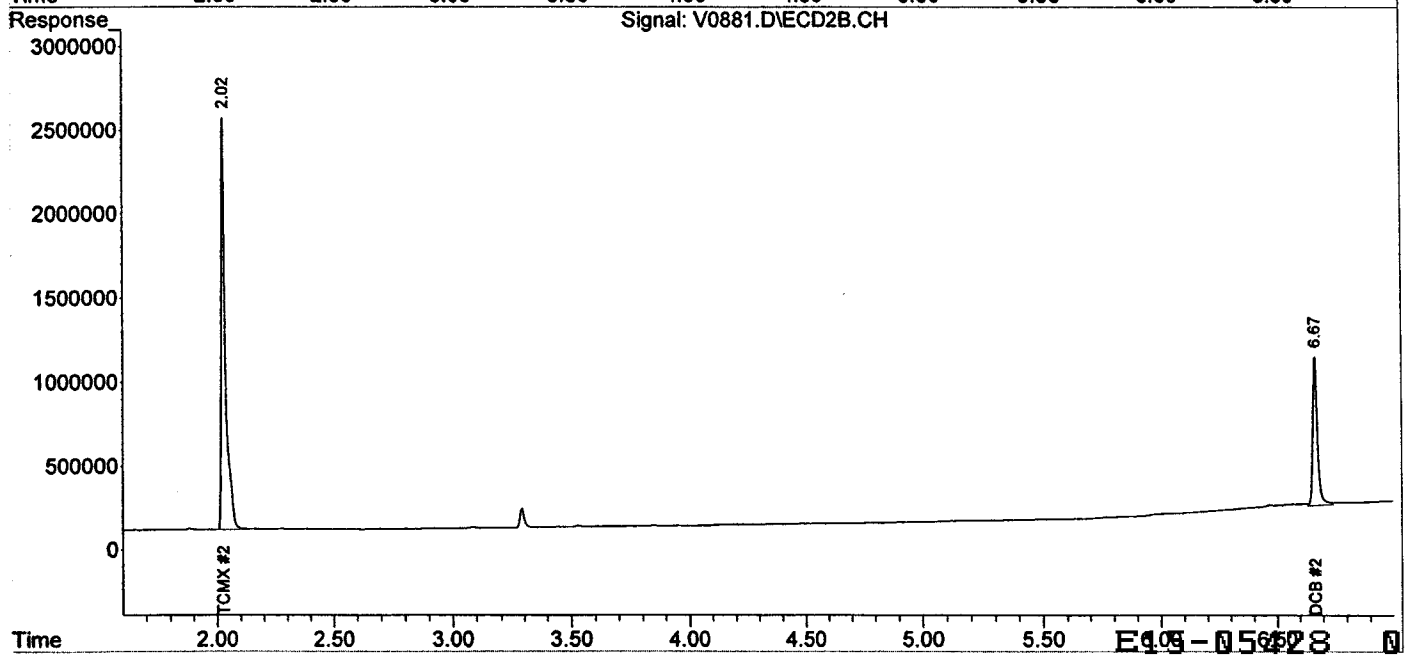
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\06-25-15\
Data File : V0881.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Jun 2015 16:01
Operator : IB
Sample : Pest,BLKS150625-13,S,30g,0,5
Misc : NA,06/25/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jun 26 08:44:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\VPST0611.M
Quant Title :
QLast Update : Thu Jun 25 09:04:21 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





EPA-0528 0521

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : 09999.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:11
Operator : IB
Sample : Pest,BLKS150701-11,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:27:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	17982878	27705465	182.335	195.805
Spiked Amount 200.000	Range 10 - 180		Recovery =		91.17%	97.90%
2) S DCB	6.57	8.12	8927587	11436781	191.429	189.156
Spiked Amount 200.000	Range 10 - 180		Recovery =		95.71%	94.58%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

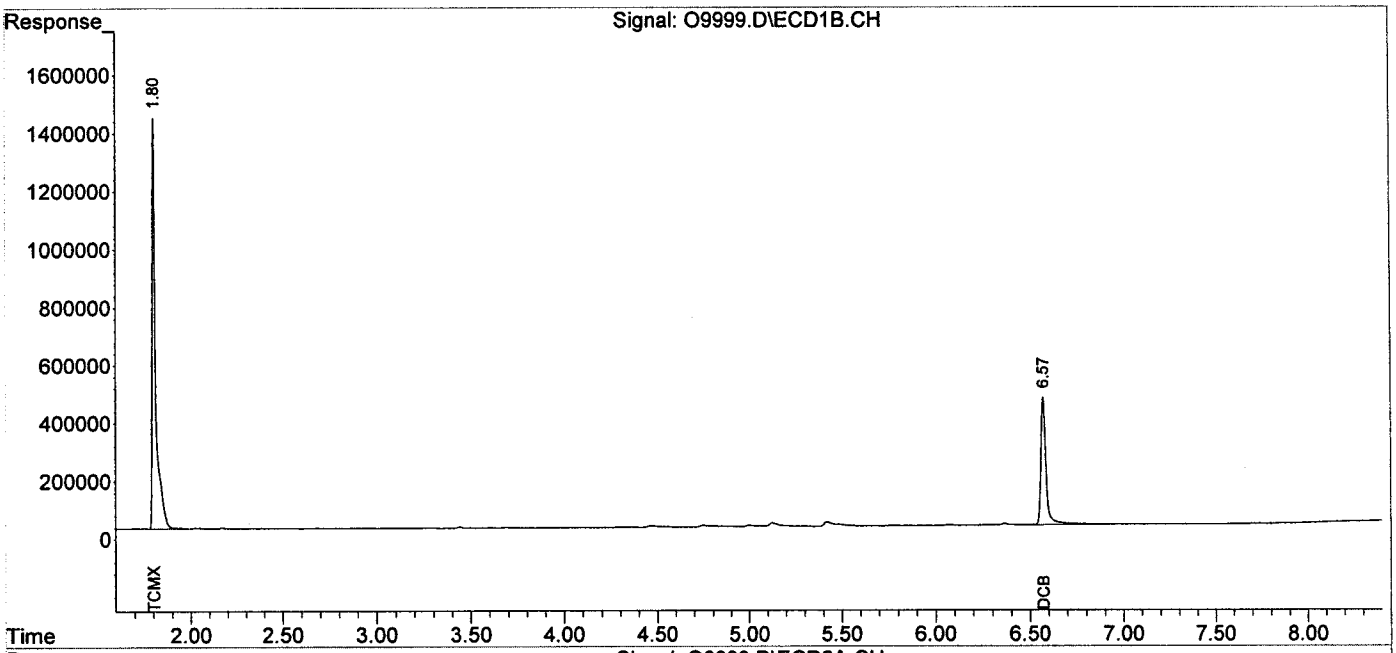
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

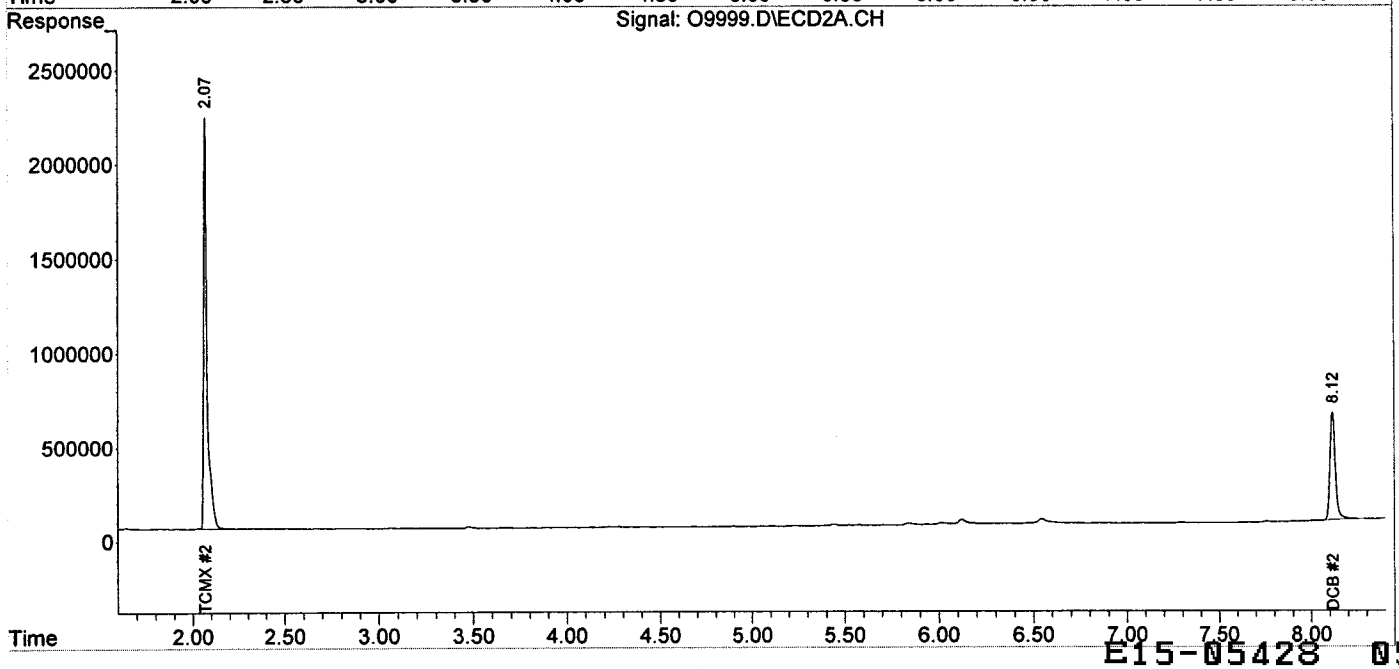
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-07-15\
Data File : O9999.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 11:11
Operator : IB
Sample : Pest,BLKS150701-11,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 11:27:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jul 07 10:45:37 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKA150629-16
Client ID: Pest
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: O9870.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.010	0.005
beta-BHC	ND		0.010	0.005
gamma-BHC (Lindane)	ND		0.010	0.005
delta-BHC	ND		0.010	0.005
Heptachlor	ND		0.010	0.005
Aldrin	ND		0.010	0.005
Heptachlor epoxide	ND		0.010	0.005
Endosulfan I	ND		0.010	0.005
4,4'-DDE	ND		0.010	0.005
Dieldrin	ND		0.010	0.005
Endrin	ND		0.010	0.005
Endosulfan II	ND		0.010	0.005
4,4'-DDD	ND		0.010	0.005
Endrin aldehyde	ND		0.010	0.005
Endosulfan sulfate	ND		0.010	0.005
4,4'-DDT	ND		0.010	0.005
Endrin ketone	ND		0.010	0.005
Methoxychlor	ND		0.010	0.005
alpha-Chlordane	ND		0.010	0.005
gamma-Chlordane	ND		0.010	0.005
Toxaphene	ND		0.125	0.060
Endosulfan (I and II)	ND		0.010	0.005
Chlordane (alpha and gamma)	ND		0.010	0.005

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 16:11
Operator : IB
Sample : Pest,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:19:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	15012918	22619082	152.221	159.858
Spiked Amount 200.000	Range 10 - 180		Recovery =		76.11%	79.93%
2) S DCB	6.58	8.13	4069406	4632021	87.258	76.610
Spiked Amount 200.000	Range 10 - 180		Recovery =		43.63%	38.31%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

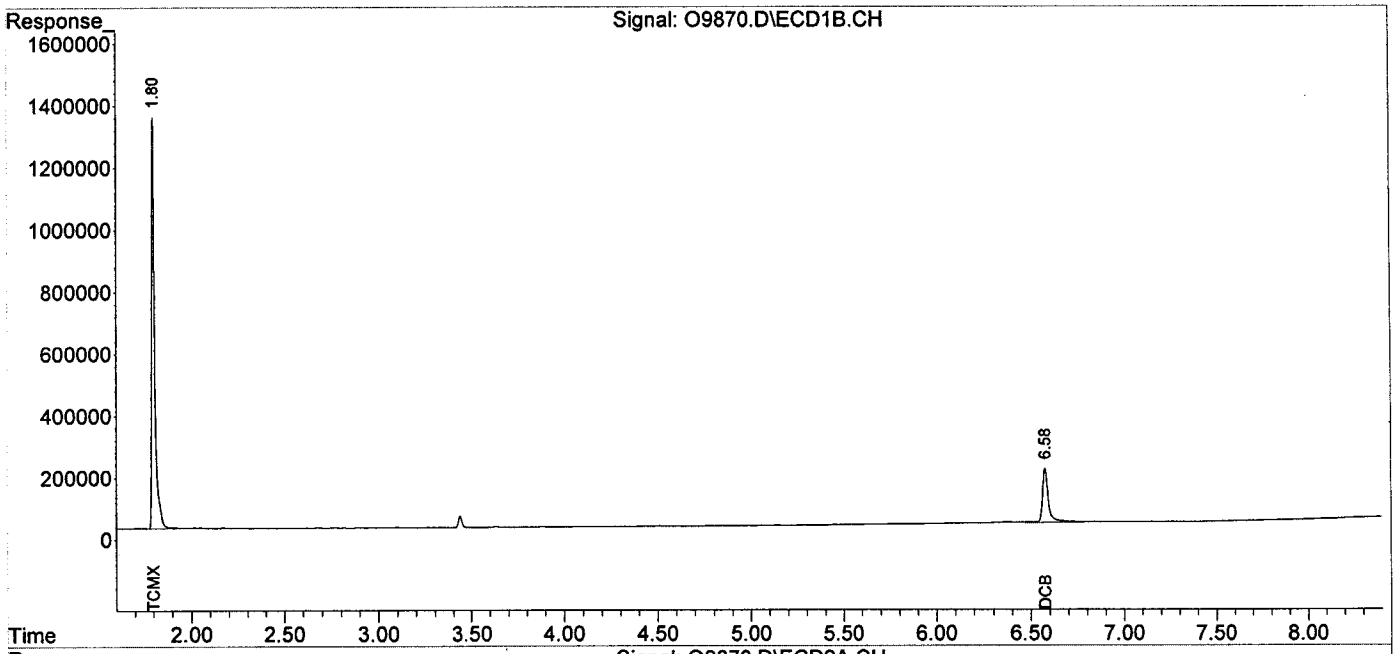
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

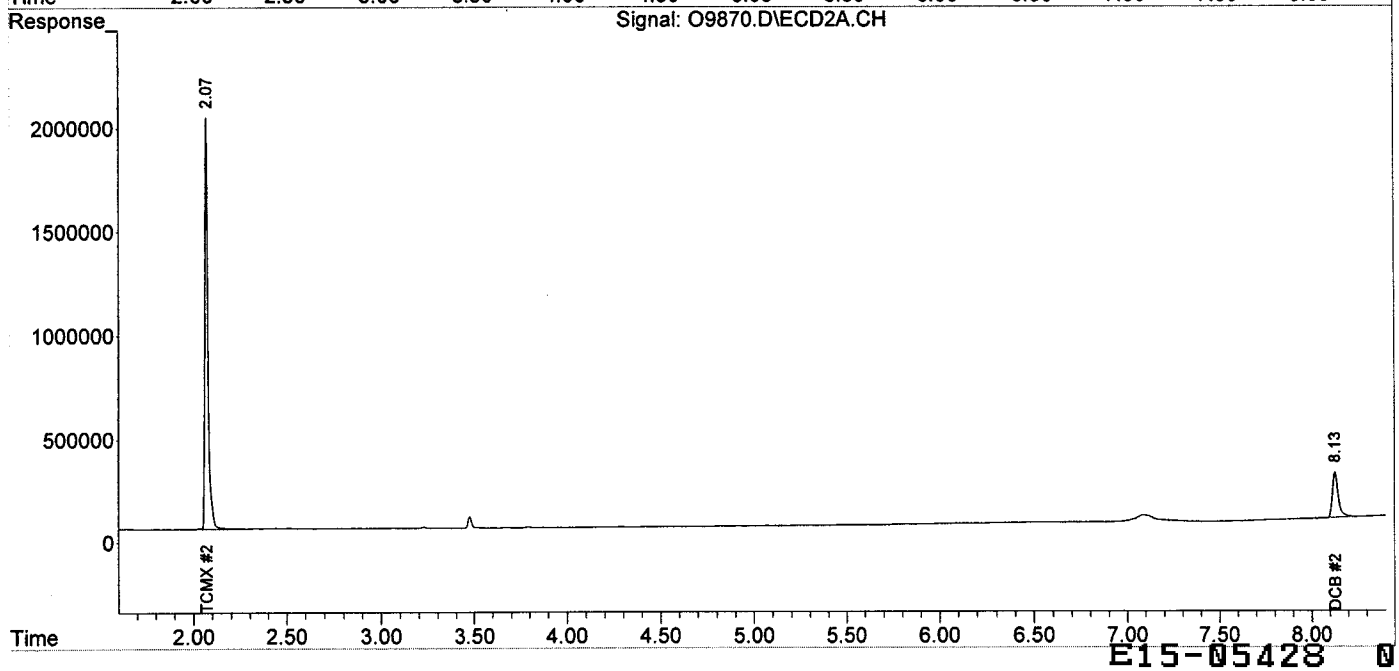
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : O9870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 16:11
Operator : IB
Sample : Pest,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 08:19:32 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Tue Jun 30 09:42:04 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS150701-07
Client ID: Pest
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: O9953.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9953.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:02
Operator : IB
Sample : Pest,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 10:53:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	1.80	2.07	14640098	22182062	148.441	156.769
Spiked Amount 200.000	Range 10 - 180		Recovery =		74.22%	78.38%
2) S DCB	6.57	8.13	7436809	9700727	159.463	160.443
Spiked Amount 200.000	Range 10 - 180		Recovery =		79.73%	80.22%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

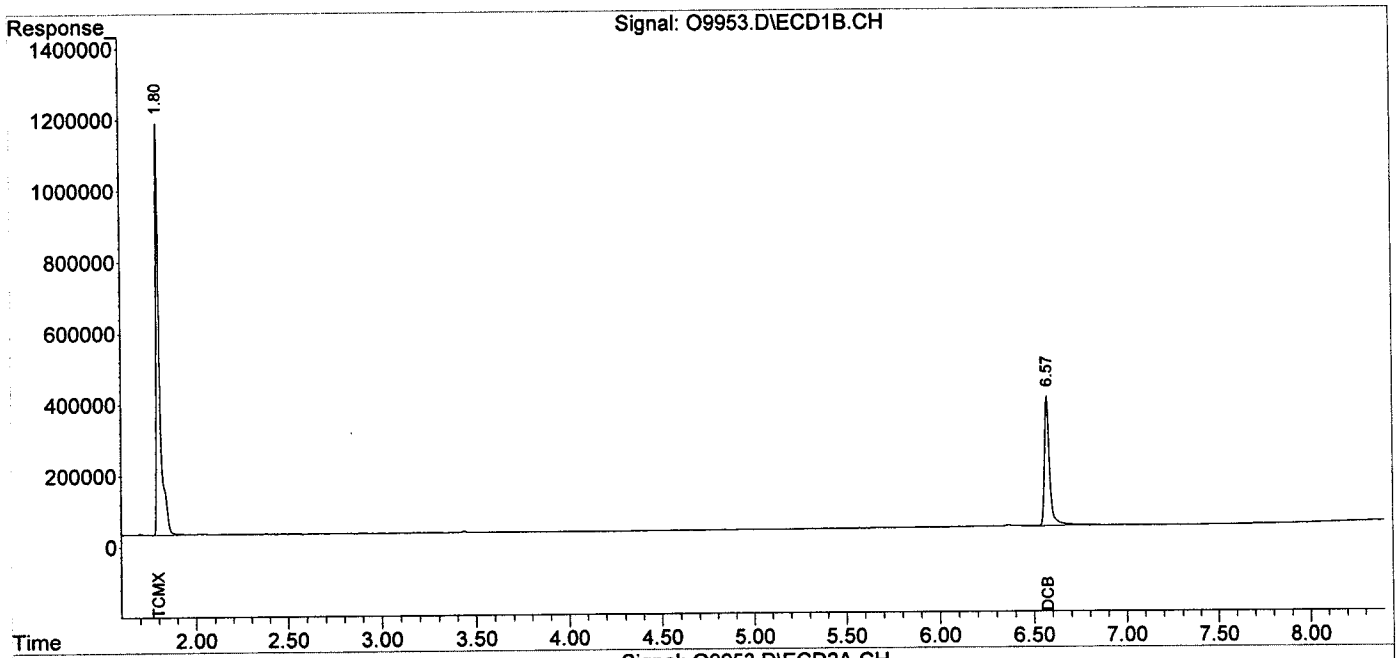
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

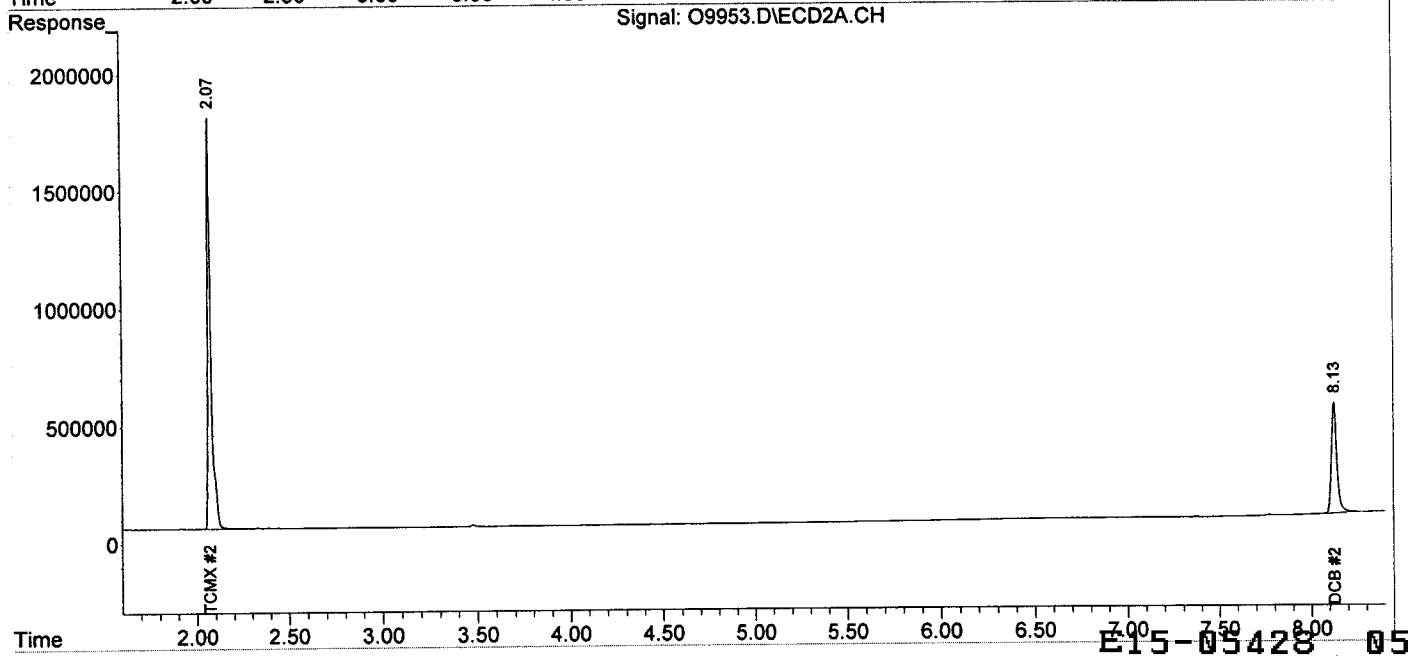
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : O9953.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 10:02
Operator : IB
Sample : Pest,BLKS150701-07,S,30g,0,5
Misc : NA,07/01/15,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 06 10:53:31 2015
Quant Method : C:\MSDCHEM\1\METHODS\OPST0611.M
Quant Title :
QLast Update : Mon Jul 06 09:19:33 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





SAMPLE TRACKING

Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 265 DAVIDSON AVE
SUITE 405 SOMERSET NJ 08873
Telephone #: 732-302-9506
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM
Project Name: ARTHUR EAST BARRACKS
Project Location (State): TRENTON, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / AA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☐ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL
☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
~~Rush/date needed~~ (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey
☐ GWQS
☑ IGW
☑ SRS
☐ Ecological
☐ DW
☐ SPLP

New York
☐ AWQS (TOGS Table 1)
☐ GWEL (TOGS Table 5)
☐ Part 375-6.8(a) - Unrestricted
☐ Part 375-6.8(b) - Restricted
☐ CP-51 Table 2 or 3 (selection required)

OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
TAT for PHC (if other than 2 weeks):
☐ DRO-8015

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082A	VOC+15 8260C	PEST 8081B	Sample Specific Notes:
E-20-0.5-1.0	0.5-1.0	6-24-15	1030	S	1	1	X			
E-20-2.0-2.5	2.0-2.5	6-24-15	1040	S	1	2	X			
E-22-0.5-1.0	0.5-1.0	6-24-15	1014	S	1	3	X			
E-22-2.0-2.5	2.0-2.5	6-24-15	1020	S	1	4	X			
E-29-0.5-1.0	0.5-1.0	6-24-15	0812	S	1	5	X			
E-29-2.0-2.5	2.0-2.5	6-24-15	0825	S	1	6	X			
E-19-0.5-1.0	0.5-1.0	6-24-15	1113	S	1	7	X			
E-19-2.0-2.5	2.0-2.5	6-24-15	1116	S	1	8	X			

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other
Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore
Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:
OBJECTIVE DKQ

FOR LAB USE ONLY
SDG #: 542D
Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-24-15			6/24/15	1525
	6/24/15	1755		6/24/15	1910

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 4

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information
Company: AMEC FOSTER WHEELER	REPORT TO:
Address: 285 DAVIDSON AVE SUITE 405 SOMERSET NJ 08873	Address:
Telephone #: 732-302-9500	Attn:
Fax #:	FAX #
Project Manager: MARLENE LINDHARDT	INVOICE TO:
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM	Address:
Project Name: AMTRAK EAST BARRACKS	
Project Location (State): TRENTON, NJ	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by: NDF / AA	

Rush TAT Charge: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day - 10%

Deliverables: NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*. NY: ☐ ASP Category A ☐ ASP Category B*

EDDs: ☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low Med High

These samples have been previously analyzed by IAL: ☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)**: _____

Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	VOC+15	PEST	Sample Specific Notes:
E-27-0.5-1.0	0.5-1.0	6-24-15	0843	S	1	9	X			
E-27-2.0-2.5	2.0-2.5	6-24-15	0848	S	1	10	X			
X-3-0.5-1.0	0.5-1.0	6-24-15	—	S	5	11	X	X	X	
E-25-0.5-1.0	0.5-1.0	6-24-15	0835	S	1	12	X			
E-25-2.0-2.5	2.0-2.5	6-24-15	0838	S	1	13	X			
E-1-0.5-1.0	0.5-1.0	6-24-15	0900	S	5	14	X	X	X	
E-1-2.0-2.5	2.0-2.5	6-24-15	0957	S	5	15	X	X	X	
E-1-3.0-3.5	3.0-3.5	6-24-15	0955	S	5	16	X	X	X	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code)
Container Type (use code)

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: J428
Cooler Temp: 4 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-24-15			6/24/15	1525
	6/24/15	1755		6/24/15	1755

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

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LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE
SUITE 405 SOMERSET NJ
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM
Project Name: AMTRAK EAST BARRACKS
Project Location (State): TRENTON, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / ATA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☐ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

~~Standard (10 business days)~~ Verbal
Rush/date needed (*only* if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey
☐ GWQS
☑ IGW
☑ SRS
☐ Ecological
☐ DW
☐ SPLP

New York
☐ AWQS (TOGS Table 1)
☐ GWEL (TOGS Table 5)
☐ Part 375-6.8(a) - Unrestricted
☐ Part 375-6.8(b) - Restricted
☐ CP-51 Table 2 or 3 (selection required)

OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	VOC+15	PEST						Sample Specific Notes:
E-1-4.5-5.0	4.5-5.0	6-24-15	1000	S	5	17	X	X	X						
E-15-0.5-1.0	0.5-1.0	6-24-15	1208	S	1	18	X								
E-15-2.0-2.5	2.0-2.5	6-24-15	1212	S	1	19	X								
E-2-0.5-1.0	0.5-1.0	6-24-15	1130	S	5	20	X	X	X						
E-2-2.0-2.5	2.0-2.5	6-24-15	1140	S	5	21	X	X	X						
E-2-3.0-3.5	3.0-3.5	6-24-15	1145	S	5	22	X	X	X						
E-2-4.0-4.5	4.0-4.5	6-24-15	1200	S	5	23	X	X	X						
E-10-0.5-1.0	0.5-1.0	6-24-15	1332	S	1	24	X								

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-24-15			6/24/15	1525
	6/24/15	1755	ZAY	6/24/15	1735

FOR LAB USE ONLY
SDG #: 5428
Cooler Temp: 4 °C

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LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.lalonline.com

Customer Information	Reporting Information
Company: AMEC Foster Wheeler	REPORT TO:
Address: 285 Davidson Ave Suite 405 Somerset NJ 08873	Address:
Telephone #: 732-302-9550	Attn:
Fax #:	FAX #
Project Manager: MARLENE LINDHARDT	INVOICE TO:
EMAIL Address: MARLENE.LINDHARDT@AMECFW.com	Address:
Project Name: AMTRAK EAST BARRACKS	
Project Location (State): TRENTON, NJ	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by: NDF / AA	

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

****Rush TAT Charge**
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables
NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*
NY: ☐ ASP Category A ☐ ASP Category B*

EDDs
☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low Med High
These samples have been previously analyzed by IAL ☐ YES ☐ NO

Turn-Around Time (TAT)
Standard (10 business days) Verbal
Rushdate needed (only if pre-approved)**
Hard Copy: Std 3 week Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015
TAT for PHC (if other than 2 weeks):

Sample Matrix
DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify)
OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS: PCB	VOC +15	PEST	Sample Specific Notes:
E-10-2.0-2.5	2.0-2.5	6-24-15	1337	S	1	21	X			
E-7-0.5-1.0	0.5-1.0	6-24-15	1255	S	4	24	X	X	X	
E-7-2.0-2.5	2.0-2.5	6-24-15	1303	S	4	27	X	X	X	
E-7-3.0-3.5	3.0-3.5	6-24-15	1322	S	4	28	X	X	X	
E-7-4.5-5.0	4.5-5.0	6-24-15	1327	S	4	29	X	X	X	
FB-062315	—	6-23-15	1515	WATER	4	30	X	X	X	
TB-062415	—	6-24-15	—	WATER	2	31		X		
FB-062415	—	6-24-15	1445	WATER	4	32	X	X	X	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code):
Container Type (use code):

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IAL Rev 2/2014

Special Instructions/QC Requirements & Comments:

Carrier (check one :)
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-24-15			6/24/15	1525
	6/24/15	1755		6/24/15	1755

FOR LAB USE ONLY
SDG #: 57428
Cooler Temp: 4 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05428: AMTRAK EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: marlene.lindhardt@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	PHC Due	Verbal Due	Hardcopy Due
Reduced	NA	Jun 24, 2015 @ 17:55	NA	Nov 30, 2015	Jul 17, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT

Criteria Requirement: NJ IGW

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05428-001	E-20 (0.5-1.0)	0.5/1.0	06/24/15@10:30	Soil	mg/Kg (ppm)	
05428-002	E-20 (2.0-2.5)	2.0/2.5	06/24/15@10:40	Soil	mg/Kg (ppm)	
05428-003	E-22 (0.5-1.0)	0.5/1.0	06/24/15@10:14	Soil	mg/Kg (ppm)	
05428-004	E-22 (2.0-2.5)	2.0/2.5	06/24/15@10:20	Soil	mg/Kg (ppm)	
05428-005	E-29 (0.5-1.0)	0.5/1.0	06/24/15@08:12	Soil	mg/Kg (ppm)	
05428-006	E-29 (2.0-2.5)	2.0/2.5	06/24/15@08:25	Soil	mg/Kg (ppm)	
05428-007	E-19 (0.5-1.0)	0.5/1.0	06/24/15@11:13	Soil	mg/Kg (ppm)	
05428-008	E-19 (2.0-2.5)	2.0/2.5	06/24/15@11:16	Soil	mg/Kg (ppm)	
05428-009	E-27 (0.5-1.0)	0.5/1.0	06/24/15@08:43	Soil	mg/Kg (ppm)	
05428-010	E-27 (2.0-2.5)	2.0/2.5	06/24/15@08:48	Soil	mg/Kg (ppm)	
05428-011	X-3 (0.5-1.0)	0.5/1.0	06/24/15	Soil	mg/Kg (ppm)	
05428-012	E-28 (0.5-1.0)	0.5/1.0	06/24/15@08:35	Soil	mg/Kg (ppm)	
05428-013	E-28 (2.0-2.5)	2.0/2.5	06/24/15@08:38	Soil	mg/Kg (ppm)	
05428-014	E-1 (0.5-1.0)	0.5/1.0	06/24/15@09:00	Soil	mg/Kg (ppm)	
05428-015	E-1 (2.0-2.5)	2.0/2.5	06/24/15@08:53	Soil	mg/Kg (ppm)	
05428-016	E-1 (3.0-3.5)	3.0/3.5	06/24/15@09:55	Soil	mg/Kg (ppm)	
05428-017	E-1 (4.5-5.0)	4.5/5.0	06/24/15@10:00	Soil	mg/Kg (ppm)	
05428-018	E-15 (0.5-1.0)	0.5/1.0	06/24/15@12:08	Soil	mg/Kg (ppm)	
05428-019	E-15 (2.0-2.5)	2.0/2.5	06/24/15@12:12	Soil	mg/Kg (ppm)	
05428-020	E-2 (0.5-1.0)	0.5/1.0	06/24/15@11:30	Soil	mg/Kg (ppm)	
05428-021	E-2 (2.0-2.5)	2.0/2.5	06/24/15@11:40	Soil	mg/Kg (ppm)	
05428-022	E-2 (3.0-3.5)	3.0/3.5	06/24/15@11:45	Soil	mg/Kg (ppm)	
05428-023	E-2 (4.0-4.5)	4.0/4.5	06/24/15@12:00	Soil	mg/Kg (ppm)	
05428-024	E-10 (0.5-1.0)	0.5/1.0	06/24/15@13:32	Soil	mg/Kg (ppm)	
05428-025	E-10 (2.0-2.5)	2.0/2.5	06/24/15@13:37	Soil	mg/Kg (ppm)	
05428-026	E-7 (0.5-1.0)	0.5/1.0	06/24/15@12:55	Soil	mg/Kg (ppm)	
05428-027	E-7 (2.0-2.5)	2.0/2.5	06/24/15@13:03	Soil	mg/Kg (ppm)	
05428-028	E-7 (3.0-3.5)	3.0/3.5	06/24/15@13:22	Soil	mg/Kg (ppm)	

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

Rev E15-05428 0535

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05428: AMTRAK EAST BARRACKS

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05428-029	E-7 (4.5-5.0)	4.5/5.0	06/24/15@13:27	Soil	mg/Kg (ppm)	
05428-030	FB-062315	NA	06/23/15@15:15	Aqueous	mg/L (ppm)	
05428-031	TB-062415	NA	06/24/15	Aqueous	mg/L (ppm)	
05428-032	FB-062415	NA	06/24/15@14:45	Aqueous	mg/L (ppm)	

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
002	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
003	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
004	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
005	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
006	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
007	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
008	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
009	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
010	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
011	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
012	GC Project Revision	Analyze		STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
013	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	GC Project Revision	Analyze		STD/2 WKS	7/8/2015
014	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
015	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
016	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
017	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
018	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
019	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
020	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
021	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
022	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

Rev E15-05428 0536

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05428: AMTRAK EAST BARRACKS

Sample #	Test	Status	Analytical Method	TAT	Holding Time Expires
022	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
023	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
024	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
025	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
026	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
027	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
028	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
029	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/8/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/8/2015
030	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/7/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	6/30/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	6/30/2015
031	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
032	TCL VO + 15	Analyze	8260C	STD/2 WKS	7/8/2015
	TCL PCB	Analyze	8082A	STD/2 WKS	7/1/2015
	TCL Pesticides	Analyze	8081B	STD/2 WKS	7/1/2015

Project Notes:

NOTE 1 taken by Frank on 06/24/2015 11:32
3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

REV 1 taken by Mark on 11/24/2015 01:56
REV 01 DUE 11/30/15

AT THE REQUEST OF RICH CERBONE, CHANGE THE SAMPLE ID PREFIX FOR SAMPLES #012 & 013 TO E-28. ORIGINAL PREFIX WAS E-25. PLEASE REVISE ALL APPROPRIATE PAGES OF REPORT.

ORIGINAL RESULTS SENT 7/14/15
ORIGINAL HC SENT 7/15/15

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

Rev E15-05428 0537

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **05428** CLIENT: AMEC

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ✓ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 6/24/15

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [ ] DATE 6/25/15

E15-05428 0538

REV 03/2013

Laboratory Custody Chronicle

IAL Case No. E15-05428

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/24/2015@17:55

Department: Volatiles			Prep. Date	Analyst	Analysis Date	Analyst
TCL VO + 15	05428-011	Soil	n/a	n/a	7/ 1/15	Xing
"	-014	"	n/a	n/a	7/ 1/15	Xing
"	-015	"	n/a	n/a	7/ 1/15	Xing
"	-016	"	n/a	n/a	7/ 1/15	Xing
"	-017	"	n/a	n/a	7/ 1/15	Xing
"	-020	"	n/a	n/a	7/ 1/15	Xing
"	-021	"	n/a	n/a	7/ 1/15	Xing
"	-022	"	n/a	n/a	7/ 1/15	Xing
"	-023	"	n/a	n/a	7/ 1/15	Xing
"	-026	"	n/a	n/a	7/ 1/15	Xing
"	-027	"	n/a	n/a	7/ 1/15	Xing
"	-028	"	n/a	n/a	7/ 1/15	Xing
"	-029	"	n/a	n/a	7/ 1/15	Xing
"	-030	Aqueous	n/a	n/a	7/ 2/15	Mei
"	-031	"	n/a	n/a	7/ 2/15	Mei
"	-032	"	n/a	n/a	7/ 2/15	Mei

Department: GC			Prep. Date	Analyst	Analysis Date	Analyst
TCL PCB	-001	Soil	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-002	"	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-003	"	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-004	"	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-005	"	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-006	"	7/ 1/15	Archimede	7/ 2/15	Justyna
"	-007	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-008	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-009	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-010	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-011	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-012	"	7/ 1/15	Archimede	7/ 6/15	Justyna
"	-013	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-014	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-015	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-016	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-017	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-018	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-019	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-020	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-021	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-022	"	7/ 1/15	Archimede	7/ 7/15	Justyna
"	-023	"	7/ 1/15	Archimede	7/ 7/15	Justyna
"	-024	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-025	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-026	"	7/ 1/15	Archimede	7/ 7/15	Justyna
"	-027	"	7/ 1/15	Archimede	7/ 7/15	Justyna

E15-05428 0539

Jul 13, 2015 @ 04:09

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

Laboratory Custody Chronicle

IAL Case No.

E15-05428

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/24/2015@17:55

"		-028	"	7/ 1/15	Archimede	7/ 7/15	Justyna
"		-029	"	7/ 1/15	Archimede	7/ 7/15	Justyna
"		-030	Aqueous	6/29/15	Archimede	6/30/15	Justyna
"		-032	"	6/29/15	Archimede	6/30/15	Justyna
TCL Pesticides		-011	Soil	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-014	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-015	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-016	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-017	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-020	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-021	"	7/ 1/15	Archimede	7/ 6/15	Iwona
"		-022	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-023	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-026	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-027	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-028	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-029	"	7/ 1/15	Archimede	7/ 7/15	Iwona
"		-030	Aqueous	6/29/15	Archimede	6/30/15	Iwona
"		-032	"	6/29/15	Archimede	6/30/15	Iwona

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK EAST BARRACKS**
IAL Case Number: **E15-05467**

These data have been reviewed and accepted by:

Michael H. Leftin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

INTEGRATED ANALYTICAL LABORATORIES, LLC.

TABLE OF CONTENTS

This report was finalized on July 15, 2015

* Methodology is included in the IAL Project Information Page

Sample Summary

IAL Case No.

E15-05467

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/25/2015@16:22

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
05467-001	E-13 (0.5-1.0)	0.5/1.0	6/25/2015@08:00	Soil	1
05467-002	E-13 (2.0-2.5)	2.0/2.5	6/25/2015@08:20	Soil	1
05467-003	E-21 (0.5-1.0)	0.5/1.0	6/25/2015@08:47	Soil	1
05467-004	E-21 (2.0-2.5)	2.0/2.5	6/25/2015@09:20	Soil	1
05467-005	E-23 (0.5-1.0)	0.5/1.0	6/25/2015@09:30	Soil	1
05467-006	E-23 (2.0-2.5)	2.0/2.5	6/25/2015@10:00	Soil	1
05467-007	E-25 (0.5-1.0)	0.5/1.0	6/25/2015@11:05	Soil	1
05467-008	E-25 (2.0-2.5)	2.0/2.5	6/25/2015@11:25	Soil	1
05467-009	E-26 (0.5-1.0)	0.5/1.0	6/25/2015@11:35	Soil	1
05467-010	E-26 (2.0-2.5)	2.0/2.5	6/25/2015@12:15	Soil	1
05467-011	X-4 (0.5-1.0)	0.5/1.0	6/25/2015	Soil	1
05467-012	FB-062515	n/a	6/25/2015@12:50	Aqueous	2
05467-013	E-24 (0.5-1.0)	0.5/1.0	6/25/2015@10:15	Soil	1
05467-014	E-24 (2.0-2.5)	2.0/2.5	6/25/2015@11:00	Soil	1

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INTEGRATED ANALYTICAL LABORATORIES, LLC.

DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05467

Integrated Analytical Laboratories, LLC. received fourteen (14) samples** from AMEC-SMRST (IAL SDG# **E15-05467**, Project: AMTRAK EAST BARRACKS) on June 25, 2015 for the analysis of :

(14) TCL PCB

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

PCB By 8082A	Batch: 150629-16	Matrix: Aqueous

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- RPD between LCS/LCSD met QC criteria.
- LCS/LCSD Percent Recovery met QC criteria.
- MS/MSD were not analyzed due to insufficient sample volume. LCS/LCSD were analyzed in their absence to meet method specific QC requirements.
- The following samples were cleaned up using method 3660B to remove sulfur: 012.

E15-05467

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05467-012	1	NA

PCB By 8082A	Batch: 150701-12	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006, 007.

E15-05467

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05467-001	1	NA
E15-05467-002	1	NA
E15-05467-003	10	Target compound(s).
E15-05467-004	1	NA
E15-05467-005	20	Target compound(s).
E15-05467-006	10	Target compound(s).
E15-05467-007	10	Target compound(s).

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E15-05467

PCB By 8082A	Batch: 150702-07	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 008, 009, 010, 011, 013, 014.

E15-05467

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E15-05467-008	1	NA
E15-05467-009	10	Target compound(s).
E15-05467-010	1	NA
E15-05467-011	5	Target compound(s).
E15-05467-013	100	Target compound(s).
E15-05467-014	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

7/14/2015
Date

E15-05467 0005

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK EAST BARRACKS
IAL Project #: E15-05467
IAL Sample ID(s): E15-05467-001 ~ -014
Sampling Date(s): 6/25/2015

List of DKQP Method Used:
TCL PCB by 8082A

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	X		
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?		X	
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		X	

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05467

Lab ID:	05467-012		
Client ID:	FB-062515		
Matrix:	Aqueous		
Sampled Date	6/25/15		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	*(mg/L)*		
Aroclor-1016	ND		0.00002
Aroclor-1221	ND		0.00002
Aroclor-1232	ND		0.00002
Aroclor-1242	ND		0.00002
Aroclor-1248	ND		0.00002
Aroclor-1254	ND		0.00002
Aroclor-1260	ND		0.00002
Aroclor-1262	ND		0.00002
Aroclor-1268	ND		0.00002
PCBs	ND		0.00002

Lab ID:	05467-001			05467-002			05467-003			05467-004		
Client ID:	E-13 (0.5-1.0)			E-13 (2.0-2.5)			E-21 (0.5-1.0)			E-21 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/25/15			6/25/15			6/25/15			6/25/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1221	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1232	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1242	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1248	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1254	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1260	5.19		0.018	3.89		0.022	17.4	D	0.165	0.195		0.019
Aroclor-1262	ND		0.018	ND		0.022	ND		0.017	ND		0.019
Aroclor-1268	ND		0.018	ND		0.022	ND		0.017	ND		0.019
PCBs	5.19		0.018	3.89		0.022	17.4	D	0.165	0.195		0.019

Lab ID:	05467-005			05467-006			05467-007			05467-008		
Client ID:	E-23 (0.5-1.0)			E-23 (2.0-2.5)			E-25 (0.5-1.0)			E-25 (2.0-2.5)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/25/15			6/25/15			6/25/15			6/25/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1221	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1232	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1242	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1248	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1254	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1260	54.5	D	0.348	29.8	D	0.172	11.9	D	0.160	ND		0.018
Aroclor-1262	ND		0.017	ND		0.017	ND		0.016	ND		0.018
Aroclor-1268	ND		0.017	ND		0.017	ND		0.016	ND		0.018
PCBs	54.5	D	0.348	29.8	D	0.172	11.9	D	0.160	ND		0.018

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E15-05467

Lab ID:	05467-009			05467-010			05467-011			05467-013		
Client ID:	E-26 (0.5-1.0)			E-26 (2.0-2.5)			X-4 (0.5-1.0)			E-24 (0.5-1.0)		
Depth:	0.5/1.0			2.0/2.5			0.5/1.0			0.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	6/25/15			6/25/15			6/25/15			6/25/15		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1221	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1232	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1242	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1248	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1254	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1260	13.7	D	0.164	2.10		0.016	8.99	D	0.081	143	D	1.66
Aroclor-1262	ND		0.016	ND		0.016	ND		0.081	ND		1.66
Aroclor-1268	ND		0.016	ND		0.016	ND		0.081	ND		1.66
PCBs	13.7	D	0.164	2.10		0.016	8.99	D	0.081	143	D	1.66

Lab ID:	05467-014		
Client ID:	E-24 (2.0-2.5)		
Depth:	2.0/2.5		
Matrix:	Soil		
Sampled Date	6/25/15		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*		
Aroclor-1016	ND		0.020
Aroclor-1221	ND		0.020
Aroclor-1232	ND		0.020
Aroclor-1242	ND		0.020
Aroclor-1248	ND		0.020
Aroclor-1254	ND		0.020
Aroclor-1260	ND		0.020
Aroclor-1262	ND		0.020
Aroclor-1268	ND		0.020
PCBs	ND		0.020

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-001
Client ID: E-13_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3041.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	5.19		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	5.19		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0011

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-002
Client ID: E-13_(2.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3042.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.22g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 28.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.054	0.022
Aroclor-1221	ND		0.054	0.022
Aroclor-1232	ND		0.054	0.022
Aroclor-1242	ND		0.054	0.022
Aroclor-1248	ND		0.054	0.022
Aroclor-1254	ND		0.054	0.022
Aroclor-1260	3.89		0.054	0.022
Aroclor-1262	ND		0.054	0.022
Aroclor-1268	ND		0.054	0.022
PCBs	3.89		0.054	0.022

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0012

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-003
Client ID: E-21_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3043.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.017
Aroclor-1221	ND		0.041	0.017
Aroclor-1232	ND		0.041	0.017
Aroclor-1242	ND		0.041	0.017
Aroclor-1248	ND		0.041	0.017
Aroclor-1254	ND		0.041	0.017
Aroclor-1260	12.9	E	0.041	0.017
Aroclor-1262	ND		0.041	0.017
Aroclor-1268	ND		0.041	0.017
PCBs	12.9	E	0.041	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0013

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-003DL
Client ID: E-21_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3062.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 10.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.412	0.165
Aroclor-1221	ND		0.412	0.165
Aroclor-1232	ND		0.412	0.165
Aroclor-1242	ND		0.412	0.165
Aroclor-1248	ND		0.412	0.165
Aroclor-1254	ND		0.412	0.165
Aroclor-1260	17.4	D	0.412	0.165
Aroclor-1262	ND		0.412	0.165
Aroclor-1268	ND		0.412	0.165
PCBs	17.4	D	0.412	0.165

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-004
Client ID: E-21_(2.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3044.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.048	0.019
Aroclor-1221	ND		0.048	0.019
Aroclor-1232	ND		0.048	0.019
Aroclor-1242	ND		0.048	0.019
Aroclor-1248	ND		0.048	0.019
Aroclor-1254	ND		0.048	0.019
Aroclor-1260	0.195		0.048	0.019
Aroclor-1262	ND		0.048	0.019
Aroclor-1268	ND		0.048	0.019
PCBs	0.195		0.048	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0015

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-005
Client ID: E-23_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3045.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.017
Aroclor-1221	ND		0.044	0.017
Aroclor-1232	ND		0.044	0.017
Aroclor-1242	ND		0.044	0.017
Aroclor-1248	ND		0.044	0.017
Aroclor-1254	ND		0.044	0.017
Aroclor-1260	47.8	E	0.044	0.017
Aroclor-1262	ND		0.044	0.017
Aroclor-1268	ND		0.044	0.017
PCBs	47.8	E	0.044	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0016

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-005DL
Client ID: E-23_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3063.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.09g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 20
% Moisture: 9.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.870	0.348
Aroclor-1221	ND		0.870	0.348
Aroclor-1232	ND		0.870	0.348
Aroclor-1242	ND		0.870	0.348
Aroclor-1248	ND		0.870	0.348
Aroclor-1254	ND		0.870	0.348
Aroclor-1260	54.5	D	0.870	0.348
Aroclor-1262	ND		0.870	0.348
Aroclor-1268	ND		0.870	0.348
PCBs	54.5	D	0.870	0.348

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0017

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-006
Client ID: E-23_(2.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3046.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.48g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	25.1	E	0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	25.1	E	0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0018

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-006DL
Client ID: E-23_(2.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3064.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.48g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 15.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.429	0.172
Aroclor-1221	ND		0.429	0.172
Aroclor-1232	ND		0.429	0.172
Aroclor-1242	ND		0.429	0.172
Aroclor-1248	ND		0.429	0.172
Aroclor-1254	ND		0.429	0.172
Aroclor-1260	29.8	D	0.429	0.172
Aroclor-1262	ND		0.429	0.172
Aroclor-1268	ND		0.429	0.172
PCBs	29.8	D	0.429	0.172

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-007
Client ID: E-25_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/03/2015
Data file: Y3047.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.56g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	10.5	E	0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	10.5	E	0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0020

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-007DL
Client ID: E-25_(0.
Date Received: 06/25/2015
Date Extracted: 07/01/2015
Date Analyzed: 07/06/2015
Data file: Y3065.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.56g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 10.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.400	0.160
Aroclor-1221	ND		0.400	0.160
Aroclor-1232	ND		0.400	0.160
Aroclor-1242	ND		0.400	0.160
Aroclor-1248	ND		0.400	0.160
Aroclor-1254	ND		0.400	0.160
Aroclor-1260	11.9	D	0.400	0.160
Aroclor-1262	ND		0.400	0.160
Aroclor-1268	ND		0.400	0.160
PCBs	11.9	D	0.400	0.160

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0021

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-008
Client ID: E-25_(2.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015
Data file: R5554.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.57g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0022

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-009
Client ID: E-26_(0.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015
Data file: R5555.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.76g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	11.5	E	0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	11.5	E	0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0023

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-009DL
Client ID: E-26_(0.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/07/2015
Data file: R5580.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.76g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 15.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.410	0.164
Aroclor-1221	ND		0.410	0.164
Aroclor-1232	ND		0.410	0.164
Aroclor-1242	ND		0.410	0.164
Aroclor-1248	ND		0.410	0.164
Aroclor-1254	ND		0.410	0.164
Aroclor-1260	13.7	D	0.410	0.164
Aroclor-1262	ND		0.410	0.164
Aroclor-1268	ND		0.410	0.164
PCBs	13.7	D	0.410	0.164

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0024

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-010
Client ID: E-26_(2.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015
Data file: R5556.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.90g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	2.10		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	2.10		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-011
Client ID: X-4_(0.5
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/07/2015
Data file: R5581.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.72g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 13.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.203	0.081
Aroclor-1221	ND		0.203	0.081
Aroclor-1232	ND		0.203	0.081
Aroclor-1242	ND		0.203	0.081
Aroclor-1248	ND		0.203	0.081
Aroclor-1254	ND		0.203	0.081
Aroclor-1260	8.99	D	0.203	0.081
Aroclor-1262	ND		0.203	0.081
Aroclor-1268	ND		0.203	0.081
PCBs	8.99	D	0.203	0.081

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0026

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-012
Client ID: FB-06251
Date Received: 06/25/2015
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5422.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0027

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-013
Client ID: E-24_(0.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/07/2015
Data file: R5582.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.61g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 100
% Moisture: 14.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		4.15	1.66
Aroclor-1221	ND		4.15	1.66
Aroclor-1232	ND		4.15	1.66
Aroclor-1242	ND		4.15	1.66
Aroclor-1248	ND		4.15	1.66
Aroclor-1254	ND		4.15	1.66
Aroclor-1260	143	D	4.15	1.66
Aroclor-1262	ND		4.15	1.66
Aroclor-1268	ND		4.15	1.66
PCBs	143	D	4.15	1.66

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0028

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E15-05467-014
Client ID: E-24_(2.
Date Received: 06/25/2015
Date Extracted: 07/02/2015
Date Analyzed: 07/07/2015
Data file: R5569.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.10g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.049	0.020
Aroclor-1221	ND		0.049	0.020
Aroclor-1232	ND		0.049	0.020
Aroclor-1242	ND		0.049	0.020
Aroclor-1248	ND		0.049	0.020
Aroclor-1254	ND		0.049	0.020
Aroclor-1260	ND		0.049	0.020
Aroclor-1262	ND		0.049	0.020
Aroclor-1268	ND		0.049	0.020
PCBs	ND		0.049	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0029

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 06/30/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA150629-16	AQUEOUS	79		61		75		48	
PCB	LCSA150629-16	AQUEOUS	84		68		81		63	
PCB	LCSDA150629-16	AQUEOUS	85		69		82		63	
FB	E15-05346-027	AQUEOUS	88		74		85		61	
FB	E15-05430-103	AQUEOUS	86		77		84		64	
FB-1	E15-05338-007	AQUEOUS	84		73		81		65	
FB-06221	E15-05367-040	AQUEOUS	86		83		83		73	
FB-06231	E15-05428-030	AQUEOUS	92		85		89		77	
FB-06241	E15-05428-032	AQUEOUS	88		80		86		77	
FB-06251	E15-05467-012	AQUEOUS	87		81		85		78	
FIELD_BL	E15-05470-016	AQUEOUS	87		81		85		75	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-12	SOIL	102		78		93		78	
PCB	LCSS150701-12	SOIL	103		79		94		77	
PCB	05428-013MS	SOIL	88		77		92		77	
PCB	05428-013MSD	SOIL	89		79		93		79	
E-25_(2.	E15-05428-013	SOIL	89		74		92		78	
E-15_(0.	E15-05428-018	SOIL	84		78		93		90	
E-15_(2.	E15-05428-019	SOIL	100		70		97		81	
E-10_(0.	E15-05428-024	SOIL	95		70		94		89	
E-10_(2.	E15-05428-025	SOIL	96		78		96		85	
C-1	E15-05432-001	SOLID	99		83		95		84	
C-2	E15-05432-002	SOLID	105		86		99		86	
C-3	E15-05432-003	SOLID	99		60		94		81	
C-4	E15-05432-004	SOLID	96		62		91		73	
C-5	E15-05432-005	SOLID	90		50		87		83	
C-6	E15-05432-006	SOLID	96		61		92		73	
C-7	E15-05432-007	SOLID	96		57		92		74	
C-8	E15-05432-008	SOLID	94		46		90		63	
E-13_(0.	E15-05467-001	SOIL	93		57		95		71	
E-13_(2.	E15-05467-002	SOIL	86		109		103		124	
E-21_(0.	E15-05467-003	SOIL	74		115		90		128	
E-21_(2.	E15-05467-004	SOIL	85		63		93		143	
E-23_(0.	E15-05467-005	SOIL	77		90		89		94	
E-23_(2.	E15-05467-006	SOIL	79		87		94		111	
E-25_(0.	E15-05467-007	SOIL	82		76		93		104	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/02/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150701-12	SOIL	102		78		93		78	
PCB	LCSS150701-12	SOIL	103		79		94		77	
E-21_(0.	E15-05467-003DL	SOIL	100		94		100		107	
E-23_(0.	E15-05467-005DL	SOIL	94		86		94		114	
E-23_(2.	E15-05467-006DL	SOIL	91		93		93		98	
E-25_(0.	E15-05467-007DL	SOIL	98		81		93		106	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150702-07	SOIL	98		107		98		100	
PCB	LCSS150702-07	SOIL	97		96		97		95	
PCB	05467-008MS	SOIL	82		118		75		104	
PCB	05467-008MSD	SOIL	81		95		74		105	
E-25_(2.	E15-05467-008	SOIL	79		91		70		106	
E-26_(0.	E15-05467-009	SOIL	83		93		77		112	
E-26_(2.	E15-05467-010	SOIL	81		106		76		113	
SB-1B	E15-05638-002	SOIL	94		108		90		93	
S-1	E15-05433-001	SOIL	97		103		97		115	
S-2	E15-05433-002	SOIL	99		104		99		106	
S-3	E15-05433-003	SOIL	99		101		97		104	
S-4	E15-05433-004	SOIL	99		117		98		101	
S-5	E15-05433-005	SOIL	101		106		100		124	
C-1	E15-05434-001	SOLID	95		78		92		90	
C-2	E15-05434-002	SOLID	94		81		89		84	
E-24_(2.	E15-05467-014	SOIL	79		95		73		105	
C-1	E15-05518-001	SOLID	92		70		85		67	
C-2	E15-05518-002	SOLID	92		80		84		85	
C-3	E15-05518-003	SOLID	93		72		86		81	
C-4	E15-05518-004	SOLID	92		73		85		69	
C-5	E15-05518-005	SOLID	90		80		82		71	
C-6	E15-05518-006	SOLID	95		75		85		70	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 07/06/2015

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS150702-07	SOIL	98		107		98		100	
PCB	LCSS150702-07	SOIL	97		96		97		95	
E-26_(0.	E15-05467-009DL	SOIL	101		108		100		112	
X-4_(0.5	E15-05467-011	SOIL	97		97		95		95	
E-24_(0.	E15-05467-013	SOIL	120		110		140		110	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	30-150	30-150
DCB = Decachlorobiphenyl	30-150	30-150

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

AQUEOUS PCB LCS/LCSD ACCURACY RECOVERY

Matrix spike Lab sample ID: BLKA150629-16
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L

Compound	SPIKE ADDED (ug/L)	SAMPLE CONC. (ug/L)	LCS CONC. (ug/L)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	399.5	80	40 - 140
Aroclor-1260	500	0.0	291.1	58	40 - 140

Compound	SAMPLE CONC. (ug/L)	LCSD CONC. (ug/L)	LCSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	405.0	81	1	50/20	40 - 140
Aroclor-1260	0.0	303.8	61	4	50/20	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150701-12
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	519.0	104	40 - 140
Aroclor-1260	500	0.0	450.3	90	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB LCS ACCURACY RECOVERY

Matrix spike Lab sample ID: LCSS150702-07
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	LCS CONC. (ug/Kg)	LCS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	575.4	115	40 - 140
Aroclor-1260	500	0.0	566.2	113	40 - 140

	Aqueous	Soil/Sediment
LCS Recovery Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05428-013
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.77g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	535.4	107	40 - 140
Aroclor-1260	500	1370.8	1719.8	70	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	544.1	109	2	50/30	40 - 140
Aroclor-1260	1370.8	1721.6	70	0	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

SOIL PCB MS/MSD ACCURACY RECOVERY

Matrix spike Lab sample ID: E15-05467-008
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015

GC Column: DB-5/DB1701P
Sample wt/vol: 5.57g
Matrix-Units: Soil-µg/Kg

Compound	SPIKE ADDED (ug/Kg)	SAMPLE CONC. (ug/Kg)	MS CONC. (ug/Kg)	MS % REC #	QC LIMITS REC.
Aroclor-1016	500	0.0	489.1	98	40 - 140
Aroclor-1260	500	0.0	590.7	118	40 - 140

Compound	SAMPLE CONC. (ug/Kg)	MSD CONC. (ug/Kg)	MSD % # REC	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Aroclor-1016	0.0	476.4	95	3	50/30	40 - 140
Aroclor-1260	0.0	512.2	102	14	50/30	40 - 140

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits	40-140	40-140
MS/MSD RPD Limits (IAL/DKQP)	50/20	50/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Non calculable

PCB METHOD BLANK SUMMARY

Lab File ID: R5413.D

Instrument ID: GC-R

Date Extracted: 06/29/2015

Matrix: AQUEOUS

Date Analyzed: 06/30/2015

Time Analyzed: 18:42

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA150629-16	06/30/2015	18:59
PCB	LCSDA150629-16	06/30/2015	19:17
FB	E15-05346-027	06/30/2015	19:34
FB	E15-05430-103	06/30/2015	19:51
FB-1	E15-05338-007	06/30/2015	20:09
FB-06221	E15-05367-040	06/30/2015	20:26
FB-06231	E15-05428-030	06/30/2015	20:44
FB-06241	E15-05428-032	06/30/2015	21:01
FB-06251	E15-05467-012	06/30/2015	21:19
FIELD_BL	E15-05470-016	06/30/2015	21:36

PCB METHOD BLANK SUMMARY

Lab File ID: Y3022.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-12	07/02/2015	21:27
PCB	05428-013MS	07/02/2015	21:45
PCB	05428-013MSD	07/02/2015	22:02
E-25_(2.	E15-05428-013	07/02/2015	22:19
E-15_(0.	E15-05428-018	07/02/2015	22:37
E-15_(2.	E15-05428-019	07/02/2015	22:54
E-10_(0.	E15-05428-024	07/02/2015	23:11
E-10_(2.	E15-05428-025	07/02/2015	23:29
C-1	E15-05432-001	07/03/2015	01:13
C-2	E15-05432-002	07/03/2015	01:30
C-3	E15-05432-003	07/03/2015	01:47
C-4	E15-05432-004	07/03/2015	02:05
C-5	E15-05432-005	07/03/2015	02:22
C-6	E15-05432-006	07/03/2015	02:39
C-7	E15-05432-007	07/03/2015	02:57
C-8	E15-05432-008	07/03/2015	03:14
E-13_(0.	E15-05467-001	07/03/2015	03:31
E-13_(2.	E15-05467-002	07/03/2015	03:49
E-21_(0.	E15-05467-003	07/03/2015	04:06
E-21_(2.	E15-05467-004	07/03/2015	04:23
E-23_(0.	E15-05467-005	07/03/2015	04:41
E-23_(2.	E15-05467-006	07/03/2015	04:58
E-25_(0.	E15-05467-007	07/03/2015	05:15

PCB METHOD BLANK SUMMARY

Lab File ID: Y3022.D

Instrument ID: GC-Y

Date Extracted: 07/01/2015

Matrix: SOIL

Date Analyzed: 07/02/2015

Time Analyzed: 21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150701-12	07/02/2015	21:27
E-21_(0.	E15-05467-003DL	07/06/2015	12:03
E-23_(0.	E15-05467-005DL	07/06/2015	12:20
E-23_(2.	E15-05467-006DL	07/06/2015	12:38
E-25_(0.	E15-05467-007DL	07/06/2015	12:55

PCB METHOD BLANK SUMMARY

Lab File ID: R5550.D

Instrument ID: GC-R

Date Extracted: 07/02/2015

Matrix: SOIL

Date Analyzed: 07/06/2015

Time Analyzed: 21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150702-07	07/06/2015	21:27
PCB	05467-008MS	07/06/2015	21:45
PCB	05467-008MSD	07/06/2015	22:02
E-25_(2.	E15-05467-008	07/06/2015	22:20
E-26_(0.	E15-05467-009	07/06/2015	22:37
E-26_(2.	E15-05467-010	07/06/2015	22:55
SB-1B	E15-05638-002	07/06/2015	23:29
S-1	E15-05433-001	07/07/2015	01:14
S-2	E15-05433-002	07/07/2015	01:32
S-3	E15-05433-003	07/07/2015	01:49
S-4	E15-05433-004	07/07/2015	02:07
S-5	E15-05433-005	07/07/2015	02:24
C-1	E15-05434-001	07/07/2015	02:41
C-2	E15-05434-002	07/07/2015	02:59
E-24_(2.	E15-05467-014	07/07/2015	03:34
C-1	E15-05518-001	07/07/2015	03:51
C-2	E15-05518-002	07/07/2015	04:08
C-3	E15-05518-003	07/07/2015	04:26
C-4	E15-05518-004	07/07/2015	04:43
C-5	E15-05518-005	07/07/2015	05:01
C-6	E15-05518-006	07/07/2015	05:18

PCB METHOD BLANK SUMMARY

Lab File ID:	R5550.D	Instrument ID:	GC-R
Date Extracted:	07/02/2015	Matrix:	SOIL
Date Analyzed:	07/06/2015	Time Analyzed:	21:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS150702-07	07/06/2015	21:27
E-26_(0.	E15-05467-009DL	07/07/2015	09:33
X-4_(0.5	E15-05467-011	07/07/2015	09:51
E-24_(0.	E15-05467-013	07/07/2015	10:08

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.18	3.18	3.18	3.17	3.17	3.17	3.10	3.24
Aroclor-1016 {2}	4.01	4.01	4.01	4.00	4.00	4.00	3.93	4.07
Aroclor-1016 {3}	4.56	4.56	4.56	4.55	4.55	4.56	4.49	4.63
Aroclor-1016 {4}	5.06	5.06	5.06	5.06	5.06	5.06	4.99	5.13
Aroclor-1016 {5}	5.47	5.46	5.46	5.46	5.45	5.46	5.39	5.53
Aroclor-1221			2.09				2.02	2.16
Aroclor-1221 {2}			2.98				2.91	3.05
Aroclor-1221 {3}			3.10				3.03	3.17
Aroclor-1221 {4}			3.18				3.11	3.25
Aroclor-1221 {5}			3.77				3.70	3.84
Aroclor-1232			3.18				3.11	3.25
Aroclor-1232 {2}			4.01				3.94	4.08
Aroclor-1232 {3}			4.68				4.61	4.75
Aroclor-1232 {4}			5.27				5.20	5.34
Aroclor-1232 {5}			5.47				5.40	5.54
Aroclor-1242			4.01				3.94	4.08
Aroclor-1242 {2}			4.95				4.88	5.02
Aroclor-1242 {3}			5.27				5.20	5.34
Aroclor-1242 {4}			5.97				5.90	6.04
Aroclor-1242 {5}			6.26				6.19	6.33
Aroclor-1248			4.41				4.33	4.49
Aroclor-1248 {2}			4.95				4.87	5.03
Aroclor-1248 {3}			5.27				5.19	5.35
Aroclor-1248 {4}			5.98				5.90	6.06
Aroclor-1248 {5}			6.26				6.18	6.34
Aroclor-1254			6.37				6.29	6.45
Aroclor-1254 {2}			6.81				6.73	6.89
Aroclor-1254 {3}			6.98				6.89	7.07
Aroclor-1254 {4}			7.41				7.32	7.50
Aroclor-1254 {5}			8.28				8.19	8.37
Aroclor-1260	8.28	8.28	8.27	8.26	8.25	8.27	7.37	9.17
Aroclor-1260 {2}	8.94	8.94	8.94	8.93	8.93	8.94	8.04	9.84
Aroclor-1260 {3}	9.43	9.43	9.42	9.41	9.41	9.42	8.52	10.32
Aroclor-1260 {4}	9.93	9.92	9.91	9.90	9.89	9.91	9.01	10.81
Aroclor-1260 {5}	10.98	10.98	10.97	10.96	10.96	10.97	10.07	11.87

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	383548	375292	385763	375421	359640	375933	2.73
Aroclor-1016 {2}	503591	530508	497528	500692	481758	502815	3.51
Aroclor-1016 {3}	681685	668513	662817	670162	650188	666673	1.72
Aroclor-1016 {4}	390492	369352	384791	347143	330681	364492	6.94
Aroclor-1016 {5}	529731	514847	535436	529296	521001	526062	1.54
Aroclor-1221			147211				
Aroclor-1221 {2}			254307				
Aroclor-1221 {3}			149368				
Aroclor-1221 {4}			547853				
Aroclor-1221 {5}			133657				
Aroclor-1232			386422				
Aroclor-1232 {2}			220885				
Aroclor-1232 {3}			174797				
Aroclor-1232 {4}			319751				
Aroclor-1232 {5}			258228				
Aroclor-1242			420497				
Aroclor-1242 {2}			242599				
Aroclor-1242 {3}			588549				
Aroclor-1242 {4}			1187200				
Aroclor-1242 {5}			429341				
Aroclor-1248			765975				
Aroclor-1248 {2}			430311				
Aroclor-1248 {3}			864904				
Aroclor-1248 {4}			2086442				
Aroclor-1248 {5}			526706				
Aroclor-1254			1217349				
Aroclor-1254 {2}			892550				
Aroclor-1254 {3}			1304938				
Aroclor-1254 {4}			1526940				
Aroclor-1254 {5}			1478160				
Aroclor-1260	1356939	1186664	1302633	1371900	1363279	1316283	5.88
Aroclor-1260 {2}	742135	683611	759465	782547	765810	746714	5.11
Aroclor-1260 {3}	1766316	1688283	2029923	2166907	2129858	1956257	11.08
Aroclor-1260 {4}	898826	750678	850957	950128	954853	881089	9.57
Aroclor-1260 {5}	541345	502458	563054	601497	596253	560921	7.30
					Average %RSD		5.54

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.75	3.75	3.75	3.75	3.75	3.75	3.68	3.82
Aroclor-1016 {2}	4.36	4.36	4.36	4.35	4.35	4.36	4.29	4.43
Aroclor-1016 {3}	5.12	5.12	5.12	5.11	5.11	5.12	5.05	5.19
Aroclor-1016 {4}	5.33	5.33	5.33	5.32	5.32	5.33	5.26	5.40
Aroclor-1016 {5}	5.51	5.50	5.50	5.50	5.49	5.50	5.43	5.57
Aroclor-1221			2.42				2.35	2.49
Aroclor-1221 {2}			3.43				3.36	3.50
Aroclor-1221 {3}			3.66				3.59	3.73
Aroclor-1221 {4}			3.76				3.69	3.83
Aroclor-1221 {5}			5.12				5.05	5.19
Aroclor-1232			3.76				3.69	3.83
Aroclor-1232 {2}			4.74				4.67	4.81
Aroclor-1232 {3}			5.33				5.26	5.40
Aroclor-1232 {4}			5.51				5.44	5.58
Aroclor-1232 {5}			6.11				6.04	6.18
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.50				5.43	5.57
Aroclor-1242 {3}			6.11				6.04	6.18
Aroclor-1242 {4}			6.27				6.20	6.34
Aroclor-1242 {5}			6.82				6.75	6.89
Aroclor-1248			5.12				5.04	5.20
Aroclor-1248 {2}			5.71				5.63	5.79
Aroclor-1248 {3}			6.11				6.03	6.19
Aroclor-1248 {4}			6.27				6.19	6.35
Aroclor-1248 {5}			6.63				6.55	6.71
Aroclor-1254			7.12				7.04	7.20
Aroclor-1254 {2}			7.71				7.63	7.79
Aroclor-1254 {3}			8.15				8.06	8.24
Aroclor-1254 {4}			8.34				8.25	8.43
Aroclor-1254 {5}			9.15				9.06	9.24
Aroclor-1260	7.89	7.89	7.89	7.88	7.88	7.89	6.99	8.79
Aroclor-1260 {2}	8.14	8.14	8.14	8.14	8.13	8.14	7.24	9.04
Aroclor-1260 {3}	9.75	9.75	9.75	9.74	9.74	9.74	8.84	10.64
Aroclor-1260 {4}	10.26	10.26	10.26	10.25	10.25	10.26	9.36	11.16
Aroclor-1260 {5}	10.85	10.85	10.85	10.84	10.84	10.85	9.95	11.75

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	2116191	2184167	2069500	1963430	1828497	2032357	6.86
Aroclor-1016 {2}	4032217	4376841	3930273	3803138	3565832	3941660	7.59
Aroclor-1016 {3}	7791958	8929233	8616852	8889690	8671818	8579910	5.37
Aroclor-1016 {4}	4274487	4074906	4139189	3771123	3566867	3965314	7.29
Aroclor-1016 {5}	3241005	3252905	3167215	2917390	2809404	3077584	6.56
Aroclor-1221			1101307				
Aroclor-1221 {2}			1591569				
Aroclor-1221 {3}			931575				
Aroclor-1221 {4}			3241230				
Aroclor-1221 {5}			767749				
Aroclor-1232			2398551				
Aroclor-1232 {2}			1010687				
Aroclor-1232 {3}			1902389				
Aroclor-1232 {4}			1470120				
Aroclor-1232 {5}			1969846				
Aroclor-1242			1767216				
Aroclor-1242 {2}			2671204				
Aroclor-1242 {3}			3427878				
Aroclor-1242 {4}			3387777				
Aroclor-1242 {5}			5330277				
Aroclor-1248			4728954				
Aroclor-1248 {2}			7333442				
Aroclor-1248 {3}			5066691				
Aroclor-1248 {4}			4686159				
Aroclor-1248 {5}			2534546				
Aroclor-1254			6166460				
Aroclor-1254 {2}			5082450				
Aroclor-1254 {3}			4179985				
Aroclor-1254 {4}			5985162				
Aroclor-1254 {5}			7752886				
Aroclor-1260	3440198	3725384	3815643	3646592	3118275	3549219	7.83
Aroclor-1260 {2}	5653519	5439844	5082333	4794742	4639360	5121959	8.31
Aroclor-1260 {3}	4528784	4795138	4543939	4444612	4428232	4548141	3.23
Aroclor-1260 {4}	10838904	10757351	10551106	10180290	10126019	10490734	3.11
Aroclor-1260 {5}	6703349	7156159	7298639	6951763	6817890	6985560	3.48
					Average %RSD		5.96

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015

Instrument ID: GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.56				8.44	8.68
Aroclor-1262 {2}			9.43				9.31	9.55
Aroclor-1262 {3}			10.06				9.94	10.18
Aroclor-1262 {4}			10.14				10.02	10.26
Aroclor-1262 {5}			10.98				10.86	11.10
Aroclor-1268			10.06				9.94	10.18
Aroclor-1268 {2}			10.14				10.02	10.26
Aroclor-1268 {3}			10.61				10.49	10.73
Aroclor-1268 {4}			10.74				10.62	10.86
Aroclor-1268 {5}			11.58				11.46	11.70

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.75				9.63	9.87
Aroclor-1262 {2}			10.26				10.14	10.38
Aroclor-1262 {3}			10.76				10.64	10.88
Aroclor-1262 {4}			10.85				10.73	10.97
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.76				10.64	10.88
Aroclor-1268 {2}			10.84				10.72	10.96
Aroclor-1268 {3}			11.10				10.98	11.22
Aroclor-1268 {4}			11.24				11.12	11.36
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/17/2015 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R5263.D R5262.D R5261.D R5260.D R5259.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1168212				
Aroclor-1262 {2}			2239849				
Aroclor-1262 {3}			879258				
Aroclor-1262 {4}			1126181				
Aroclor-1262 {5}			839831				
Aroclor-1268			2311054				
Aroclor-1268 {2}			3012042				
Aroclor-1268 {3}			2314168				
Aroclor-1268 {4}			631651				
Aroclor-1268 {5}			7380276				

GC Column (2nd): DB-1701P

Data File: R5263.C R5262.C R5261.C R5260.C R5259.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			5360706				
Aroclor-1262 {2}			12638729				
Aroclor-1262 {3}			4064561				
Aroclor-1262 {4}			8668956				
Aroclor-1262 {5}			2098932				
Aroclor-1268			11967904				
Aroclor-1268 {2}			12782905				
Aroclor-1268 {3}			10108282				
Aroclor-1268 {4}			2858263				
Aroclor-1268 {5}			29150062				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5401.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	389866	3.71
Aroclor-1016 {2}	4.01	3.93	4.07	502815	515488	2.52
Aroclor-1016 {3}	4.56	4.49	4.63	666673	683552	2.53
Aroclor-1016 {4}	5.07	4.99	5.13	364492	351877	3.46
Aroclor-1016 {5}	5.47	5.39	5.53	526062	525343	0.14
Aroclor-1260	8.27	7.37	9.17	1316283	1299868	1.25
Aroclor-1260 {2}	8.94	8.04	9.84	746714	728779	2.40
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	1955817	0.02
Aroclor-1260 {4}	9.91	9.01	10.81	881089	876409	0.53
Aroclor-1260 {5}	10.97	10.07	11.87	560921	510817	8.93

Data File: R5401.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2139076	5.25
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4220504	7.07
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9368061	9.19
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	4118329	3.86
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3205909	4.17
Aroclor-1260	7.90	6.99	8.79	3549219	3228705	9.03
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4622896	9.74
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4147919	8.80
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	8976984	14.43
Aroclor-1260 {5}	10.86	9.95	11.75	6985560	5988006	14.28

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 06/30/2015 **Instrument ID:** GC-R

Data File: R5424.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	415039	10.40
Aroclor-1016 {2}	4.01	3.93	4.07	502815	535457	6.49
Aroclor-1016 {3}	4.56	4.49	4.63	666673	718890	7.83
Aroclor-1016 {4}	5.07	4.99	5.13	364492	390403	7.11
Aroclor-1016 {5}	5.47	5.39	5.53	526062	565847	7.56
Aroclor-1260	8.27	7.37	9.17	1316283	1334254	1.37
Aroclor-1260 {2}	8.94	8.04	9.84	746714	746865	0.02
Aroclor-1260 {3}	9.42	8.52	10.32	1956257	2038526	4.21
Aroclor-1260 {4}	9.91	9.01	10.81	881089	881737	0.07
Aroclor-1260 {5}	10.98	10.07	11.87	560921	535984	4.45

Data File: R5424.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	2032357	2312450	13.78
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4568460	15.90
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	10119055	17.94
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4576445	15.41
Aroclor-1016 {5}	5.50	5.43	5.57	3077584	3587966	16.58
Aroclor-1260	7.89	6.99	8.79	3549219	3894443	9.73
Aroclor-1260 {2}	8.14	7.24	9.04	5121959	5008381	2.22
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4223262	7.14
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9217606	12.14
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6233678	10.76

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-R

Data File: R5549.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	407334	8.35
Aroclor-1016 {2}	4.01	3.93	4.07	502815	531743	5.75
Aroclor-1016 {3}	4.57	4.49	4.63	666673	720810	8.12
Aroclor-1016 {4}	5.07	4.99	5.13	364492	377724	3.63
Aroclor-1016 {5}	5.47	5.39	5.53	526062	558403	6.15
Aroclor-1260	8.27	7.37	9.17	1316283	1345019	2.18
Aroclor-1260 {2}	8.95	8.04	9.84	746714	739515	0.96
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	2009661	2.73
Aroclor-1260 {4}	9.92	9.01	10.81	881089	877001	0.46
Aroclor-1260 {5}	10.98	10.07	11.87	560921	618498	10.26

Data File: R5549.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2196889	8.10
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4461606	13.19
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9839288	14.68
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4234414	6.79
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3367797	9.43
Aroclor-1260	7.89	6.99	8.79	3549219	3871049	9.07
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5022358	1.94
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4127982	9.24
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9453756	9.88
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6430633	7.94

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-R

Data File: R5560.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	399031	6.14
Aroclor-1016 {2}	4.01	3.93	4.07	502815	516937	2.81
Aroclor-1016 {3}	4.57	4.49	4.63	666673	707746	6.16
Aroclor-1016 {4}	5.07	4.99	5.13	364492	372835	2.29
Aroclor-1016 {5}	5.47	5.39	5.53	526062	543782	3.37
Aroclor-1260	8.28	7.37	9.17	1316283	1282456	2.57
Aroclor-1260 {2}	8.95	8.04	9.84	746714	685818	8.16
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1906961	2.52
Aroclor-1260 {4}	9.92	9.01	10.81	881089	846304	3.95
Aroclor-1260 {5}	10.98	10.07	11.87	560921	582651	3.87

Data File: R5560.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2202869	8.39
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4421689	12.18
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9721734	13.31
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4139007	4.38
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3319327	7.85
Aroclor-1260	7.89	6.99	8.79	3549219	3879266	9.30
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	5077969	0.86
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4281511	5.86
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	10259488	2.20
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	7167728	2.61

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-R

Data File: R5578.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	391384	4.11
Aroclor-1016 {2}	4.01	3.93	4.07	502815	500770	0.41
Aroclor-1016 {3}	4.57	4.49	4.63	666673	674861	1.23
Aroclor-1016 {4}	5.07	4.99	5.13	364492	313288	14.05
Aroclor-1016 {5}	5.47	5.39	5.53	526062	454383	13.63
Aroclor-1260	8.27	7.37	9.17	1316283	1220831	7.25
Aroclor-1260 {2}	8.95	8.04	9.84	746714	677072	9.33
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1880293	3.88
Aroclor-1260 {4}	9.91	9.01	10.81	881089	860179	2.37
Aroclor-1260 {5}	10.97	10.07	11.87	560921	556739	0.75

Data File: R5578.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	2032357	2234181	9.93
Aroclor-1016 {2}	4.36	4.29	4.43	3941660	4414562	12.00
Aroclor-1016 {3}	5.12	5.05	5.19	8579910	9710610	13.18
Aroclor-1016 {4}	5.33	5.26	5.40	3965314	4123096	3.98
Aroclor-1016 {5}	5.51	5.43	5.57	3077584	3317720	7.80
Aroclor-1260	7.89	6.99	8.79	3549219	3282030	7.53
Aroclor-1260 {2}	8.15	7.24	9.04	5121959	4229125	17.43
Aroclor-1260 {3}	9.75	8.84	10.64	4548141	4093050	10.01
Aroclor-1260 {4}	10.26	9.36	11.16	10490734	9245640	11.87
Aroclor-1260 {5}	10.85	9.95	11.75	6985560	6598220	5.54

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/07/2015 **Instrument ID:** GC-R

Data File: R5583.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.18	3.10	3.24	375933	395102	5.10
Aroclor-1016 {2}	4.01	3.93	4.07	502815	510660	1.56
Aroclor-1016 {3}	4.57	4.49	4.63	666673	683880	2.58
Aroclor-1016 {4}	5.07	4.99	5.13	364492	362653	0.50
Aroclor-1016 {5}	5.48	5.39	5.53	526062	524256	0.34
Aroclor-1260	8.28	7.37	9.17	1316283	1272211	3.35
Aroclor-1260 {2}	8.95	8.04	9.84	746714	703751	5.75
Aroclor-1260 {3}	9.43	8.52	10.32	1956257	1928324	1.43
Aroclor-1260 {4}	9.92	9.01	10.81	881089	847744	3.78
Aroclor-1260 {5}	10.98	10.07	11.87	560921	500489	10.77

Data File: R5583.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.77	3.68	3.82	2032357	2326594	14.48
Aroclor-1016 {2}	4.37	4.29	4.43	3941660	4504671	14.28
Aroclor-1016 {3}	5.13	5.05	5.19	8579910	9954053	16.02
Aroclor-1016 {4}	5.34	5.26	5.40	3965314	4325919	9.09
Aroclor-1016 {5}	5.52	5.43	5.57	3077584	3421996	11.19
Aroclor-1260	7.90	6.99	8.79	3549219	3929064	10.70
Aroclor-1260 {2}	8.16	7.24	9.04	5121959	5067615	1.06
Aroclor-1260 {3}	9.76	8.84	10.64	4548141	4416877	2.89
Aroclor-1260 {4}	10.27	9.36	11.16	10490734	9708752	7.45
Aroclor-1260 {5}	10.86	9.95	11.75	6985560	6619494	5.24

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.24	3.24	3.24	3.24	3.24	3.24	3.17	3.31
Aroclor-1016 {2}	4.07	4.07	4.07	4.07	4.07	4.07	4.00	4.14
Aroclor-1016 {3}	4.62	4.63	4.62	4.62	4.62	4.62	4.55	4.69
Aroclor-1016 {4}	5.13	5.13	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1016 {5}	5.53	5.53	5.53	5.53	5.53	5.53	5.46	5.60
Aroclor-1221			2.14				2.07	2.21
Aroclor-1221 {2}			3.03				2.96	3.10
Aroclor-1221 {3}			3.16				3.09	3.23
Aroclor-1221 {4}			3.24				3.17	3.31
Aroclor-1221 {5}			3.83				3.76	3.90
Aroclor-1232			3.24				3.17	3.31
Aroclor-1232 {2}			4.07				4.00	4.14
Aroclor-1232 {3}			4.74				4.67	4.81
Aroclor-1232 {4}			5.33				5.26	5.40
Aroclor-1232 {5}			5.53				5.46	5.60
Aroclor-1242			4.07				4.00	4.14
Aroclor-1242 {2}			5.01				4.94	5.08
Aroclor-1242 {3}			5.33				5.26	5.40
Aroclor-1242 {4}			6.03				5.96	6.10
Aroclor-1242 {5}			6.31				6.24	6.38
Aroclor-1248			4.47				4.39	4.55
Aroclor-1248 {2}			5.01				4.93	5.09
Aroclor-1248 {3}			5.33				5.25	5.41
Aroclor-1248 {4}			6.04				5.96	6.12
Aroclor-1248 {5}			6.32				6.24	6.40
Aroclor-1254			6.43				6.35	6.51
Aroclor-1254 {2}			6.87				6.79	6.95
Aroclor-1254 {3}			7.04				6.95	7.13
Aroclor-1254 {4}			7.47				7.38	7.56
Aroclor-1254 {5}			8.33				8.24	8.42
Aroclor-1260	8.32	8.33	8.33	8.32	8.32	8.32	7.42	9.22
Aroclor-1260 {2}	9.00	9.00	9.00	9.00	9.00	9.00	8.10	9.90
Aroclor-1260 {3}	9.48	9.48	9.48	9.48	9.47	9.48	8.58	10.38
Aroclor-1260 {4}	9.97	9.97	9.96	9.96	9.96	9.96	9.06	10.86
Aroclor-1260 {5}	11.03	11.02	11.02	11.02	11.02	11.02	10.12	11.92

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1035220	1134677	1200626	1141101	1179553	1138235	5.60
Aroclor-1016 {2}	1465857	1417900	1561807	1517080	1549717	1502472	4.00
Aroclor-1016 {3}	1971167	1971569	2134979	2053626	2147950	2055858	4.14
Aroclor-1016 {4}	1161680	1093048	1154206	1080175	1119575	1121737	3.22
Aroclor-1016 {5}	1714728	1531336	1696349	1641444	1758369	1668445	5.24
Aroclor-1221			449690				
Aroclor-1221 {2}			797648				
Aroclor-1221 {3}			494086				
Aroclor-1221 {4}			1826249				
Aroclor-1221 {5}			349620				
Aroclor-1232			1283730				
Aroclor-1232 {2}			679188				
Aroclor-1232 {3}			600221				
Aroclor-1232 {4}			546220				
Aroclor-1232 {5}			888909				
Aroclor-1242			1327257				
Aroclor-1242 {2}			826000				
Aroclor-1242 {3}			1025010				
Aroclor-1242 {4}			2509146				
Aroclor-1242 {5}			1614150				
Aroclor-1248			2660626				
Aroclor-1248 {2}			1486008				
Aroclor-1248 {3}			1797318				
Aroclor-1248 {4}			3729181				
Aroclor-1248 {5}			2536819				
Aroclor-1254			4149122				
Aroclor-1254 {2}			3098341				
Aroclor-1254 {3}			4553666				
Aroclor-1254 {4}			4265173				
Aroclor-1254 {5}			4303752				
Aroclor-1260	4131374	3602975	4306509	4242607	4423326	4141358	7.70
Aroclor-1260 {2}	2439674	2054713	2406192	2420883	2455212	2355335	7.18
Aroclor-1260 {3}	5614242	5258674	6353528	6215095	6341158	5956539	8.30
Aroclor-1260 {4}	2638606	2324791	2795276	2788768	2865653	2682619	8.07
Aroclor-1260 {5}	1517585	1427974	1525858	1491030	1509914	1494472	2.63
					Average %RSD		5.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015

Instrument ID: GC-Y

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.79	3.79	3.79	3.79	3.79	3.79	3.72	3.86
Aroclor-1016 {2}	4.39	4.39	4.39	4.39	4.39	4.39	4.32	4.46
Aroclor-1016 {3}	5.15	5.15	5.15	5.15	5.15	5.15	5.08	5.22
Aroclor-1016 {4}	5.36	5.36	5.36	5.36	5.36	5.36	5.29	5.43
Aroclor-1016 {5}	5.54	5.54	5.54	5.54	5.54	5.54	5.47	5.61
Aroclor-1221			2.45				2.38	2.52
Aroclor-1221 {2}			3.46				3.39	3.53
Aroclor-1221 {3}			3.70				3.63	3.77
Aroclor-1221 {4}			3.79				3.72	3.86
Aroclor-1221 {5}			5.15				5.08	5.22
Aroclor-1232			3.70				3.63	3.77
Aroclor-1232 {2}			4.71				4.64	4.78
Aroclor-1232 {3}			5.15				5.08	5.22
Aroclor-1232 {4}			5.36				5.29	5.43
Aroclor-1232 {5}			6.14				6.07	6.21
Aroclor-1242			4.78				4.71	4.85
Aroclor-1242 {2}			5.54				5.47	5.61
Aroclor-1242 {3}			6.14				6.07	6.21
Aroclor-1242 {4}			6.30				6.23	6.37
Aroclor-1242 {5}			6.85				6.78	6.92
Aroclor-1248			5.15				5.07	5.23
Aroclor-1248 {2}			5.74				5.66	5.82
Aroclor-1248 {3}			6.14				6.06	6.22
Aroclor-1248 {4}			6.29				6.21	6.37
Aroclor-1248 {5}			6.65				6.57	6.73
Aroclor-1254			7.14				7.06	7.22
Aroclor-1254 {2}			7.73				7.65	7.81
Aroclor-1254 {3}			8.36				8.27	8.45
Aroclor-1254 {4}			8.58				8.49	8.67
Aroclor-1254 {5}			9.17				9.08	9.26
Aroclor-1260	7.92	7.91	7.92	7.92	7.92	7.92	7.02	8.82
Aroclor-1260 {2}	8.17	8.17	8.17	8.17	8.17	8.17	7.27	9.07
Aroclor-1260 {3}	9.77	9.77	9.77	9.77	9.77	9.77	8.87	10.67
Aroclor-1260 {4}	10.28	10.28	10.28	10.28	10.28	10.28	9.38	11.18
Aroclor-1260 {5}	10.87	10.87	10.87	10.87	10.87	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	727179	649681	599818	572679	596428	629157	9.78
Aroclor-1016 {2}	1451309	1253159	1169195	1102953	1162450	1227813	11.07
Aroclor-1016 {3}	2849344	2530697	2600004	2514006	2692095	2637229	5.22
Aroclor-1016 {4}	1324756	1271114	1143157	1071810	1116437	1185455	9.07
Aroclor-1016 {5}	1029139	916078	878209	835898	880789	908023	8.09
Aroclor-1221			248315				
Aroclor-1221 {2}			395120				
Aroclor-1221 {3}			243765				
Aroclor-1221 {4}			924924				
Aroclor-1221 {5}			157727				
Aroclor-1232			155379				
Aroclor-1232 {2}			170266				
Aroclor-1232 {3}			1103692				
Aroclor-1232 {4}			515970				
Aroclor-1232 {5}			518462				
Aroclor-1242			453993				
Aroclor-1242 {2}			757756				
Aroclor-1242 {3}			959648				
Aroclor-1242 {4}			979390				
Aroclor-1242 {5}			1546010				
Aroclor-1248			1344062				
Aroclor-1248 {2}			2099649				
Aroclor-1248 {3}			1468554				
Aroclor-1248 {4}			1371497				
Aroclor-1248 {5}			722538				
Aroclor-1254			1762464				
Aroclor-1254 {2}			1459628				
Aroclor-1254 {3}			1313798				
Aroclor-1254 {4}			1001882				
Aroclor-1254 {5}			2271862				
Aroclor-1260	1114518	1071341	1054896	1020713	940767	1040447	6.26
Aroclor-1260 {2}	1736190	1550859	1474231	1399297	1445588	1521233	8.69
Aroclor-1260 {3}	1591443	1402133	1426458	1400913	1455999	1455389	5.45
Aroclor-1260 {4}	3835300	3153994	3293958	3277088	3383463	3388761	7.75
Aroclor-1260 {5}	2687365	2299414	2360009	2336144	2380674	2412721	6.49
					Average %RSD		7.79

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015

Instrument ID: GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.61				8.49	8.73
Aroclor-1262 {2}			9.48				9.36	9.60
Aroclor-1262 {3}			10.11				9.99	10.23
Aroclor-1262 {4}			10.19				10.07	10.31
Aroclor-1262 {5}			11.02				10.90	11.14
Aroclor-1268			10.11				9.99	10.23
Aroclor-1268 {2}			10.19				10.07	10.31
Aroclor-1268 {3}			10.66				10.54	10.78
Aroclor-1268 {4}			11.02				10.90	11.14
Aroclor-1268 {5}			11.62				11.50	11.74

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.77				9.65	9.89
Aroclor-1262 {2}			10.28				10.16	10.40
Aroclor-1262 {3}			10.77				10.65	10.89
Aroclor-1262 {4}			10.86				10.74	10.98
Aroclor-1262 {5}			11.46				11.34	11.58
Aroclor-1268			10.77				10.65	10.89
Aroclor-1268 {2}			10.86				10.74	10.98
Aroclor-1268 {3}			11.11				10.99	11.23
Aroclor-1268 {4}			11.91				11.79	12.03
Aroclor-1268 {5}			12.33				12.21	12.45

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 06/15/2015 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2653.D Y2652.D Y2651.D Y2650.D Y2649.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3942099				
Aroclor-1262 {2}			7631823				
Aroclor-1262 {3}			2755124				
Aroclor-1262 {4}			3476908				
Aroclor-1262 {5}			2531033				
Aroclor-1268			7248111				
Aroclor-1268 {2}			9271222				
Aroclor-1268 {3}			6927535				
Aroclor-1268 {4}			2776800				
Aroclor-1268 {5}			21046728				

GC Column (2nd): DB-1701P

Data File: Y2653.C Y2652.C Y2651.C Y2650.C Y2649.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1738813				
Aroclor-1262 {2}			4008201				
Aroclor-1262 {3}			1271006				
Aroclor-1262 {4}			2847748				
Aroclor-1262 {5}			513693				
Aroclor-1268			4026781				
Aroclor-1268 {2}			4415953				
Aroclor-1268 {3}			3441265				
Aroclor-1268 {4}			1482145				
Aroclor-1268 {5}			10901949				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/02/2015 **Instrument ID:** GC-Y

Data File: Y3021.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1248450	9.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1459422	2.87
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2153358	4.74
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1160017	3.41
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1673764	0.32
Aroclor-1260	8.33	7.42	9.22	4141358	3841492	7.24
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1962626	16.67
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5254919	11.78
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2154907	19.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1283214	14.14

Data File: Y3021.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	612648	2.62
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1164984	5.12
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2558796	2.97
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1109967	6.37
Aroclor-1016 {5}	5.54	5.47	5.61	908023	848730	6.53
Aroclor-1260	7.92	7.02	8.82	1040447	954903	8.22
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1295787	14.82
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1210913	16.80
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2768561	18.30
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	1946172	19.34

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3032.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1274065	11.93
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1668575	11.06
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2271346	10.48
Aroclor-1016 {4}	5.13	5.06	5.20	1121737	1215949	8.40
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1765462	5.81
Aroclor-1260	8.33	7.42	9.22	4141358	4503660	8.75
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2520198	7.00
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	6485409	8.88
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2664680	0.67
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1481540	0.87

Data File: Y3032.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	635559	1.02
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1210344	1.42
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2716194	2.99
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1185605	0.01
Aroclor-1016 {5}	5.54	5.47	5.61	908023	907360	0.07
Aroclor-1260	7.92	7.02	8.82	1040447	1070893	2.93
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1467749	3.52
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1438854	1.14
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3365800	0.68
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2430287	0.73

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/03/2015 **Instrument ID:** GC-Y

Data File: Y3055.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1249590	9.78
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1425194	5.14
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2121582	3.20
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1205332	7.45
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1695215	1.60
Aroclor-1260	8.33	7.42	9.22	4141358	3851645	7.00
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	1938282	17.71
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5252544	11.82
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2213141	17.50
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1282827	14.16

Data File: Y3055.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	640788	1.85
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1212509	1.25
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2683131	1.74
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1182590	0.24
Aroclor-1016 {5}	5.54	5.47	5.61	908023	903170	0.53
Aroclor-1260	7.92	7.02	8.82	1040447	997470	4.13
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1381031	9.22
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1279710	12.07
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	2913217	14.03
Aroclor-1260 {5}	10.86	9.97	11.77	2412721	2072422	14.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3056.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1339496	17.68
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1593650	6.07
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2307503	12.24
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1217027	8.49
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1787366	7.13
Aroclor-1260	8.33	7.42	9.22	4141358	4095878	1.10
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2120942	9.95
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5563039	6.61
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2375486	11.45
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1258259	15.81

Data File: Y3056.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	693129	10.17
Aroclor-1016 {2}	4.40	4.32	4.46	1227813	1292323	5.25
Aroclor-1016 {3}	5.16	5.08	5.22	2637229	2867215	8.72
Aroclor-1016 {4}	5.37	5.29	5.43	1185455	1235456	4.22
Aroclor-1016 {5}	5.54	5.47	5.61	908023	952956	4.95
Aroclor-1260	7.92	7.02	8.82	1040447	1050696	0.99
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1433485	5.77
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1373278	5.64
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3149693	7.05
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2241538	7.10

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 07/06/2015 **Instrument ID:** GC-Y

Data File: Y3066.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.24	3.17	3.31	1138235	1300400	14.25
Aroclor-1016 {2}	4.07	4.00	4.14	1502472	1630197	8.50
Aroclor-1016 {3}	4.63	4.55	4.69	2055858	2389934	16.25
Aroclor-1016 {4}	5.14	5.06	5.20	1121737	1304204	16.27
Aroclor-1016 {5}	5.54	5.46	5.60	1668445	1856225	11.25
Aroclor-1260	8.33	7.42	9.22	4141358	4308258	4.03
Aroclor-1260 {2}	9.01	8.10	9.90	2355335	2253041	4.34
Aroclor-1260 {3}	9.48	8.58	10.38	5956539	5995207	0.65
Aroclor-1260 {4}	9.97	9.06	10.86	2682619	2541612	5.26
Aroclor-1260 {5}	11.03	10.12	11.92	1494472	1309646	12.37

Data File: Y3066.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.79	3.72	3.86	629157	697702	10.89
Aroclor-1016 {2}	4.39	4.32	4.46	1227813	1324110	7.84
Aroclor-1016 {3}	5.15	5.08	5.22	2637229	2915672	10.56
Aroclor-1016 {4}	5.36	5.29	5.43	1185455	1270603	7.18
Aroclor-1016 {5}	5.54	5.47	5.61	908023	971414	6.98
Aroclor-1260	7.92	7.02	8.82	1040447	1075474	3.37
Aroclor-1260 {2}	8.17	7.27	9.07	1521233	1486540	2.28
Aroclor-1260 {3}	9.77	8.87	10.67	1455389	1388714	4.58
Aroclor-1260 {4}	10.28	9.38	11.18	3388761	3197845	5.63
Aroclor-1260 {5}	10.87	9.97	11.77	2412721	2278661	5.56

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.72 **DCB 1** 12.07 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA150629-16	06/30/2015	18:42	2.72		12.07		2.87		12.55	
PCB	LCSA150629-16	06/30/2015	18:59	2.72		12.07		2.87		12.55	
PCB	LCSDA150629-16	06/30/2015	19:17	2.72		12.07		2.87		12.55	
FB	E15-05346-027	06/30/2015	19:34	2.71		12.07		2.87		12.55	
FB	E15-05430-103	06/30/2015	19:51	2.71		12.07		2.87		12.55	
FB-1	E15-05338-007	06/30/2015	20:09	2.72		12.07		2.87		12.55	
FB-06221	E15-05367-040	06/30/2015	20:26	2.72		12.07		2.87		12.55	
FB-06231	E15-05428-030	06/30/2015	20:44	2.72		12.07		2.88		12.55	
FB-06241	E15-05428-032	06/30/2015	21:01	2.71		12.06		2.87		12.55	
FB-06251	E15-05467-012	06/30/2015	21:19	2.72		12.07		2.87		12.55	
FIELD_BL	E15-05470-016	06/30/2015	21:36	2.71		12.07		2.87		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-12	07/02/2015	21:10	2.77		12.11		2.91		12.56	
PCB	LCSS150701-12	07/02/2015	21:27	2.77		12.11		2.91		12.56	
PCB	05428-013MS	07/02/2015	21:45	2.77		12.11		2.90		12.56	
PCB	05428-013MSD	07/02/2015	22:02	2.77		12.12		2.91		12.56	
E-25_(2.	E15-05428-013	07/02/2015	22:19	2.77		12.12		2.91		12.56	
E-15_(0.	E15-05428-018	07/02/2015	22:37	2.77		12.11		2.91		12.56	
E-15_(2.	E15-05428-019	07/02/2015	22:54	2.77		12.12		2.91		12.56	
E-10_(0.	E15-05428-024	07/02/2015	23:11	2.77		12.11		2.90		12.56	
E-10_(2.	E15-05428-025	07/02/2015	23:29	2.77		12.11		2.91		12.56	
C-1	E15-05432-001	07/03/2015	01:13	2.77		12.11		2.91		12.56	
C-2	E15-05432-002	07/03/2015	01:30	2.77		12.11		2.90		12.56	
C-3	E15-05432-003	07/03/2015	01:47	2.77		12.11		2.91		12.56	
C-4	E15-05432-004	07/03/2015	02:05	2.77		12.11		2.91		12.56	
C-5	E15-05432-005	07/03/2015	02:22	2.77		12.11		2.91		12.56	
C-6	E15-05432-006	07/03/2015	02:39	2.77		12.11		2.91		12.56	
C-7	E15-05432-007	07/03/2015	02:57	2.77		12.11		2.91		12.56	
C-8	E15-05432-008	07/03/2015	03:14	2.77		12.11		2.91		12.56	
E-13_(0.	E15-05467-001	07/03/2015	03:31	2.77		12.11		2.91		12.56	
E-13_(2.	E15-05467-002	07/03/2015	03:49	2.77		12.11		2.91		12.56	
E-21_(0.	E15-05467-003	07/03/2015	04:06	2.77		12.11		2.91		12.56	
E-21_(2.	E15-05467-004	07/03/2015	04:23	2.77		12.11		2.91		12.56	
E-23_(0.	E15-05467-005	07/03/2015	04:41	2.78		12.11		2.91		12.56	
E-23_(2.	E15-05467-006	07/03/2015	04:58	2.77		12.11		2.91		12.56	
E-25_(0.	E15-05467-007	07/03/2015	05:15	2.77		12.12		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.77 **DCB 1** 12.11 **TCMX 2** 2.91 **DCB 2** 12.56

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150701-12	07/02/2015	21:10	2.77		12.11		2.91		12.56	
PCB	LCSS150701-12	07/02/2015	21:27	2.77		12.11		2.91		12.56	
E-21_(0.	E15-05467-003DL	07/06/2015	12:03	2.78		12.11		2.91		12.56	
E-23_(0.	E15-05467-005DL	07/06/2015	12:20	2.78		12.11		2.91		12.56	
E-23_(2.	E15-05467-006DL	07/06/2015	12:38	2.78		12.11		2.91		12.56	
E-25_(0.	E15-05467-007DL	07/06/2015	12:55	2.78		12.11		2.91		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 12.07 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150702-07	07/06/2015	21:10	2.71		12.07		2.87		12.55	
PCB	LCSS150702-07	07/06/2015	21:27	2.72		12.07		2.87		12.55	
PCB	05467-008MS	07/06/2015	21:45	2.72		12.06		2.87		12.55	
PCB	05467-008MSD	07/06/2015	22:02	2.71		12.06		2.87		12.55	
E-25_(2.	E15-05467-008	07/06/2015	22:20	2.72		12.06		2.87		12.54	
E-26_(0.	E15-05467-009	07/06/2015	22:37	2.71		12.06		2.87		12.55	
E-26_(2.	E15-05467-010	07/06/2015	22:55	2.72		12.06		2.87		12.55	
SB-1B	E15-05638-002	07/06/2015	23:29	2.72		12.07		2.87		12.55	
S-1	E15-05433-001	07/07/2015	01:14	2.72		12.06		2.87		12.55	
S-2	E15-05433-002	07/07/2015	01:32	2.71		12.06		2.87		12.55	
S-3	E15-05433-003	07/07/2015	01:49	2.71		12.07		2.87		12.55	
S-4	E15-05433-004	07/07/2015	02:07	2.72		12.06		2.87		12.55	
S-5	E15-05433-005	07/07/2015	02:24	2.72		12.06		2.87		12.55	
C-1	E15-05434-001	07/07/2015	02:41	2.72		12.06		2.87		12.55	
C-2	E15-05434-002	07/07/2015	02:59	2.72		12.06		2.87		12.55	
E-24_(2.	E15-05467-014	07/07/2015	03:34	2.72		12.06		2.87		12.55	
C-1	E15-05518-001	07/07/2015	03:51	2.72		12.06		2.87		12.55	
C-2	E15-05518-002	07/07/2015	04:08	2.72		12.06		2.87		12.55	
C-3	E15-05518-003	07/07/2015	04:26	2.72		12.07		2.87		12.55	
C-4	E15-05518-004	07/07/2015	04:43	2.72		12.06		2.87		12.55	
C-5	E15-05518-005	07/07/2015	05:01	2.72		12.07		2.87		12.55	
C-6	E15-05518-006	07/07/2015	05:18	2.72		12.07		2.87		12.55	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 12.07 **TCMX 2** 2.87 **DCB 2** 12.55

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS150702-07	07/06/2015	21:10	2.71		12.07		2.87		12.55	
PCB	LCSS150702-07	07/06/2015	21:27	2.72		12.07		2.87		12.55	
E-26_(0.	E15-05467-009DL	07/07/2015	09:33	2.72		12.07		2.87		12.55	
X-4_(0.5	E15-05467-011	07/07/2015	09:51	2.72		12.06		2.87		12.55	
E-24_(0.	E15-05467-013	07/07/2015	10:08	2.72		12.07		2.88		12.56	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 3:31
Operator : JS
Sample : E-13_(0.,E15-05467-001,S,5.24g,13.4,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:52:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	12351.4E6	6571.3E6	185.447	189.609
Spiked Amount 200.000			Recovery	=	92.72%	94.80%
2) S DCB	12.11	12.56	2332.0E6	1749.5E6	113.855	141.548
Spiked Amount 200.000			Recovery	=	56.93%	70.77%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	5257.7E6	1026.5E6	1269.550	986.621
34) L8 Aroclor-1260 {2}	9.00	8.17	2332.0E6	1435.0E6	990.072	943.324
35) L8 Aroclor-1260 {3}	9.48	9.77	6787.1E6	1918.7E6	1139.444	1318.312
36) L8 Aroclor-1260 {4}	9.97	10.28	3453.3E6	4849.2E6	1287.285	1430.976
37) L8 Aroclor-1260 {5}	11.03	10.87	1799.6E6	3620.7E6	1204.171	1500.686
Sum Aroclor-1260			19629.7E6	12850.2E6	5890.522	6179.918
Average Aroclor-1260					1178.104	1235.984
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

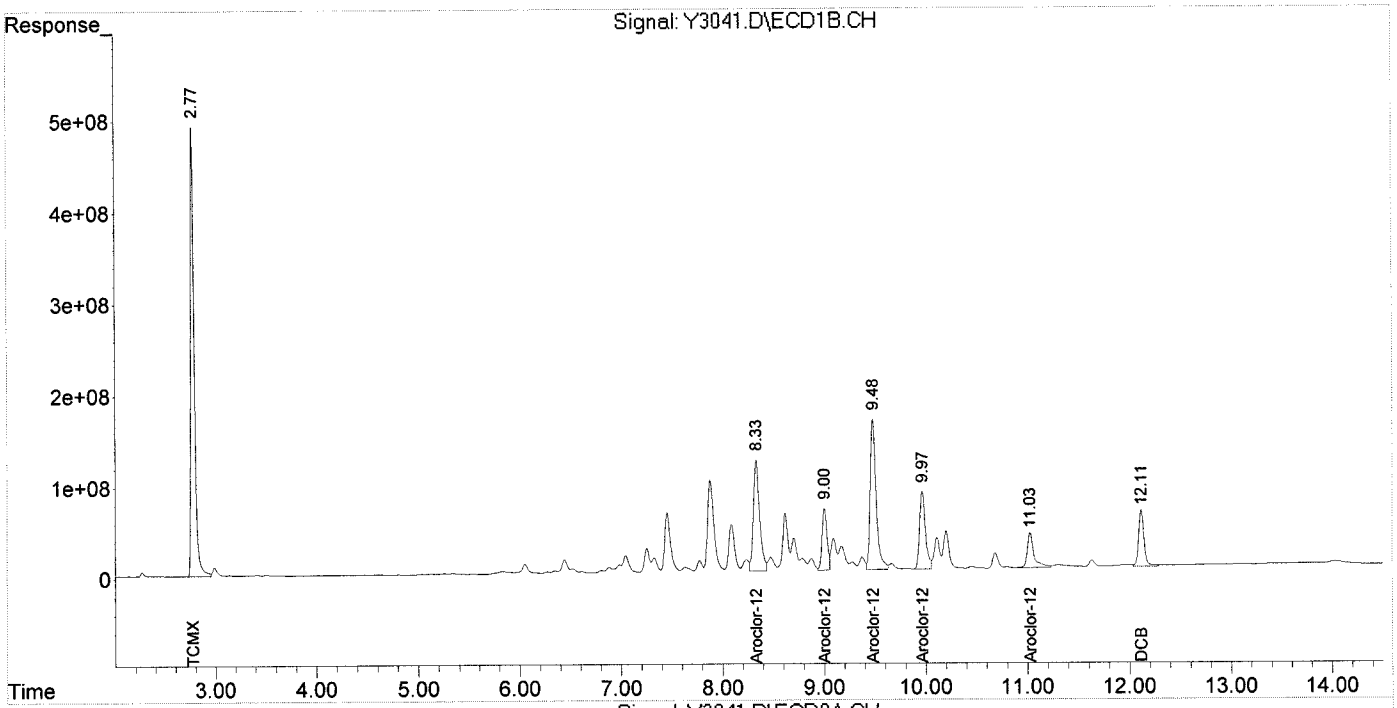
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

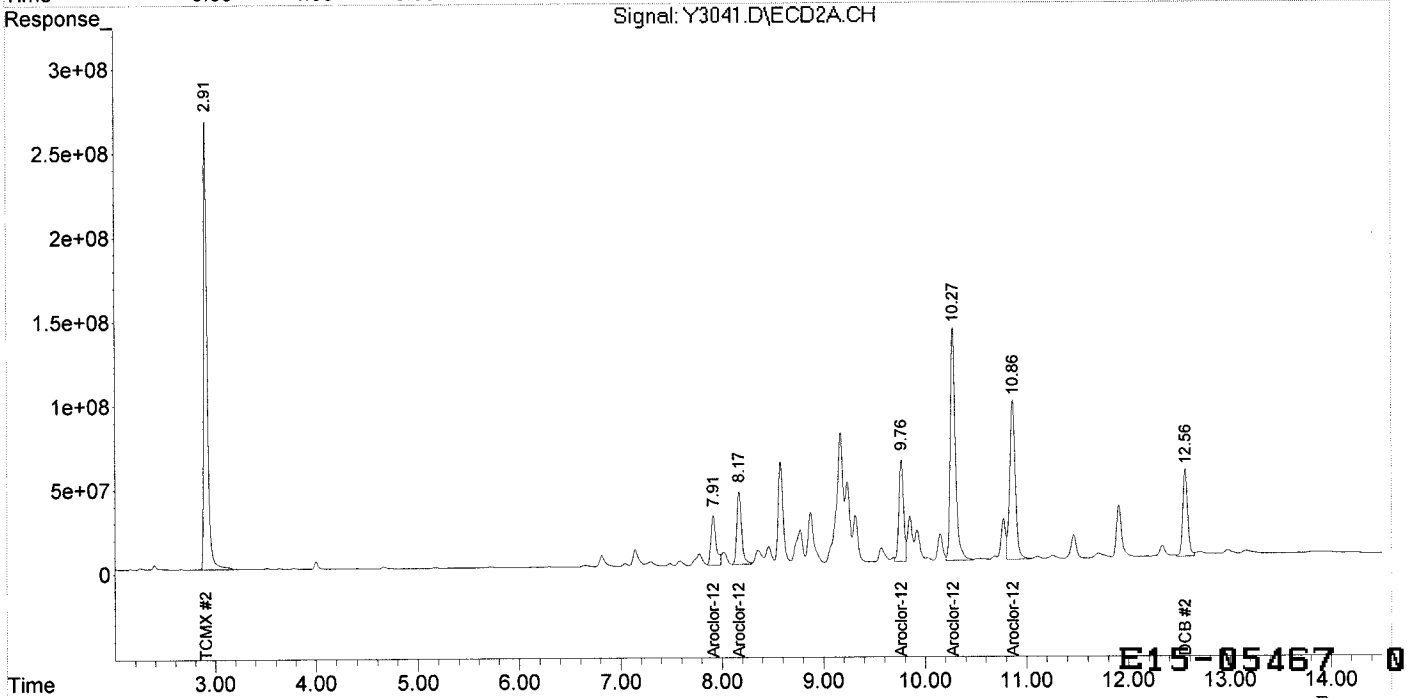
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3041.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 3:31
Operator : JS
Sample : E-13_(0.,E15-05467-001,S,5.24g,13.4,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:52:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 3:49
Operator : JS
Sample : E-13_(2.,E15-05467-002,S,5.22g,28.9,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:53:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11385.2E6	7115.2E6	170.940	205.302
Spiked Amount 200.000			Recovery	=	85.47%	102.65%
2) S DCB	12.11	12.56	4475.2E6	3073.8E6	218.490	248.692
Spiked Amount 200.000			Recovery	=	109.25%	124.35%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	4445.4E6	624.1E6	1073.416m	599.809 #
34) L8 Aroclor-1260 {2}	9.00	8.17	1239.9E6	845.4E6	526.407m	555.715
35) L8 Aroclor-1260 {3}	9.48	9.76	4251.3E6	1318.3E6	713.728m	905.795 #
36) L8 Aroclor-1260 {4}	9.96	10.27	2007.8E6	2895.6E6	748.443m	854.461
37) L8 Aroclor-1260 {5}	11.02	10.86	818.3E6	2444.5E6	547.553m	1013.175 #
Sum Aroclor-1260			12762.7E6	8127.8E6	3609.546	3928.955
Average Aroclor-1260					721.909	785.791
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

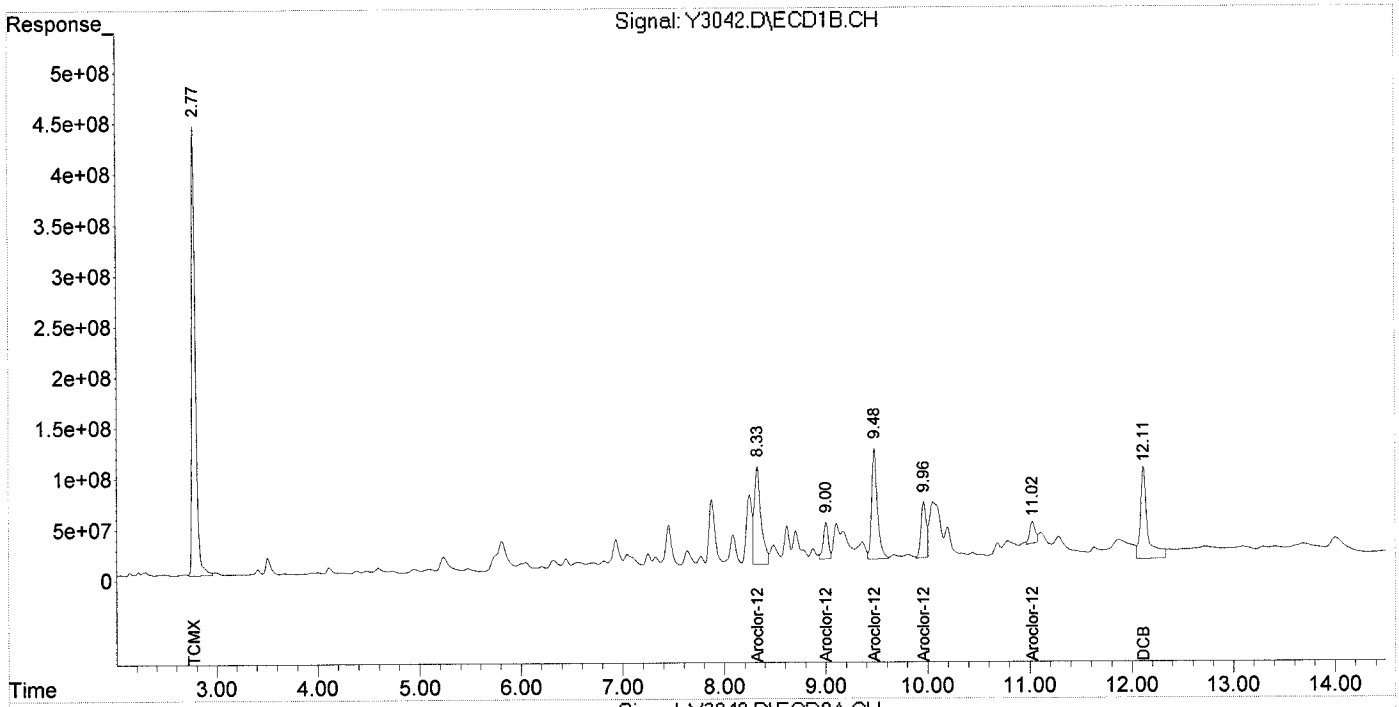
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

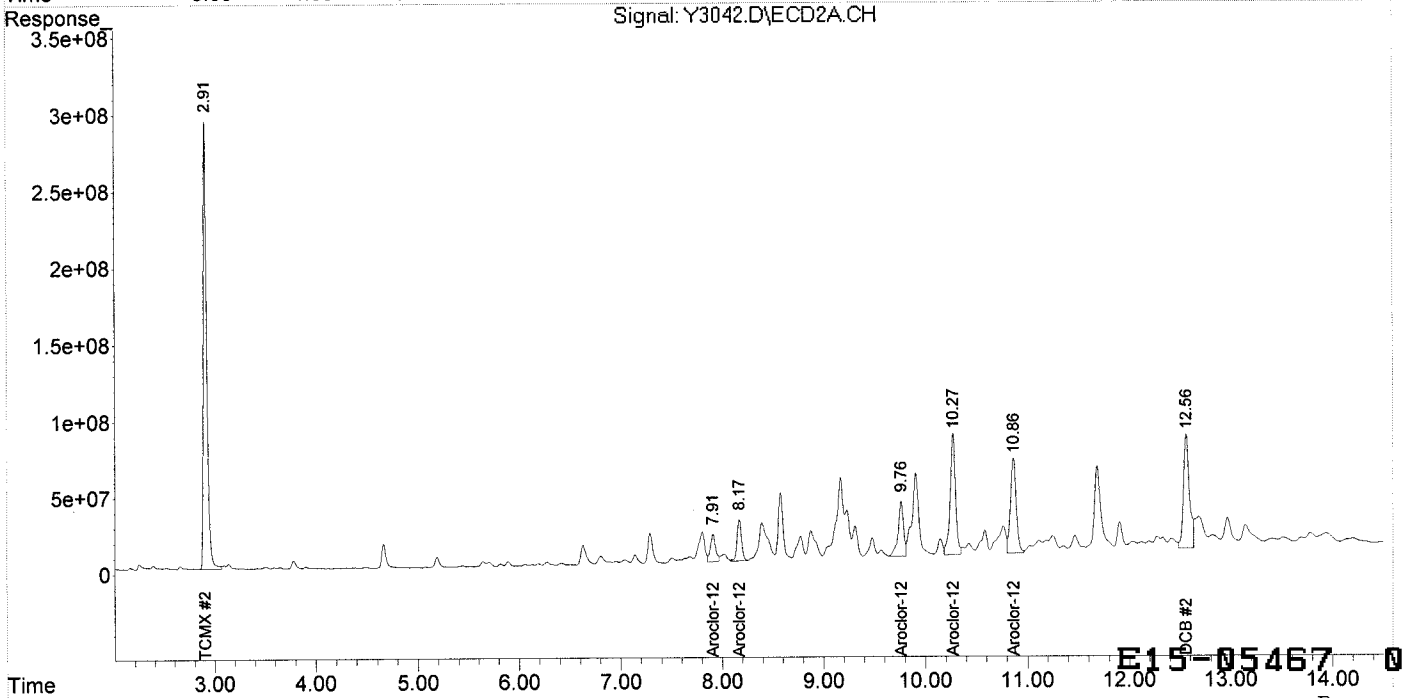
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3042.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 3:49
Operator : JS
Sample : E-13_(2.,E15-05467-002,S,5.22g,28.9,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:53:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:06
Operator : JS
Sample : E-21_(0.,E15-05467-003,S,5.44g,10.7,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:54:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	9831.8E6	6201.5E6	147.617	178.939
Spiked Amount 200.000			Recovery	=	73.81%	89.47%
2) S DCB	12.11	12.56	4698.3E6	3159.7E6	229.384	255.635
Spiked Amount 200.000			Recovery	=	114.69%	127.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	14437.8E6	3214.6E6	3486.250	3089.622
34) L8 Aroclor-1260 {2}	9.00	8.17	5528.4E6	3900.8E6	2347.203	2564.233
35) L8 Aroclor-1260 {3}	9.48	9.76	16688.6E6	4896.9E6	2801.725	3364.679
36) L8 Aroclor-1260 {4}	9.96	10.27	8533.5E6	12454.0E6	3181.037	3675.102
37) L8 Aroclor-1260 {5}	11.02	10.86	5759.0E6	9305.7E6	3853.520	3856.950
Sum Aroclor-1260			50947.3E6	33772.1E6	15669.734	16550.586
Average Aroclor-1260					3133.947	3310.117
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

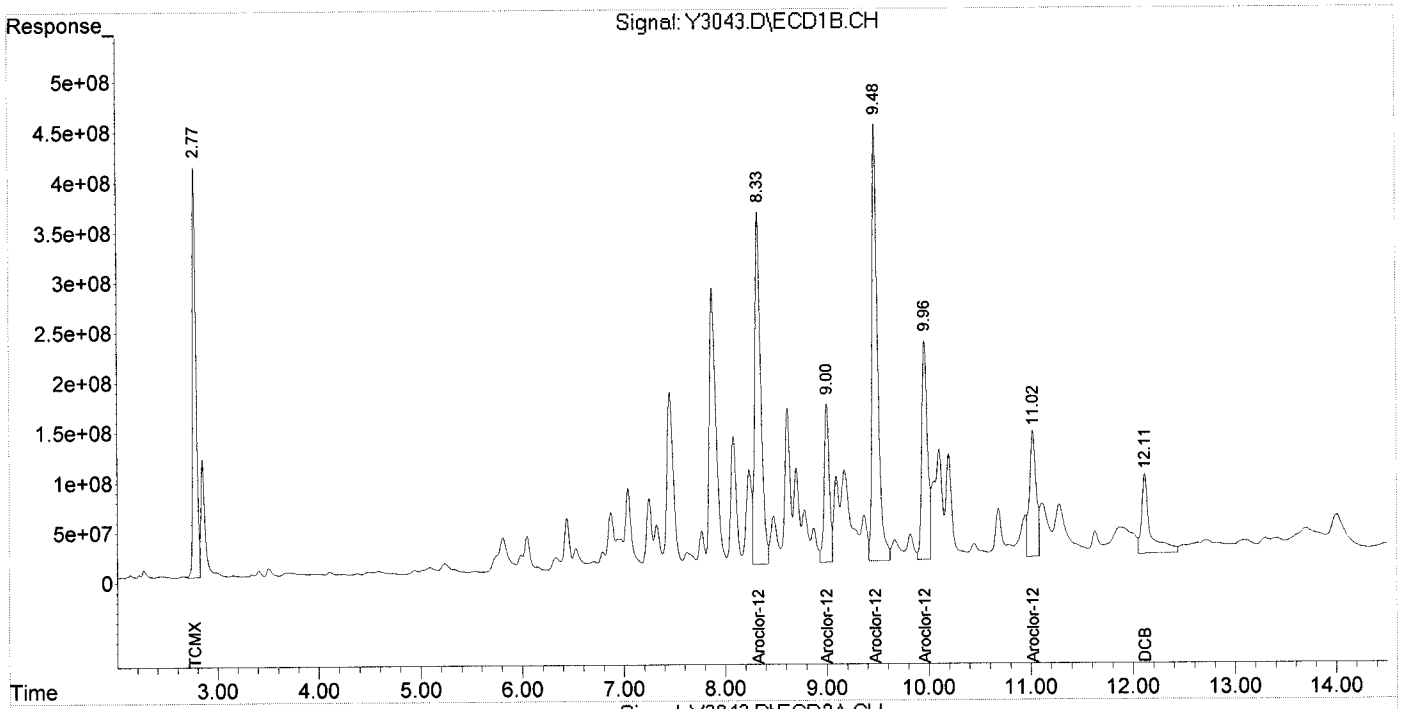
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

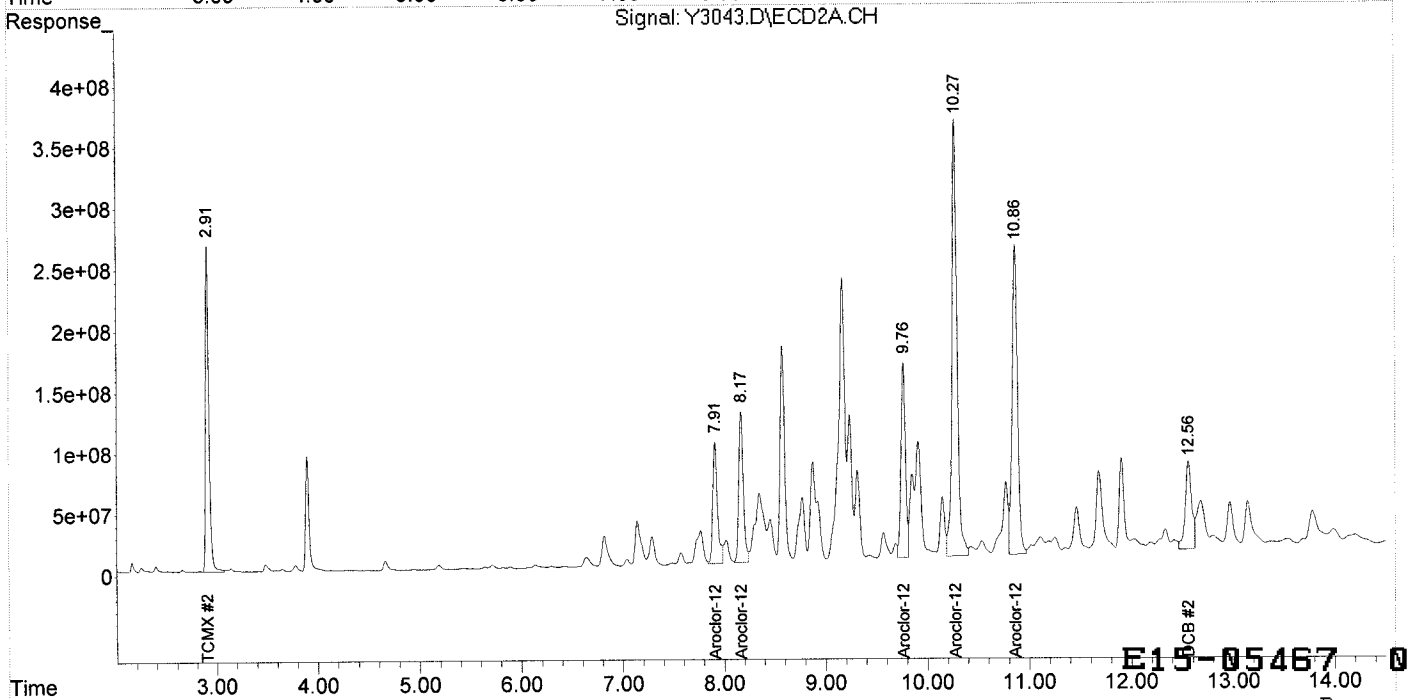
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3043.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:06
Operator : JS
Sample : E-21_(0.,E15-05467-003,S,5.44g,10.7,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 46 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:54:52 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467 0081

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3062.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:03
Operator : JS
Sample : E-21_(0.,E15-05467-003DL,S,5.44g,10.7,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:06:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.78	2.91	1330.2E6	690.3E6	19.972	19.917	
Spiked Amount 200.000			Recovery	=	9.99%	9.96%	
2) S DCB	12.11	12.56	383.3E6	264.5E6	18.715m	21.403	
Spiked Amount 200.000			Recovery	=	9.36%	10.70%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.33	7.91	2475.9E6	446.8E6	597.838	429.473	#
34) L8 Aroclor-1260 {2}	9.00	8.17	845.8E6	531.7E6	359.091	349.512	
35) L8 Aroclor-1260 {3}	9.48	9.76	2556.8E6	636.6E6	429.237	437.425	
36) L8 Aroclor-1260 {4}	9.96	10.27	1274.1E6	1509.0E6	474.961	445.282	
37) L8 Aroclor-1260 {5}	11.03	10.86	700.8E6	1093.6E6	468.905	453.278	
Sum Aroclor-1260			7853.3E6	4217.7E6	2330.032	2114.970	
Average Aroclor-1260					466.006	422.994	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

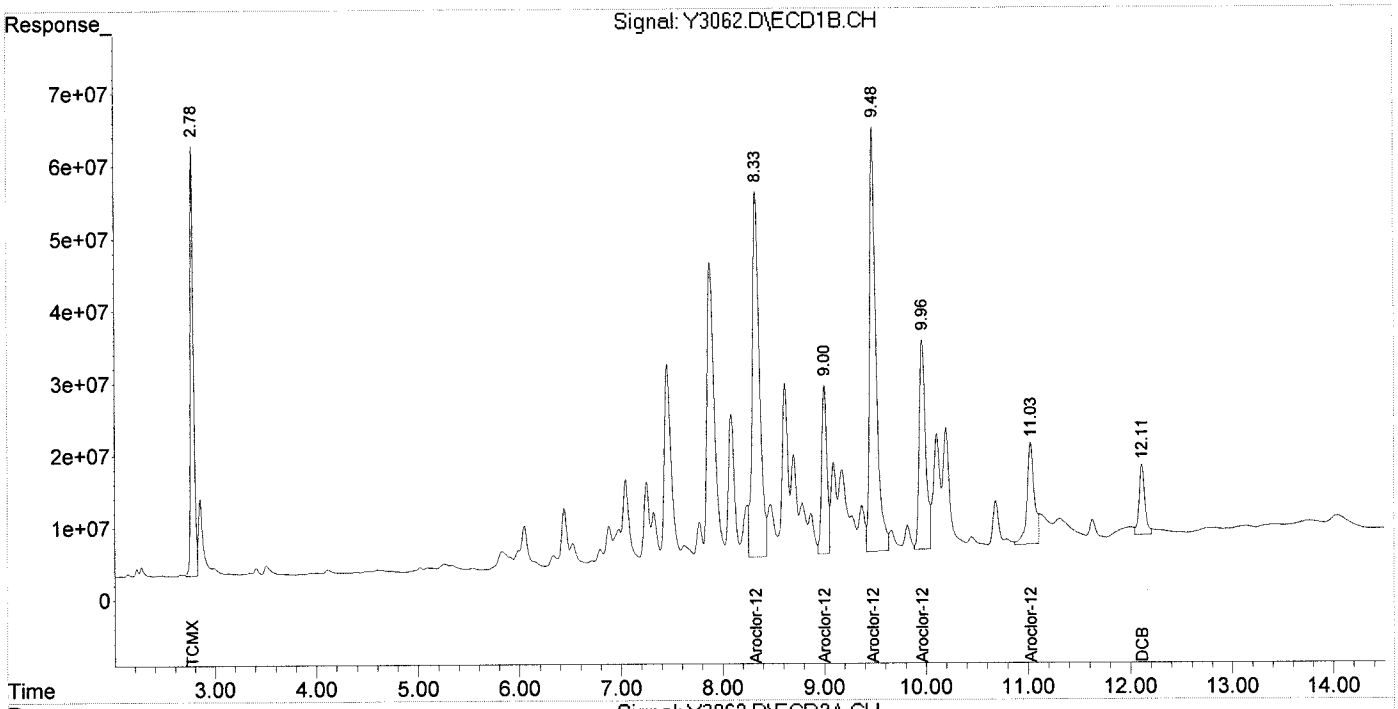
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

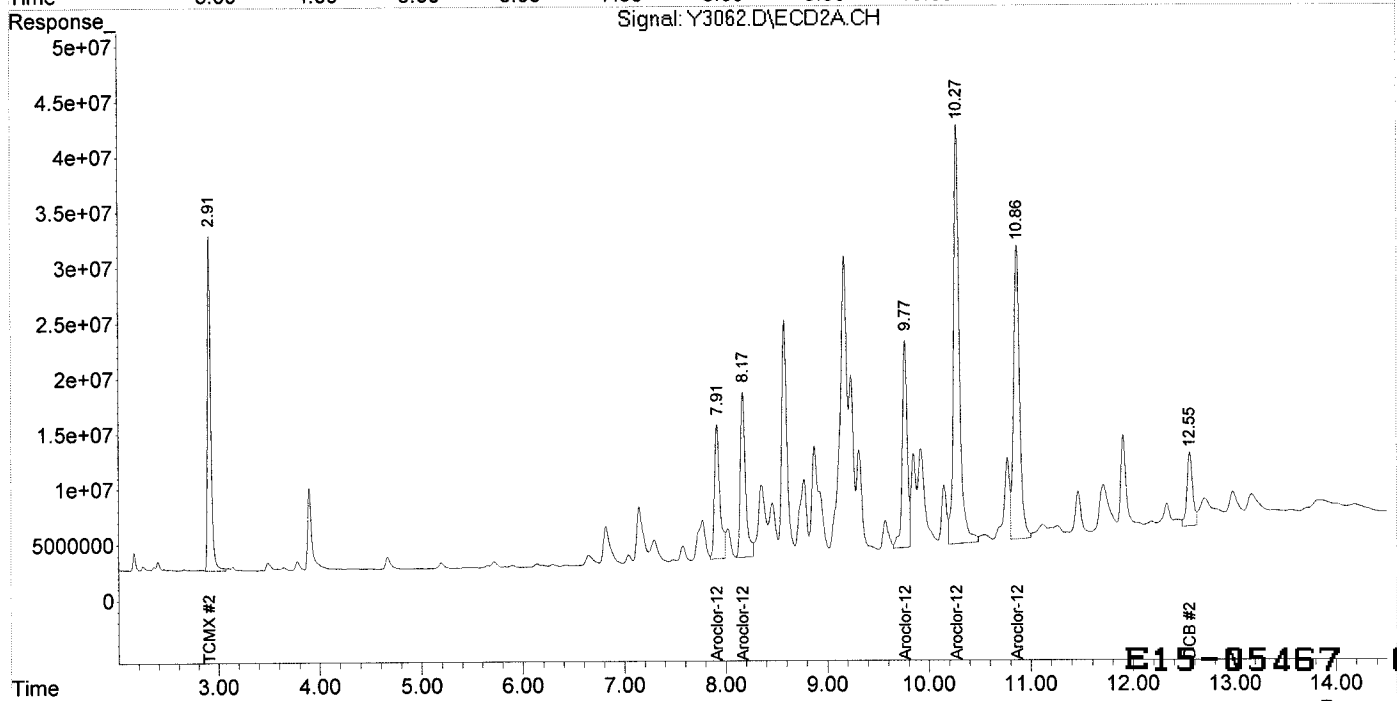
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3062.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:03
Operator : JS
Sample : E-21_(0.,E15-05467-003DL,S,5.44g,10.7,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:06:13 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467 0083

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:23
Operator : JS
Sample : E-21_(2.,E15-05467-004,S,5.47g,23.0,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:56:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	11349.0E6	6423.7E6	170.397	185.351
Spiked Amount 200.000			Recovery	=	85.20%	92.68%
2) S DCB	12.11	12.56	2572.0E6	3526.8E6	125.574	285.336m#
Spiked Amount 200.000			Recovery	=	62.79%	142.67%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.32	7.91	250.9E6	42538762	60.577m	40.885m#
34) L8 Aroclor-1260 {2}	9.00	8.17	96200025	65708796	40.843m	43.194m
35) L8 Aroclor-1260 {3}	9.48	9.77	231.0E6	53020896	38.775m	36.431m
36) L8 Aroclor-1260 {4}	9.96	10.27	126.6E6	115.7E6	47.202m	34.148m#
37) L8 Aroclor-1260 {5}	11.02	10.87	39919070	123.0E6	26.711m	50.995m#
Sum Aroclor-1260			744.6E6	400.0E6	214.108	205.653
Average Aroclor-1260					42.822	41.131
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

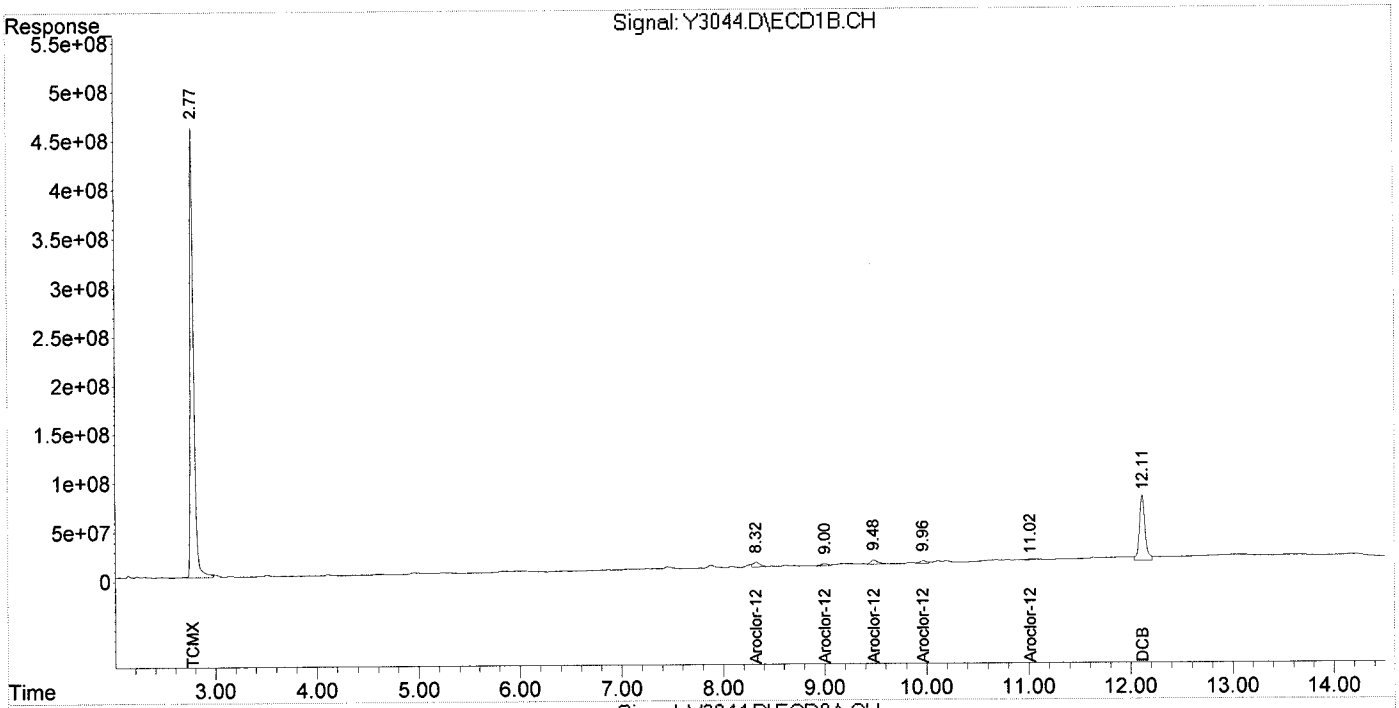
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

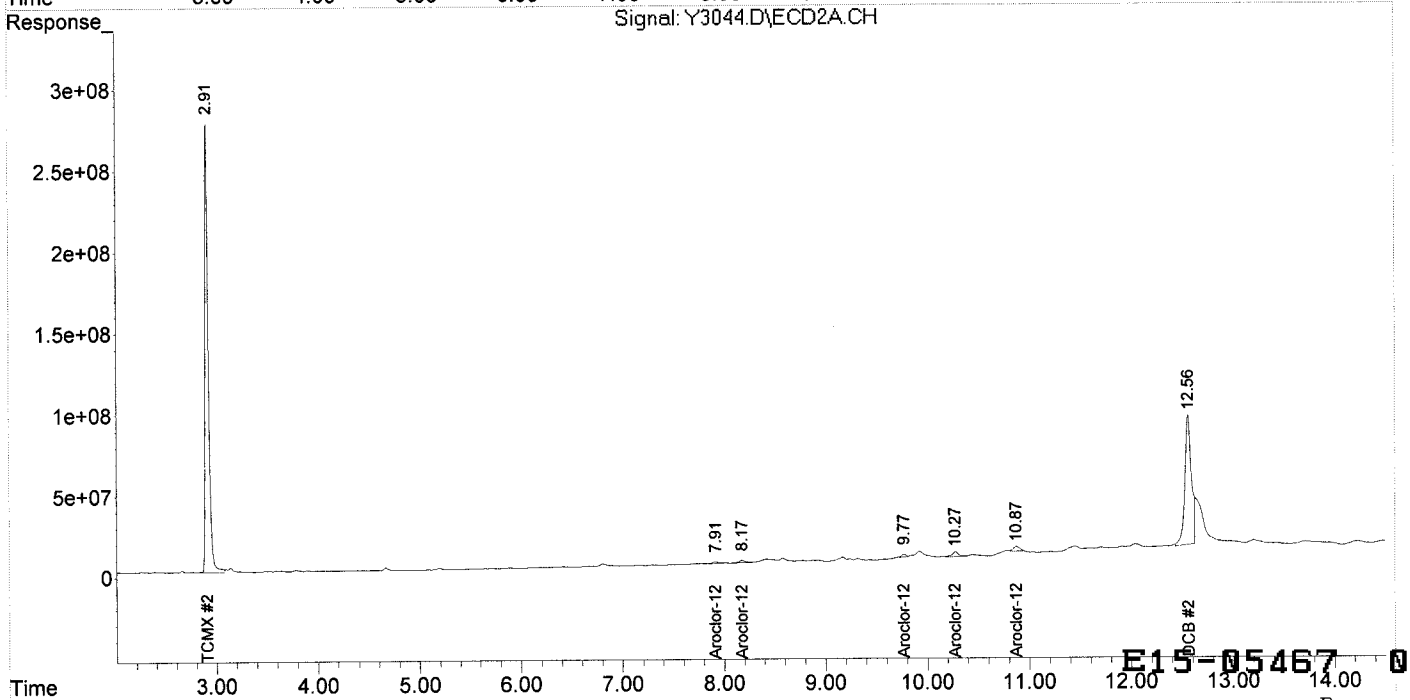
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3044.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:23
Operator : JS
Sample : E-21_(2.,E15-05467-004,S,5.47g,23.0,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 47 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:56:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:41
Operator : JS
Sample : E-23_(0.,E15-05467-005,S,5.09g,9.70,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:57:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	10307.1E6	6145.5E6	154.754	177.321
Spiked Amount 200.000			Recovery	=	77.38%	88.66%
2) S DCB	12.11	12.56	3669.5E6	2313.4E6	179.156	187.169
Spiked Amount 200.000			Recovery	=	89.58%	93.58%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	49880.5E6	10623.8E6	12044.476	10210.829
34) L8 Aroclor-1260 {2}	9.00	8.17	20225.2E6	14800.2E6	8586.970	9729.055
35) L8 Aroclor-1260 {3}	9.48	9.77	63670.2E6	19216.8E6	10689.129	13203.888
36) L8 Aroclor-1260 {4}	9.96	10.27	32613.0E6	50008.8E6	12157.156	14757.251
37) L8 Aroclor-1260 {5}	11.02	10.87	17094.7E6	36059.9E6	11438.642	14945.752 #
Sum Aroclor-1260			183483.6E6	130709.5E6	54916.373	62846.775
Average Aroclor-1260					10983.275	12569.355
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

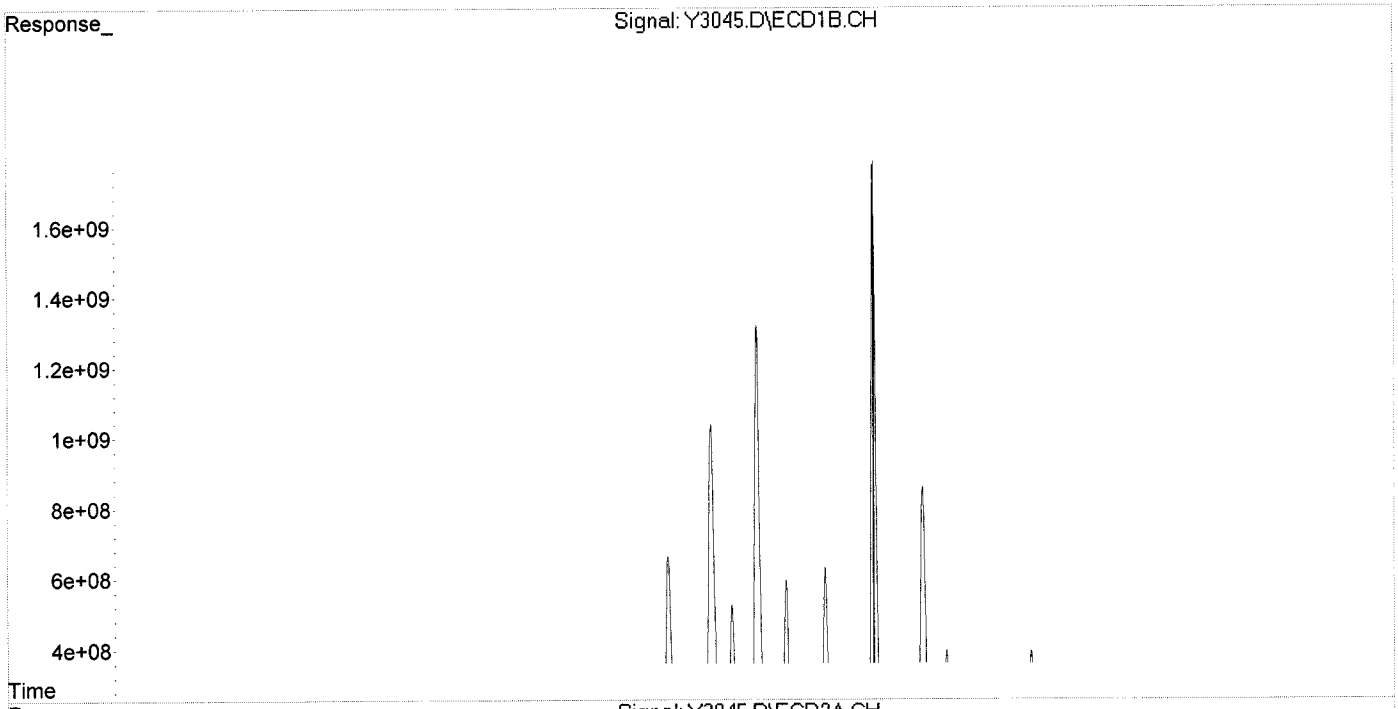
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

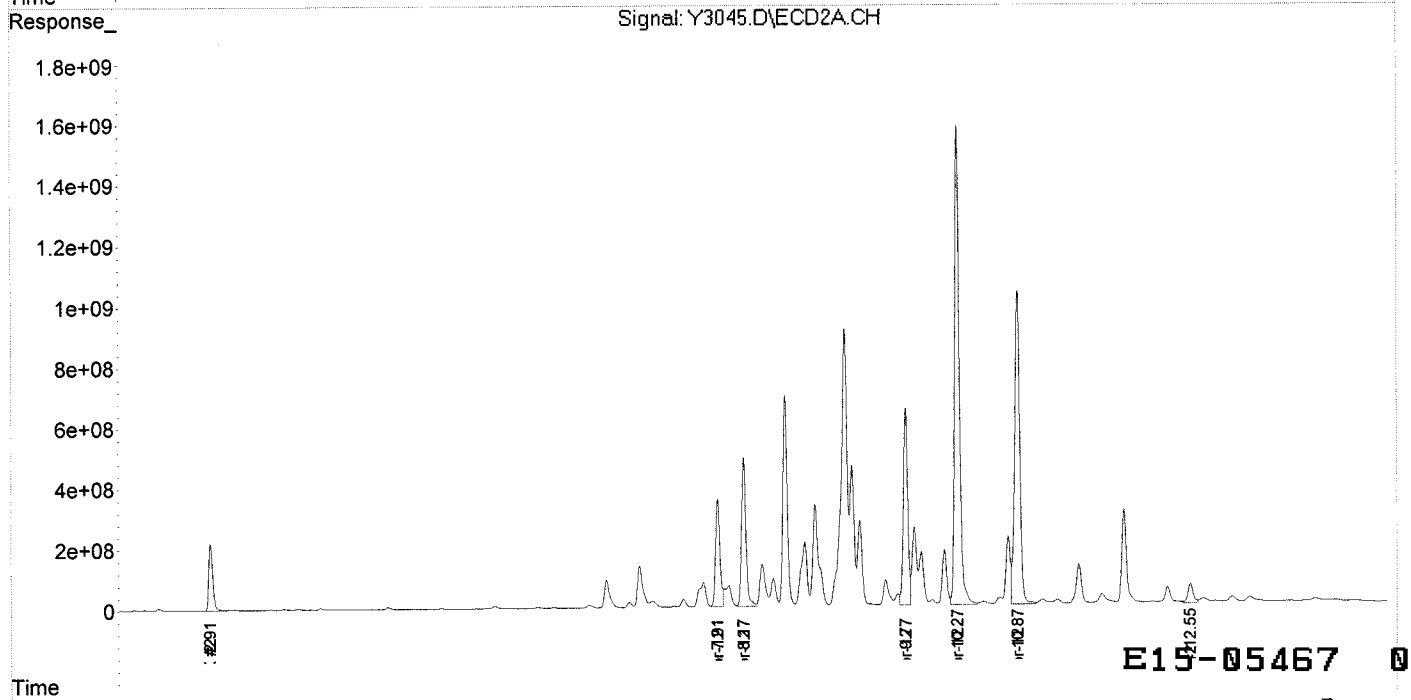
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3045.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:41
Operator : JS
Sample : E-23_(0.,E15-05467-005,S,5.09g,9.70,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 48 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:57:51 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

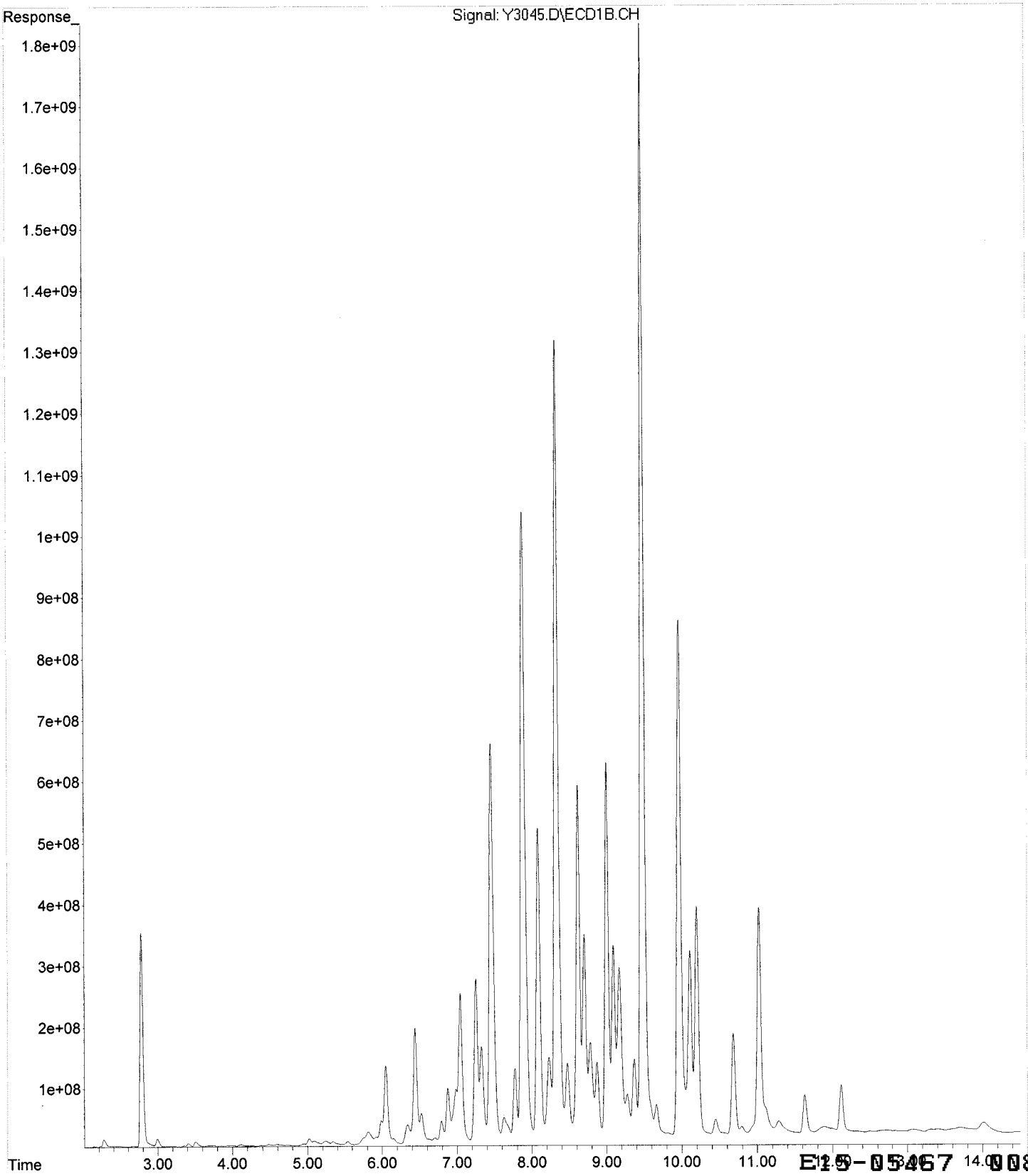
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



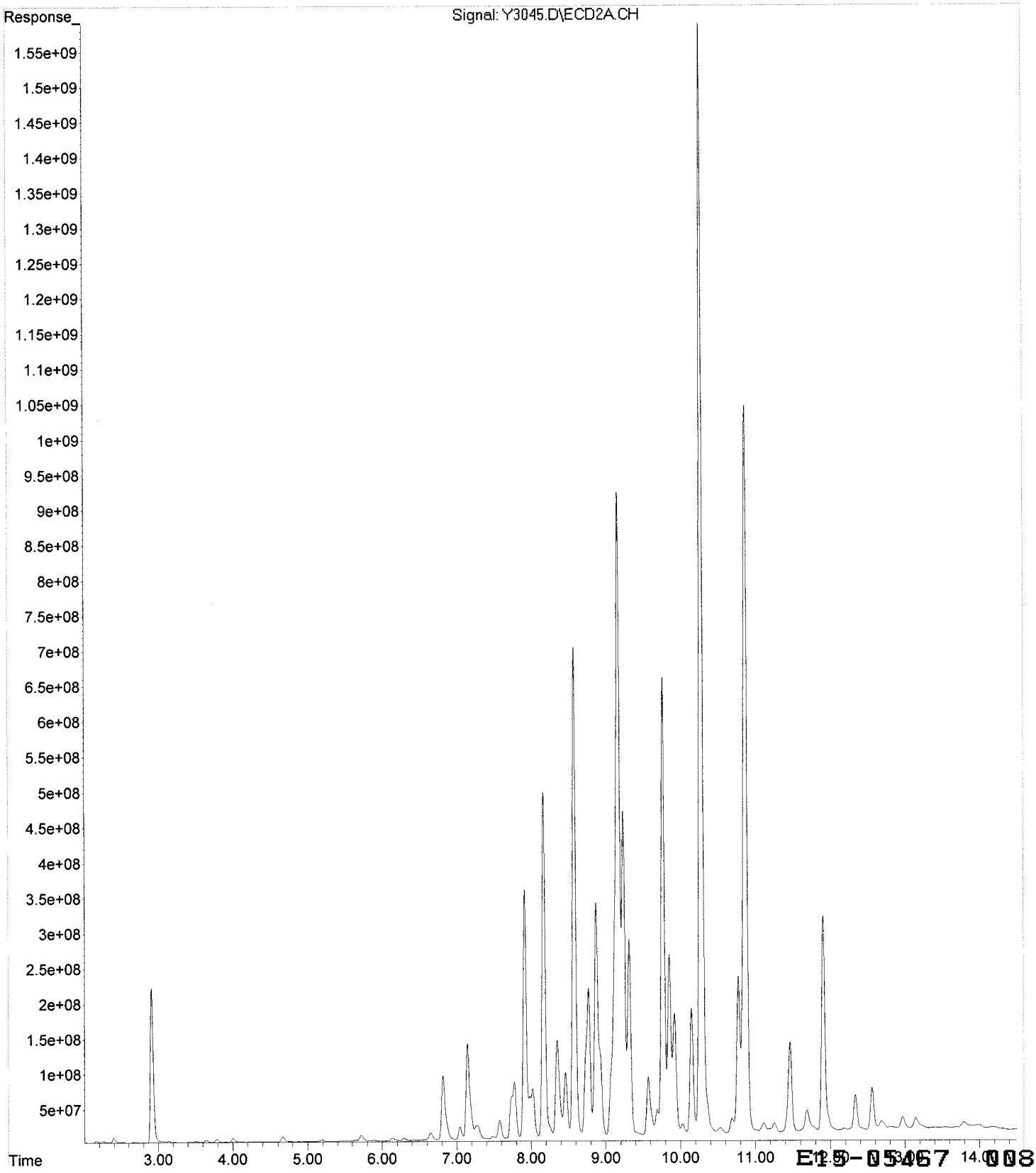


E15-05467 0087

File : C:\MSDCHEM\1\DATA\07-02-15\Y3045.D
Operator : JS
Acquired : 03 Jul 2015 4:41 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-23_(0.,E15-05467-005,S,5.09g,9.70,20
Misc Info : 150701-12,07/01/15,06/25/15,1
Vial Number: 48



File : C:\MSDCHEM\1\DATA\07-02-15\Y3045.D
Operator : JS
Acquired : 03 Jul 2015 4:41 using AcqMethod YPCB0615.M
Instrument : GC-Y
Sample Name: E-23_(0.,E15-05467-005,S,5.09g,9.70,20
Misc Info : 150701-12,07/01/15,06/25/15,1
Vial Number: 48



E15-05467 0089

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3063.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:20
Operator : JS
Sample : E-23_(0.,E15-05467-005DL,S,5.09g,9.70,20
Misc : 150701-12,07/01/15,06/25/15,20
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:06:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	631.7E6	326.9E6	9.484	9.432
Spiked Amount 200.000			Recovery =		4.74%	4.72%
2) S DCB	12.11	12.56	176.3E6	140.0E6	8.607	11.331m#
Spiked Amount 200.000			Recovery =		4.30%	5.67%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	3238.7E6	633.2E6	782.027	608.601
34) L8 Aroclor-1260 {2}	9.00	8.17	1334.9E6	803.4E6	566.776	528.141
35) L8 Aroclor-1260 {3}	9.48	9.77	3788.8E6	963.1E6	636.075	661.780
36) L8 Aroclor-1260 {4}	9.96	10.28	1867.4E6	2215.4E6	696.126	653.744
37) L8 Aroclor-1260 {5}	11.03	10.86	826.5E6	1641.7E6	553.026	680.422
Sum Aroclor-1260			11056.3E6	6256.8E6	3234.029	3132.689
Average Aroclor-1260					646.806	626.538
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

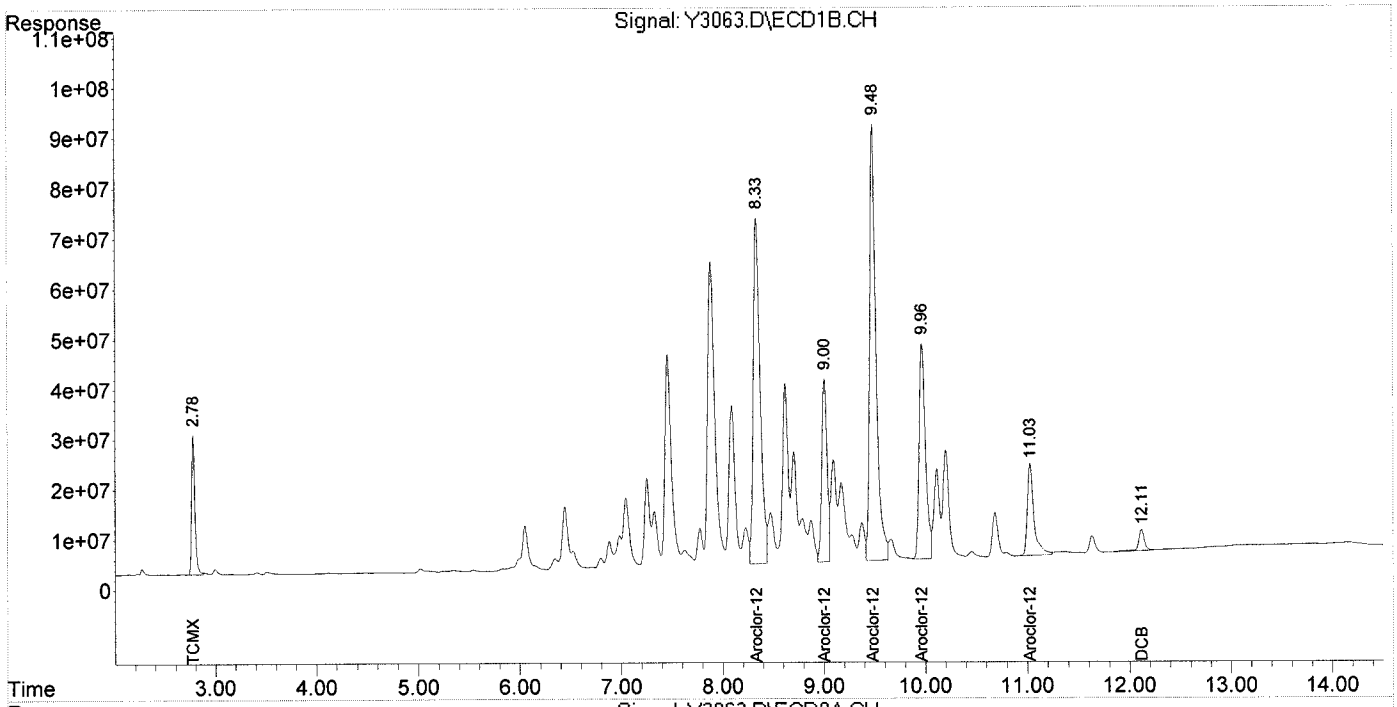
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

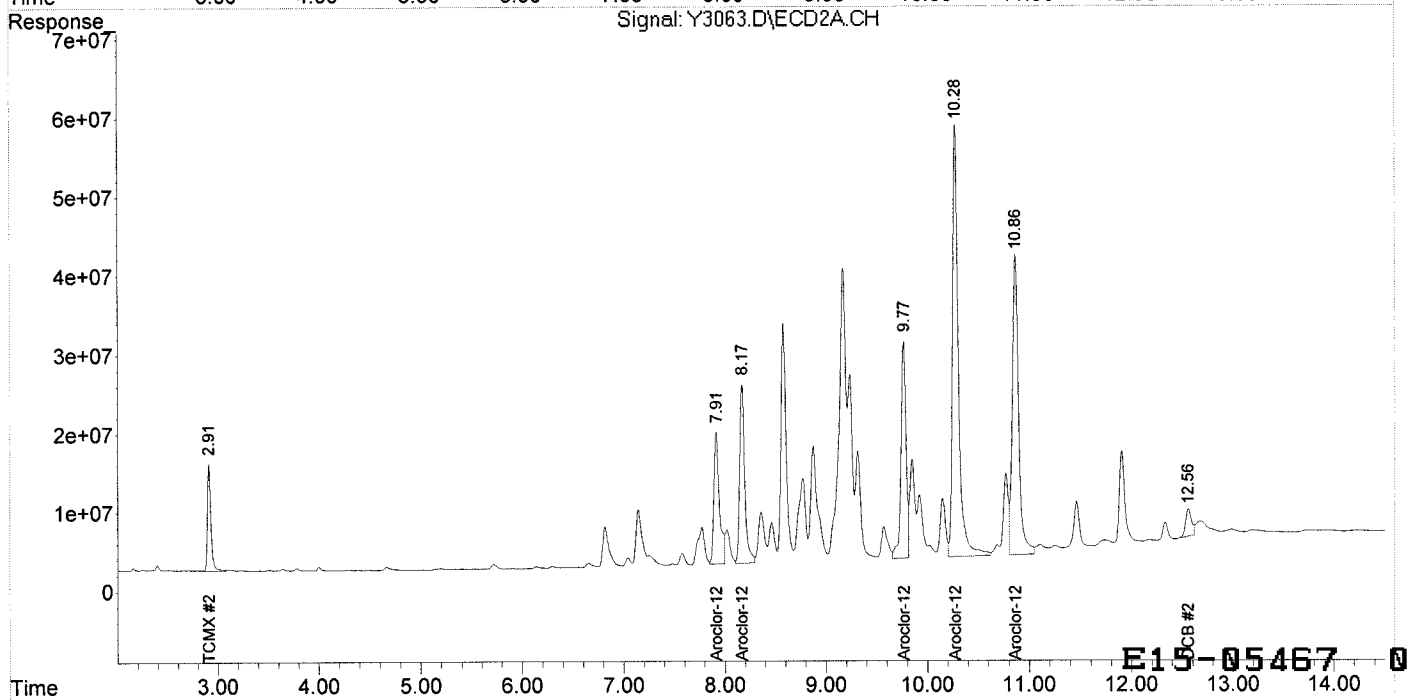
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3063.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:20
Operator : JS
Sample : E-23_(0.,E15-05467-005DL,S,5.09g,9.70,20
Misc : 150701-12,07/01/15,06/25/15,20
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:06:56 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:58
Operator : JS
Sample : E-23_(2.,E15-05467-006,S,5.48g,15.0,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:59:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10481.0E6	6532.3E6	157.365	188.482
Spiked Amount 200.000			Recovery	=	78.68%	94.24%
2) S DCB	12.11	12.56	3569.4E6	2742.3E6	174.266	221.866m#
Spiked Amount 200.000			Recovery	=	87.13%	110.93%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	26485.4E6	6639.2E6	6395.347	6381.148
34) L8 Aroclor-1260 {2}	9.00	8.17	11124.8E6	8414.8E6	4723.252	5531.568
35) L8 Aroclor-1260 {3}	9.48	9.77	32224.3E6	9996.8E6	5409.904	6868.795 #
36) L8 Aroclor-1260 {4}	9.96	10.27	16664.8E6	24575.1E6	6212.148	7251.950
37) L8 Aroclor-1260 {5}	11.02	10.86	9627.2E6	17622.4E6	6441.854	7303.963
Sum Aroclor-1260			96126.6E6	67248.4E6	29182.506	33337.422
Average Aroclor-1260					5836.501	6667.484
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

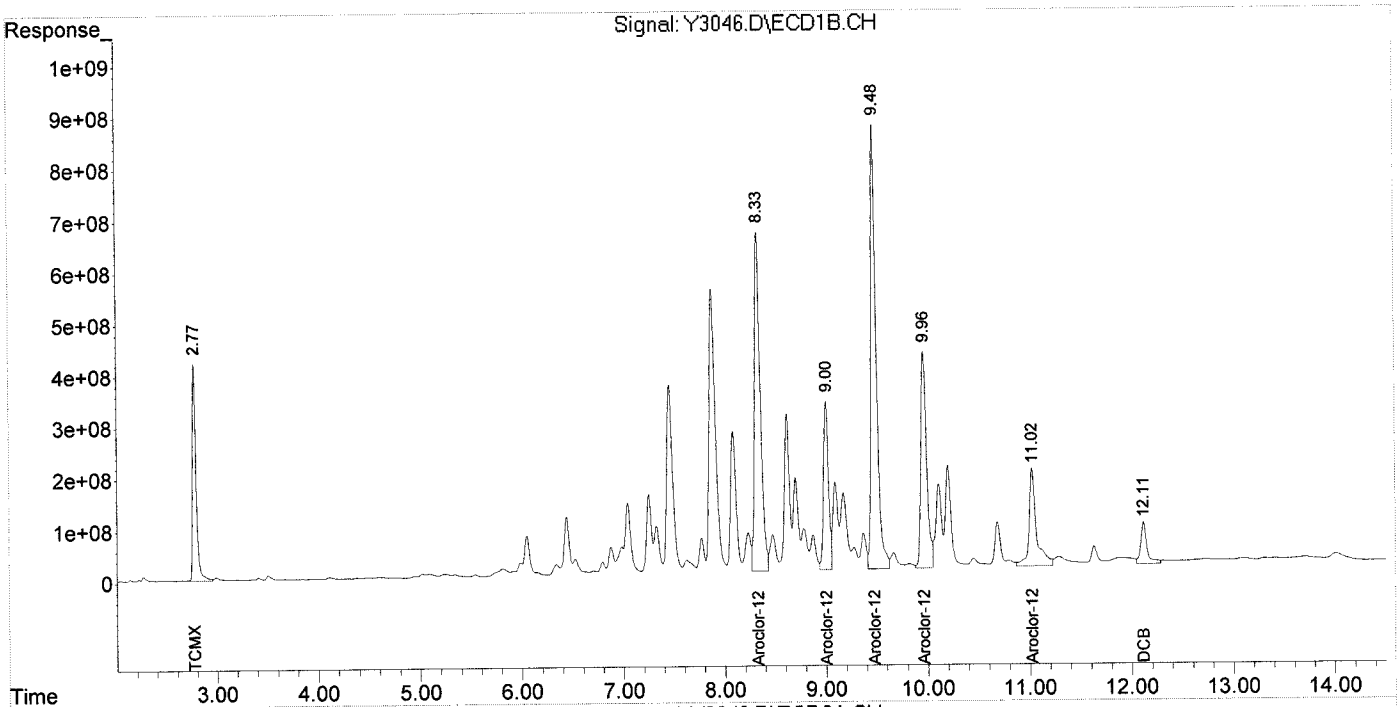
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

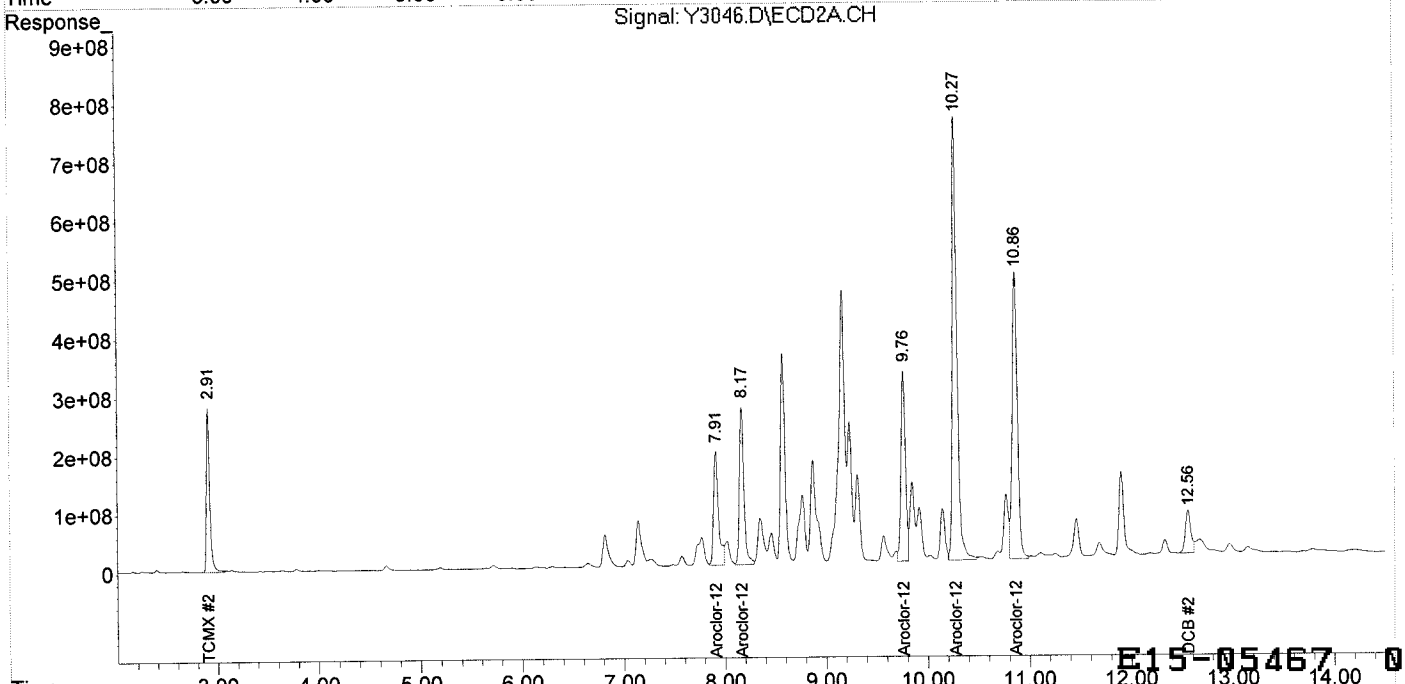
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3046.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 4:58
Operator : JS
Sample : E-23_(2.,E15-05467-006,S,5.48g,15.0,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:59:03 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3064.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:38
Operator : JS
Sample : E-23_(2.,E15-05467-006DL,S,5.48g,15.0,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:07:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1213.5E6	646.9E6	18.220	18.666
Spiked Amount 200.000			Recovery	=	9.11%	9.33%
2) S DCB	12.11	12.56	382.2E6	241.4E6	18.661	19.528
Spiked Amount 200.000			Recovery	=	9.33%	9.76%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	3579.8E6	748.8E6	864.392	719.734
34) L8 Aroclor-1260 {2}	9.00	8.17	1480.2E6	930.9E6	628.453	611.964
35) L8 Aroclor-1260 {3}	9.48	9.77	4124.2E6	1053.4E6	692.386	723.798
36) L8 Aroclor-1260 {4}	9.97	10.27	2033.2E6	2373.8E6	757.934	700.507
37) L8 Aroclor-1260 {5}	11.02	10.86	977.9E6	1735.0E6	654.370	719.102
Sum Aroclor-1260			12195.4E6	6842.0E6	3597.535	3475.106
Average Aroclor-1260					719.507	695.021
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

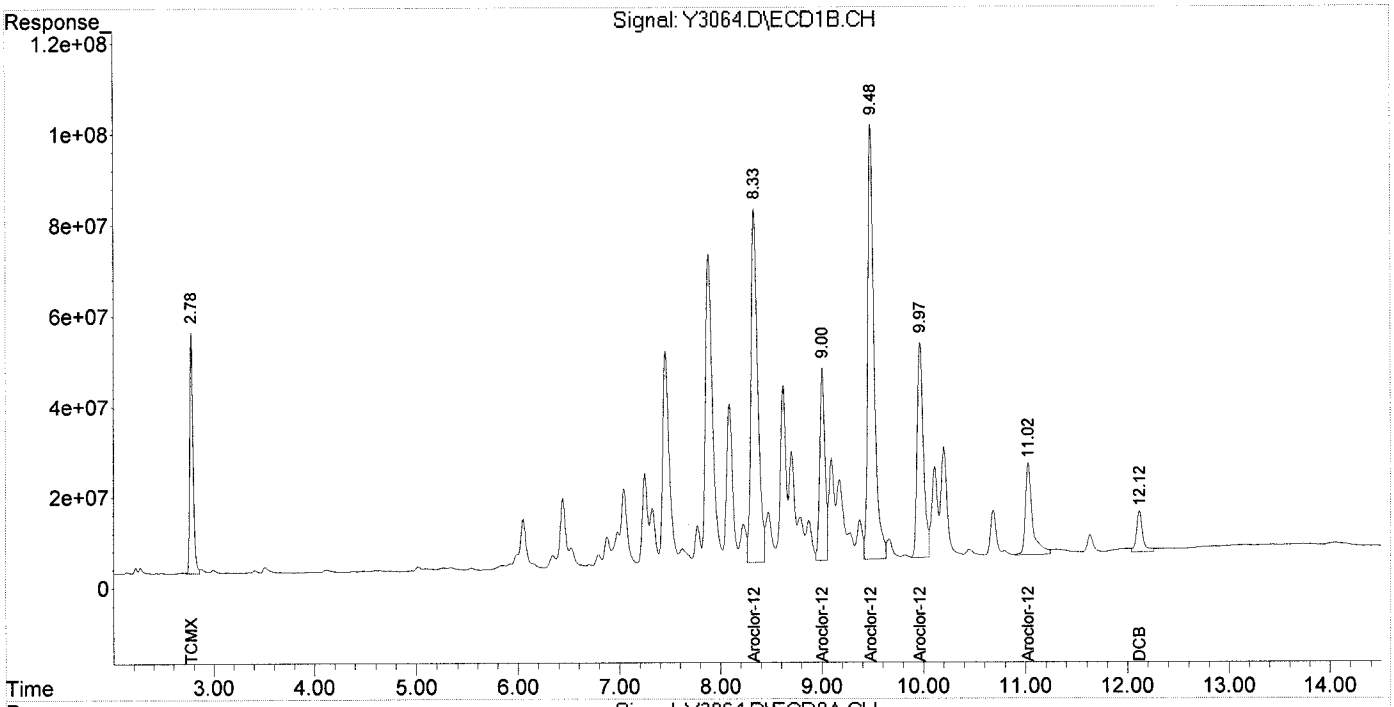
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

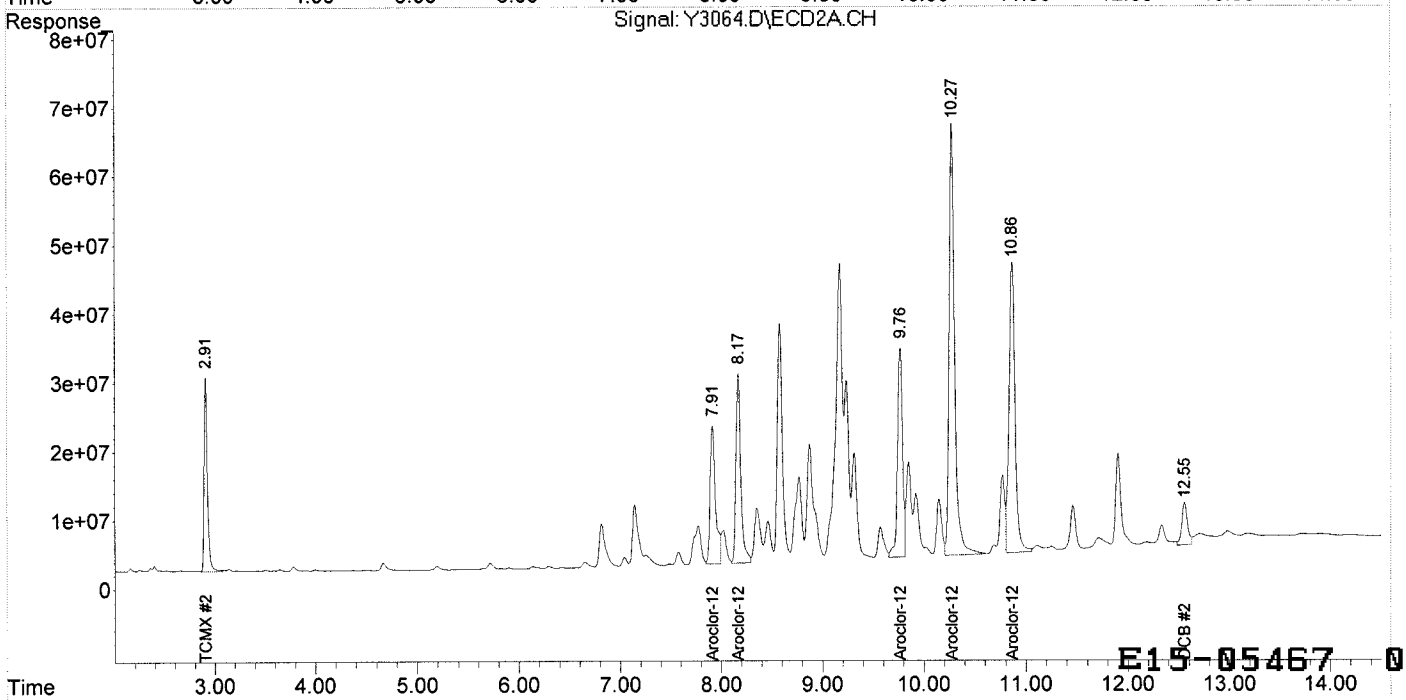
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3064.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:38
Operator : JS
Sample : E-23_(2.,E15-05467-006DL,S,5.48g,15.0,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:07:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467 0095

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3047.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 5:15
Operator : JS
Sample : E-25_(0.,E15-05467-007,S,5.56g,10.1,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:59:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	10918.1E6	6408.2E6	163.927	184.904
Spiked Amount 200.000			Recovery	=	81.96%	92.45%
2) S DCB	12.12	12.56	3124.8E6	2572.3E6	152.563	208.113m#
Spiked Amount 200.000			Recovery	=	76.28%	104.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.91	10924.8E6	1946.2E6	2637.980	1870.505 #
34) L8 Aroclor-1260 {2}	9.00	8.17	5044.4E6	3920.1E6	2141.690	2576.947
35) L8 Aroclor-1260 {3}	9.48	9.76	14320.9E6	4418.1E6	2404.231	3035.666 #
36) L8 Aroclor-1260 {4}	9.96	10.27	7394.2E6	10132.7E6	2756.331	2990.087
37) L8 Aroclor-1260 {5}	11.02	10.86	4704.9E6	7485.7E6	3148.207	3102.582
Sum Aroclor-1260			42389.2E6	27902.7E6	13088.440	13575.786
Average Aroclor-1260					2617.688	2715.157
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

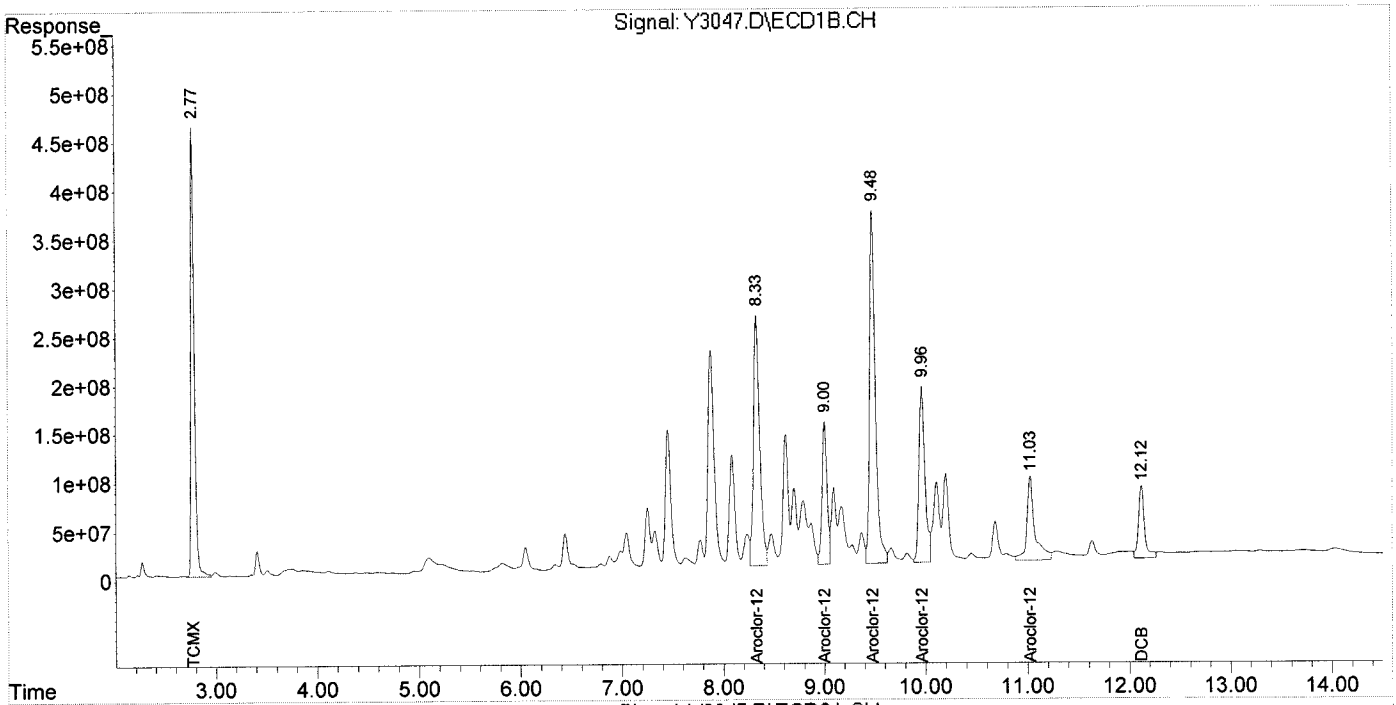
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

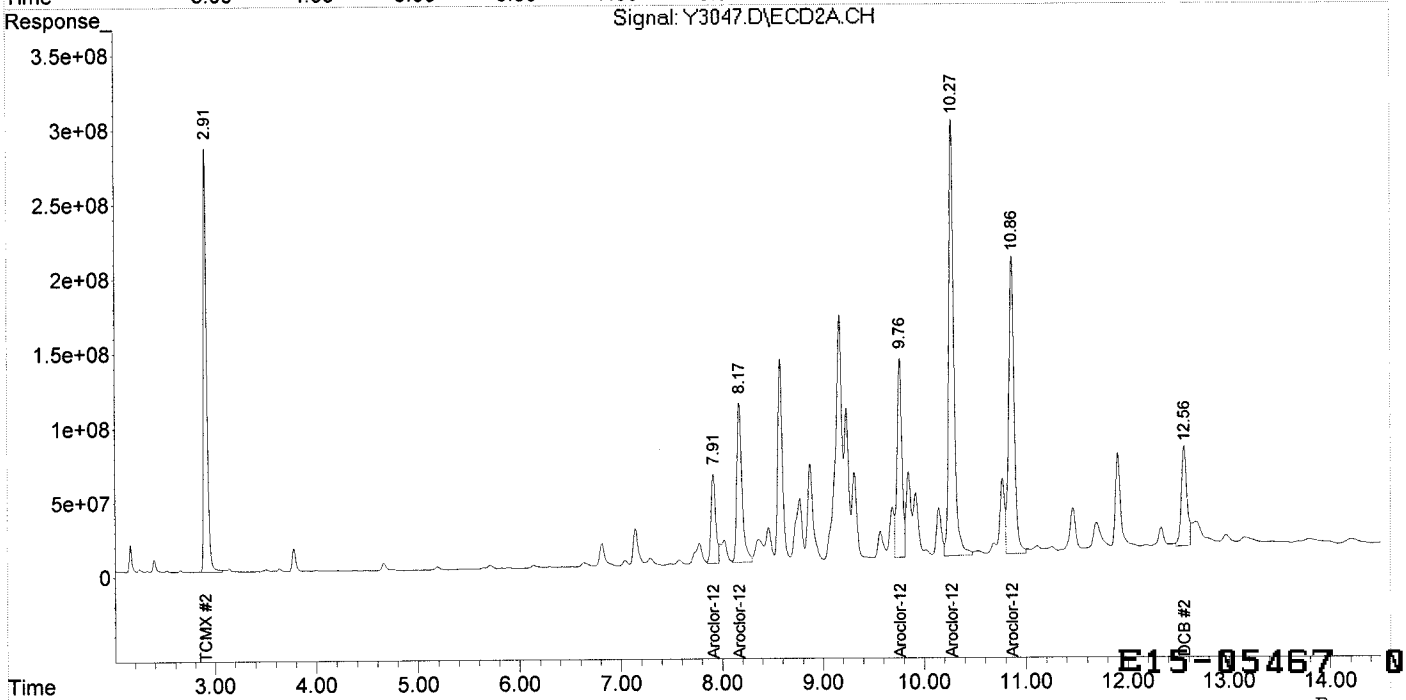
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-02-15\
Data File : Y3047.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 03 Jul 2015 5:15
Operator : JS
Sample : E-25_(0.,E15-05467-007,S,5.56g,10.1,20
Misc : 150701-12,07/01/15,06/25/15,1
ALS Vial : 50 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:59:44 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3065.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:55
Operator : JS
Sample : E-25_(0.,E15-05467-007DL,S,5.56g,10.1,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:07:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.78	2.91	1305.6E6	641.3E6	19.602	18.504
Spiked Amount 200.000			Recovery	=	9.80%	9.25%
2) S DCB	12.11	12.56	333.3E6	263.2E6	16.274	21.295 #
Spiked Amount 200.000			Recovery	=	8.14%	10.65%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.33	7.92	1396.6E6	248.1E6	337.234	238.488 #
34) L8 Aroclor-1260 {2}	9.01	8.17	680.5E6	400.7E6	288.899	263.405
35) L8 Aroclor-1260 {3}	9.48	9.76	1809.7E6	537.7E6	303.823	369.429
36) L8 Aroclor-1260 {4}	9.97	10.28	854.9E6	1021.9E6	318.683	301.549
37) L8 Aroclor-1260 {5}	11.03	10.87	440.3E6	750.2E6	294.611	310.944
Sum Aroclor-1260			5182.0E6	2958.6E6	1543.250	1483.816
Average Aroclor-1260					308.650	296.763
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

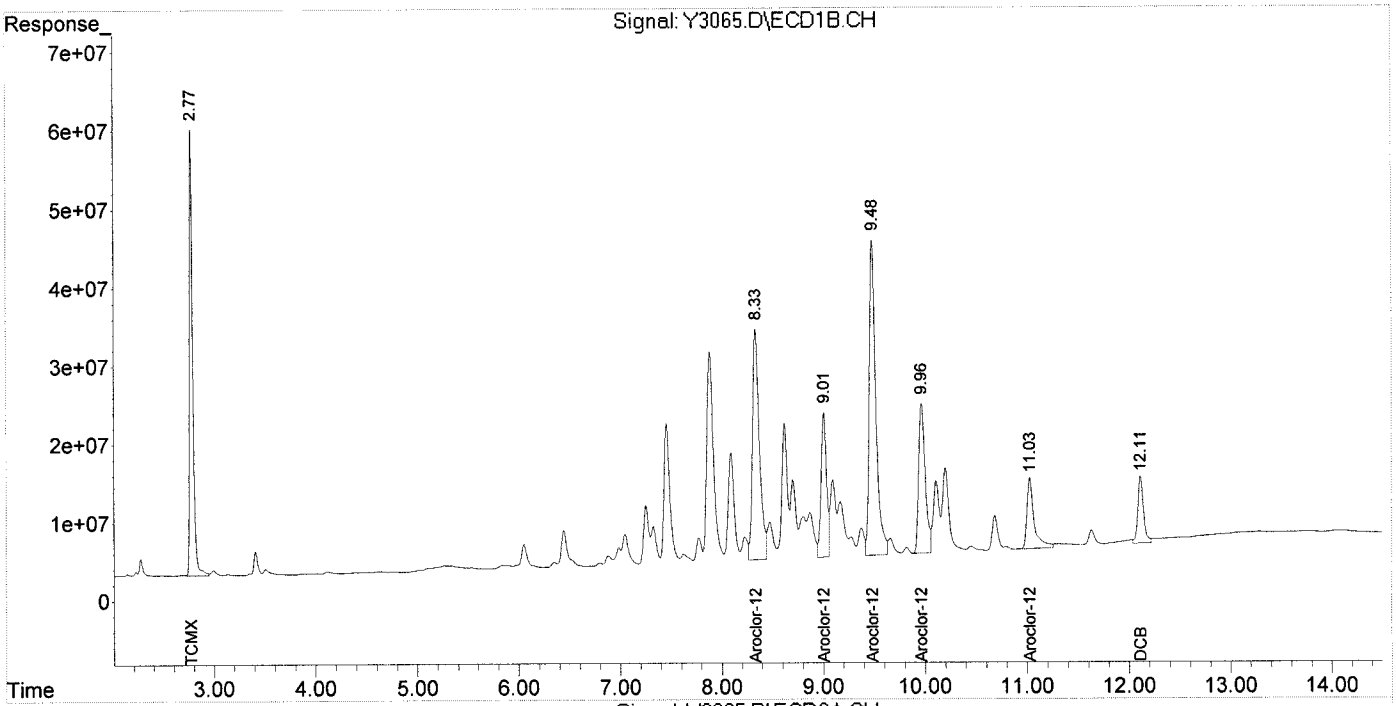
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

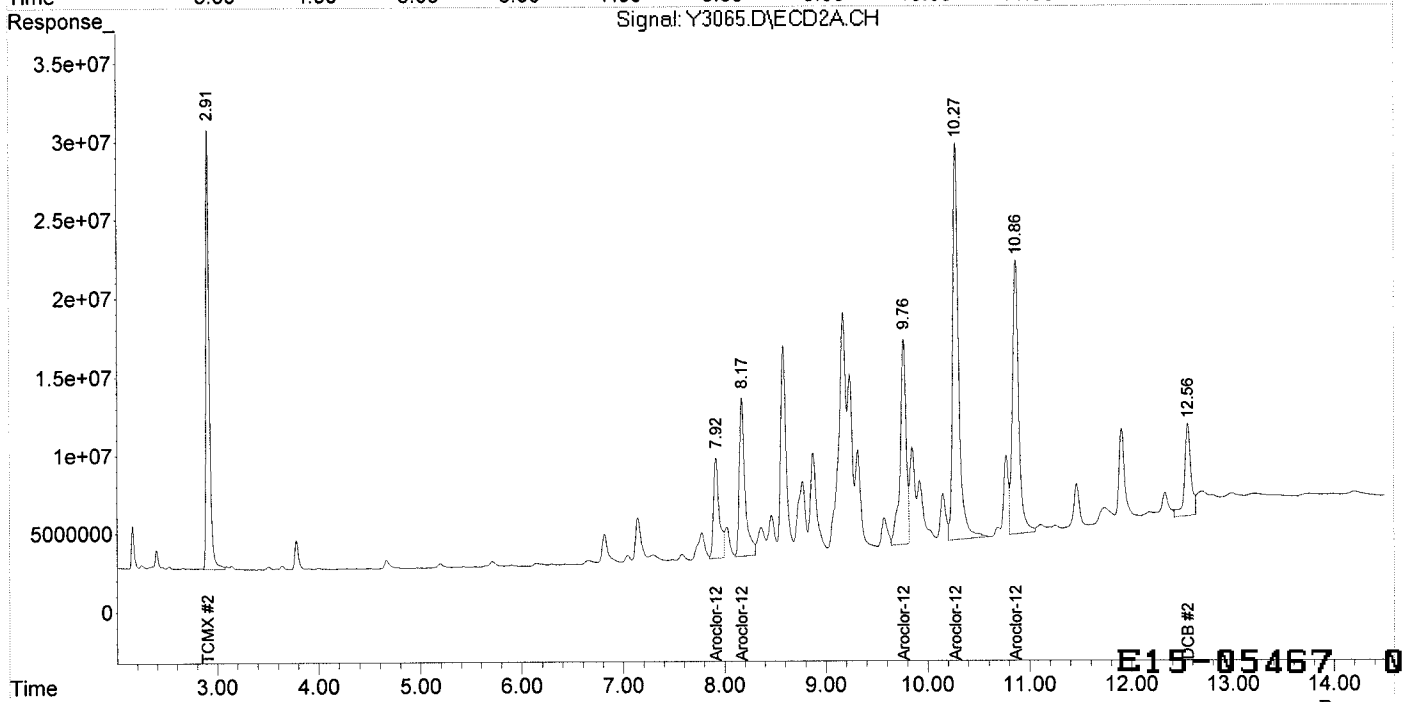
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : Y3065.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 12:55
Operator : JS
Sample : E-25_(0.,E15-05467-007DL,S,5.56g,10.1,20
Misc : 150701-12,07/01/15,06/25/15,10
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 15:07:54 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5554.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:20
Operator : JS
Sample : E-25_(2.,E15-05467-008,S,5.57g,19.2,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:31:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3180.9E6	17121.3E6	158.173	140.259
Spiked Amount 200.000			Recovery	=	79.09%	70.13%
2) S DCB	12.06	12.54	1498.1E6	7275.7E6	181.341m	211.942
Spiked Amount 200.000			Recovery	=	90.67%	105.97%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

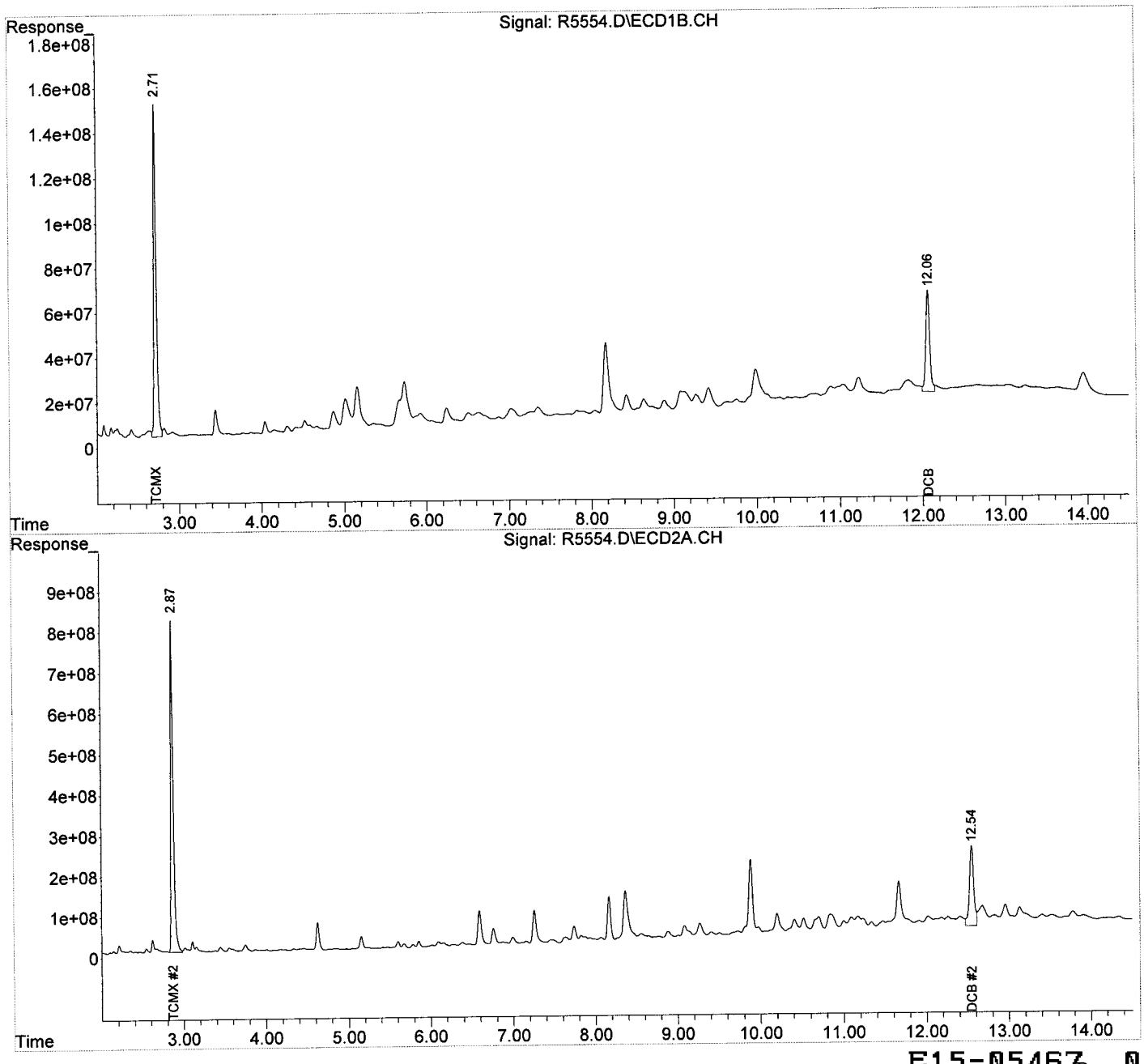
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5554.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:20
Operator : JS
Sample : E-25_(2.,E15-05467-008,S,5.57g,19.2,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:31:40 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



E15-05467-0101

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5555.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:37
Operator : JS
Sample : E-26_(0.,E15-05467-009,S,5.76g,15.3,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:33:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.87	3328.8E6	18672.6E6	165.527	152.968
Spiked Amount 200.000			Recovery	=	82.76%	76.48%
2) S DCB	12.06	12.55	1530.9E6	7668.8E6	185.308m	223.392m
Spiked Amount 200.000			Recovery	=	92.65%	111.70%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.88	4878.6E6	6545.1E6	3706.332	1844.086 #
34) L8 Aroclor-1260 {2}	8.94	8.15	2344.2E6	12987.9E6	3139.394	2535.728
35) L8 Aroclor-1260 {3}	9.42	9.74	7373.8E6	12984.6E6	3769.362	2854.924
36) L8 Aroclor-1260 {4}	9.90	10.25	3889.7E6	33239.6E6	4414.633	3168.470 #
37) L8 Aroclor-1260 {5}	10.97	10.85	2313.6E6	25197.4E6	4124.610m	3607.066
Sum Aroclor-1260			20799.9E6	90954.5E6	19154.331	14010.275
Average Aroclor-1260					3830.866	2802.055
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

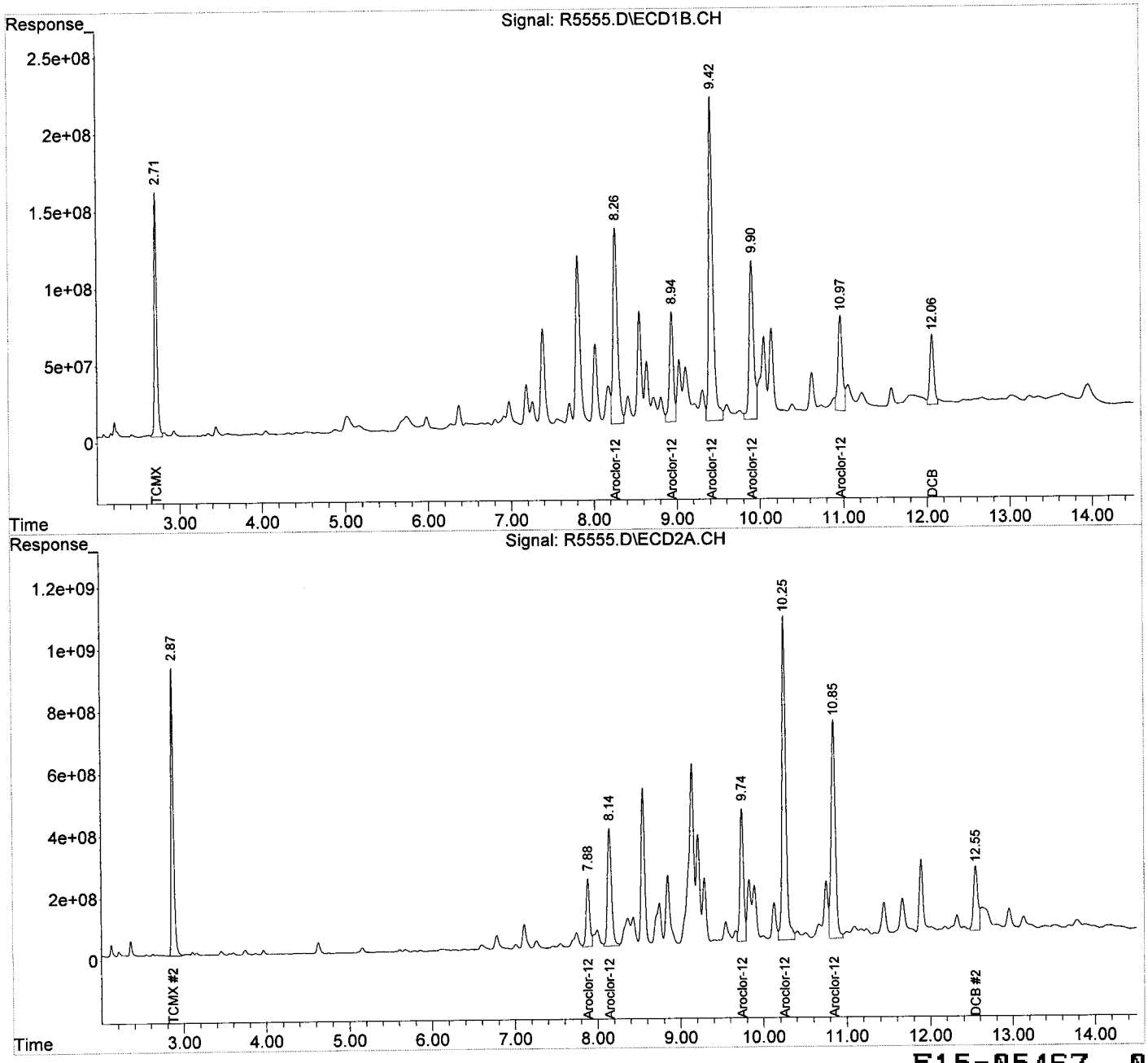
E15-05467_0102

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5555.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:37
Operator : JS
Sample : E-26_(0.,E15-05467-009,S,5.76g,15.3,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:33:50 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5580.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:33
Operator : JS
Sample : E-26_(0.,E15-05467-009DL,S,5.76g,15.3,20
Misc : 150702-07,07/02/15,06/25/15,10
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 12:51:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	406.3E6	2431.1E6	20.206	19.915
Spiked Amount 200.000			Recovery	=	10.10%	9.96%
2) S DCB	12.07	12.55	177.8E6	770.5E6	21.527m	22.444m
Spiked Amount 200.000			Recovery	=	10.76%	11.22%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	578.0E6	1023.7E6	439.085	288.425 #
34) L8 Aroclor-1260 {2}	8.94	8.15	251.4E6	1691.5E6	336.702	330.250
35) L8 Aroclor-1260 {3}	9.42	9.75	778.0E6	1569.7E6	397.710	345.127
36) L8 Aroclor-1260 {4}	9.91	10.26	378.6E6	3475.2E6	429.663	331.260
37) L8 Aroclor-1260 {5}	10.97	10.85	224.9E6	2606.6E6	400.998	373.136
Sum Aroclor-1260			2210.9E6	10366.6E6	2004.158	1668.197
Average Aroclor-1260					400.832	333.639
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

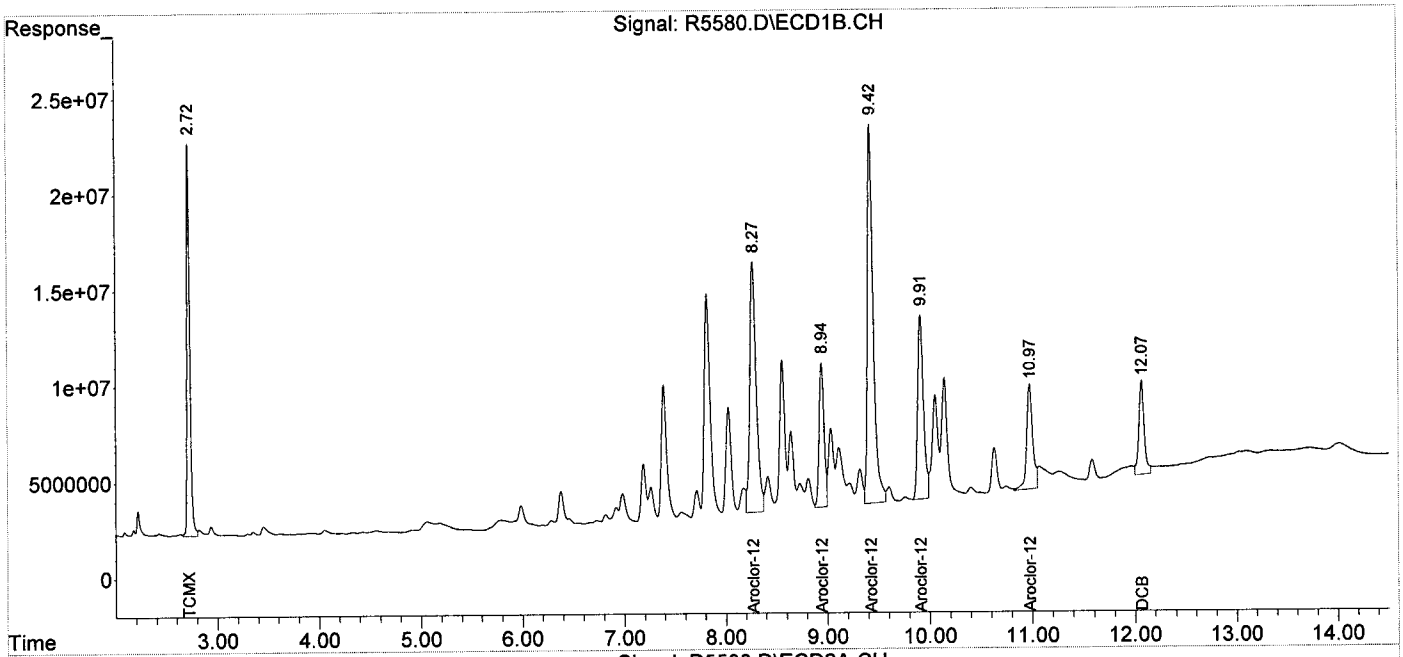
E15-05467-0104

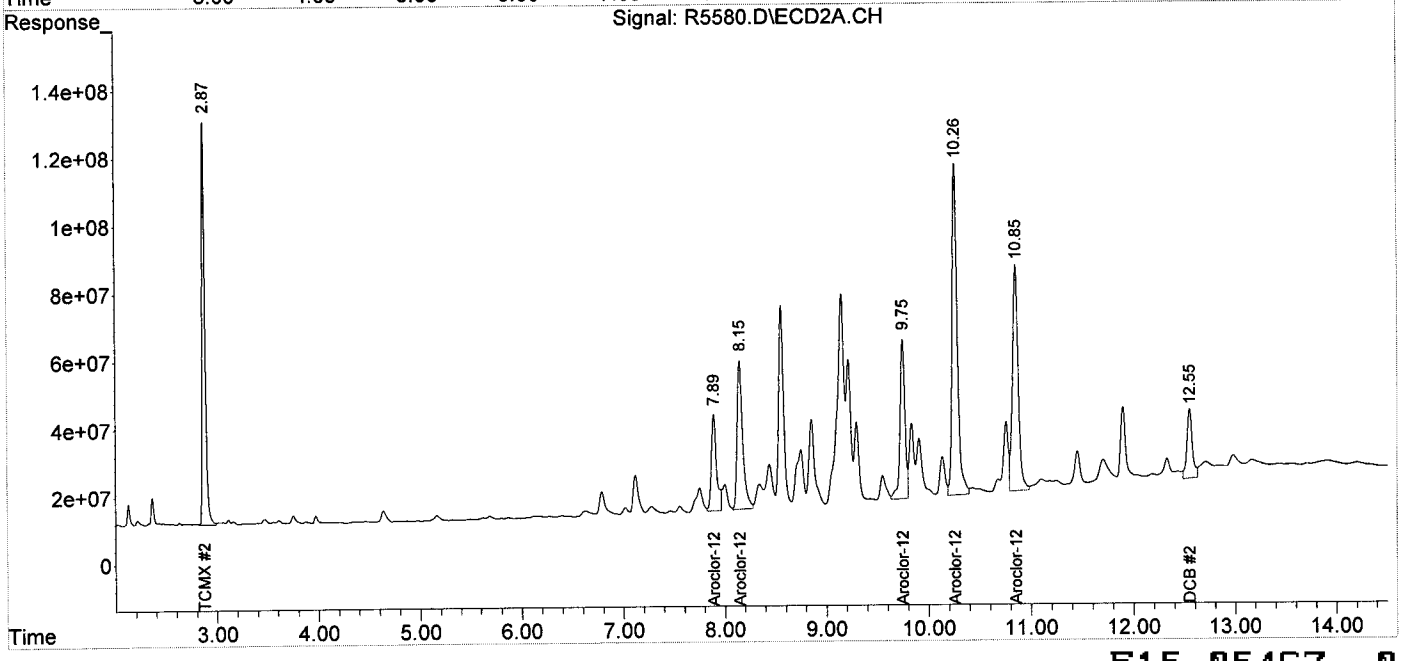
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5580.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:33
Operator : JS
Sample : E-26_(0.,E15-05467-009DL,S,5.76g,15.3,20
Misc : 150702-07,07/02/15,06/25/15,10
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 12:51:49 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5556.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:55
Operator : JS
Sample : E-26_(2.,E15-05467-010,S,5.90g,16.1,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:34:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3246.9E6	18430.5E6	161.455	150.984
Spiked Amount 200.000			Recovery	=	80.73%	75.49%
2) S DCB	12.06	12.55	1743.5E6	7745.7E6	211.043	225.633m
Spiked Amount 200.000			Recovery	=	105.52%	112.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.26	7.88	907.8E6	1111.7E6	689.706	313.227 #
34) L8 Aroclor-1260 {2}	8.94	8.15	466.2E6	2496.1E6	624.374	487.340
35) L8 Aroclor-1260 {3}	9.42	9.74	1388.3E6	2429.9E6	709.655	534.269
36) L8 Aroclor-1260 {4}	9.90	10.25	727.9E6	5436.7E6	826.178	518.239 #
37) L8 Aroclor-1260 {5}	10.96	10.85	434.1E6	5203.3E6	773.895m	744.867
Sum Aroclor-1260			3924.4E6	16677.8E6	3623.808	2597.941
Average Aroclor-1260					724.762	519.588
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

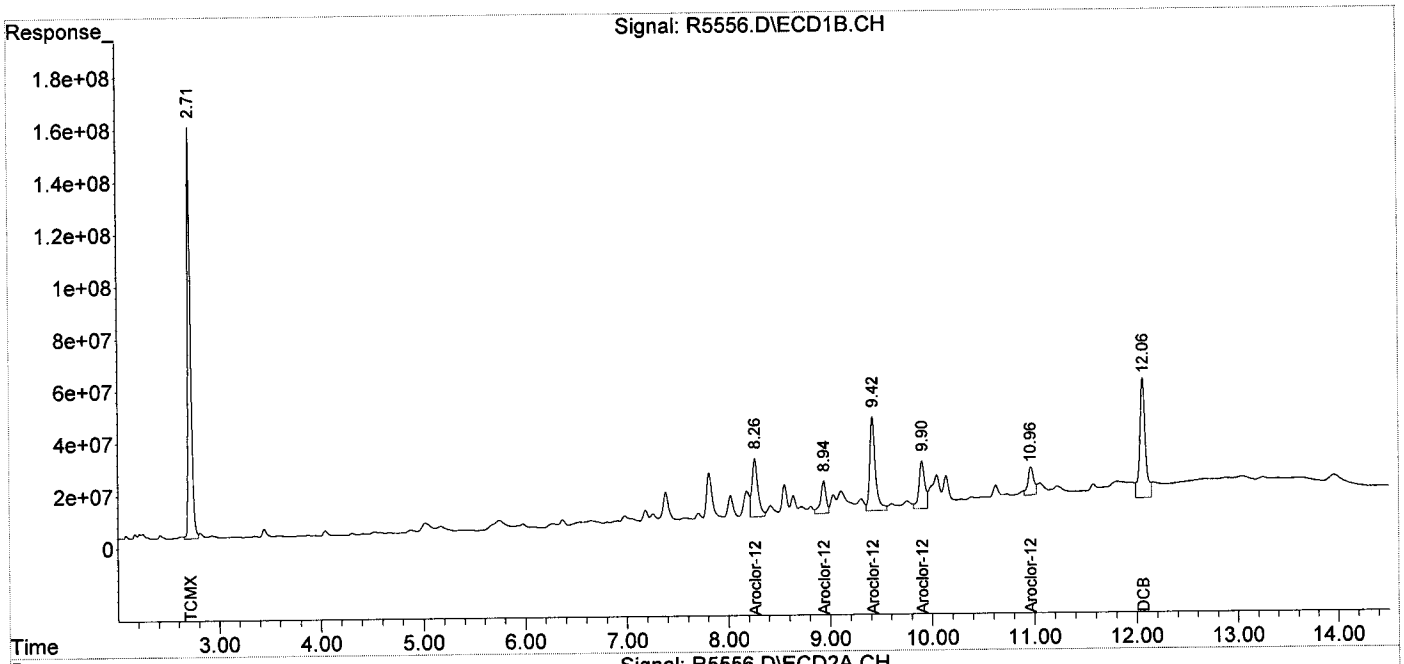
E15-05467-0106

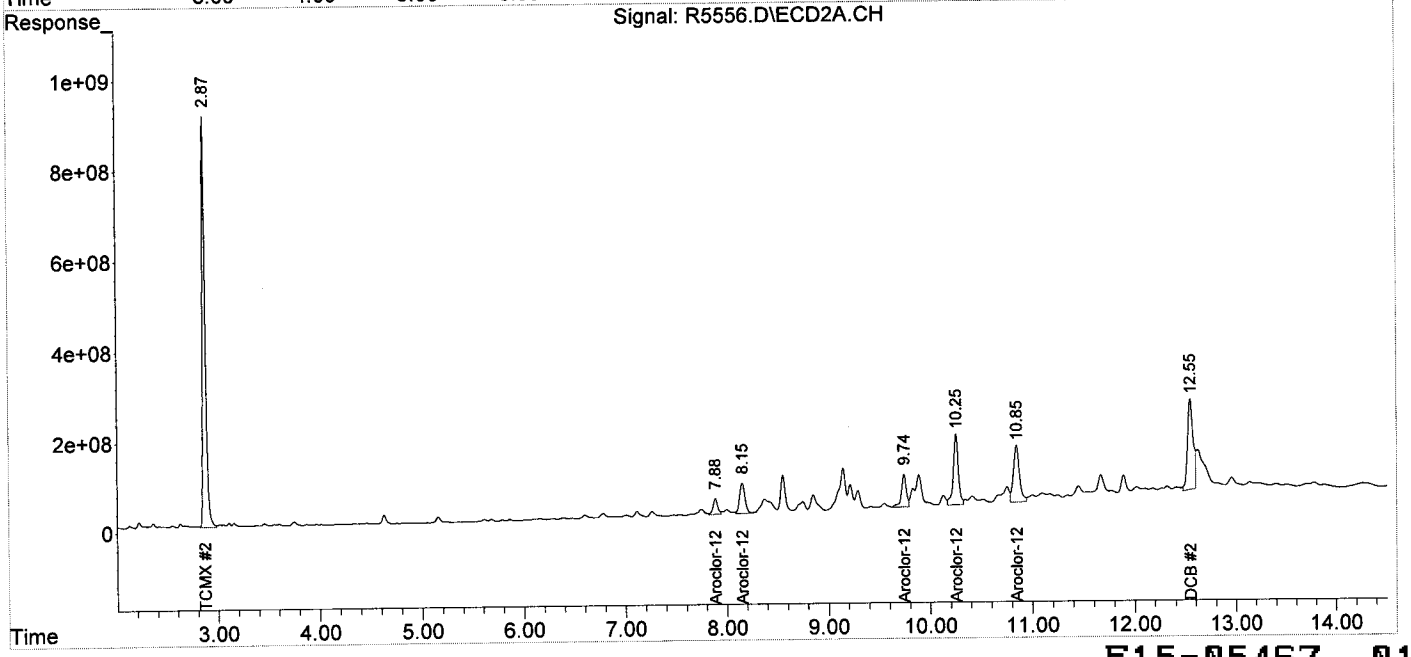
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5556.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 22:55
Operator : JS
Sample : E-26_(2.,E15-05467-010,S,5.90g,16.1,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:34:35 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467_0107

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5581.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:51
Operator : JS
Sample : X-4_(0.5,E15-05467-011,S,5.72g,13.8,20
Misc : 150702-07,07/02/15,06/25/15,5
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:36:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	779.8E6	4604.5E6	38.777	37.721
Spiked Amount 200.000			Recovery	=	19.39%	18.86%
2) S DCB	12.06	12.55	320.4E6	1304.6E6	38.778m	38.003m
Spiked Amount 200.000			Recovery	=	19.39%	19.00%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.27	7.89	721.8E6	1338.2E6	548.383	377.045 #
34) L8 Aroclor-1260 {2}	8.94	8.15	325.2E6	2392.3E6	435.529	467.062
35) L8 Aroclor-1260 {3}	9.42	9.75	969.0E6	2114.1E6	495.327	464.821
36) L8 Aroclor-1260 {4}	9.91	10.26	486.1E6	4420.2E6	551.701	421.346
37) L8 Aroclor-1260 {5}	10.97	10.85	241.9E6	3390.7E6	431.288m	485.394
Sum Aroclor-1260			2744.0E6	13655.5E6	2462.229	2215.667
Average Aroclor-1260					492.446	443.133
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

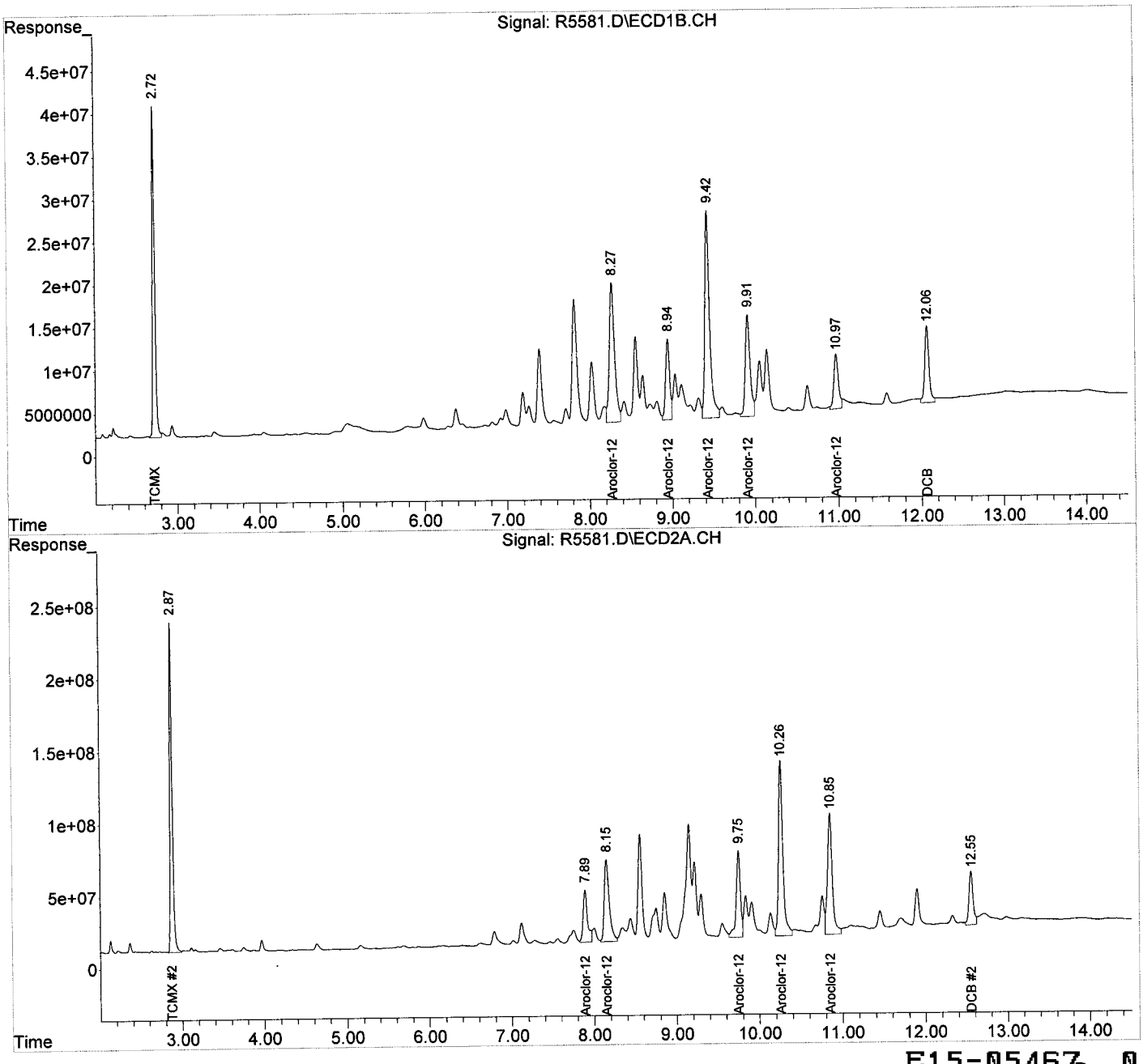
E15-05467_0108

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5581.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 9:51
Operator : JS
Sample : X-4_(0.5,E15-05467-011,S,5.72g,13.8,20
Misc : 150702-07,07/02/15,06/25/15,5
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:36:29 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 21:19
Operator : JS
Sample : FB-06251,E15-05467-012,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/25/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:40:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3480.9E6	20619.9E6	173.090	168.920
Spiked Amount 200.000			Recovery	=	86.55%	84.46%
2) S DCB	12.07	12.55	1342.7E6	5361.1E6	162.531	156.168
Spiked Amount 200.000			Recovery	=	81.27%	78.08%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

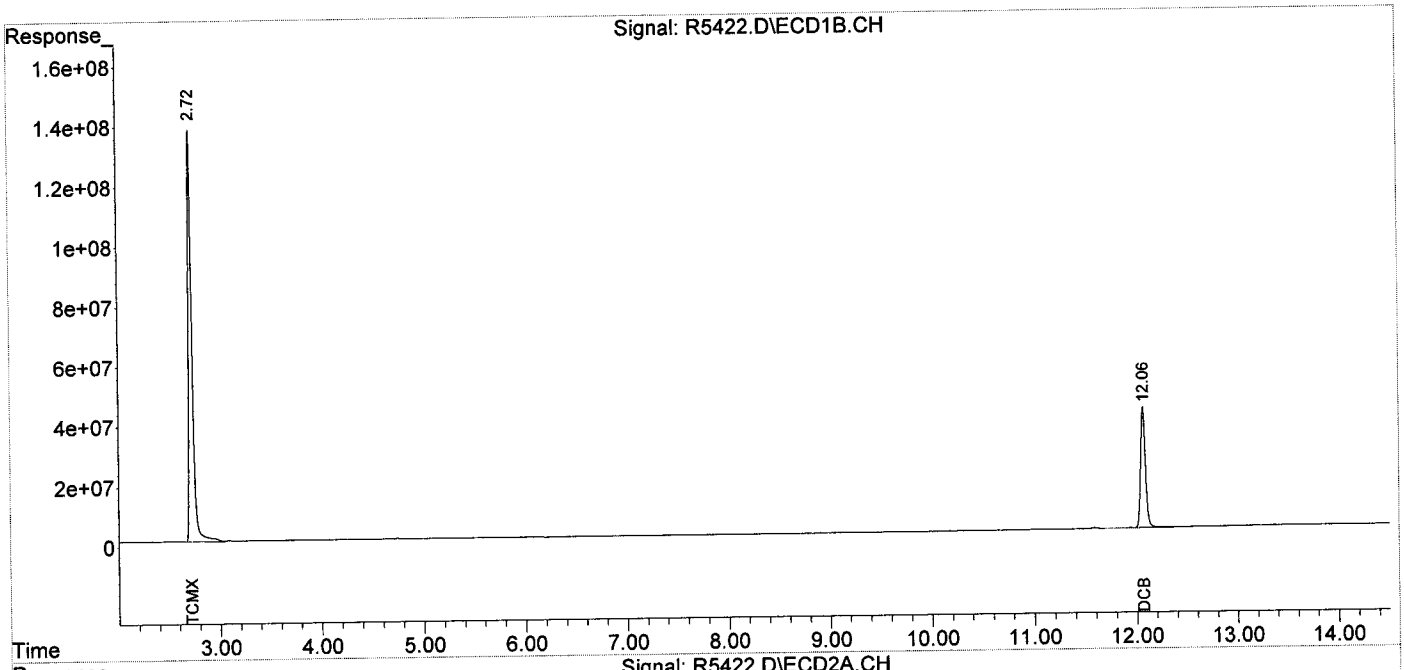
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

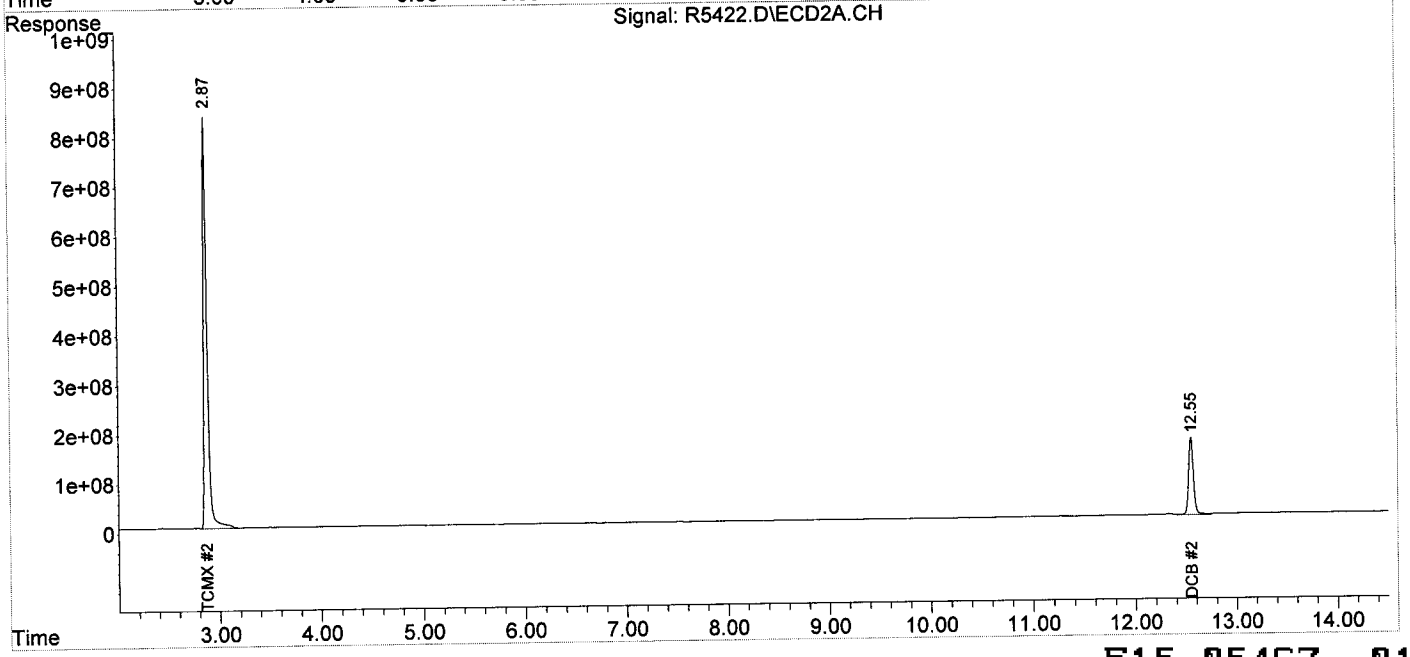
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5422.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 21:19
Operator : JS
Sample : FB-06251,E15-05467-012,A,1000ml,100,5
Misc : 150629-16,06/29/15,06/25/15,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:40:06 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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 : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5582.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 10:08
Operator : JS
Sample : E-24_(0.,E15-05467-013,S,5.61g,14.1,20
Misc : 150702-07,07/02/15,06/25/15,100
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 12:53:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.88	47556991	334.2E6	2.365	2.738
Spiked Amount 200.000			Recovery	=	1.18%	1.37%
2) S DCB	12.07	12.56	17693206	78310431	2.142m	2.281m
Spiked Amount 200.000			Recovery	=	1.07%	1.14%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.28	7.89	535.8E6	1292.5E6	407.061	364.151
34) L8 Aroclor-1260 {2}	8.95	8.15	242.5E6	1679.4E6	324.814	327.889
35) L8 Aroclor-1260 {3}	9.43	9.75	698.5E6	1562.5E6	357.047	343.540
36) L8 Aroclor-1260 {4}	9.91	10.26	341.9E6	3416.3E6	388.066	325.653
37) L8 Aroclor-1260 {5}	10.98	10.85	174.1E6	2514.2E6	310.335	359.907
Sum Aroclor-1260			1992.8E6	10464.9E6	1787.323	1721.141
Average Aroclor-1260					357.465	344.228
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

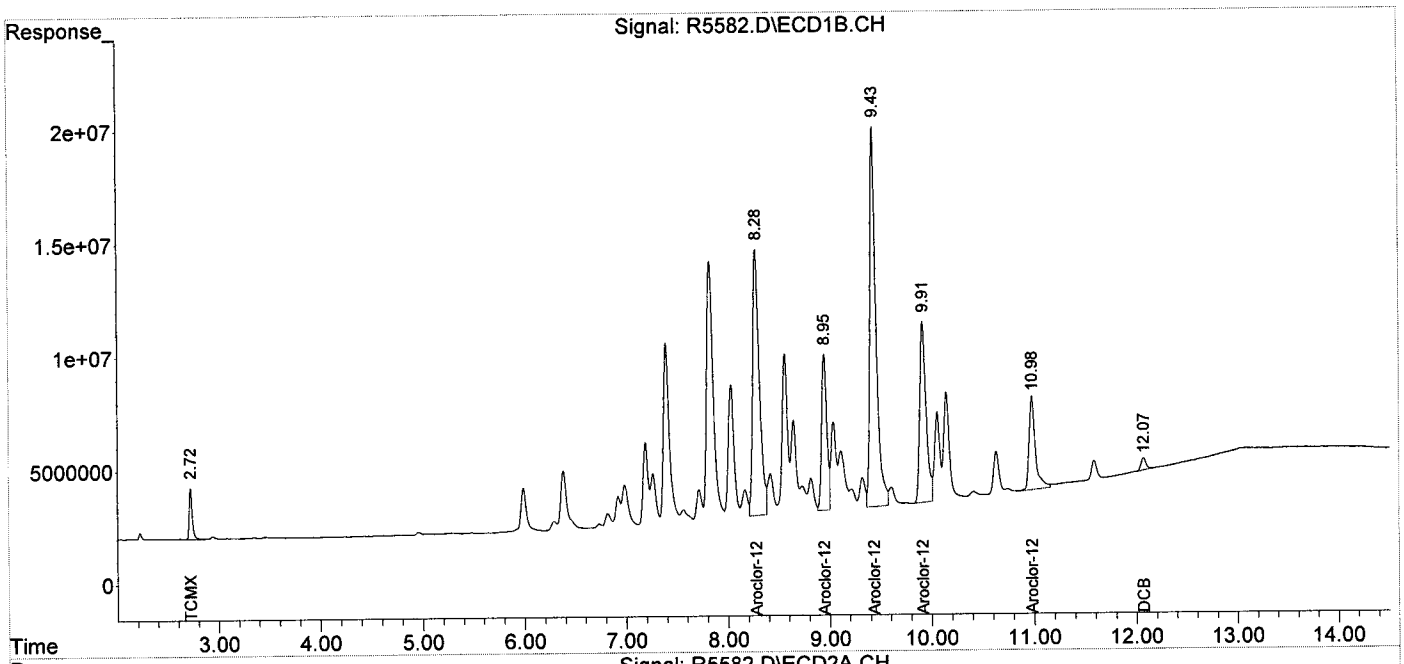
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

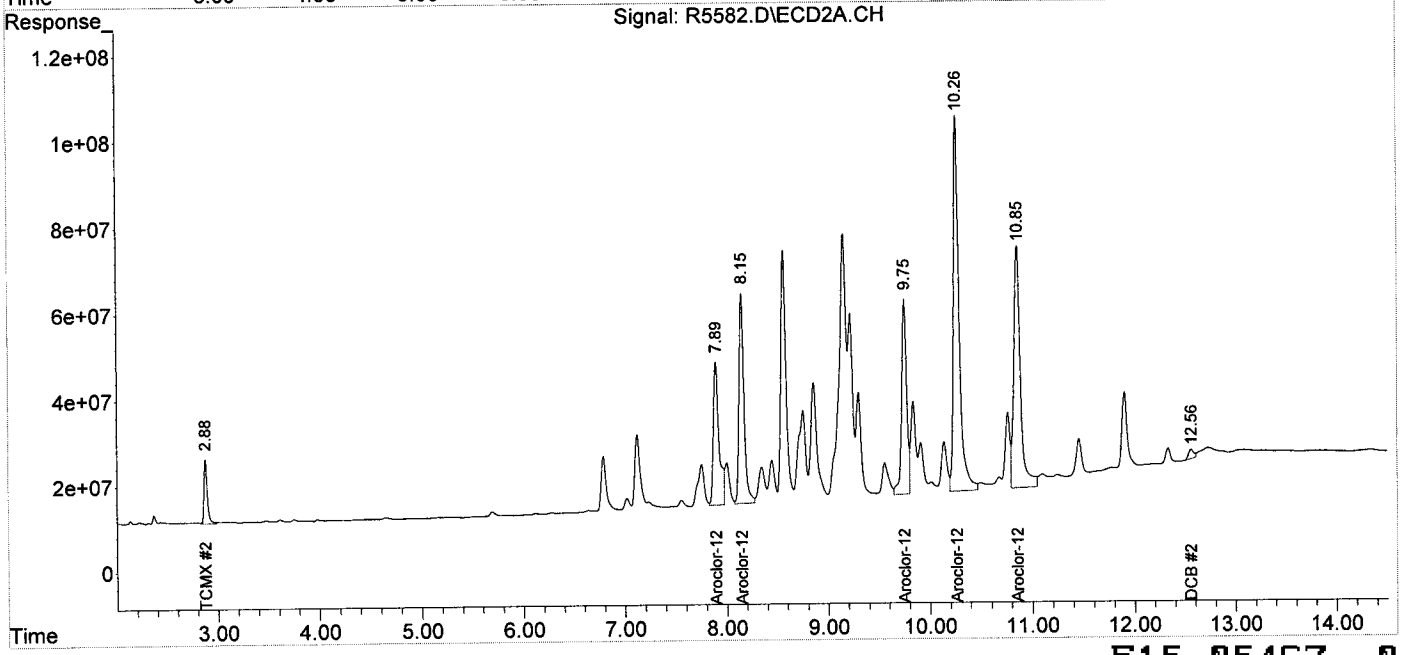
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5582.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 10:08
Operator : JS
Sample : E-24_(0.,E15-05467-013,S,5.61g,14.1,20
Misc : 150702-07,07/02/15,06/25/15,100
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 12:53:12 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467_013

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:34
Operator : JS
Sample : E-24_(2.,E15-05467-014,S,5.10g,20.3,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 13:49:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3182.1E6	17779.1E6	158.235	145.649
Spiked Amount 200.000			Recovery	=	79.12%	72.82%
2) S DCB	12.06	12.55	1566.7E6	7199.1E6	189.641m	209.709m
Spiked Amount 200.000			Recovery	=	94.82%	104.85%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

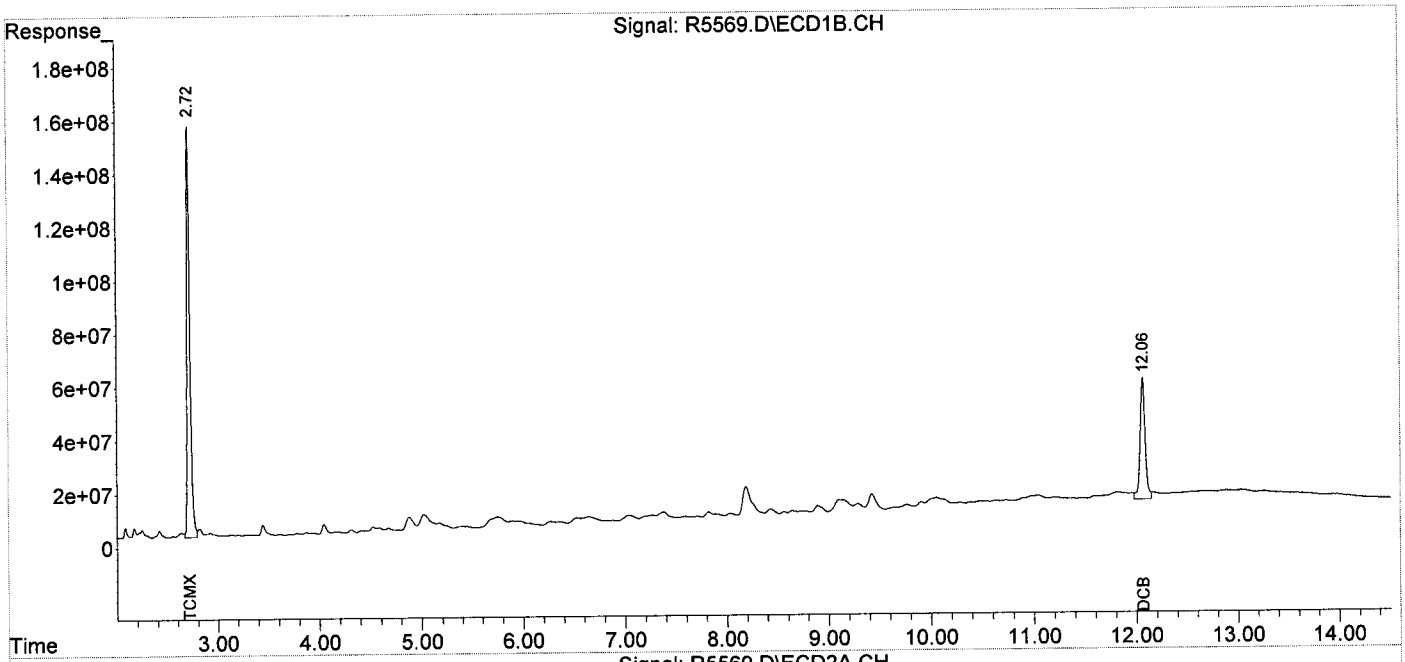
E15-05467_0114

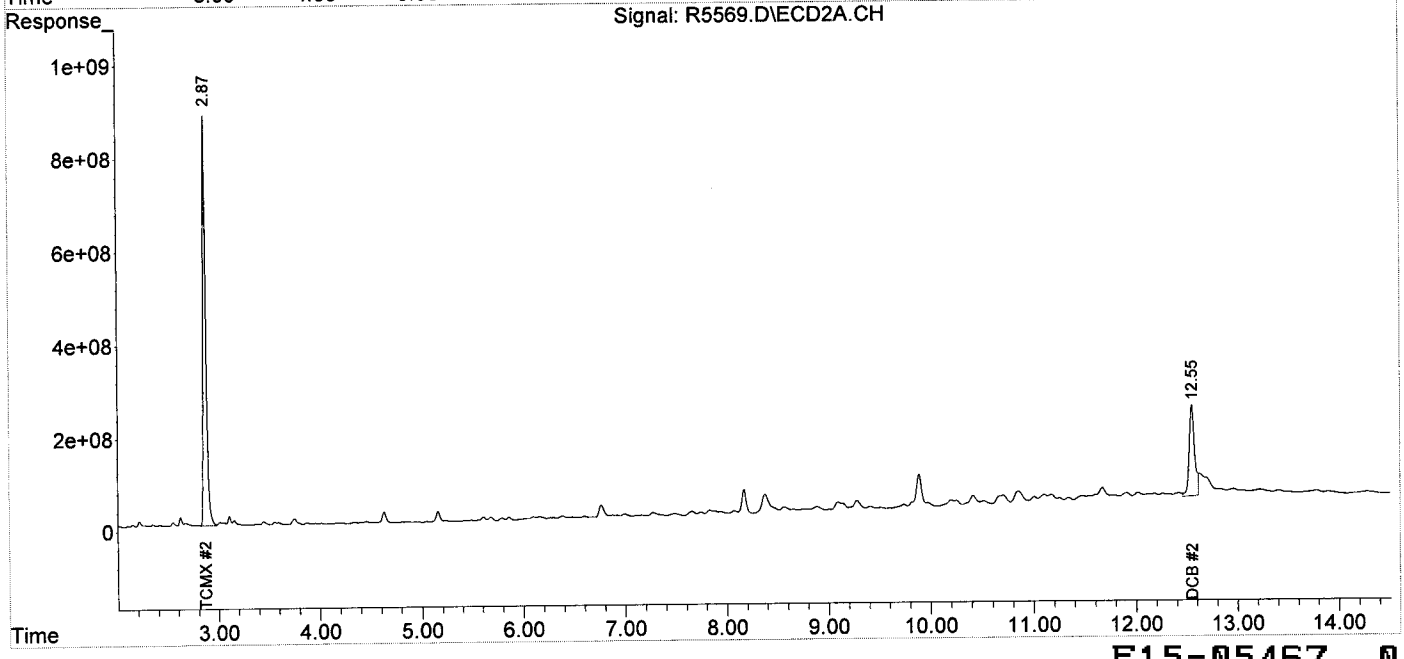
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5569.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 07 Jul 2015 3:34
Operator : JS
Sample : E-24_(2.,E15-05467-014,S,5.10g,20.3,20
Misc : 150702-07,07/02/15,06/25/15,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 13:49:05 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA150629-16
Client ID: PCB
Date Received: NA
Date Extracted: 06/29/2015
Date Analyzed: 06/30/2015
Data file: R5413.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0116

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.72	2.87	3162.4E6	18379.5E6	157.252	150.567
Spiked Amount 200.000			Recovery	=	78.63%	75.28%
2) S DCB	12.07	12.55	1005.6E6	3291.9E6	121.721	95.892
Spiked Amount 200.000			Recovery	=	60.86%	47.95%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

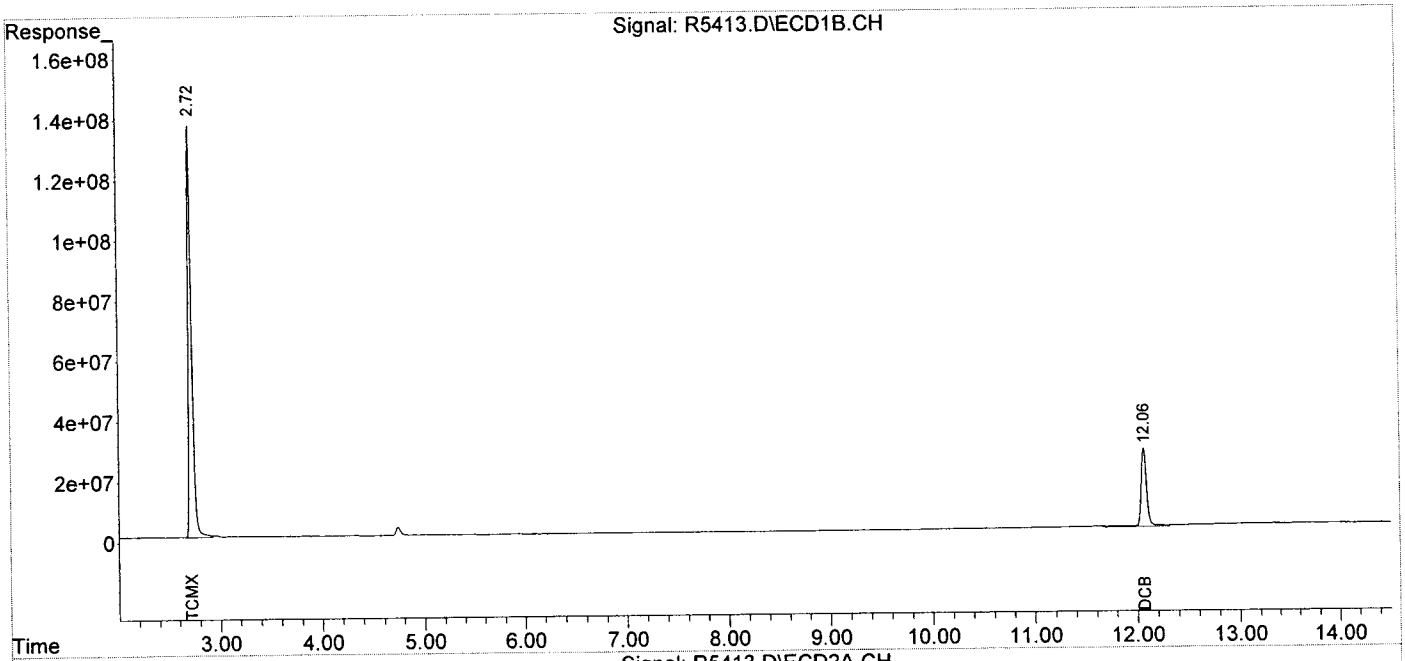
E15-05467_0117

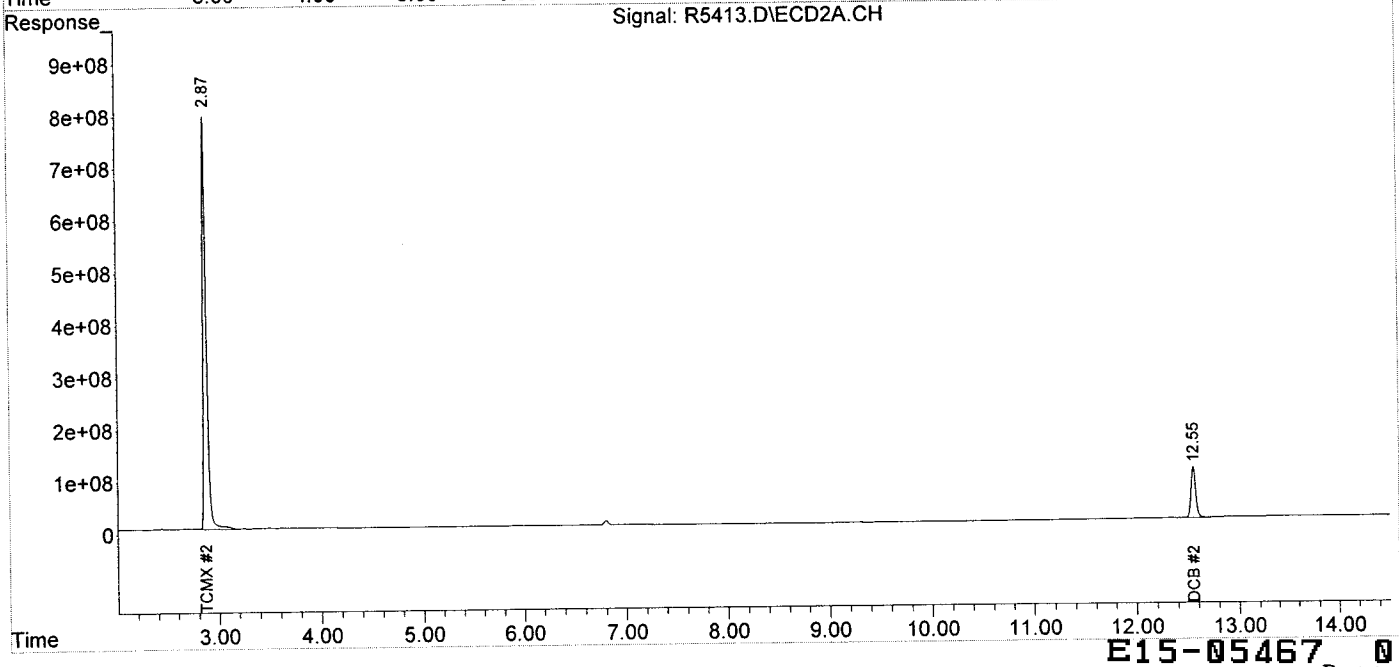
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\06-30-15\
Data File : R5413.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 30 Jun 2015 18:42
Operator : JS
Sample : PCB,BLKA150629-16,A,1000ml,100,5
Misc : NA,06/29/15,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 01 10:34:57 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150701-12
Client ID: PCB
Date Received: NA
Date Extracted: 07/01/2015
Date Analyzed: 07/02/2015
Data file: Y3022.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0119

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y3022.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150701-12,S,5.00g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:38:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.77	2.91	13575.2E6	6441.9E6	203.822	185.875
Spiked Amount 200.000			Recovery	=	101.91%	92.94%
2) S DCB	12.11	12.56	3185.9E6	1933.9E6	155.545	156.462
Spiked Amount 200.000			Recovery	=	77.77%	78.23%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

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

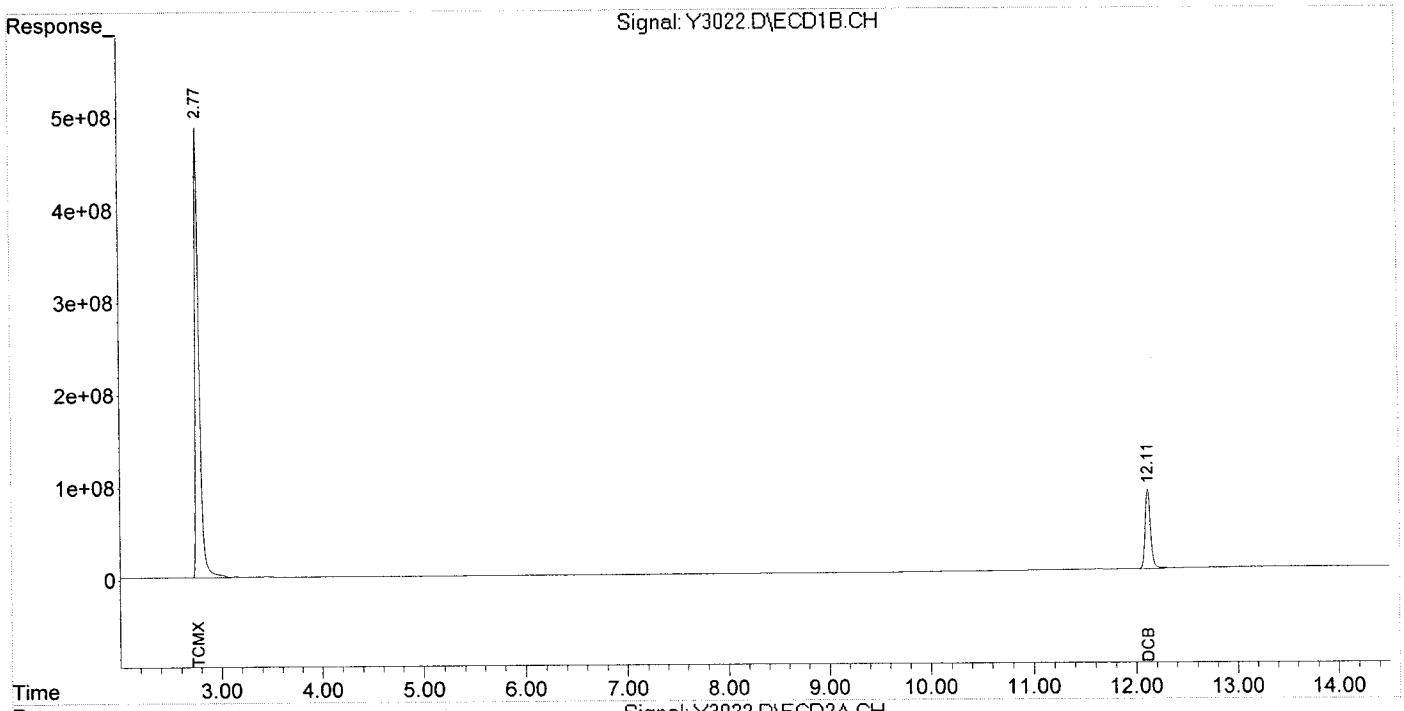
E15-05467 0120

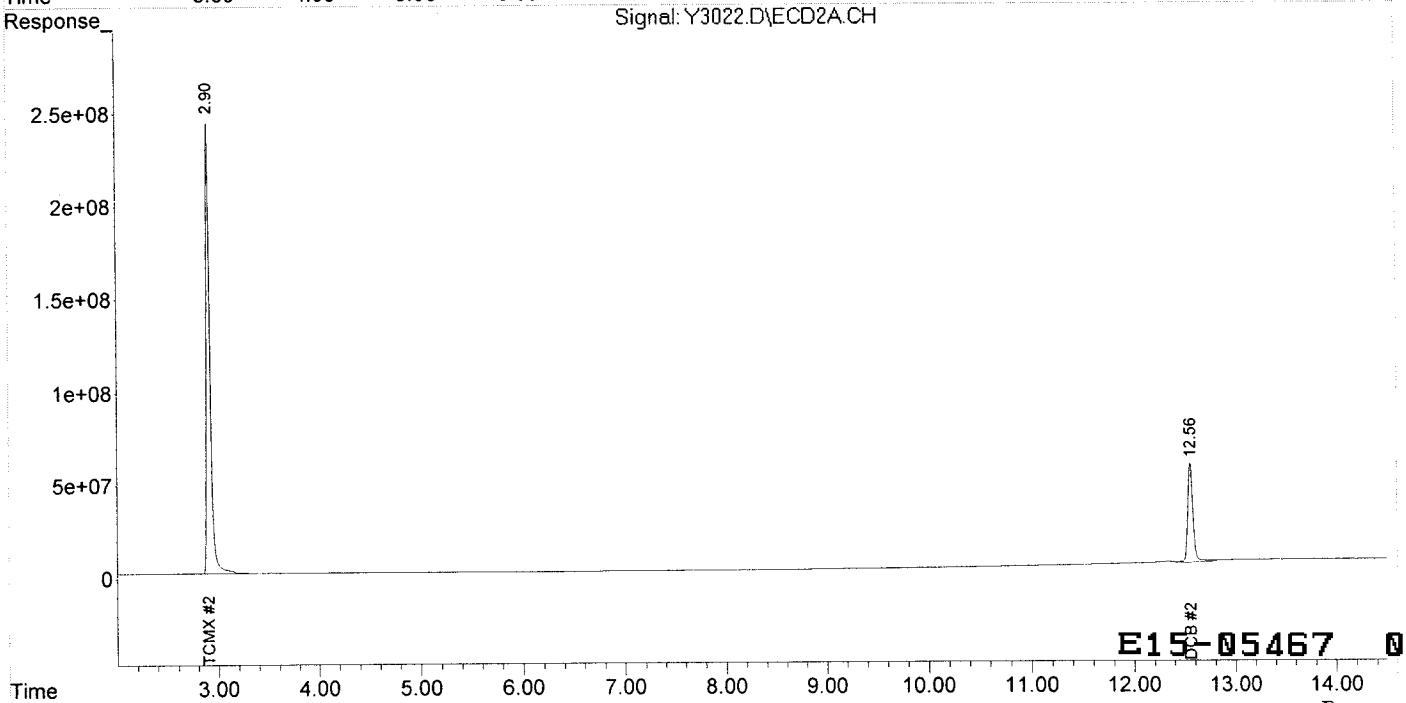
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\07-02-15\
Data File : Y3022.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 02 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150701-12,S,5.00g,0,20
Misc : NA,07/01/15,NA,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 08 14:38:17 2015
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0615.M
Quant Title :
QLast Update : Mon Jun 29 09:15:06 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





E15-05467 0121

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS150702-07
Client ID: PCB
Date Received: NA
Date Extracted: 07/02/2015
Date Analyzed: 07/06/2015
Data file: R5550.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

E15-05467 0122

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150702-07,S,5g,0,20
Misc : NA,07/02/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:25:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.87	3957.0E6	24000.4E6	196.764	196.614
Spiked Amount 200.000			Recovery	=	98.38%	98.31%
2) S DCB	12.07	12.55	1771.2E6	6886.5E6	214.391	200.604
Spiked Amount 200.000			Recovery	=	107.20%	100.30%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

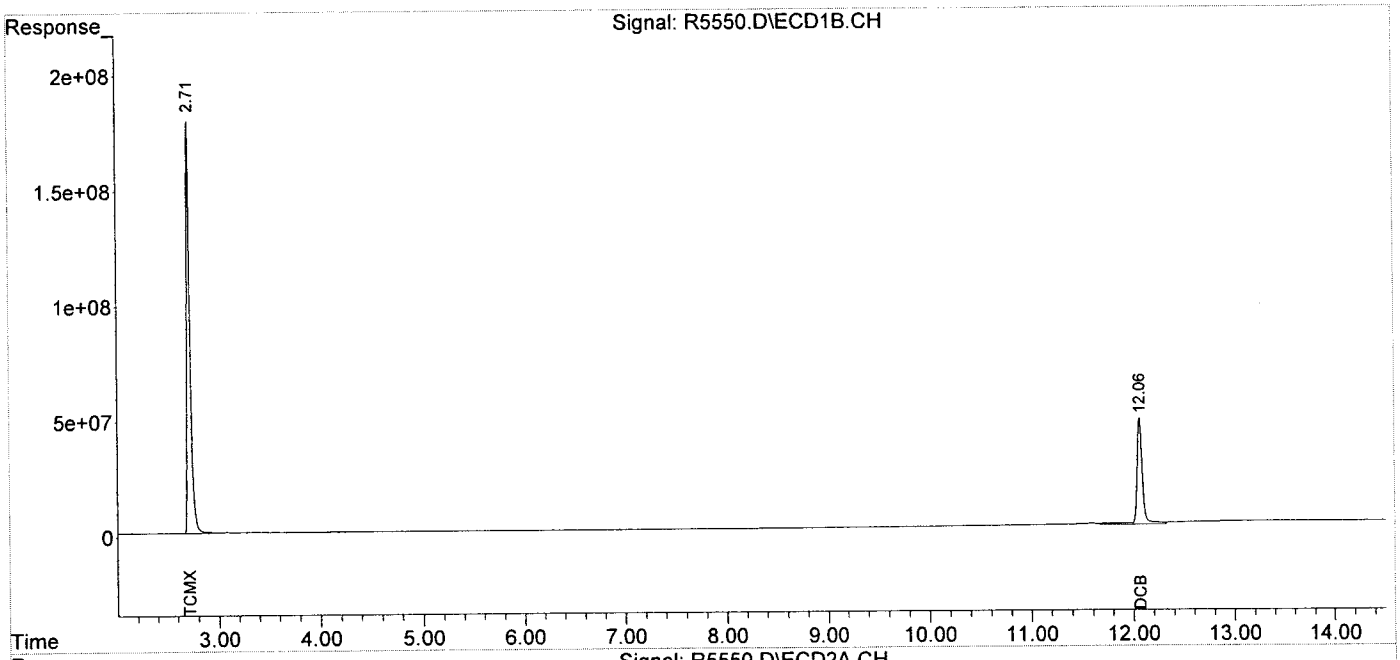
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

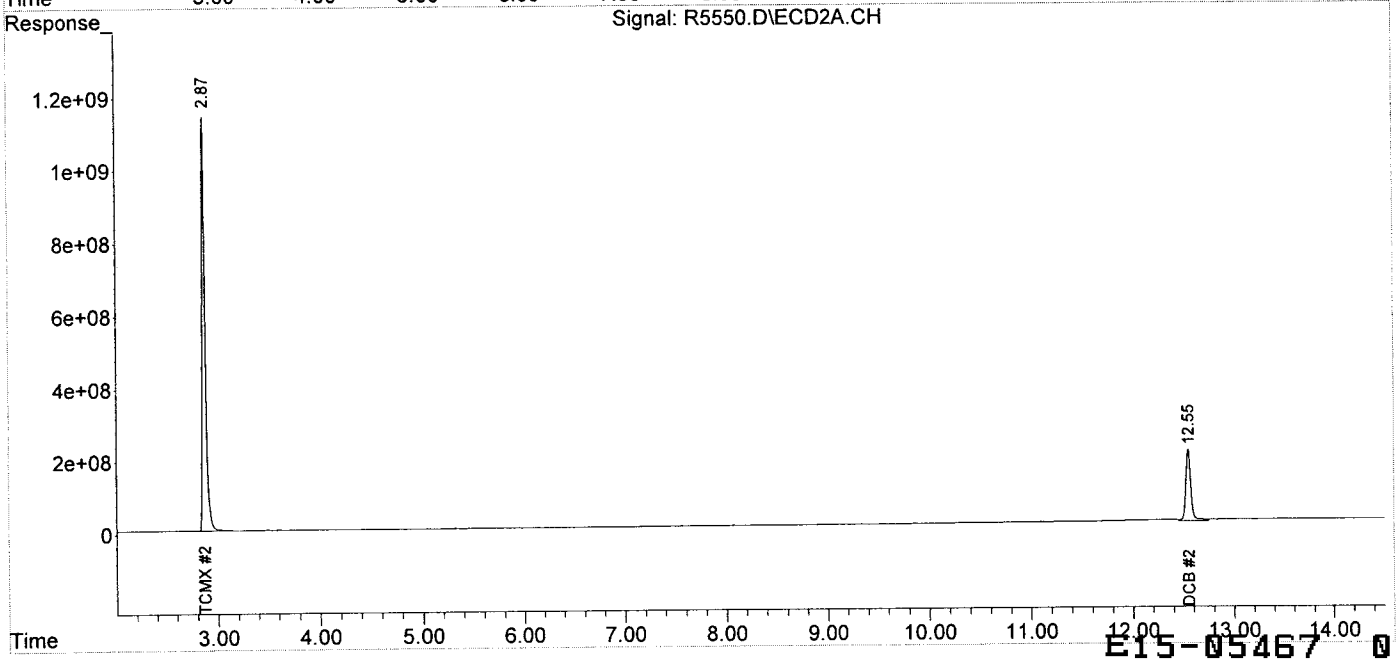
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\07-06-15\
Data File : R5550.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 06 Jul 2015 21:10
Operator : JS
Sample : PCB,BLKS150702-07,S,5g,0,20
Misc : NA,07/02/15,NA,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Jul 07 16:25:24 2015
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0617.M
Quant Title :
QLast Update : Fri Jun 26 14:03:02 2015
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





SAMPLE TRACKING

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM
Project Name: AMTRAK EAST BARRACKS
Project Location (State): TRENTON, NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / AZ-MP

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*
NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015
TAT for PHC (if other than 2 weeks):

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082A	Sample Specific Notes:
E-13-0.5-1.0	0.5-1.0	6-25-15	0800	S	1	1	X	
E-13-2.0-2.5	2.0-2.5	6-25-15	0820	S	1	2	X	
E-21-0.5-1.0	0.5-1.0	6-25-15	0847	S	1	3	X	
E-21-2.0-2.5	2.0-2.5	6-25-15	0920	S	1	4	X	
E-23-0.5-1.0	0.5-1.0	6-25-15	0930	S	1	5	X	
E-23-2.0-2.5	2.0-2.5	6-25-15	1000	S	1	6	X	
E-25-0.5-1.0	0.5-1.0	6-25-15	1105	S	1	7	X	
E-25-2.0-2.5	2.0-2.5	6-25-15	1125	S	1	8	X	

ANALYTICAL PARAMETERS (please note if contingent)

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other
Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore
Preservative (use code)
Container Type (use code)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Special Instructions/QC Requirements & Comments:
OBJECTIVE DKQ

Carrier (check one):
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-25-15	1325		6/25/15	1326
	6/25/15	1627		6/26/15	1622

FOR LAB USE ONLY
SDG #: 5467
Cooler Temp: 4 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information
Company: AMEC FOSTER WHEELER	REPORT TO:
Address: 285 DAVIDSON AVE SUITE 405 SOMERSET NJ 08873	Address:
Telephone #: 732-302-9500	Attn:
Fax #:	FAX #
Project Manager: MARLENE LINDHARDT	INVOICE TO:
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM	Address:
Project Name: AMTRAK EAST BARRACKS	
Project Location (State): TRENTON, NJ	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by: MAF / MP	

COMPLETED BY IAL:
_____ Field Sampling _____ Equipment Rental

Sample Matrix

DW - Drinking Water	**OI** - Oil
WW - Waste Water	**S** - Soil
GW - Groundwater	**SOL** - Solid
SW - Surface Water	**SL** - Sludge
LIQ - Liquid (Specify)	**W** - Wipe
	B - Biphasic

****Rush TAT Charge**
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs
☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected: Low Med High

These samples have been previously analyzed by IAL
☐ YES ☐ NO

Turn-Around Time (TAT)
Standard (10 business days) Verbal
~~Rush/date needed~~ (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED
☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015
TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB 8082A	Sample Specific Notes:
E-26-0.5-1.0	0.5-1.0	6-25-15	1135	S	1	9	X	
E-26-2.0-2.5	2.0-2.5	6-25-15	1215	S	1	10	X	
X-4-0.5-1.0	0.5-1.0	6-25-15	—	S	1	11	X	
FB-062515	—	6-25-15	1250	WATER	2	12	X	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 57167
Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	6-25-15	1325		6/25/15	1326
	6/25/15	1625	GAL	6/26/15	0622

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05467: AMTRAK EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: marlene.lindhardt@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Jun 25, 2015 @ 16:22	NA	Jul 10, 2015	Jul 17, 2015 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT

**** QC Requirement (must meet):** NJ IGW

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
05467-001	E-13 (0.5-1.0)	0.5/1.0	06/25/15@08:00	Soil	mg/Kg (ppm)	
05467-002	E-13 (2.0-2.5)	2.0/2.5	06/25/15@08:20	Soil	mg/Kg (ppm)	
05467-003	E-21 (0.5-1.0)	0.5/1.0	06/25/15@08:47	Soil	mg/Kg (ppm)	
05467-004	E-21 (2.0-2.5)	2.0/2.5	06/25/15@09:20	Soil	mg/Kg (ppm)	
05467-005	E-23 (0.5-1.0)	0.5/1.0	06/25/15@09:30	Soil	mg/Kg (ppm)	
05467-006	E-23 (2.0-2.5)	2.0/2.5	06/25/15@10:00	Soil	mg/Kg (ppm)	
05467-007	E-25 (0.5-1.0)	0.5/1.0	06/25/15@11:05	Soil	mg/Kg (ppm)	
05467-008	E-25 (2.0-2.5)	2.0/2.5	06/25/15@11:25	Soil	mg/Kg (ppm)	
05467-009	E-26 (0.5-1.0)	0.5/1.0	06/25/15@11:35	Soil	mg/Kg (ppm)	
05467-010	E-26 (2.0-2.5)	2.0/2.5	06/25/15@12:15	Soil	mg/Kg (ppm)	
05467-011	X-4 (0.5-1.0)	0.5/1.0	06/25/15	Soil	mg/Kg (ppm)	
05467-012	FB-062515	NA	06/25/15@12:50	Aqueous	mg/L (ppm)	
05467-013	E-24 (0.5-1.0)	0.5/1.0	06/25/15@10:15	Soil	mg/Kg (ppm)	
05467-014	E-24 (2.0-2.5)	2.0/2.5	06/25/15@11:00	Soil	mg/Kg (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
002	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
003	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
004	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
005	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
006	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
007	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
008	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
009	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
010	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

E15-05467: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
011	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
012	TCL PCB	Analyze	8082A	STD/2 WKS	7/2/2015
013	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015
014	TCL PCB	Analyze	8082A	STD/2 WKS	7/9/2015

Project Notes:

NOTE 2 taken by kim on 06/29/2015 02:18

SAMPLES E-24-0.5-1.0 AND E-24-2.0-2.5 RECEIVED BUT NOT ON CHAIN OF CUSTODY.

WAITING FOR CALL BACK FROM CLIENT.

SAMPLES LOGGED IN ON HOLD.

REV 1 taken by kim on 06/30/2015 11:52

ANALYZE SAMPLES 013 & 014 FOR TCL PCBS PER MARLENE LINDHART.

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 15** **05467** CLIENT: AMEC

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	13 - R - 24 - 0.5 - 1.0 - 6/25/11 - 1011
✓	no-Missing Bottles	17 R - 24 - 2.0 - 2.5 - 6/25/11 - 1100
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	NOT ON COC (ON HOLD)
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [ ] DATE 6/25/11

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [ ] DATE 6/25/11

E1505467 0130

REV 03/2013

Laboratory Custody Chronicle

IAL Case No.

E15-05467

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 6/25/2015@16:22

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	05467-001	Soil	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-002	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-003	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-004	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-005	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-006	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-007	"	7/ 1/15	Archimede	7/ 8/15	Justyna
"	-008	"	7/ 2/15	Archimede	7/ 8/15	Justyna
"	-009	"	7/ 2/15	Archimede	7/ 8/15	Justyna
"	-010	"	7/ 2/15	Archimede	7/ 8/15	Justyna
"	-011	"	7/ 2/15	Archimede	7/ 8/15	Justyna
"	-012	Aqueous	6/29/15	Archimede	6/30/15	Justyna
"	-013	Soil	7/ 2/15	Archimede	7/ 8/15	Justyna
"	-014	"	7/ 2/15	Archimede	7/ 8/15	Justyna

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IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK EAST BARRACKS**
IAL Case Number: **E16-09537**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Integrated Analytical Laboratories - Table of Contents

Sample Summary

IAL Case No.

E16-09537

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/12/2016@18:00

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
09537-001	E-54 (0.5-1)	0.5/1	10/10/2016@07:50	Soil	1
09537-002	E-54 (2-2.5)	2/2.5	10/10/2016@08:05	Soil	1
09537-003	E-42 (0.5-1)	0.5/1	10/10/2016@08:30	Soil	1
09537-004	E-42 (2-2.5)	2/2.5	10/10/2016@08:55	Soil	1
09537-005	E-42 (3-3.5)	3/3.5	10/10/2016@09:15	Soil	1
09537-006	E-42 (4-4.5)	4/4.5	10/10/2016@09:48	Soil	1
09537-007	E-51 (0.5-1)	0.5/1	10/10/2016@10:20	Soil	1
09537-008	E-51 (2-2.5)	2/2.5	10/10/2016@10:30	Soil	1
09537-009	E-51 (3-3.5)	3/3.5	10/10/2016@10:55	Soil	1
09537-010	E-49 (0.5-1)	0.5/1	10/10/2016@10:05	Soil	1
09537-011	E-52 (0.5-1)	0.5/1	10/10/2016@13:55	Soil	1
09537-012	E-37 (0.5-1)	0.5/1	10/10/2016@09:55	Soil	1
09537-013	E-44 (0.5-1)	0.5/1	10/10/2016@13:00	Soil	1
09537-014	E-44 (2-2.5)	2/2.5	10/10/2016@13:14	Soil	1
09537-015	E-44 (3-3.5)	3/3.5	10/10/2016@13:30	Soil	1
09537-016	E-60 (0.5-1)	0.5/1	10/10/2016@14:08	Soil	1
09537-017	E-36 (0.5-1)	0.5/1	10/10/2016@14:15	Soil	1
09537-018	E-36 (2-2.5)	2/2.5	10/10/2016@15:12	Soil	1
09537-019	E-47 (0.5-1)	0.5/1	10/10/2016@15:00	Soil	1
09537-020	X-1 (0.5-1)	0.5/1	10/10/2016	Soil	1
09537-021	EB-101016	n/a	10/10/2016@15:30	Aqueous	2
09537-022	E-43 (0.5-1)	0.5/1	10/11/2016@08:50	Soil	1
09537-023	E-43 (2-2.5)	2/2.5	10/11/2016@08:55	Soil	1
09537-024	E-43 (3-3.5)	3/3.5	10/11/2016@09:02	Soil	1
09537-025	E-43 (4.5-5)	4.5/5	10/11/2016@09:50	Soil	1
09537-026	E-55 (4.5-5)	4.5/5	10/11/2016@10:08	Soil	1
09537-027	E-34 (3-3.5)	3/3.5	10/11/2016@12:04	Soil	1
09537-028	E-34 (4.5-5)	4.5/5	10/11/2016@12:05	Soil	1
09537-029	E-57 (4.5-5)	4.5/5	10/11/2016@13:00	Soil	1
09537-030	E-57 (6-6.5)	6/6.5	10/11/2016@13:05	Soil	1
09537-031	E-56 (4.5-5)	4.5/5	10/11/2016@12:35	Soil	1
09537-032	E-56 (6-6.5)	6/6.5	10/11/2016@12:38	Soil	1
09537-033	E-30 (3-3.5)	3/3.5	10/11/2016@09:53	Soil	4
09537-034	E-30 (4.5-5)	4.5/5	10/11/2016@10:15	Soil	4
09537-035	E-31 (3-3.5)	3/3.5	10/11/2016@10:16	Soil	4
09537-036	E-31 (4.5-5)	4.5/5	10/11/2016@10:40	Soil	4
09537-037	E-33 (0.5-1)	0.5/1	10/11/2016@13:20	Soil	1
09537-038	E-33 (2-2.5)	2/2.5	10/11/2016@13:45	Soil	1
09537-039	E-33 (3-3.5)	3/3.5	10/11/2016@13:56	Soil	1
09537-040	E-33 (4.5-5)	4.5/5	10/11/2016@13:58	Soil	5
09537-041	E-33 (5.5-6)	5.5/6	10/11/2016@13:58	Soil	5
09537-042	E-40 (4.5-5)	4.5/5	10/11/2016@11:15	Soil	1
09537-043	E-39 (4.5-5)	4.5/5	10/11/2016@13:25	Soil	1
09537-044	EB-101116	n/a	10/11/2016@14:15	Aqueous	5
09537-045	E-32 (0.5-1)	0.5/1	10/12/2016@08:35	Soil	1
09537-046	E-32 (2-2.5)	2/2.5	10/12/2016@08:41	Soil	1

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Sample Summary

IAL Case No.

E16-09537

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/12/2016@18:00

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
09537-047	E-32 (3-3.5)	3/3.5	10/12/2016@08:53	Soil	1
09537-048	E-32 (4.5-5)	4.5/5	10/12/2016@08:55	Soil	5
09537-049	E-32 (5.5-6)	5.5/6	10/12/2016@08:58	Soil	5
09537-050	E-41 (0.5-1)	0.5/1	10/12/2016@08:57	Soil	1
09537-051	E-41 (2-2.5)	2/2.5	10/12/2016@09:13	Soil	1
09537-052	E-41 (4-4.5)	4/4.5	10/12/2016@09:22	Soil	1
09537-053	E-41 (5-5.5)	5/5.5	10/12/2016@09:25	Soil	1
09537-054	X-2 (2-2.5)	2/2.5	10/12/2016	Soil	1
09537-055	E-50 (4.5-5)	4.5/5	10/12/2016@10:28	Soil	1
09537-056	E-51 (4.5-5)	4.5/5	10/12/2016@10:35	Soil	1
09537-057	E-44 (4.5-5)	4.5/5	10/12/2016@10:08	Soil	1
09537-058	E-50 (0.5-1)	0.5/1	10/10/2016@12:00	Soil	1
09537-059	E-50 (2-2.5)	2/2.5	10/10/2016@12:35	Soil	1
09537-060	TRIP BLANK	n/a	10/10/2016	Aqueous	2

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DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09537

Integrated Analytical Laboratories, LLC. received sixty (60) samples** from AMEC-SMRST (IAL SDG# **E16-09537**, Project: AMTRAK EAST BARRACKS) on October 12, 2016 for the analysis of :

(10) Special VO
(52) TCL PCB
(7) % Moisture

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 8260C	**Batch: 161019A**	**Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E16-09537 - All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-044	1	NA
E16-09537-060	1	NA

Volatiles By 8260C	**Batch: F161017-01**	**Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E16-09537 - All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-033	1	NA
E16-09537-035	1	NA
E16-09537-040	1	NA
E16-09537-041	1	NA
E16-09537-048	1	NA
E16-09537-049	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09537

Volatiles By 8260C | **Batch: F161024-01** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E16-09537
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-034	1	NA
E16-09537-036	1	NA

PCB By 8082A | **Batch: 161017-13** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 003, 004, 005, 007, 008, 009, 010, 011, 012, 013, 014, 016, 017, 018, 019.

E16-09537
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-001	1;10	Target compound(s).
E16-09537-003	1	NA
E16-09537-004	1	NA
E16-09537-005	2	Target compound(s).
E16-09537-007	1	NA
E16-09537-008	1	NA
E16-09537-009	1	NA
E16-09537-010	1	NA
E16-09537-011	1	NA
E16-09537-012	1	NA
E16-09537-013	1	NA
E16-09537-014	1	NA
E16-09537-016	1;10	Target compound(s).
E16-09537-017	1	NA
E16-09537-018	1	NA
E16-09537-019	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09537

PCB By 8082A	Batch: 161017-14	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to matrix interference.
- MS/MSD percent recovery did not meet QC criteria due to matrix interference. NJDEP DKQP criteria not met.
- The RPD between the primary and secondary column was >40% for the following samples: #042. Per SW-846 8000D, the lower of the two concentrations was reported.
- The following samples were cleaned up using method 3660B to remove sulfur: 020, 022, 023, 024, 026, 027, 029, 030, 031, 032, 037, 038, 039, 040, 041, 042, 043, 045, 046, 047.

E16-09537

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-020	200	Target compound(s).
E16-09537-022	1;10	Target compound(s).
E16-09537-023	1	NA
E16-09537-024	1	NA
E16-09537-026	1	NA
E16-09537-027	1	NA
E16-09537-029	1	NA
E16-09537-030	1	NA
E16-09537-031	1	NA
E16-09537-032	1	NA
E16-09537-037	1;5	Target compound(s).
E16-09537-038	1;5	Target compound(s).
E16-09537-039	1	NA
E16-09537-040	1	NA
E16-09537-041	1	NA
E16-09537-042	1	NA
E16-09537-043	1	NA
E16-09537-045	1;5	Target compound(s).
E16-09537-046	1	NA
E16-09537-047	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09537

PCB By 8082A | **Batch: 161017-23** | **Matrix: Soil**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 048, 049, 050, 051, 054, 055, 056, 058, 059.

E16-09537
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.
- Surrogate for sample 058 was diluted out.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-048	1	NA
E16-09537-049	1	NA
E16-09537-050	1;5	Target compound(s).
E16-09537-051	1	NA
E16-09537-054	1	NA
E16-09537-055	1	NA
E16-09537-056	1	NA
E16-09537-058	200	Target compound(s).
E16-09537-059	1	NA

PCB By 8082A | **Batch: 161017-25** | **Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3665A: 021, 044.
- The following samples were cleaned up using method 3660B to remove sulfur: 021, 044.

E16-09537
- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-021	1	NA
E16-09537-044	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09537

PCB By 8082A	Batch: 161025-09	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 002, 006, 025, 053, 057.

E16-09537

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09537-002	1	NA
E16-09537-006	1	NA
E16-09537-025	1	NA
E16-09537-053	1	NA
E16-09537-057	1	NA

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

11/8/2016
Date

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK EAST BARRACKS
IAL Project #: E16-09537
IAL Sample ID(s): E16-09537-001 ~ -060
Sampling Date(s): 10/10/2016

List of DKQP Method Used:
Special VO by 8260C
TCL PCB by 8082A
% Moisture by D2216-71

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		X	
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?		X	
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		X	

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

	Lab ID:	09537-001			09537-002			09537-003			09537-004		
	Client ID:	E-54 (0.5-1)			E-54 (2-2.5)			E-42 (0.5-1)			E-42 (2-2.5)		
	Depth:	0.5/1			2/2.5			0.5/1			2/2.5		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/10/16			10/10/16			10/10/16			10/10/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1221		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1232		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1242		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1248		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1254		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1260		30.6	D	0.168	5.09		0.015	6.28		0.016	6.04		0.016
Aroclor-1262		ND		0.017	ND		0.015	ND		0.016	ND		0.016
Aroclor-1268		ND		0.017	ND		0.015	ND		0.016	ND		0.016
PCBs		30.6	D	0.168	5.09		0.015	6.28		0.016	6.04		0.016

	Lab ID:	09537-005			09537-006			09537-007			09537-008		
	Client ID:	E-42 (3-3.5)			E-42 (4-4.5)			E-51 (0.5-1)			E-51 (2-2.5)		
	Depth:	3/3.5			4/4.5			0.5/1			2/2.5		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/10/16			10/10/16			10/10/16			10/10/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1221		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1232		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1242		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1248		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1254		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1260		6.98	D	0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1262		ND		0.031	ND		0.014	ND		0.016	ND		0.016
Aroclor-1268		ND		0.031	ND		0.014	ND		0.016	ND		0.016
PCBs		6.98	D	0.031	ND		0.014	ND		0.016	ND		0.016

	Lab ID:	09537-009			09537-010			09537-011			09537-012		
	Client ID:	E-51 (3-3.5)			E-49 (0.5-1)			E-52 (0.5-1)			E-37 (0.5-1)		
	Depth:	3/3.5			0.5/1			0.5/1			0.5/1		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/10/16			10/10/16			10/10/16			10/10/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1221		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1232		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1242		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1248		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1254		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1260		0.097		0.015	0.205		0.016	ND		0.016	0.064		0.015
Aroclor-1262		ND		0.015	ND		0.016	ND		0.016	ND		0.015
Aroclor-1268		ND		0.015	ND		0.016	ND		0.016	ND		0.015
PCBs		0.097		0.015	0.205		0.016	ND		0.016	0.064		0.015

ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

	Lab ID:	09537-013			09537-014			09537-015			09537-016		
	Client ID:	E-44 (0.5-1)			E-44 (2-2.5)			E-44 (3-3.5)			E-60 (0.5-1)		
	Depth:	0.5/1			2/2.5			3/3.5			0.5/1		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/10/16			10/10/16			10/10/16			10/10/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1221		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1232		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1242		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1248		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1254		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1260		0.472		0.015	0.247		0.015	~		~	18.0	D	0.159
Aroclor-1262		ND		0.015	ND		0.015	~		~	ND		0.016
Aroclor-1268		ND		0.015	ND		0.015	~		~	ND		0.016
PCBs		0.472		0.015	0.247		0.015	~		~	18.0	D	0.159

	Lab ID:	09537-017			09537-018			09537-019			09537-020		
	Client ID:	E-36 (0.5-1)			E-36 (2-2.5)			E-47 (0.5-1)			X-1 (0.5-1)		
	Depth:	0.5/1			2/2.5			0.5/1			0.5/1		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/10/16			10/10/16			10/10/16			10/10/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1221		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1232		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1242		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1248		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1254		ND		0.016	ND		0.016	2.83		0.016	ND		3.59
Aroclor-1260		ND		0.016	ND		0.016	ND		0.016	377	D	3.59
Aroclor-1262		ND		0.016	ND		0.016	ND		0.016	ND		3.59
Aroclor-1268		ND		0.016	ND		0.016	ND		0.016	ND		3.59
PCBs		ND		0.016	ND		0.016	2.83		0.016	377	D	3.59

	Lab ID:	09537-022			09537-023			09537-024			09537-025		
	Client ID:	E-43 (0.5-1)			E-43 (2-2.5)			E-43 (3-3.5)			E-43 (4.5-5)		
	Depth:	0.5/1			2/2.5			3/3.5			4.5/5		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/11/16			10/11/16			10/11/16			10/11/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1221		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1232		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1242		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1248		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1254		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1260		31.0	D	0.167	1.66		0.018	0.323		0.017	ND		0.015
Aroclor-1262		ND		0.017	ND		0.018	ND		0.017	ND		0.015
Aroclor-1268		ND		0.017	ND		0.018	ND		0.017	ND		0.015
PCBs		31.0	D	0.167	1.66		0.018	0.323		0.017	ND		0.015

ND = Analyzed for but Not Detected at the MDL

D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

Lab ID:	09537-026			09537-027			09537-028			09537-029		
Client ID:	E-55 (4.5-5)			E-34 (3-3.5)			E-34 (4.5-5)			E-57 (4.5-5)		
Depth:	4.5/5			3/3.5			4.5/5			4.5/5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/11/16			10/11/16			10/11/16			10/11/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1221	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1232	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1242	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1248	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1254	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1260	ND		0.016	0.196		0.017	~		~	0.088		0.016
Aroclor-1262	ND		0.016	ND		0.017	~		~	ND		0.016
Aroclor-1268	ND		0.016	ND		0.017	~		~	ND		0.016
PCBs	ND		0.016	0.196		0.017	~		~	0.088		0.016

Lab ID:	09537-030			09537-031			09537-032			09537-033		
Client ID:	E-57 (6-6.5)			E-56 (4.5-5)			E-56 (6-6.5)			E-30 (3-3.5)		
Depth:	6/6.5			4.5/5			6/6.5			3/3.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/11/16			10/11/16			10/11/16			10/11/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Tetrachloroethene	~		~	~		~	~		~	ND		0.000371
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1221	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1232	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1242	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1248	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1254	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1260	0.022	J	0.015	0.110		0.016	ND		0.016	~		~
Aroclor-1262	ND		0.015	ND		0.016	ND		0.016	~		~
Aroclor-1268	ND		0.015	ND		0.016	ND		0.016	~		~
PCBs	0.022	J	0.015	0.110		0.016	ND		0.016	~		~
General Analytical (Units)												
Percent Moisture(%)	~		~	~		~	~		~	11.80		NA

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

Lab ID:	09537-034			09537-035			09537-036			09537-037		
Client ID:	E-30 (4.5-5)			E-31 (3-3.5)			E-31 (4.5-5)			E-33 (0.5-1)		
Depth:	4.5/5			3/3.5			4.5/5			0.5/1		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/11/16			10/11/16			10/11/16			10/11/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Tetrachloroethene	ND		0.0003	ND		0.000388	ND		0.000364	~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	~		~	~		~	~		~	ND		0.018
Aroclor-1221	~		~	~		~	~		~	ND		0.018
Aroclor-1232	~		~	~		~	~		~	ND		0.018
Aroclor-1242	~		~	~		~	~		~	ND		0.018
Aroclor-1248	~		~	~		~	~		~	ND		0.018
Aroclor-1254	~		~	~		~	~		~	ND		0.018
Aroclor-1260	~		~	~		~	~		~	11.3	D	0.088
Aroclor-1262	~		~	~		~	~		~	ND		0.018
Aroclor-1268	~		~	~		~	~		~	ND		0.018
PCBs	~		~	~		~	~		~	11.3	D	0.088
General Analytical (Units)												
Percent Moisture(%)	11.80		NA	~		~	17.50		NA	~		~

Lab ID:	09537-038			09537-039			09537-040			09537-041		
Client ID:	E-33 (2-2.5)			E-33 (3-3.5)			E-33 (4.5-5)			E-33 (5.5-6)		
Depth:	2/2.5			3/3.5			4.5/5			5.5/6		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/11/16			10/11/16			10/11/16			10/11/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Tetrachloroethene	~		~	~		~	ND		0.000466	ND		0.000388
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1221	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1232	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1242	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1248	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1254	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1260	11.7	D	0.081	2.54		0.016	0.435		0.015	0.070		0.014
Aroclor-1262	ND		0.016	ND		0.016	ND		0.015	ND		0.014
Aroclor-1268	ND		0.016	ND		0.016	ND		0.015	ND		0.014
PCBs	11.7	D	0.081	2.54		0.016	0.435		0.015	0.070		0.014
General Analytical (Units)												
Percent Moisture(%)	~		~	~		~	7.30		NA	3.10		NA

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

Lab ID:	**09537-042**			**09537-043**			**09537-045**			**09537-046**		
Client ID:	**E-40 (4.5-5)**			**E-39 (4.5-5)**			**E-32 (0.5-1)**			**E-32 (2-2.5)**		
Depth:	**4.5/5**			**4.5/5**			**0.5/1**			**2/2.5**		
Matrix:	**Soil**			**Soil**			**Soil**			**Soil**		
Sampled Date	**10/11/16**			**10/11/16**			**10/12/16**			**10/12/16**		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1221	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1232	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1242	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1248	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1254	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1260	0.061		0.015	0.110		0.016	11.8	D	0.080	5.53		0.017
Aroclor-1262	ND		0.015	ND		0.016	ND		0.016	ND		0.017
Aroclor-1268	ND		0.015	ND		0.016	ND		0.016	ND		0.017
PCBs	0.061		0.015	0.110		0.016	11.8	D	0.080	5.53		0.017
Lab ID:	**09537-047**			**09537-048**			**09537-049**			**09537-050**		
Client ID:	**E-32 (3-3.5)**			**E-32 (4.5-5)**			**E-32 (5.5-6)**			**E-41 (0.5-1)**		
Depth:	**3/3.5**			**4.5/5**			**5.5/6**			**0.5/1**		
Matrix:	**Soil**			**Soil**			**Soil**			**Soil**		
Sampled Date	**10/12/16**			**10/12/16**			**10/12/16**			**10/12/16**		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Tetrachloroethene	~		~	ND		0.000434	ND		0.00048	~		~
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1221	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1232	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1242	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1248	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1254	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1260	1.13		0.015	0.103		0.015	0.042		0.015	13.3	D	0.084
Aroclor-1262	ND		0.015	ND		0.015	ND		0.015	ND		0.017
Aroclor-1268	ND		0.015	ND		0.015	ND		0.015	ND		0.017
PCBs	1.13		0.015	0.103		0.015	0.042		0.015	13.3	D	0.084
General Analytical (Units)												
Percent Moisture(%)	~		~	7.40		NA	8.10		NA	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

Lab ID:	09537-051			09537-052			09537-053			09537-054		
Client ID:	E-41 (2-2.5)			E-41 (4-4.5)			E-41 (5-5.5)			X-2 (2-2.5)		
Depth:	2/2.5			4/4.5			5/5.5			2/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/12/16			10/12/16			10/12/16			10/12/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1221	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1232	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1242	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1248	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1254	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1260	1.30		0.015	~		~	0.954		0.018	1.54		0.015
Aroclor-1262	ND		0.015	~		~	ND		0.018	ND		0.015
Aroclor-1268	ND		0.015	~		~	ND		0.018	ND		0.015
PCBs	1.30		0.015	~		~	0.954		0.018	1.54		0.015

Lab ID:	09537-055			09537-056			09537-057			09537-058		
Client ID:	E-50 (4.5-5)			E-51 (4.5-5)			E-44 (4.5-5)			E-50 (0.5-1)		
Depth:	4.5/5			4.5/5			4.5/5			0.5/1		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/12/16			10/12/16			10/12/16			10/10/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1221	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1232	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1242	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1248	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1254	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1260	0.736		0.015	ND		0.017	ND		0.020	506	D	3.83
Aroclor-1262	ND		0.015	ND		0.017	ND		0.020	ND		3.83
Aroclor-1268	ND		0.015	ND		0.017	ND		0.020	ND		3.83
PCBs	0.736		0.015	ND		0.017	ND		0.020	506	D	3.83

Lab ID:	09537-059		
Client ID:	E-50 (2-2.5)		
Depth:	2/2.5		
Matrix:	Soil		
Sampled Date	10/10/16		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*		
Aroclor-1016	ND		0.017
Aroclor-1221	ND		0.017
Aroclor-1232	ND		0.017
Aroclor-1242	ND		0.017
Aroclor-1248	ND		0.017
Aroclor-1254	ND		0.017
Aroclor-1260	0.735		0.017
Aroclor-1262	ND		0.017
Aroclor-1268	ND		0.017
PCBs	0.735		0.017

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09537

	Lab ID:	09537-021		09537-044		09537-060	
	Client ID:	EB-101016		EB-101116		TRIP BLANK	
	Matrix:	Aqueous		Aqueous		Aqueous	
	Sampled Date	10/10/16		10/11/16		10/10/16	
PARAMETER(Units)		Conc	Q MDL	Conc	Q MDL	Conc	Q MDL
Volatiles (Units)		*(mg/L)*		*(mg/L)*		*(mg/L)*	
Tetrachloroethene		~	~	ND	0.000381	ND	0.000381
PCB's (Units)		*(mg/L)*		*(mg/L)*		*(mg/L)*	
Aroclor-1016		ND	0.00002	ND	0.00002	~	~
Aroclor-1221		ND	0.00002	ND	0.00002	~	~
Aroclor-1232		ND	0.00002	ND	0.00002	~	~
Aroclor-1242		ND	0.00002	ND	0.00002	~	~
Aroclor-1248		ND	0.00002	ND	0.00002	~	~
Aroclor-1254		ND	0.00002	ND	0.00002	~	~
Aroclor-1260		ND	0.00002	ND	0.00002	~	~
Aroclor-1262		ND	0.00002	ND	0.00002	~	~
Aroclor-1268		ND	0.00002	ND	0.00002	~	~
PCBs		ND	0.00002	ND	0.00002	~	~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-033
Client ID: E-30_(3-3.5)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2812.D

GC/MS Column: DB-624
Sample wt/vol: 5.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00105	0.000371

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-034
Client ID: E-30_(4.5-5)/4
Date Received: 10/12/2016
Date Analyzed: 10/24/2016
Data file: F2981.D

GC/MS Column: DB-624
Sample wt/vol: 6.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00085	0.0003

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-035
Client ID: E-31_(3-3.5)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2813.D

GC/MS Column: DB-624
Sample wt/vol: 5.6g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.0

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0011	0.000388

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-036
Client ID: E-31_(4.5-5)/4
Date Received: 10/12/2016
Date Analyzed: 10/24/2016
Data file: F2982.D

GC/MS Column: DB-624
Sample wt/vol: 5.9g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.5

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00103	0.000364

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-040
Client ID: E-33_(4.5-5)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2814.D

GC/MS Column: DB-624
Sample wt/vol: 4.1g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00132	0.000466

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-041
Client ID: E-33_(5.5-6)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2815.D

GC/MS Column: DB-624
Sample wt/vol: 4.7g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.10

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0011	0.000388

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-044
Client ID: EB-101116
Date Received: 10/12/2016
Date Analyzed: 10/20/2016
Data file: E5931.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0005	0.000381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-048
Client ID: E-32_(4.5-5)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2816.D

GC/MS Column: DB-624
Sample wt/vol: 4.4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.40

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00123	0.000434

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-049
Client ID: E-32_(5.5-6)
Date Received: 10/12/2016
Date Analyzed: 10/17/2016
Data file: F2817.D

GC/MS Column: DB-624
Sample wt/vol: 4g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.10

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.00136	0.00048

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09537-060
Client ID: TRIP_BLANK
Date Received: 10/12/2016
Date Analyzed: 10/20/2016
Data file: E5932.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0005	0.000381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-001
Client ID: E-54_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3824.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	28.6	E	0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	28.6	E	0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-001DL
Client ID: E-54_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3843.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 9.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.419	0.168
Aroclor-1221	ND		0.419	0.168
Aroclor-1232	ND		0.419	0.168
Aroclor-1242	ND		0.419	0.168
Aroclor-1248	ND		0.419	0.168
Aroclor-1254	ND		0.419	0.168
Aroclor-1260	30.6	D	0.419	0.168
Aroclor-1262	ND		0.419	0.168
Aroclor-1268	ND		0.419	0.168
PCBs	30.6	D	0.419	0.168

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-002
Client ID: E-54_(2-
Date Received: 10/12/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4073.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.86g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	5.09		0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	5.09		0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-003
Client ID: E-42_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3825.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.72g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	6.28		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	6.28		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-004
Client ID: E-42_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3826.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.46g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	6.04		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	6.04		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-005
Client ID: E-42_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3846.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.48g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 6.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.078	0.031
Aroclor-1221	ND		0.078	0.031
Aroclor-1232	ND		0.078	0.031
Aroclor-1242	ND		0.078	0.031
Aroclor-1248	ND		0.078	0.031
Aroclor-1254	ND		0.078	0.031
Aroclor-1260	6.98	D	0.078	0.031
Aroclor-1262	ND		0.078	0.031
Aroclor-1268	ND		0.078	0.031
PCBs	6.98	D	0.078	0.031

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-006
Client ID: E-42_(4-
Date Received: 10/12/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4074.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.84g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.036	0.014
Aroclor-1221	ND		0.036	0.014
Aroclor-1232	ND		0.036	0.014
Aroclor-1242	ND		0.036	0.014
Aroclor-1248	ND		0.036	0.014
Aroclor-1254	ND		0.036	0.014
Aroclor-1260	ND		0.036	0.014
Aroclor-1262	ND		0.036	0.014
Aroclor-1268	ND		0.036	0.014
PCBs	ND		0.036	0.014

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-007
Client ID: E-51_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3829.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-008
Client ID: E-51_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3830.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.52g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-009
Client ID: E-51_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3831.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.81g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	0.097		0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	0.097		0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-010
Client ID: E-49_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3832.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	0.205		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	0.205		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-011
Client ID: E-52_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3833.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.43g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-012
Client ID: E-37_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3834.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.55g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.064		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.064		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-013
Client ID: E-44_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3835.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.79g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.472		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.472		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-014
Client ID: E-44_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3836.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.68g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.247		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.247		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-016
Client ID: E-60_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3837.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.82g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	16.6	E	0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	16.6	E	0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-016DL
Client ID: E-60_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3847.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.82g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 13.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.396	0.159
Aroclor-1221	ND		0.396	0.159
Aroclor-1232	ND		0.396	0.159
Aroclor-1242	ND		0.396	0.159
Aroclor-1248	ND		0.396	0.159
Aroclor-1254	ND		0.396	0.159
Aroclor-1260	18.0	D	0.396	0.159
Aroclor-1262	ND		0.396	0.159
Aroclor-1268	ND		0.396	0.159
PCBs	18.0	D	0.396	0.159

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-017
Client ID: E-36_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3838.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.53g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-018
Client ID: E-36_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3839.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.51g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-019
Client ID: E-47_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: R3840.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.44g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	2.83		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	2.83		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-020
Client ID: X-1_(0.5
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0838.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 14.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		8.98	3.59
Aroclor-1221	ND		8.98	3.59
Aroclor-1232	ND		8.98	3.59
Aroclor-1242	ND		8.98	3.59
Aroclor-1248	ND		8.98	3.59
Aroclor-1254	ND		8.98	3.59
Aroclor-1260	377	D	8.98	3.59
Aroclor-1262	ND		8.98	3.59
Aroclor-1268	ND		8.98	3.59
PCBs	377	D	8.98	3.59

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-021
Client ID: EB-10101
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3813.D

GC Column: DB-5/DB1701P
Sample wt/vol: 500ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-022
Client ID: E-43_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0814.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.71g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	23.7	E	0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	23.7	E	0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-022DL
Client ID: E-43_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0839.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.71g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 16.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.418	0.167
Aroclor-1221	ND		0.418	0.167
Aroclor-1232	ND		0.418	0.167
Aroclor-1242	ND		0.418	0.167
Aroclor-1248	ND		0.418	0.167
Aroclor-1254	ND		0.418	0.167
Aroclor-1260	31.0	D	0.418	0.167
Aroclor-1262	ND		0.418	0.167
Aroclor-1268	ND		0.418	0.167
PCBs	31.0	D	0.418	0.167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-023
Client ID: E-43_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0815.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.25g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	1.66		0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	1.66		0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-024
Client ID: E-43_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0816.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.52g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	0.323		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	0.323		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-025
Client ID: E-43_(4.
Date Received: 10/12/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4075.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.62g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 4.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	ND		0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	ND		0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-026
Client ID: E-55_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0817.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.35g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-027
Client ID: E-34_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0818.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.04g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	0.196		0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	0.196		0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-029
Client ID: E-57_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0819.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.39g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	0.088		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	0.088		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-030
Client ID: E-57_(6-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0820.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.88g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.015
Aroclor-1221	ND		0.039	0.015
Aroclor-1232	ND		0.039	0.015
Aroclor-1242	ND		0.039	0.015
Aroclor-1248	ND		0.039	0.015
Aroclor-1254	ND		0.039	0.015
Aroclor-1260	0.022	J	0.039	0.015
Aroclor-1262	ND		0.039	0.015
Aroclor-1268	ND		0.039	0.015
PCBs	0.022	J	0.039	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-031
Client ID: E-56_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0821.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.43g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.20

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	0.110		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.110		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-032
Client ID: E-56_(6-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0822.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.53g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.30

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-037
Client ID: E-33_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0824.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	10.1	E	0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	10.1	E	0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-037DL
Client ID: E-33_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0840.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 12.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.219	0.088
Aroclor-1221	ND		0.219	0.088
Aroclor-1232	ND		0.219	0.088
Aroclor-1242	ND		0.219	0.088
Aroclor-1248	ND		0.219	0.088
Aroclor-1254	ND		0.219	0.088
Aroclor-1260	11.3	D	0.219	0.088
Aroclor-1262	ND		0.219	0.088
Aroclor-1268	ND		0.219	0.088
PCBs	11.3	D	0.219	0.088

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-038
Client ID: E-33_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0825.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.68g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	10.4	E	0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	10.4	E	0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-038DL
Client ID: E-33_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0841.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.68g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 12.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.201	0.081
Aroclor-1221	ND		0.201	0.081
Aroclor-1232	ND		0.201	0.081
Aroclor-1242	ND		0.201	0.081
Aroclor-1248	ND		0.201	0.081
Aroclor-1254	ND		0.201	0.081
Aroclor-1260	11.7	D	0.201	0.081
Aroclor-1262	ND		0.201	0.081
Aroclor-1268	ND		0.201	0.081
PCBs	11.7	D	0.201	0.081

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-039
Client ID: E-33_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0826.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.32g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	2.54		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	2.54		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-040
Client ID: E-33_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0827.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.65g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.30

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.435		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.435		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-041
Client ID: E-33_(5.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0828.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.88g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 3.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.035	0.014
Aroclor-1221	ND		0.035	0.014
Aroclor-1232	ND		0.035	0.014
Aroclor-1242	ND		0.035	0.014
Aroclor-1248	ND		0.035	0.014
Aroclor-1254	ND		0.035	0.014
Aroclor-1260	0.070		0.035	0.014
Aroclor-1262	ND		0.035	0.014
Aroclor-1268	ND		0.035	0.014
PCBs	0.070		0.035	0.014

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-042
Client ID: E-40_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0829.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.061		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.061		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-043
Client ID: E-39_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0830.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.93g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	0.110		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	0.110		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-044
Client ID: EB-10111
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3814.D

GC Column: DB-5/DB1701P
Sample wt/vol: 500ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-045
Client ID: E-32_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0831.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	10.9	E	0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	10.9	E	0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-045DL
Client ID: E-32_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0842.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.58g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 10.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.200	0.080
Aroclor-1221	ND		0.200	0.080
Aroclor-1232	ND		0.200	0.080
Aroclor-1242	ND		0.200	0.080
Aroclor-1248	ND		0.200	0.080
Aroclor-1254	ND		0.200	0.080
Aroclor-1260	11.8	D	0.200	0.080
Aroclor-1262	ND		0.200	0.080
Aroclor-1268	ND		0.200	0.080
PCBs	11.8	D	0.200	0.080

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-046
Client ID: E-32_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0832.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.74g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.017
Aroclor-1221	ND		0.041	0.017
Aroclor-1232	ND		0.041	0.017
Aroclor-1242	ND		0.041	0.017
Aroclor-1248	ND		0.041	0.017
Aroclor-1254	ND		0.041	0.017
Aroclor-1260	5.53		0.041	0.017
Aroclor-1262	ND		0.041	0.017
Aroclor-1268	ND		0.041	0.017
PCBs	5.53		0.041	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-047
Client ID: E-32_(3-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0833.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.69g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	1.13		0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	1.13		0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-048
Client ID: E-32_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0848.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.67g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.40

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.103		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.103		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-049
Client ID: E-32_(5.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0849.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.67g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	0.042		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	0.042		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-050
Client ID: E-41_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0850.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	11.9	E	0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	11.9	E	0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-050DL
Client ID: E-41_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0859.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 5
% Moisture: 10.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.211	0.084
Aroclor-1221	ND		0.211	0.084
Aroclor-1232	ND		0.211	0.084
Aroclor-1242	ND		0.211	0.084
Aroclor-1248	ND		0.211	0.084
Aroclor-1254	ND		0.211	0.084
Aroclor-1260	13.3	D	0.211	0.084
Aroclor-1262	ND		0.211	0.084
Aroclor-1268	ND		0.211	0.084
PCBs	13.3	D	0.211	0.084

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-051
Client ID: E-41_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0851.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.64g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	1.30		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	1.30		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-053
Client ID: E-41_(5-
Date Received: 10/12/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4076.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.55g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 20.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	0.954		0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	0.954		0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-054
Client ID: X-2_(2-2
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0852.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.70g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	1.54		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	1.54		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-055
Client ID: E-50_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0853.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.79g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.60

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.037	0.015
Aroclor-1221	ND		0.037	0.015
Aroclor-1232	ND		0.037	0.015
Aroclor-1242	ND		0.037	0.015
Aroclor-1248	ND		0.037	0.015
Aroclor-1254	ND		0.037	0.015
Aroclor-1260	0.736		0.037	0.015
Aroclor-1262	ND		0.037	0.015
Aroclor-1268	ND		0.037	0.015
PCBs	0.736		0.037	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-056
Client ID: E-51_(4.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0854.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.63g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	ND		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	ND		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-057
Client ID: E-44_(4.
Date Received: 10/12/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4077.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.22g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-058
Client ID: E-50_(0.
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0858.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 200
% Moisture: 21.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		9.58	3.83
Aroclor-1221	ND		9.58	3.83
Aroclor-1232	ND		9.58	3.83
Aroclor-1242	ND		9.58	3.83
Aroclor-1248	ND		9.58	3.83
Aroclor-1254	ND		9.58	3.83
Aroclor-1260	506	D	9.58	3.83
Aroclor-1262	ND		9.58	3.83
Aroclor-1268	ND		9.58	3.83
PCBs	506	D	9.58	3.83

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09537-059
Client ID: E-50_(2-
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0860.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.34g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	0.735		0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	0.735		0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture

Client/Project: AMEC-SMRST/AMTRAK EAST BARRACKS

Date Received: 10/12/16 18:00
Method: D2216-71

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E16-09537-033	E-30 (3-3.5)	11.8		1	Soil-%	NA	NA	10/11/16 09:53	10/14/16 10:23
E16-09537-040	E-33 (4.5-5)	7.30		1	Soil-%	NA	NA	10/11/16 13:58	10/14/16 10:23
E16-09537-041	E-33 (5.5-6)	3.10		1	Soil-%	NA	NA	10/11/16 13:58	10/14/16 10:23
E16-09537-048	E-32 (4.5-5)	7.40		1	Soil-%	NA	NA	10/12/16 08:55	10/14/16 10:23
E16-09537-049	E-32 (5.5-6)	8.10		1	Soil-%	NA	NA	10/12/16 08:58	10/14/16 10:23

INTEGRATED ANALYTICAL LABORATORIES, LLC.

% Moisture

Client/Project: AMEC-SMRST/AMTRAK EAST BARRACKS

Date Received: 10/12/16 18:00
Method: D2216-71

Lab ID	Client ID	Result	Q	DF	Matrix-Unit	MDL	RL	Date Collected	Date Analyzed
E16-09537-034	E-30 (4.5-5)	11.8		1	Soil-%	NA	NA	10/11/16 10:15	10/14/16 10:23
E16-09537-036	E-31 (4.5-5)	17.5		1	Soil-%	NA	NA	10/11/16 10:40	10/14/16 10:23

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/17/2016

Lab Sample ID	Matrix	File ID	SMC1	#	SMC2	#	SMC3	#
BLKS161017-01	SOIL	F2802.D	114		98		96	
E16-09502-008	SOIL	F2803.D	128		101		96	
E16-09519-005DUP	SOIL	F2804.D	145	$	105		77	
E16-09519-013	SOIL	F2805.D	127		99		99	
E16-09519-019	SOIL	F2806.D	128		103		96	
E16-09519-020	SOIL	F2807.D	128		100		99	
E16-09555-001	SOIL	F2808.D	116		99		96	
LCSS161017-01	SOIL	F2809.D	117		103		106	
E16-09555-001MS	SOIL	F2810.D	118		105		105	
E16-09555-001MSD	SOIL	F2811.D	111		100		106	
E16-09537-033	SOIL	F2812.D	114		101		96	
E16-09537-035	SOIL	F2813.D	119		99		98	
E16-09537-040	SOIL	F2814.D	120		100		97	
E16-09537-041	SOIL	F2815.D	144	$	100		102	
E16-09537-048	SOIL	F2816.D	139	$	101		99	
E16-09537-049	SOIL	F2817.D	139	$	101		101	
E16-09536-002	SOIL	F2818.D	144	$	103		100	
E16-09536-003	SOIL	F2819.D	140	$	100		101	
E16-09536-010	SOIL	F2820.D	152	$	102		100	
E16-09536-011	SOIL	F2821.D	143	$	105		110	

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

D Surrogate diluted out

M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/20/2016

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA161019a	AQUEOUS	E5925.D	105	95	98
LCSA161019a	AQUEOUS	E5926.D	107	98	100
E16-09642-001MS	AQUEOUS	E5927.D	104	98	101
E16-09642-001MSD	AQUEOUS	E5928.D	94	94	101
E16-09642-001	AQUEOUS	E5930.D	104	94	99
E16-09537-044	AQUEOUS	E5931.D	110	91	99
E16-09537-060	AQUEOUS	E5932.D	92	98	96
E16-09469-001	AQUEOUS	E5933.D	107	99	99
E16-09469-002	AQUEOUS	E5934.D	96	96	98
E16-09469-003	AQUEOUS	E5935.D	117	96	96
E16-09469-004	AQUEOUS	E5936.D	99	96	96
E16-09619-001	AQUEOUS	E5937.D	114	95	98
E16-09632-001	AQUEOUS	E5938.D	121	96	99
E16-09632-002	AQUEOUS	E5939.D	106	95	98

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	59-138	43-133
SMC2 = Toluene-d8	50 ppb	70-130	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	70-130	42-152	45-145

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/24/2016

Lab Sample ID	Matrix	File ID	SMC1	#	SMC2	#	SMC3	#
BLKS161024-01	SOIL	F2967.D	115		98		97	
E16-09714-001DUP	SOIL	F2968.D	145	$	104		92	
E16-09803-001	SOIL	F2969.D	119		100		97	
E16-09803-002	SOIL	F2970.D	116		101		98	
E16-09803-003	SOIL	F2971.D	122		101		97	
LCSS161024-01	SOIL	F2972.D	115		108		108	
E16-09803-001MS	SOIL	F2973.D	115		106		108	
E16-09803-001MSD	SOIL	F2974.D	112		106		106	
E16-09852-001	SOIL	F2975.D	117		100		98	
E16-09852-002	SOIL	F2976.D	96		100		96	
E16-09852-003	SOIL	F2977.D	101		100		95	
E16-09852-004	SOIL	F2978.D	97		103		94	
E16-09852-005	SOIL	F2979.D	121		101		97	
E16-09852-006	SOIL	F2980.D	95		99		95	
E16-09537-034	SOIL	F2981.D	122		101		98	
E16-09537-036	SOIL	F2982.D	116		102		96	
E16-09803-012	SOIL	F2983.D	123		101		97	
E16-09803-013	SOIL	F2984.D	124		101		97	
E16-09803-014	SOIL	F2985.D	124		101		96	
E16-09803-015	SOIL	F2986.D	121		102		97	
E16-09803-016	SOIL	F2987.D	123		100		97	

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	55-153	36-162
SMC2 = Toluene-d8	50 ppb	70-130	56-151	46-156
SMC3 = Bromofluorobenzene	50 ppb	70-130	67-140	43-151

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

D Surrogate diluted out

M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSS161017-01
Date Received:
Date Analyzed: 10/17/2016
LCS Data file: F2809.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
Dichlorodifluoromethane	50.0	55.3	111		67-130
Chloromethane	50.0	51.3	103		68-126
Vinyl chloride	50.0	49.3	99		71-131
Bromomethane	50.0	39.7	79		71-135
Chloroethane	50.0	37.2	74		69-131
Trichlorofluoromethane	50.0	50.0	100		71-134
Acrolein	150	110.7	74		52-142
1,1-Dichloroethene	50.0	41.5	83		73-129
Acetone	50.0	45.4	91		61-142
Carbon disulfide	50.0	44.3	89		72-128
Vinyl acetate	50.0	55.9	112		67-127
Methylene chloride	50.0	39.2	78		69-132
Acrylonitrile	150.0	123.5	82		71-144
tert-Butyl alcohol (TBA)	100.0	98.0	98		67-141
trans-1,2-Dichloroethene	50.0	48.1	96		68-131
Methyl tert-butyl ether (MTBE)	50.0	53.7	107		83-133
1,1-Dichloroethane	50.0	51.5	103		71-130
Diisopropyl ether (DIPE)	50.0	55.7	111		74-134
cis-1,2-Dichloroethene	50.0	50.7	101		73-132
2,2-Dichloropropane	50.0	52.6	105		71-134
2-Butanone (MEK)	50.0	54.1	108		62-140
Bromochloromethane	50.0	51.0	102		77-134
Chloroform	50.0	53.3	107		77-130
1,1,1-Trichloroethane	50.0	55.4	111		73-132
Carbon tetrachloride	50.0	56.9	114		71-134
1,1-Dichloropropene	50.0	52.9	106		76-125
1,2-Dichloroethane (EDC)	50.0	58.8	118		75-135
Benzene	50.0	49.3	99		74-129
Trichloroethene	50.0	50.3	101		73-126
1,2-Dichloropropane	50.0	51.3	103		70-133
Dibromomethane	50.0	53.8	108		80-128
1,4-Dioxane	1500	1391	93		56-140
Bromodichloromethane	50.0	55.8	112		72-133
2-Chloroethyl vinyl ether	50.0	58.7	117		69-131
cis-1,3-Dichloropropene	50.0	55.5	111		72-131
4-Methyl-2-pentanone (MIBK)	50.0	55.1	110		69-140
Toluene	50.0	49.6	99		73-127
trans-1,3-Dichloropropene	50.0	56.2	112		75-133
1,1,2-Trichloroethane	50.0	50.3	101		77-132
Tetrachloroethene	50.0	49.7	99		65-124
1,3-Dichloropropane	50.0	52.6	105		76-135

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS161017-01
Date Received:
Date Analyzed: 10/17/2016
LCS Data file: F2809.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
2-Hexanone	50.0	55.5	111		68-139
Dibromochloromethane	50.0	55.3	111		74-136
1,2-Dibromoethane (EDB)	50.0	51.7	103		81-137
Chlorobenzene	50.0	46.9	94		71-119
1,1,1,2-Tetrachloroethane	50.0	51.4	103		73-128
Ethylbenzene	50.0	50.2	100		71-125
m,p-Xylene	100.0	98.7	99		71-126
o-Xylene	50.0	50.6	101		74-132
Styrene	50.0	52.1	104		72-133
Bromoform	50.0	49.2	98		67-122
Isopropylbenzene	50.0	52.0	104		74-124
1,1,2,2-Tetrachloroethane	50.0	50.6	101		70-128
Bromobenzene	50.0	48.7	97		70-124
1,2,3-Trichloropropane	50.0	50.4	101		74-124
n-Propylbenzene	50.0	51.5	103		67-124
2-Chlorotoluene	50.0	50.7	101		69-125
1,3,5-Trimethylbenzene	50.0	53.3	107		68-127
4-Chlorotoluene	50.0	51.9	104		66-130
tert-Butylbenzene	50.0	54.0	108		74-129
1,2,4-Trimethylbenzene	50.0	54.1	108		73-128
sec-Butylbenzene	50.0	53.0	106		70-124
1,3-Dichlorobenzene	50.0	48.5	97		65-127
4-Isopropyltoluene	50.0	54.6	109		70-126
1,4-Dichlorobenzene	50.0	49.3	99		64-127
n-Butylbenzene	50.0	54.2	108		65-126
1,2-Dichlorobenzene	50.0	50.9	102		67-130
1,2-Dibromo-3-chloropropane	50.0	52.7	105		67-124
1,2,4-Trichlorobenzene	50.0	52.0	104		69-128
Hexachlorobutadiene	50.0	54.5	109		62-127
Naphthalene	50.0	54.5	109		67-136
1,2,3-Trichlorobenzene	50.0	55.2	110		72-127
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	40.9	82		71-131
Methyl acetate	50.0	40.6	81		68-142
Cyclohexane	50.0	46.8	94		67-127
Methylcyclohexane	50.0	52.9	106		70-126

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS161017-01
Date Received:
Date Analyzed: 10/17/2016
LCS Data file: F2809.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	LCS	MS Conc.	%Rec	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA161019a
Date Received: NA
Date Analyzed: 10/20/2016
LCS Data file: E5926.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
Dichlorodifluoromethane	50.0	41.6	83		47-152
Chloromethane	50.0	53.6	107		64-124
Vinyl chloride	50.0	47.6	95		67-131
Bromomethane	50.0	42.1	84		60-156
Chloroethane	50.0	46.0	92		69-161
Trichlorofluoromethane	50.0	44.0	88		70-160
1,1-Dichloroethene	50.0	44.6	89		67-156
Acetone	100	72.6	73		63-168
Carbon disulfide	50.0	48.7	97		67-144
Methylene chloride	50.0	48.3	97		61-170
Acrylonitrile	150.0	139.4	93		34-180
tert-Butyl alcohol (TBA)	100.0	109.4	109		77-155
trans-1,2-Dichloroethene	50.0	57.2	114		61-166
Methyl tert-butyl ether (MTBE)	50.0	52.8	106		47-163
1,1-Dichloroethane	50.0	62.0	124		70-127
cis-1,2-Dichloroethene	50.0	61.9	124		71-124
2,2-Dichloropropane	50.0	42.7	85		63-151
2-Butanone (MEK)	100	84.3	84		71-134
Bromochloromethane	50.0	62.0	124		69-131
Chloroform	50.0	59.4	119		68-136
1,1,1-Trichloroethane	50.0	58.1	116		66-151
Carbon tetrachloride	50.0	53.0	106		66-158
1,1-Dichloropropene	50.0	54.0	108		70-142
1,2-Dichloroethane (EDC)	50.0	58.7	117		68-128
Benzene	50.0	56.9	114		70-128
Trichloroethene	50.0	61.6	123		70-137
1,2-Dichloropropane	50.0	60.0	120		70-133
Dibromomethane	50.0	58.4	117		71-129
1,4-Dioxane	1500	1453	97		41-150
Bromodichloromethane	50.0	57.4	115		69-140
cis-1,3-Dichloropropene	50.0	49.1	98		72-138
4-Methyl-2-pentanone (MIBK)	100	86.1	86		73-127
Toluene	50.0	53.1	106		71-130
trans-1,3-Dichloropropene	50.0	39.8	80		72-137
1,1,2-Trichloroethane	50.0	49.6	99		70-133
Tetrachloroethene	50.0	48.2	96		71-133
1,3-Dichloropropane	50.0	52.4	105		72-125

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA161019a
Date Received: NA
Date Analyzed: 10/20/2016
LCS Data file: E5926.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
2-Hexanone	100	79.8	80		71-144
Dibromochloromethane	50.0	45.5	91		70-148
1,2-Dibromoethane (EDB)	50.0	48.2	96		73-125
Chlorobenzene	50.0	53.0	106		69-131
1,1,1,2-Tetrachloroethane	50.0	53.9	108		72-136
Ethylbenzene	50.0	54.1	108		70-129
m,p-Xylene	100.0	108.7	109		69-130
o-Xylene	50.0	57.8	116		70-129
Styrene	50.0	54.3	109		74-139
Bromoform	50.0	51.1	102		70-132
Isopropylbenzene	50.0	50.7	101		72-135
1,1,2,2-Tetrachloroethane	50.0	37.4	75		72-115
Bromobenzene	50.0	52.2	104		69-125
1,2,3-Trichloropropane	50.0	42.2	84		71-142
n-Propylbenzene	50.0	50.4	101		72-128
2-Chlorotoluene	50.0	51.9	104		70-121
1,3,5-Trimethylbenzene	50.0	49.2	98		72-126
4-Chlorotoluene	50.0	49.1	98		70-120
tert-Butylbenzene	50.0	48.5	97		72-132
1,2,4-Trimethylbenzene	50.0	49.5	99		71-125
sec-Butylbenzene	50.0	45.8	92		72-133
1,3-Dichlorobenzene	50.0	47.8	96		70-123
4-Isopropyltoluene	50.0	46.4	93		72-129
1,4-Dichlorobenzene	50.0	47.5	95		69-117
n-Butylbenzene	50.0	43.9	88		72-130
1,2-Dichlorobenzene	50.0	49.3	99		71-122
1,2-Dibromo-3-chloropropane	50.0	44.2	88		73-126
1,2,4-Trichlorobenzene	50.0	45.4	91		71-120
Hexachlorobutadiene	50.0	39.4	79		67-148
Naphthalene	50.0	39.6	79		65-139
1,2,3-Trichlorobenzene	50.0	43.5	87		63-132
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.1	86		72-163
Methyl acetate	50.0	55.1	110		68-159
Cyclohexane	50.0	52.8	106		69-138
Methylcyclohexane	50.0	46.0	92		67-150

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA161019a
Date Received: NA
Date Analyzed: 10/20/2016
LCS Data file: E5926.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	LCS	MS Conc.	%Rec	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

8260

LCS ACCURACY REPORT

Lab ID: LCSS161024-01
Date Received: 10/21/2016
Date Analyzed: 10/24/2016
LCS Data file: F2972.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
Dichlorodifluoromethane	50.0	48.4	97		67-130
Chloromethane	50.0	44.3	89		68-126
Vinyl chloride	50.0	48.3	97		71-131
Bromomethane	50.0	44.7	89		71-135
Chloroethane	50.0	35.3	71		69-131
Trichlorofluoromethane	50.0	51.7	103		71-134
Acrolein	150	105.7	70		52-142
1,1-Dichloroethene	50.0	41.1	82		73-129
Acetone	50.0	38.6	77		61-142
Carbon disulfide	50.0	40.0	80		72-128
Vinyl acetate	50.0	51.0	102		67-127
Methylene chloride	50.0	49.5	99		69-132
Acrylonitrile	150.0	186.7	124		71-144
tert-Butyl alcohol (TBA)	100.0	120.7	121		67-141
trans-1,2-Dichloroethene	50.0	51.9	104		68-131
Methyl tert-butyl ether (MTBE)	50.0	58.5	117		83-133
1,1-Dichloroethane	50.0	52.6	105		71-130
Diisopropyl ether (DIPE)	50.0	52.1	104		74-134
cis-1,2-Dichloroethene	50.0	53.3	107		73-132
2,2-Dichloropropane	50.0	63.2	126		71-134
2-Butanone (MEK)	50.0	52.6	105		62-140
Bromochloromethane	50.0	56.0	112		77-134
Chloroform	50.0	57.2	114		77-130
1,1,1-Trichloroethane	50.0	64.4	129		73-132
Carbon tetrachloride	50.0	64.0	128		71-134
1,1-Dichloropropene	50.0	54.8	110		76-125
1,2-Dichloroethane (EDC)	50.0	63.5	127		75-135
Benzene	50.0	51.3	103		74-129
Trichloroethene	50.0	54.7	109		73-126
1,2-Dichloropropane	50.0	51.7	103		70-133
Dibromomethane	50.0	58.1	116		80-128
1,4-Dioxane	1500	1566	104		56-140
Bromodichloromethane	50.0	61.9	124		72-133
2-Chloroethyl vinyl ether	50.0	59.2	118		69-131
cis-1,3-Dichloropropene	50.0	60.9	122		72-131
4-Methyl-2-pentanone (MIBK)	50.0	54.4	109		69-140
Toluene	50.0	55.7	111		73-127
trans-1,3-Dichloropropene	50.0	63.7	127		75-133
1,1,2-Trichloroethane	50.0	56.5	113		77-132
Tetrachloroethene	50.0	58.1	116		65-124
1,3-Dichloropropane	50.0	59.0	118		76-135

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS161024-01
Date Received: 10/21/2016
Date Analyzed: 10/24/2016
LCS Data file: F2972.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
2-Hexanone	50.0	55.6	111		68-139
Dibromochloromethane	50.0	62.4	125		74-136
1,2-Dibromoethane (EDB)	50.0	59.2	118		81-137
Chlorobenzene	50.0	48.5	97		71-119
1,1,1,2-Tetrachloroethane	50.0	52.6	105		73-128
Ethylbenzene	50.0	51.9	104		71-125
m,p-Xylene	100.0	104.5	105		71-126
o-Xylene	50.0	53.1	106		74-132
Styrene	50.0	54.8	110		72-133
Bromoform	50.0	53.0	106		67-122
Isopropylbenzene	50.0	54.4	109		74-124
1,1,2,2-Tetrachloroethane	50.0	50.5	101		70-128
Bromobenzene	50.0	52.2	104		70-124
1,2,3-Trichloropropane	50.0	51.2	102		74-124
n-Propylbenzene	50.0	53.2	106		67-124
2-Chlorotoluene	50.0	53.3	107		69-125
1,3,5-Trimethylbenzene	50.0	56.3	113		68-127
4-Chlorotoluene	50.0	55.7	111		66-130
tert-Butylbenzene	50.0	57.1	114		74-129
1,2,4-Trimethylbenzene	50.0	57.2	114		73-128
sec-Butylbenzene	50.0	55.8	112		70-124
1,3-Dichlorobenzene	50.0	53.0	106		65-127
4-Isopropyltoluene	50.0	57.7	115		70-126
1,4-Dichlorobenzene	50.0	53.9	108		64-127
n-Butylbenzene	50.0	57.3	115		65-126
1,2-Dichlorobenzene	50.0	55.2	110		67-130
1,2-Dibromo-3-chloropropane	50.0	53.0	106		67-124
1,2,4-Trichlorobenzene	50.0	54.1	108		69-128
Hexachlorobutadiene	50.0	57.7	115		62-127
Naphthalene	50.0	53.6	107		67-136
1,2,3-Trichlorobenzene	50.0	55.9	112		72-127
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	36.3	73		71-131
Methyl acetate	50.0	36.2	72		68-142
Cyclohexane	50.0	40.9	82		67-127
Methylcyclohexane	50.0	48.7	97		70-126

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSS161024-01
Date Received: 10/21/2016
Date Analyzed: 10/24/2016
LCS Data file: F2972.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	LCS	MS Conc.	%Rec	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

8260 **MS/MSD SPIKE REPORT**

Lab ID: E16-09555-001
Client ID: WC-1
Date Received:
Date Analyzed: 10/17/2016
MS Data file: F2810.D
MSD Data file: F2811.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% RPD	#	Limits
Dichlorodifluoromethane	50.0	0.0	60.4	121		54.4	109	10		20-169/25
Chloromethane	50.0	0.0	53.2	106		51.9	104	2		24-183/27
Vinyl chloride	50.0	0.0	52.8	106		50.7	101	4		28-177/25
Bromomethane	50.0	0.0	45.2	90		43.5	87	4		39-185/24
Chloroethane	50.0	0.0	41.1	82		41.0	82	0		32-181/25
Trichlorofluoromethane	50.0	0.0	53.0	106		50.4	101	5		31-182/25
Acrolein	150	0.0	116	77		107	71	8		3-198/28
1,1-Dichloroethene	50.0	0.0	46.2	92		44.6	89	4		28-175/24
Acetone	50.0	0.0	47.3	95		45.3	91	4		22-171/25
Carbon disulfide	50.0	0.0	43.9	88		40.4	81	8		22-183/27
Vinyl acetate	50.0	0.0	53.5	107		46.9	94	13		21-164/24
Methylene chloride	50.0	0.0	38.4	77		35.1	70	9		22-177/26
Acrylonitrile	150	0.0	189	126		153	102	21		34-189/26
tert-Butyl alcohol (TBA)	100	0.0	106.1	106		92.9	93	13		22-191/28
trans-1,2-Dichloroethene	50.0	0.0	50.1	100		44.9	90	11		27-180/26
Methyl tert-butyl ether (MTBE)	50.0	0.0	55.2	110		50.0	100	10		38-183/24
1,1-Dichloroethane	50.0	0.0	52.9	106		47.8	96	10		29-181/25
Diisopropyl ether (DIPE)	50.0	0.0	56.0	112		50.9	102	10		35-184/25
cis-1,2-Dichloroethene	50.0	0.0	51.9	104		47.2	94	9		41-175/22
2,2-Dichloropropane	50.0	0.0	50.8	102		46.3	93	9		33-179/24
2-Butanone (MEK)	50.0	0.0	58.8	118		52.7	105	11		36-170/22
Bromochloromethane	50.0	0.0	54.0	108		48.0	96	12		43-172/22
Chloroform	50.0	0.0	55.1	110		50.1	100	10		34-171/23
1,1,1-Trichloroethane	50.0	0.0	53.0	106		48.5	97	9		36-174/23
Carbon tetrachloride	50.0	0.0	56.3	113		51.0	102	10		36-177/24
1,1-Dichloropropene	50.0	0.0	53.1	106		48.8	98	8		37-167/22
1,2-Dichloroethane (EDC)	50.0	0.0	59.6	119		53.5	107	11		38-179/23
Benzene	50.0	0.0	50.9	102		46.8	94	8		32-172/23
Trichloroethene	50.0	0.0	50.3	101		46.0	92	9		19-197/30
1,2-Dichloropropane	50.0	0.0	51.5	103		46.5	93	10		36-169/22
Dibromomethane	50.0	0.0	54.8	110		48.4	97	12		39-171/22
1,4-Dioxane	1,500	0.0	1701	113		1812	121	6		31-173/24
Bromodichloromethane	50.0	0.0	57.4	115		51.4	103	11		37-182/24
2-Chloroethyl vinyl ether	50.0	0.0	60.3	121		50.3	101	18		26-180/26
cis-1,3-Dichloropropene	50.0	0.0	57.1	114		50.5	101	12		45-180/23
4-Methyl-2-pentanone (MIBK)	50.0	0.0	59.4	119		53.0	106	11		33-187/26
Toluene	50.0	0.0	49.5	99		43.7	87	12		31-172/23
trans-1,3-Dichloropropene	50.0	0.0	59.1	118		50.8	102	15		41-183/24
1,1,2-Trichloroethane	50.0	0.0	52.8	106		45.4	91	15		38-173/23
Tetrachloroethene	50.0	0.0	48.5	97		42.3	85	14		23-170/25
1,3-Dichloropropane	50.0	0.0	55.1	110		47.7	95	14		44-178/22

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09555-001
Client ID: WC-1
Date Received:
Date Analyzed: 10/17/2016
MS Data file: F2810.D
MSD Data file: F2811.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% RPD	#	Limits
2-Hexanone	50.0	0.0	61.1	122		54.4	109	12		30-187/26
Dibromochloromethane	50.0	0.0	57.7	115		49.3	99	16		41-184/24
1,2-Dibromoethane (EDB)	50.0	0.0	55.2	110		47.5	95	15		43-176/22
Chlorobenzene	50.0	0.0	46.3	93		43.6	87	6		23-170/24
1,1,1,2-Tetrachloroethane	50.0	0.0	50.3	101		48.4	97	4		36-176/23
Ethylbenzene	50.0	0.0	49.2	98		45.8	92	7		29-170/24
m,p-Xylene	100	0.0	96.1	96		89.0	89	8		23-179/26
o-Xylene	50.0	0.0	49.3	99		46.8	94	5		29-181/25
Styrene	50.0	0.0	51.2	102		47.7	95	7		35-173/23
Bromoform	50.0	0.0	49.6	99		45.9	92	8		18-167/25
Isopropylbenzene	50.0	0.0	49.1	98		46.7	93	5		34-167/22
1,1,2,2-Tetrachloroethane	50.0	0.0	51.8	104		48.3	97	7		4-176/28
Bromobenzene	50.0	0.0	47.9	96		45.9	92	4		27-169/24
1,2,3-Trichloropropane	50.0	0.0	50.8	102		48.5	97	5		31-168/23
n-Propylbenzene	50.0	0.0	49.2	98		45.9	92	7		23-167/24
2-Chlorotoluene	50.0	0.0	49.6	99		46.8	94	6		26-168/24
1,3,5-Trimethylbenzene	50.0	0.0	50.5	101		47.9	96	5		27-170/24
4-Chlorotoluene	50.0	0.0	51.0	102		47.1	94	8		18-175/26
tert-Butylbenzene	50.0	0.0	50.7	101		49.3	99	3		26-169/24
1,2,4-Trimethylbenzene	50.0	0.0	51.4	103		48.9	98	5		29-166/23
sec-Butylbenzene	50.0	0.0	49.7	99		47.3	95	5		19-167/25
1,3-Dichlorobenzene	50.0	0.0	47.2	94		45.1	90	5		14-170/26
4-Isopropyltoluene	50.0	0.0	50.7	101		48.2	96	5		20-167/24
1,4-Dichlorobenzene	50.0	0.0	47.5	95		44.8	90	6		11-174/27
n-Butylbenzene	50.0	0.0	50.0	100		47.8	96	4		14-167/25
1,2-Dichlorobenzene	50.0	0.0	49.7	99		47.8	96	4		20-167/25
1,2-Dibromo-3-chloropropane	50.0	0.0	55.5	111		55.2	110	1		12-172/27
1,2,4-Trichlorobenzene	50.0	0.0	49.1	98		48.7	97	1		8-155/24
Hexachlorobutadiene	50.0	0.0	43.9	88		43.6	87	1		3-141/23
Naphthalene	50.0	0.0	53.5	107		53.1	106	1		4-176/29
1,2,3-Trichlorobenzene	50.0	0.0	51.4	103		50.8	102	1		9-147/23
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	1.2	43.7	85		45.5	89	4		26-170/24
Methyl acetate	50.0	0.0	43.2	86		41.5	83	4		5-169/24
Cyclohexane	50.0	0.0	44.5	89		44.6	89	0		17-167/25
Methylcyclohexane	50.0	0.0	49.1	98		47.6	95	3		23-164/24

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	70-130	70-130
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09555-001
Client ID: WC-1
Date Received:
Date Analyzed: 10/17/2016
MS Data file: F2810.D
MSD Data file: F2811.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RP #

As per SW-846 8260C, up to 10% of the compounds may be out , but may be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

8260

MS/MSD SPIKE REPORT

Lab ID: E16-09642-001
Client ID: PZ-1
Date Received:
Date Analyzed: 10/20/2016
MS Data file: E5927.D
MSD Data file: E5928.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% RPD	#	Limits
Dichlorodifluoromethane	50.0	0.0	48.5	97		40.1	80	19		34-178/24
Chloromethane	50.0	0.0	57.4	115		52.9	106	8		36-162/21
Vinyl chloride	50.0	0.0	53.2	106		46.9	94	13		40-175/22
Bromomethane	50.0	0.0	39.3	79		41.8	84	6		37-181/24
Chloroethane	50.0	0.0	52.0	104		44.7	89	15		38-178/23
Trichlorofluoromethane	50.0	0.0	49.9	100		43.6	87	13		32-176/24
1,1-Dichloroethene	50.0	0.0	49.7	99		43.7	87	13		45-175/22
Acetone	100	0.0	98.3	98		90.3	90	8		25-164/23
Carbon disulfide	50.0	0.0	53.4	107		47.6	95	11		42-182/23
Methylene chloride	50.0	0.0	54.8	110		50.3	101	9		36-170/22
Acrylonitrile	150	0.0	141	94		123	82	14		40-170/22
tert-Butyl alcohol (TBA)	100	0.0	109.1	109		104.3	104	4		35-159/21
trans-1,2-Dichloroethene	50.0	0.0	64.4	129		54.5	109	17		39-169/22
Methyl tert-butyl ether (MTBE)	50.0	0.0	50.9	102		49.4	99	3		39-162/21
1,1-Dichloroethane	50.0	0.0	58.9	118		59.4	119	1		43-158/19
cis-1,2-Dichloroethene	50.0	0.0	59.6	119		59.4	119	0		44-168/21
2,2-Dichloropropane	50.0	0.0	44.3	89		37.9	76	16		38-157/20
2-Butanone (MEK)	100	0.0	102.9	103		106.9	107	4		28-146/20
Bromochloromethane	50.0	0.0	55.3	111		56.1	112	1		45-165/20
Chloroform	50.0	2.9	65.2	125		55.5	105	16		41-168/21
1,1,1-Trichloroethane	50.0	0.0	50.9	102		54.5	109	7		35-171/23
Carbon tetrachloride	50.0	0.0	59.0	118		49.9	100	17		33-176/24
1,1-Dichloropropene	50.0	0.0	59.8	120		52.1	104	14		42-159/20
1,2-Dichloroethane (EDC)	50.0	0.0	64.5	129		53.5	107	19		36-161/21
Benzene	50.0	0.0	63.3	127		55.3	111	13		44-156/19
Trichloroethene	50.0	0.0	58.7	117		60.1	120	2		11-198/31
1,2-Dichloropropane	50.0	0.0	56.9	114		57.6	115	1		44-150/18
Dibromomethane	50.0	0.0	63.2	126		52.7	105	18		43-156/19
1,4-Dioxane	1,500	0.0	1345	90		1257	84	7		44-179/23
Bromodichloromethane	50.0	2.4	59.9	115		54.9	105	9		43-167/21
cis-1,3-Dichloropropene	50.0	0.0	50.6	101		47.2	94	7		44-165/20
4-Methyl-2-pentanone (MIBK)	100	0.0	102.2	102		90.2	90	12		29-145/19
Toluene	50.0	0.0	59.9	120		50.9	102	16		43-158/19
trans-1,3-Dichloropropene	50.0	0.0	41.2	82		40.0	80	3		43-164/20
1,1,2-Trichloroethane	50.0	0.0	58.1	116		48.2	96	19		45-159/19
Tetrachloroethene	50.0	0.0	55.9	112		47.8	96	16		41-152/19
1,3-Dichloropropane	50.0	0.0	60.1	120		50.9	102	17		45-159/19

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09642-001
Client ID: PZ-1
Date Received:
Date Analyzed: 10/20/2016
MS Data file: E5927.D
MSD Data file: E5928.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% RPD	#	Limits
2-Hexanone	100	0.0	91.0	91		83.5	84	9		29-148/20
Dibromochloromethane	50.0	1.5	44.6	86		43.6	84	2		42-173/22
1,2-Dibromoethane (EDB)	50.0	0.0	55.9	112		47.0	94	17		46-162/19
Chlorobenzene	50.0	0.0	59.5	119		53.7	107	10		42-147/18
1,1,1,2-Tetrachloroethane	50.0	0.0	59.0	118		54.5	109	8		39-162/21
Ethylbenzene	50.0	0.0	60.2	120		53.9	108	11		42-148/18
m,p-Xylene	100	0.0	122.6	123		109.5	110	11		18-173/26
o-Xylene	50.0	0.0	64.7	129		58.0	116	11		40-155/19
Styrene	50.0	0.0	62.6	125		56.1	112	11		40-156/19
Bromoform	50.0	0.0	51.1	102		48.6	97	5		35-159/21
Isopropylbenzene	50.0	0.0	58.1	116		52.5	105	10		41-150/18
1,1,2,2-Tetrachloroethane	50.0	0.0	40.9	82		37.4	75	9		37-157/20
Bromobenzene	50.0	0.0	58.0	116		52.4	105	10		41-151/18
1,2,3-Trichloropropane	50.0	0.0	46.7	93		43.0	86	8		39-146/18
n-Propylbenzene	50.0	0.0	57.4	115		51.4	103	11		40-146/18
2-Chlorotoluene	50.0	0.0	58.7	117		52.8	106	11		41-147/18
1,3,5-Trimethylbenzene	50.0	0.0	57.9	116		51.7	103	11		42-150/18
4-Chlorotoluene	50.0	0.0	55.7	111		49.5	99	12		40-145/18
tert-Butylbenzene	50.0	0.0	55.6	111		52.4	105	6		40-152/19
1,2,4-Trimethylbenzene	50.0	0.0	57.2	114		51.7	103	10		42-148/18
sec-Butylbenzene	50.0	0.0	53.5	107		50.3	101	6		39-151/19
1,3-Dichlorobenzene	50.0	0.0	54.3	109		48.3	97	12		38-150/19
4-Isopropyltoluene	50.0	0.0	54.3	109		50.5	101	7		39-150/18
1,4-Dichlorobenzene	50.0	0.0	54.0	108		48.4	97	11		37-148/19
n-Butylbenzene	50.0	0.0	51.6	103		48.4	97	6		36-150/19
1,2-Dichlorobenzene	50.0	0.0	55.3	111		50.2	100	10		40-151/19
1,2-Dibromo-3-chloropropane	50.0	0.0	44.2	88		46.1	92	4		35-151/19
1,2,4-Trichlorobenzene	50.0	0.0	51.3	103		50.3	101	2		23-153/22
Hexachlorobutadiene	50.0	0.3	45.0	89		47.9	95	6		22-162/23
Naphthalene	50.0	0.0	46.8	94		47.0	94	0		28-157/21
1,2,3-Trichlorobenzene	50.0	0.0	49.3	99		50.0	100	1		23-157/22
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	46.6	93		42.0	84	10		36-157/20
Methyl acetate	50.0	0.0	52.2	104		48.0	96	8		26-152/21
Cyclohexane	50.0	0.0	59.2	118		54.8	110	8		34-138/17
Methylcyclohexane	50.0	0.0	52.0	104		46.9	94	10		34-137/17

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	70-130	70-130
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09642-001	GC/MS Column: DB-624
Client ID: PZ-1	Sample wt/vol: 5mL
Date Received:	Matrix-Units: Aqueous-µg/L
Date Analyzed: 10/20/2016	% Moisture: 100
MS Data file: E5927.D	Dilution Factor: 1
MSD Data file: E5928.D	Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RP #

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but may be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

8260

MS/MSD SPIKE REPORT

Lab ID: E16-09803-001
Client ID: GPEC-T1-2/2
Date Received:
Date Analyzed: 10/24/2016
MS Data file: F2973.D
MSD Data file: F2974.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Limits
Dichlorodifluoromethane	50.0	0.0	50.7	101		42.7	85		17		20-169/25
Chloromethane	50.0	0.0	47.5	95		41.3	83		14		24-183/27
Vinyl chloride	50.0	0.0	53.8	108		47.1	94		13		28-177/25
Bromomethane	50.0	0.0	47.7	95		44.3	89		7		39-185/24
Chloroethane	50.0	0.0	39.3	79		37.9	76		4		32-181/25
Trichlorofluoromethane	50.0	0.0	52.5	105		46.4	93		12		31-182/25
Acrolein	150	0.0	80	53	$	79	53	$	1		3-198/28
1,1-Dichloroethene	50.0	0.0	41.9	84		38.6	77		8		28-175/24
Acetone	50.0	0.0	40.4	81		34.9	70		15		22-171/25
Carbon disulfide	50.0	0.0	37.0	74		35.5	71		4		22-183/27
Vinyl acetate	50.0	0.0	47.7	95		43.5	87		9		21-164/24
Methylene chloride	50.0	0.0	35.8	72		37.9	76		6		22-177/26
Acrylonitrile	150	0.0	181	121		171	114		6		34-189/26
tert-Butyl alcohol (TBA)	100	0.0	100.1	100		77.2	77		26		22-191/28
trans-1,2-Dichloroethene	50.0	0.0	49.5	99		38.7	77		24		27-180/26
Methyl tert-butyl ether (MTBE)	50.0	0.0	60.1	120		51.9	104		15		38-183/24
1,1-Dichloroethane	50.0	0.0	52.0	104		49.1	98		6		29-181/25
Diisopropyl ether (DIPE)	50.0	0.0	52.5	105		48.8	98		7		35-184/25
cis-1,2-Dichloroethene	50.0	0.0	51.6	103		48.5	97		6		41-175/22
2,2-Dichloropropane	50.0	0.0	62.9	126		57.2	114		9		33-179/24
2-Butanone (MEK)	50.0	0.0	52.8	106		46.8	94		12		36-170/22
Bromochloromethane	50.0	0.0	54.9	110		50.6	101		8		43-172/22
Chloroform	50.0	0.0	55.8	112		52.5	105		6		34-171/23
1,1,1-Trichloroethane	50.0	0.0	63.6	127		57.3	115		10		36-174/23
Carbon tetrachloride	50.0	0.0	63.5	127		57.7	115		10		36-177/24
1,1-Dichloropropene	50.0	0.0	51.6	103		47.9	96		7		37-167/22
1,2-Dichloroethane (EDC)	50.0	0.0	61.5	123		56.1	112		9		38-179/23
Benzene	50.0	0.0	49.3	99		47.0	94		5		32-172/23
Trichloroethene	50.0	0.0	49.6	99		47.3	95		5		19-197/30
1,2-Dichloropropane	50.0	0.0	49.7	99		47.6	95		4		36-169/22
Dibromomethane	50.0	0.0	54.6	109		51.2	102		6		39-171/22
1,4-Dioxane	1,500	0.0	1504	100		1502	100		0		31-173/24
Bromodichloromethane	50.0	0.0	58.9	118		54.6	109		8		37-182/24
2-Chloroethyl vinyl ether	50.0	0.0	55.9	112		52.0	104		7		26-180/26
cis-1,3-Dichloropropene	50.0	0.0	56.1	112		52.9	106		6		45-180/23
4-Methyl-2-pentanone (MIBK)	50.0	0.0	53.0	106		48.2	96		9		33-187/26
Toluene	50.0	0.0	51.1	102		48.2	96		6		31-172/23
trans-1,3-Dichloropropene	50.0	0.0	56.9	114		53.3	107		7		41-183/24
1,1,2-Trichloroethane	50.0	0.0	52.8	106		48.9	98		8		38-173/23
Tetrachloroethene	50.0	0.0	50.3	101		47.1	94		7		23-170/25
1,3-Dichloropropane	50.0	0.0	54.8	110		51.8	104		6		44-178/22

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09803-001
Client ID: GPEC-T1-2/2
Date Received:
Date Analyzed: 10/24/2016
MS Data file: F2973.D
MSD Data file: F2974.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	% RPD	#	Limits
2-Hexanone	50.0	0.0	54.9	110		48.5	97		12		30-187/26
Dibromochloromethane	50.0	0.0	60.4	121		55.8	112		8		41-184/24
1,2-Dibromoethane (EDB)	50.0	0.0	54.6	109		51.5	103		6		43-176/22
Chlorobenzene	50.0	0.0	43.5	87		42.0	84		4		23-170/24
1,1,1,2-Tetrachloroethane	50.0	0.0	50.3	101		48.3	97		4		36-176/23
Ethylbenzene	50.0	0.0	47.1	94		44.9	90		5		29-170/24
m,p-Xylene	100	0.0	93.7	94		89.1	89		5		23-179/26
o-Xylene	50.0	0.0	48.2	96		46.1	92		4		29-181/25
Styrene	50.0	0.0	48.5	97		46.6	93		4		35-173/23
Bromoform	50.0	0.0	50.2	100		46.1	92		9		18-167/25
Isopropylbenzene	50.0	0.0	47.4	95		44.9	90		5		34-167/22
1,1,2,2-Tetrachloroethane	50.0	0.0	48.9	98		45.0	90		8		4-176/28
Bromobenzene	50.0	0.0	44.7	89		43.6	87		2		27-169/24
1,2,3-Trichloropropane	50.0	0.0	49.3	99		44.9	90		9		31-168/23
n-Propylbenzene	50.0	0.0	43.7	87		42.4	85		3		23-167/24
2-Chlorotoluene	50.0	0.0	45.1	90		43.2	86		4		26-168/24
1,3,5-Trimethylbenzene	50.0	0.0	46.6	93		45.7	91		2		27-170/24
4-Chlorotoluene	50.0	0.0	44.9	90		43.9	88		2		18-175/26
tert-Butylbenzene	50.0	0.0	46.4	93		45.2	90		3		26-169/24
1,2,4-Trimethylbenzene	50.0	0.0	47.2	94		45.8	92		3		29-166/23
sec-Butylbenzene	50.0	0.0	42.7	85		42.5	85		0		19-167/25
1,3-Dichlorobenzene	50.0	0.0	40.9	82		40.3	81		1		14-170/26
4-Isopropyltoluene	50.0	0.0	43.3	87		43.7	87		1		20-167/24
1,4-Dichlorobenzene	50.0	0.0	41.2	82		40.2	80		2		11-174/27
n-Butylbenzene	50.0	0.0	38.3	77		39.0	78		2		14-167/25
1,2-Dichlorobenzene	50.0	0.0	43.6	87		42.2	84		3		20-167/25
1,2-Dibromo-3-chloropropane	50.0	0.0	50.6	101		45.5	91		11		12-172/27
1,2,4-Trichlorobenzene	50.0	0.0	29.8	60	$	33.3	67	$	11		8-155/24
Hexachlorobutadiene	50.0	0.0	27.3	55	$	30.8	62	$	12		3-141/23
Naphthalene	50.0	0.0	38.4	77		38.3	77		0		4-176/29
1,2,3-Trichlorobenzene	50.0	0.0	31.1	62	$	35.0	70		12		9-147/23
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	38.2	76		35.5	71		7		26-170/24
Methyl acetate	50.0	0.0	37.7	75		36.4	73		4		5-169/24
Cyclohexane	50.0	0.0	39.5	79		36.9	74		7		17-167/25
Methylcyclohexane	50.0	0.0	41.1	82		39.7	79		3		23-164/24

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	70-130	70-130
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09803-001
Client ID: GPEC-T1-2/2
Date Received:
Date Analyzed: 10/24/2016
MS Data file: F2973.D
MSD Data file: F2974.D

GC/MS Column: DB-624
Sample wt/vol: 2.5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 2
Dilution Factor: 2

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RP #

As per SW-846 8260C, up to 10% of the compounds may be out , but may be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F2802.D Instrument ID: MSD_F

Date Analyzed: 10/17/2016 Time Analyzed: 13:45

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
SB-4/0.5-1	E16-09502-008	10/17/2016	14:16
SB-14A/1.5-2	E16-09519-005DUP	10/17/2016	14:47
SB-18A/1.5-2	E16-09519-013	10/17/2016	15:18
SB-21A/1.5-2	E16-09519-019	10/17/2016	15:50
SB-21B/3.5-4	E16-09519-020	10/17/2016	16:21
WC-1	E16-09555-001	10/17/2016	16:53
LCS-50PPB	LCSS161017-01	10/17/2016	17:24
MS	E16-09555-001MS	10/17/2016	17:55
MSD	E16-09555-001MSD	10/17/2016	18:27
E-30_(3-3.5)	E16-09537-033	10/17/2016	18:58
E-31_(3-3.5)	E16-09537-035	10/17/2016	19:30
E-33_(4.5-5)	E16-09537-040	10/17/2016	20:01
E-33_(5.5-6)	E16-09537-041	10/17/2016	20:32
E-32_(4.5-5)	E16-09537-048	10/17/2016	21:03
E-32_(5.5-6)	E16-09537-049	10/17/2016	21:34
X28_(25-25.5	E16-09536-002	10/17/2016	22:06
X30__(21-21.	E16-09536-003	10/17/2016	22:37
W28__(19.5-2	E16-09536-010	10/17/2016	23:08
W27__(15.5-1	E16-09536-011	10/17/2016	23:40

FORM 4

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E5925.D Instrument ID: MSD_E

Date Analyzed: 10/20/2016 Time Analyzed: 06:43

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
LCSA161019	LCSA161019a	10/20/2016	7:13
E16-09642-001MS	E16-09642-001MS	10/20/2016	7:43
E16-09642-001MSD	E16-09642-001MSD	10/20/2016	8:12
PZ-1	E16-09642-001	10/20/2016	10:04
EB-101116	E16-09537-044	10/20/2016	10:34
TRIP_BLANK	E16-09537-060	10/20/2016	11:04
MW-1	E16-09469-001	10/20/2016	11:54
MW-2	E16-09469-002	10/20/2016	12:24
MW-3	E16-09469-003	10/20/2016	12:53
MW-4	E16-09469-004	10/20/2016	13:23
WP_1/8	E16-09619-001	10/20/2016	13:53
MW-1	E16-09632-001	10/20/2016	14:22
TIP	E16-09632-002	10/20/2016	14:52

FORM 4

VOLATILE METHOD BLANK SUMMARY

Lab File ID: F2967.D Instrument ID: MSD_F

Date Analyzed: 10/24/2016 Time Analyzed: 13:11

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
10L-2000G-B1	E16-09714-001DUP	10/24/2016	13:42
GPEC-T1-2/2-	E16-09803-001	10/24/2016	14:13
GPEC-T1-3/2-	E16-09803-002	10/24/2016	14:45
GPEC-T1-4/2-	E16-09803-003	10/24/2016	15:16
LCS-50PPB	LCSS161024-01	10/24/2016	15:47
MS	E16-09803-001MS	10/24/2016	16:18
MSD	E16-09803-001MSD	10/24/2016	16:49
TOPSOIL_1	E16-09852-001	10/24/2016	17:21
TOPSOIL_2	E16-09852-002	10/24/2016	17:52
TOPSOIL_3	E16-09852-003	10/24/2016	18:24
TOPSOIL_4	E16-09852-004	10/24/2016	18:55
TOPSOIL_5	E16-09852-005	10/24/2016	19:26
TOPSOIL_6	E16-09852-006	10/24/2016	19:57
E-30_(4.5-5)/4	E16-09537-034	10/24/2016	20:28
E-31_(4.5-5)/4	E16-09537-036	10/24/2016	20:59
GPEC-T2-6/2-	E16-09803-012	10/24/2016	21:31
GPEC-T2-7/2-	E16-09803-013	10/24/2016	22:02
GPEC-T2-8/2-	E16-09803-014	10/24/2016	22:34
GPEC-T2-1/2-	E16-09803-015	10/24/2016	23:05
GPEC-T2-2/2-	E16-09803-016	10/24/2016	23:36

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E5681.D BFB Injection Date: 10/07/2016

Inst ID: MSD_E BFB Injection Time: 10:02

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.2			
75	30.0 - 60.0% of mass 95	52.6			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.8	(	1.0	)1
174	Great than 50.0% of mass 95	81.7			
175	5.0 - 9.0% of mass 174	5.7	(	7.0	)1
176	95.0 - 101.0% of mass 174	79.4	(	97.2	)1
177	5.0 - 9.0% of mass 176	5.0	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC161007	ICC100	E5688.D	10/07/2016	13:38
ICC161007	ICC00.5	E5683.D	10/07/2016	11:01
ICC161007	ICC001	E5684.D	10/07/2016	11:31
ICC161007	ICC005	E5685.D	10/07/2016	12:01
ICC161007	ICC020	E5687.D	10/07/2016	13:09
ICC161007	ICC150	E5689.D	10/07/2016	14:08
ICC161007	ICC200	E5690.D	10/07/2016	14:38
ICV161007	ICV100	E5694.D	10/07/2016	17:03

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E5921.D BFB Injection Date: 10/20/2016

Inst ID: MSD_E BFB Injection Time: 4:44

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	25.5			
75	30.0 - 60.0% of mass 95	51.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.6	(	0.8	)1
174	Great than 50.0% of mass 95	73.2			
175	5.0 - 9.0% of mass 174	5.6	(	7.7	)1
176	95.0 - 101.0% of mass 174	72.3	(	98.8	)1
177	5.0 - 9.0% of mass 176	5.1	(	7.0	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV161019a	E5922.D	10/20/2016	5:14
BLKA161019	BLKA161019a	E5925.D	10/20/2016	6:43
LCSA161019	LCSA161019a	E5926.D	10/20/2016	7:13
E16-09642-001MS	E16-09642-001MS	E5927.D	10/20/2016	7:43
E16-09642-001MSI	E16-09642-001MS	E5928.D	10/20/2016	8:12
PZ-1	E16-09642-001	E5930.D	10/20/2016	10:04
EB-101116	E16-09537-044	E5931.D	10/20/2016	10:34
TRIP_BLANK	E16-09537-060	E5932.D	10/20/2016	11:04
MW-1	E16-09469-001	E5933.D	10/20/2016	11:54
MW-2	E16-09469-002	E5934.D	10/20/2016	12:24
MW-3	E16-09469-003	E5935.D	10/20/2016	12:53
MW-4	E16-09469-004	E5936.D	10/20/2016	13:23
WP_1/8	E16-09619-001	E5937.D	10/20/2016	13:53
MW-1	E16-09632-001	E5938.D	10/20/2016	14:22
TIP	E16-09632-002	E5939.D	10/20/2016	14:52

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F2654.D BFB Injection Date: 10/10/2016

Inst ID: MSD_F BFB Injection Time: 11:55

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	18.2			
75	30.0 - 60.0% of mass 95	50.4			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.5			
173	Less than 2.0% of mass 174	0.7	(	0.9	)1
174	Great than 50.0% of mass 95	76.9			
175	5.0 - 9.0% of mass 174	5.5	(	7.1	)1
176	95.0 - 101.0% of mass 174	74.0	(	96.2	)1
177	5.0 - 9.0% of mass 176	4.9	(	6.6	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC161010	ICC1	F2656.D	10/10/2016	13:10
ICC161010	ICC2	F2657.D	10/10/2016	13:57
ICC161010	ICC5	F2658.D	10/10/2016	14:33
ICC161010	ICC20	F2659.D	10/10/2016	15:12
ICC161010	ICC100	F2660.D	10/10/2016	15:51
ICC161010	ICC200	F2661.D	10/10/2016	16:22
ICC161010	ICC150	F2662.D	10/10/2016	16:55
ICV100	ICV161010	F2664.D	10/10/2016	17:57

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F2798.D BFB Injection Date: 10/17/2016

Inst ID: MSD_F BFB Injection Time: 11:38

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.7			
75	30.0 - 60.0% of mass 95	54.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.9	(	1.2	)1
174	Great than 50.0% of mass 95	71.9			
175	5.0 - 9.0% of mass 174	5.2	(	7.3	)1
176	95.0 - 101.0% of mass 174	70.4	(	97.9	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV161017a	F2800.D	10/17/2016	12:44
BLKS161017-01	BLKS161017-01	F2802.D	10/17/2016	13:45
SB-4/0.5-1	E16-09502-008	F2803.D	10/17/2016	14:16
SB-14A/1.5-2	E16-09519-005DL	F2804.D	10/17/2016	14:47
SB-18A/1.5-2	E16-09519-013	F2805.D	10/17/2016	15:18
SB-21A/1.5-2	E16-09519-019	F2806.D	10/17/2016	15:50
SB-21B/3.5-4	E16-09519-020	F2807.D	10/17/2016	16:21
WC-1	E16-09555-001	F2808.D	10/17/2016	16:53
LCS-50PPB	LCSS161017-01	F2809.D	10/17/2016	17:24
MS	E16-09555-001MS	F2810.D	10/17/2016	17:55
MSD	E16-09555-001MS	F2811.D	10/17/2016	18:27
E-30_(3-3.5)	E16-09537-033	F2812.D	10/17/2016	18:58
E-31_(3-3.5)	E16-09537-035	F2813.D	10/17/2016	19:30
E-33_(4.5-5)	E16-09537-040	F2814.D	10/17/2016	20:01
E-33_(5.5-6)	E16-09537-041	F2815.D	10/17/2016	20:32
E-32_(4.5-5)	E16-09537-048	F2816.D	10/17/2016	21:03
E-32_(5.5-6)	E16-09537-049	F2817.D	10/17/2016	21:34
X28_(25-25.5	E16-09536-002	F2818.D	10/17/2016	22:06
X30__(21-21.	E16-09536-003	F2819.D	10/17/2016	22:37
W28__(19.5-2	E16-09536-010	F2820.D	10/17/2016	23:08

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F2798.D BFB Injection Date : 10/17/201

Inst ID: MSD_F BFB Injection Time: 11:38

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.7			
75	30.0 - 60.0% of mass 95	54.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.9	(	1.2	)1
174	Great than 50.0% of mass 95	71.9			
175	5.0 - 9.0% of mass 174	5.2	(	7.3	)1
176	95.0 - 101.0% of mass 174	70.4	(	97.9	)1
177	5.0 - 9.0% of mass 176	4.6	(	6.5	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
W27__(15.5-1	E16-09536-011	F2821.D	10/17/2016	23:40

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F2964.D BFB Injection Date: 10/24/2016

Inst ID: MSD_F BFB Injection Time: 11:38

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.5			
75	30.0 - 60.0% of mass 95	54.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.9	(	1.2	)1
174	Great than 50.0% of mass 95	79.0			
175	5.0 - 9.0% of mass 174	5.8	(	7.4	)1
176	95.0 - 101.0% of mass 174	75.8	(	95.9	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV161024-01	F2965.D	10/24/2016	12:06
BLKS161024-01	BLKS161024-01	F2967.D	10/24/2016	13:11
10L-2000G-B1	E16-09714-001DL	F2968.D	10/24/2016	13:42
GPEC-T1-2/2-	E16-09803-001	F2969.D	10/24/2016	14:13
GPEC-T1-3/2-	E16-09803-002	F2970.D	10/24/2016	14:45
GPEC-T1-4/2-	E16-09803-003	F2971.D	10/24/2016	15:16
LCS-50PPB	LCSS161024-01	F2972.D	10/24/2016	15:47
MS	E16-09803-001MS	F2973.D	10/24/2016	16:18
MSD	E16-09803-001MS	F2974.D	10/24/2016	16:49
TOPSOIL_1	E16-09852-001	F2975.D	10/24/2016	17:21
TOPSOIL_2	E16-09852-002	F2976.D	10/24/2016	17:52
TOPSOIL_3	E16-09852-003	F2977.D	10/24/2016	18:24
TOPSOIL_4	E16-09852-004	F2978.D	10/24/2016	18:55
TOPSOIL_5	E16-09852-005	F2979.D	10/24/2016	19:26
TOPSOIL_6	E16-09852-006	F2980.D	10/24/2016	19:57
E-30_(4.5-5)/4	E16-09537-034	F2981.D	10/24/2016	20:28
E-31_(4.5-5)/4	E16-09537-036	F2982.D	10/24/2016	20:59
GPEC-T2-6/2-	E16-09803-012	F2983.D	10/24/2016	21:31
GPEC-T2-7/2-	E16-09803-013	F2984.D	10/24/2016	22:02
GPEC-T2-8/2-	E16-09803-014	F2985.D	10/24/2016	22:34

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: F2964.D BFB Injection Date : 10/24/201

Inst ID: MSD_F BFB Injection Time: 11:38

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	19.5			
75	30.0 - 60.0% of mass 95	54.9			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.7			
173	Less than 2.0% of mass 174	0.9	(	1.2	)1
174	Great than 50.0% of mass 95	79.0			
175	5.0 - 9.0% of mass 174	5.8	(	7.4	)1
176	95.0 - 101.0% of mass 174	75.8	(	95.9	)1
177	5.0 - 9.0% of mass 176	5.1	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
GPEC-T2-1/2-	E16-09803-015	F2986.D	10/24/2016	23:05
GPEC-T2-2/2-	E16-09803-016	F2987.D	10/24/2016	23:36

Response Factor Report MSD_E

Method Path : C:\MSDCHEM\1\METHODS\
Method File : E8161007.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Fri Oct 07 16:26:24 2016
Response Via : Initial Calibration

Calibration Files
0.5 =E5683.D 1.0 =E5684.D 5.0 =E5685.D
20. =E5687.D 100 =E5688.D 150 =E5689.D 200 =E5690.D

		Compound	0.5	1.0	5.0	20.	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	ISTD								
2)	T	Dichlorodifluorom		0.569	0.528	0.417	0.413	0.450	0.406	0.464	14.79
3)	P	Chloromethane		0.775	0.851	0.674	0.631	0.681	0.632	0.707	12.37
4)	C	Vinyl chloride		0.755	0.832	0.677	0.660	0.683	0.619	0.704	10.88
5)	T	Bromomethane		0.314	0.365	0.304	0.295	0.290	0.277	0.308	10.03
6)	T	Chloroethane	0.338	0.388	0.436	0.362	0.344	0.341	0.317	0.361	11.00
7)	T	Trichlorofluorome	0.689	0.795	0.778	0.643	0.668	0.672	0.625	0.696	9.42
9)	MC	1,1-Dichloroethen	0.470	0.633	0.589	0.468	0.454	0.473	0.436	0.503	15.04
10)	T	Acetone		0.157	0.135	0.117	0.117	0.097	0.102	0.121	18.27
11)	T	Carbon disulfide	1.082	1.911	1.603	1.387	1.402	1.501	1.409	1.471	17.08
13)	T	Methylene chlorid	0.440	0.724	0.608	0.489	0.481	0.498	0.484	0.532	18.64
14)	T	Acrylonitrile		0.208	0.139	0.150	0.210	0.168	0.162	0.173	17.29
15)	T	tert-Butyl alcoho	0.017	0.017	0.020	0.017	0.021	0.016	0.015	0.018	12.59
16)	T	trans-1,2-Dichlor	0.345	0.484	0.433	0.400	0.436	0.449	0.431	0.425	10.23
17)	T	Methyl tert-butyl	1.049	1.110	0.961	1.066	1.214	1.170	1.141	1.101	7.67
18)	P	1,1-Dichloroethan	0.727	0.933	0.795	0.789	0.872	0.884	0.810	0.830	8.39
19)	T	Diisopropyl ether	1.241	1.401	1.409	1.408	1.643	1.584	1.525	1.459	9.26
20)	T	cis-1,2-Dichloroe	0.352	0.476	0.386	0.413	0.460	0.457	0.428	0.425	10.50
21)	T	2,2-Dichloropropa	0.365	0.418	0.362	0.330	0.340	0.314	0.282	0.344	12.49
22)	T	2-Butanone (MEK)	0.264	0.243	0.188	0.199	0.236	0.233	0.232	0.228	11.53
23)	T	Bromochloromethan		0.220	0.159	0.194	0.208	0.189	0.188	0.193	10.85
25)	C	Chloroform	0.778	0.869	0.729	0.738	0.803	0.799	0.738	0.779	6.43
26)	T	1,1,1-Trichloroet	0.509	0.674	0.699	0.600	0.642	0.656	0.648	0.633	9.89
27)	T	Carbon tetrachlor	0.448	0.683	0.678	0.587	0.632	0.672	0.651	0.621	13.41
28)	T	1,1-Dichloroprope	0.457	0.763	0.665	0.552	0.608	0.641	0.613	0.614	15.47
29)	T	1,2-Dichloroethan	0.754	0.823	0.621	0.683	0.751	0.721	0.672	0.718	9.19
30)	S	1,2-Dichloroethan	0.707	0.701	0.499	0.611	0.572	0.486	0.486	0.580	16.67
31)	I	1,4-Difluorobenzene	ISTD								
32)	M	Benzene	0.965	1.154	1.152	1.055	1.147	1.186	1.157	1.116	7.00
33)	M	Trichloroethene	0.238	0.341	0.336	0.286	0.308	0.320	0.319	0.307	11.54
34)	C	1,2-Dichloropropa	0.236	0.307	0.322	0.288	0.316	0.326	0.319	0.302	10.51
35)	T	Dibromomethane	0.133	0.191	0.152	0.169	0.187	0.174	0.177	0.169	11.97
36)	T	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	19.75
37)	T	Bromodichlorometh	0.293	0.346	0.343	0.343	0.387	0.401	0.394	0.358	10.65
39)	T	cis-1,3-Dichlorop	0.281	0.348	0.361	0.401	0.454	0.460	0.458	0.395	17.33
40)	T	4-Methyl-2-pentan	0.273	0.215	0.227	0.323	0.337	0.307	0.317	0.285	16.90
41)	S	Toluene-d8	1.138	1.149	1.245	1.209	1.189	1.160	1.219	1.187	3.34
42)	MC	Toluene	0.581	0.700	0.760	0.678	0.717	0.750	0.748	0.705	8.82
43)	T	trans-1,3-Dichlor	0.455	0.287	0.340	0.385	0.434	0.437	0.466	0.401	16.58
44)	T	1,1,2-Trichloroet		0.209	0.232	0.214	0.225	0.224	0.225	0.221	3.79
45)	T	Tetrachloroethene	0.219	0.385	0.354	0.278	0.288	0.303	0.305	0.305	17.59
46)	T	1,3-Dichloropropa	0.378	0.380	0.448	0.438	0.454	0.466	0.462	0.432	8.68
47)	T	2-Hexanone	0.186	0.187	0.194	0.204	0.259	0.235	0.227	0.213	13.07
48)	T	Dibromochlorometh		0.205	0.233	0.239	0.275	0.272	0.283	0.251	12.07
49)	T	1,2-Dibromoethane	0.228	0.238	0.276	0.260	0.275	0.276	0.278	0.261	7.90
50)	I	Chlorobenzene-d5	ISTD								
51)	MP	Chlorobenzene	0.774	0.978	0.969	0.877	0.912	0.954	0.933	0.914	7.75
52)	T	1,1,1,2-Tetrachlo	0.270	0.306	0.314	0.288	0.320	0.335	0.338	0.310	7.95
53)	C	Ethylbenzene	1.162	1.602	1.656	1.490	1.631	1.740	1.714	1.571	12.39

54)	T	m,p-Xylene	0.351	0.566	0.628	0.569	0.630	0.666	0.633	0.578	18.39
55)	T	o-Xylene	0.338	0.482	0.554	0.536	0.578	0.613	0.598	0.529	17.88
56)	T	Styrene		0.650	0.898	0.928	1.027	1.087	1.044	0.939	16.90
57)	P	Bromoform	0.219	0.141	0.143	0.164	0.212	0.211	0.206	0.185	18.66
58)	T	Isopropylbenzene		1.262	1.571	1.431	1.600	1.686	1.652	1.534	10.40
59)	S	Bromofluorobenzen	0.575	0.582	0.603	0.619	0.629	0.631	0.634	0.610	3.97
60)	P	1,1,2,2-Tetrachlo	0.406	0.446	0.467	0.423	0.484	0.476	0.483	0.455	6.75
61)	T	Bromobenzene	0.328	0.395	0.380	0.367	0.395	0.412	0.403	0.383	7.40
62)	T	1,2,3-Trichloropr	0.437	0.426	0.429	0.376	0.432	0.426	0.432	0.423	4.97
63)	T	n-Propylbenzene	1.222	1.917	2.099	1.828	1.955	2.075	2.014	1.873	16.12
64)	T	2-Chlorotoluene	0.817	1.177	1.266	1.097	1.189	1.258	1.233	1.148	13.68
65)	T	1,3,5-Trimethylbe		1.147	1.407	1.298	1.386	1.460	1.420	1.353	8.45
66)	T	4-Chlorotoluene		1.375	1.524	1.308	1.367	1.472	1.438	1.414	5.57
67)	T	tert-Butylbenzene		0.892	1.068	0.985	1.085	1.151	1.139	1.053	9.39
68)	T	1,2,4-Trimethylbe		1.105	1.428	1.320	1.389	1.498	1.459	1.366	10.38
69)	T	sec-Butylbenzene		1.473	1.803	1.600	1.674	1.793	1.743	1.681	7.59
70)	T	1,3-Dichlorobenze		0.816	0.829	0.720	0.761	0.805	0.765	0.783	5.25
71)	T	4-Isopropyltoluen		1.116	1.498	1.296	1.392	1.500	1.458	1.377	10.83
72)	T	1,4-Dichlorobenze		0.833	0.848	0.732	0.762	0.816	0.786	0.796	5.59
73)	T	n-Butylbenzene		1.219	1.405	1.255	1.295	1.392	1.343	1.318	5.69
74)	T	1,2-Dichlorobenze		0.682	0.788	0.706	0.747	0.777	0.748	0.742	5.48
75)	T	1,2-Dibromo-3-chl		0.063	0.065	0.066	0.094	0.092	0.092	0.079	19.61
76)	T	1,2,4-Trichlorobe		0.453	0.474	0.444	0.486	0.529	0.481	0.478	6.29
77)	T	Hexachlorobutadie		0.215	0.212	0.170	0.160	0.185	0.173	0.186	12.20
78)	T	Naphthalene		0.836	1.116	1.267	1.400	1.404	1.525	1.258	19.81
79)	T	1,2,3-Trichlorobe		0.383	0.500	0.453	0.484	0.533	0.490	0.474	10.85
80)	T	1,1,2-Trichloro-1	0.381	0.419	0.490	0.367	0.347	0.364	0.318	0.384	14.65
81)	T	Methyl acetate	0.406	0.294	0.272	0.264	0.366	0.270	0.278	0.307	18.24
82)	T	Cyclohexane		0.743	0.836	0.743	0.753	0.820	0.742	0.773	5.56
83)	T	Methylcyclohexane		0.694	0.656	0.549	0.594	0.644	0.597	0.622	8.39

(#) = Out of Range ### Number of calibration levels exceeded format ###

E8161007.M Wed Oct 26 09:24:12 2016 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-07-16\
Data File : E5694.D
Acq On : 7 Oct 2016 17:03
Operator : BARBARA
Sample : ICV100,ICV161007,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 07 17:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Oct 07 16:26:24 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	112	0.00
2	T	Dichlorodifluoromethane	0.464	0.395	14.9	108	0.00
3	P	Chloromethane	0.707	0.583	17.5	104	0.00
4	C	Vinyl chloride	0.704	0.623	11.5	106	0.02
5	T	Bromomethane	0.308	0.280	9.1	107	0.00
6	T	Chloroethane	0.361	0.328	9.1	107	0.00
7	T	Trichlorofluoromethane	0.696	0.617	11.4	104	0.02
8	T	Acrolein	0.056	0.057	-1.8	116	0.00
9	MC	1,1-Dichloroethene	0.503	0.441	12.3	109	0.00
10	T	Acetone	0.121	0.120	0.8	116	-0.03
11	T	Carbon disulfide	1.471	1.398	5.0	112	0.00
13	T	Methylene chloride	0.532	0.485	8.8	113	0.00
14	T	Acrylonitrile	0.173	0.201	-16.2	108	-0.01
15	T	tert-Butyl alcohol (TBA)	0.018	0.020	-11.1	107	0.00
16	T	trans-1,2-Dichloroethene	0.425	0.463	-8.9	119	0.00
17	T	Methyl tert-butyl ether (MT	1.101	1.290	-17.2	119	0.00
18	P	1,1-Dichloroethane	0.830	0.926	-11.6	119	0.00
20	T	cis-1,2-Dichloroethene	0.425	0.507	-19.3	124	-0.01
21	T	2,2-Dichloropropane	0.344	0.332	3.5	110	0.00
22	T	2-Butanone (MEK)	0.228	0.267	-17.1	127	-0.01
23	T	Bromochloromethane	0.193	0.216	-11.9	117	0.00
25	C	Chloroform	0.779	0.873	-12.1	122	0.00
26	T	1,1,1-Trichloroethane	0.633	0.650	-2.7	114	-0.01
27	T	Carbon tetrachloride	0.621	0.660	-6.3	117	-0.01
28	T	1,1-Dichloropropene	0.614	0.633	-3.1	117	0.00
29	T	1,2-Dichloroethane (EDC)	0.718	0.851	-18.5	127	0.00
30	S	1,2-Dichloroethane-d4	0.580	0.661	-14.0	130	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	115	0.00
32	M	Benzene	1.116	1.195	-7.1	120	0.00
33	M	Trichloroethene	0.307	0.311	-1.3	116	0.00
34	C	1,2-Dichloropropane	0.302	0.335	-10.9	122	0.00
35	T	Dibromomethane	0.169	0.195	-15.4	120	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	102	-0.02
37	T	Bromodichloromethane	0.358	0.423	-18.2	126	0.00
39	T	cis-1,3-Dichloropropene	0.395	0.427	-8.1	108	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.285	0.326	-14.4	111	0.00
41	S	Toluene-d8	1.187	1.184	0.3	114	0.00
42	MC	Toluene	0.705	0.743	-5.4	119	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.472	-17.7	125	0.00
44	T	1,1,2-Trichloroethane	0.221	0.239	-8.1	122	0.00
45	T	Tetrachloroethene	0.305	0.291	4.6	116	0.00
46	T	1,3-Dichloropropane	0.432	0.488	-13.0	124	0.00
47	T	2-Hexanone	0.213	0.227	-6.6	101	0.00
48	T	Dibromochloromethane	0.251	0.253	-0.8	106	0.00

49	T	1,2-Dibromoethane (EDB)	0.261	0.289	-10.7	121	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00
51	MP	Chlorobenzene	0.914	0.940	-2.8	118	0.00
52	T	1,1,1,2-Tetrachloroethane	0.310	0.339	-9.4	121	0.00
53	C	Ethylbenzene	1.571	1.664	-5.9	117	0.00
54	T	m,p-Xylene	0.578	0.631	-9.2	114	0.00
55	T	o-Xylene	0.529	0.594	-12.3	117	0.00
56	T	Styrene	0.939	1.048	-11.6	116	0.00
57	P	Bromoform	0.185	0.196	-5.9	105	0.00
58	T	Isopropylbenzene	1.534	1.567	-2.2	112	0.00
59	S	Bromofluorobenzene	0.610	0.618	-1.3	112	0.00
60	P	1,1,2,2-Tetrachloroethane	0.455	0.464	-2.0	110	0.00
61	T	Bromobenzene	0.383	0.396	-3.4	114	0.00
62	T	1,2,3-Trichloropropane	0.423	0.412	2.6	109	0.00
63	T	n-Propylbenzene	1.873	1.937	-3.4	113	0.00
64	T	2-Chlorotoluene	1.148	1.173	-2.2	113	0.00
65	T	1,3,5-Trimethylbenzene	1.353	1.342	0.8	111	0.00
66	T	4-Chlorotoluene	1.414	1.383	2.2	116	0.00
67	T	tert-Butylbenzene	1.053	1.035	1.7	109	0.00
68	T	1,2,4-Trimethylbenzene	1.366	1.353	1.0	111	0.00
69	T	sec-Butylbenzene	1.681	1.609	4.3	110	0.00
70	T	1,3-Dichlorobenzene	0.783	0.750	4.2	113	0.00
71	T	4-Isopropyltoluene	1.377	1.382	-0.4	113	0.00
72	T	1,4-Dichlorobenzene	0.796	0.754	5.3	113	0.00
73	T	n-Butylbenzene	1.318	1.284	2.6	113	0.00
74	T	1,2-Dichlorobenzene	0.742	0.713	3.9	109	0.00
75	T	1,2-Dibromo-3-chloropropane	0.079	0.090	-13.9	109	0.00
76	T	1,2,4-Trichlorobenzene	0.478	0.472	1.3	111	0.00
77	T	Hexachlorobutadiene	0.186	0.165	11.3	118	0.00
78	T	Naphthalene	1.258	1.386	-10.2	113	0.00
79	T	1,2,3-Trichlorobenzene	0.474	0.452	4.6	107	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.384	0.330	14.1	109	0.00
81	T	Methyl acetate	0.307	0.343	-11.7	107	-0.01
82	T	Cyclohexane	0.773	0.737	4.7	112	0.00
83	T	Methylcyclohexane	0.622	0.593	4.7	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E8161007.M Wed Oct 26 09:31:44 2016 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5922.D
Acq On : 20 Oct 2016 5:14
Operator : BARBARA
Sample : CCV100,CCV161019a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Oct 20 09:33:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	94	0.00
2	T	Dichlorodifluoromethane	0.464	0.384	17.2	87	0.00
3	P	Chloromethane	0.707	0.735	-4.0	109	0.00
4	C	Vinyl chloride	0.704	0.643	8.7	92	0.00
5	T	Bromomethane	0.308	0.247	19.8	79	0.00
6	T	Chloroethane	0.361	0.310	14.1	85	0.00
7	T	Trichlorofluoromethane	0.696	0.609	12.5	86	0.01
9	MC	1,1-Dichloroethene	0.503	0.433	13.9	90	-0.01
10	T	Acetone	0.121	0.111	8.3	89	0.37
11	T	Carbon disulfide	1.471	1.393	5.3	93	-0.01
12	T	Vinyl acetate	0.361	0.376	-4.2	73	0.01
13	T	Methylene chloride	0.532	0.495	7.0	97	-0.04
14	T	Acrylonitrile	0.173	0.155	10.4	69	0.00
15	T	tert-Butyl alcohol (TBA)	0.018	0.018	0.0	78	0.01
16	T	trans-1,2-Dichloroethene	0.425	0.459	-8.0	99	0.00
17	T	Methyl tert-butyl ether (MT	1.101	1.164	-5.7	90	0.00
18	P	1,1-Dichloroethane	0.830	0.978	-17.8	105	0.00
20	T	cis-1,2-Dichloroethene	0.425	0.505	-18.8	103	0.00
21	T	2,2-Dichloropropane	0.344	0.298	13.4	82	0.00
22	T	2-Butanone (MEK)	0.228	0.200	12.3	79	0.00
23	T	Bromochloromethane	0.193	0.221	-14.5	99	0.00
25	C	Chloroform	0.779	0.868	-11.4	101	0.00
26	T	1,1,1-Trichloroethane	0.633	0.702	-10.9	103	0.00
27	T	Carbon tetrachloride	0.621	0.648	-4.3	96	0.00
28	T	1,1-Dichloropropene	0.614	0.647	-5.4	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.718	0.789	-9.9	99	0.00
30	S	1,2-Dichloroethane-d4	0.580	0.543	6.4	89	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
32	M	Benzene	1.116	1.237	-10.8	102	0.00
33	M	Trichloroethene	0.307	0.366	-19.2	112	0.00
34	C	1,2-Dichloropropane	0.302	0.352	-16.6	105	0.00
35	T	Dibromomethane	0.169	0.184	-8.9	93	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	78	0.00
37	T	Bromodichloromethane	0.358	0.393	-9.8	96	0.00
39	T	cis-1,3-Dichloropropene	0.395	0.385	2.5	80	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.285	0.245	14.0	69	0.00
41	S	Toluene-d8	1.187	1.139	4.0	90	0.00
42	MC	Toluene	0.705	0.729	-3.4	96	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.323	19.5	70	0.00
44	T	1,1,2-Trichloroethane	0.221	0.206	6.8	86	0.00
45	T	Tetrachloroethene	0.305	0.294	3.6	96	0.00
46	T	1,3-Dichloropropane	0.432	0.425	1.6	88	0.00
47	T	2-Hexanone	0.213	0.215	-0.9	78	0.00
48	T	Dibromochloromethane	0.251	0.220	12.4	75	0.00

49	T	1,2-Dibromoethane (EDB)	0.261	0.244	6.5	84	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00
51	MP	Chlorobenzene	0.914	0.963	-5.4	97	0.00
52	T	1,1,1,2-Tetrachloroethane	0.310	0.353	-13.9	101	0.00
53	C	Ethylbenzene	1.571	1.712	-9.0	96	0.00
54	T	m,p-Xylene	0.578	0.648	-12.1	94	0.00
55	T	o-Xylene	0.529	0.623	-17.8	99	0.00
56	T	Styrene	0.939	1.058	-12.7	94	0.00
57	P	Bromoform	0.185	0.155	17.4	54	0.00
58	T	Isopropylbenzene	1.534	1.654	-7.8	95	0.00
59	S	Bromofluorobenzene	0.610	0.621	-1.8	90	0.00
60	P	1,1,2,2-Tetrachloroethane	0.455	0.370	18.7	70	0.00
61	T	Bromobenzene	0.383	0.402	-5.0	93	0.00
62	T	1,2,3-Trichloropropane	0.423	0.377	10.9	80	0.00
63	T	n-Propylbenzene	1.873	1.984	-5.9	93	0.00
64	T	2-Chlorotoluene	1.148	1.251	-9.0	96	0.00
65	T	1,3,5-Trimethylbenzene	1.353	1.439	-6.4	95	0.00
66	T	4-Chlorotoluene	1.414	1.430	-1.1	96	0.00
67	T	tert-Butylbenzene	1.053	1.148	-9.0	97	0.00
68	T	1,2,4-Trimethylbenzene	1.366	1.462	-7.0	96	0.00
69	T	sec-Butylbenzene	1.681	1.722	-2.4	94	0.00
70	T	1,3-Dichlorobenzene	0.783	0.770	1.7	93	0.00
71	T	4-Isopropyltoluene	1.377	1.441	-4.6	95	0.00
72	T	1,4-Dichlorobenzene	0.796	0.783	1.6	94	0.00
73	T	n-Butylbenzene	1.318	1.330	-0.9	94	0.00
74	T	1,2-Dichlorobenzene	0.742	0.768	-3.5	94	0.00
75	T	1,2-Dibromo-3-chloropropane	0.079	0.065	17.7	64	0.00
76	T	1,2,4-Trichlorobenzene	0.478	0.517	-8.2	97	0.00
77	T	Hexachlorobutadiene	0.186	0.175	5.9	100	0.00
78	T	Naphthalene	1.258	1.339	-6.4	88	0.00
79	T	1,2,3-Trichlorobenzene	0.474	0.500	-5.5	95	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.384	0.329	14.3	87	0.00
81	T	Methyl acetate	0.307	0.291	5.2	73	0.01
82	T	Cyclohexane	0.773	0.828	-7.1	101	0.00
83	T	Methylcyclohexane	0.622	0.605	2.7	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E8161007.M Mon Oct 24 10:09:22 2016 RT1

Response Factor Report MSD_F

Method Path : C:\MSDCHEM\1\METHODS\
Method File : FS101016.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Tue Oct 11 12:30:33 2016
Response Via : Initial Calibration

WXF 10/11/16
CC 10/11/16

Calibration Files
1 =F2656.D 2 =F2657.D 5 =F2658.D
20 =F2659.D 100 =F2660.D 150 =F2662.D 200 =F2661.D

		Compound	1	2	5	20	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------								
2)	T	Dichlorodifluorom	0.545	0.496	0.463	0.523	0.426	0.396	0.423	0.467	11.96
3)	P	Chloromethane	0.445	0.461	0.430	0.464	0.382	0.360	0.388	0.419	9.97
4)	C	Vinyl chloride	0.496	0.518	0.480	0.543	0.464	0.436	0.477	0.488	7.23
5)	T	Bromomethane	0.314	0.312	0.308	0.334	0.262	0.235	0.251	0.288	13.08
6)	T	Chloroethane	0.288	0.275	0.272	0.295	0.246	0.222	0.239	0.262	10.21
7)	T	Trichlorofluorome	0.817	0.832	0.761	0.890	0.775	0.719	0.792	0.798	6.91
8)	T	Acrolein	0.013	0.016	0.013	0.012	0.011	0.010	0.012	0.012	15.32
9)	MC	1,1-Dichloroethen	0.379	0.422	0.382	0.435	0.387	0.378	0.406	0.398	5.66
10)	T	Acetone			0.125	0.111	0.091	0.086	0.091	0.101	16.64
11)	T	Carbon disulfide	1.349	1.342	1.266	1.495	1.362	1.328	1.416	1.365	5.29
12)	T	Vinyl acetate	1.344	1.407	1.337	1.582	1.472	1.386	1.469	1.428	6.06
13)	T	Methylene chlorid		0.597	0.519	0.496	0.396	0.383	0.402	0.466	18.42
14)	T	Acrylonitrile	0.130	0.141	0.123	0.114	0.106	0.090	0.118	0.118	14.04
15)	T	tert-Butyl alcoho	0.055	0.056	0.041	0.052	0.043	0.042	0.044	0.048	13.81
16)	T	trans-1,2-Dichlor	0.568	0.587	0.519	0.595	0.517	0.499	0.532	0.545	6.91
17)	T	Methyl tert-butyl	1.333	1.443	1.285	1.519	1.345	1.287	1.397	1.373	6.26
18)	P	1,1-Dichloroethan	1.008	1.000	0.931	1.059	0.932	0.897	0.961	0.970	5.77
19)	T	Diisopropyl ether	1.391	1.532	1.429	1.778	1.572	1.460	1.556	1.531	8.37
20)	T	cis-1,2-Dichloroe	0.514	0.550	0.497	0.588	0.541	0.516	0.553	0.537	5.71
21)	T	2,2-Dichloropropa	0.577	0.608	0.602	0.654	0.564	0.537	0.546	0.584	6.93
22)	T	2-Butanone (MEK)	0.192	0.166	0.157	0.185	0.165	0.154	0.159	0.168	8.74
23)	T	Bromochloromethan	0.216	0.266	0.234	0.272	0.246	0.237	0.254	0.247	7.85
25)	C	Chloroform	0.949	0.974	0.906	1.045	0.919	0.881	0.952	0.946	5.66
26)	T	1,1,1-Trichloroet	0.836	0.840	0.829	0.971	0.872	0.837	0.896	0.869	5.87
27)	T	Carbon tetrachlor	0.781	0.838	0.799	0.956	0.896	0.848	0.913	0.861	7.34
28)	T	1,1-Dichloroprope	0.711	0.735	0.669	0.799	0.731	0.703	0.735	0.726	5.47
29)	T	1,2-Dichloroethan	0.683	0.752	0.678	0.777	0.698	0.647	0.696	0.704	6.34
30)	S	1,2-Dichloroethan	0.438	0.429	0.419	0.415	0.406	0.390	0.394	0.413	4.25
31)	I	1,4-Difluorobenzene	----------ISTD----------								
32)	M	Benzene	1.419	1.503	1.364	1.645	1.449	1.410	1.491	1.469	6.22
33)	M	Trichloroethene	0.410	0.404	0.381	0.452	0.410	0.397	0.417	0.410	5.32
34)	C	1,2-Dichloropropa	0.346	0.347	0.343	0.395	0.367	0.347	0.370	0.359	5.28
35)	T	Dibromomethane	0.192	0.210	0.179	0.217	0.202	0.189	0.205	0.199	6.59
36)	T	1,4-Dioxane	0.003	0.003	0.003	0.003	0.002	0.002	0.003	0.003	8.87
37)	T	Bromodichlorometh	0.452	0.452	0.425	0.515	0.498	0.475	0.516	0.476	7.37
38)	T	2-Chloroethyl vin	0.130	0.148	0.134	0.156	0.174	0.157	0.174	0.153	11.45
39)	T	cis-1,3-Dichlorop	0.416	0.441	0.459	0.571	0.566	0.536	0.585	0.511	13.73
40)	T	4-Methyl-2-pentan	0.252	0.209	0.202	0.265	0.247	0.241	0.255	0.239	10.02
41)	S	Toluene-d8	0.967	0.971	0.980	0.987	1.003	0.976	0.998	0.983	1.40
42)	MC	Toluene	0.911	0.960	0.897	1.026	0.948	0.898	0.969	0.944	4.94
43)	T	trans-1,3-Dichlor	0.403	0.434	0.402	0.509	0.515	0.469	0.515	0.464	11.03
44)	T	1,1,2-Trichloroet	0.216	0.241	0.211	0.238	0.226	0.205	0.225	0.223	6.06
45)	T	Tetrachloroethene	0.419	0.437	0.417	0.482	0.455	0.427	0.464	0.443	5.60
46)	T	1,3-Dichloropropa	0.457	0.464	0.430	0.503	0.487	0.444	0.482	0.467	5.48
47)	T	2-Hexanone	0.154	0.169	0.143	0.182	0.179	0.177	0.187	0.170	9.31
48)	T	Dibromochlorometh	0.297	0.326	0.300	0.367	0.374	0.350	0.386	0.343	10.44
49)	T	1,2-Dibromoethane	0.239	0.290	0.249	0.291	0.282	0.258	0.283	0.270	7.84
50)	I	Chlorobenzene-d5	----------ISTD----------								
51)	MP	Chlorobenzene	1.363	1.351	1.240	1.411	1.278	1.238	1.299	1.311	5.02
52)	T	1,1,1,2-Tetrachlo	0.420	0.463	0.414	0.516	0.484	0.488	0.511	0.471	8.64

53)	C	Ethylbenzene	2.034	2.119	2.039	2.488	2.337	2.263	2.379	2.237	7.92
54)	T	m,p-Xylene	0.768	0.825	0.804	0.981	0.898	0.854	0.884	0.859	8.15
55)	T	o-Xylene	0.711	0.672	0.713	0.903	0.833	0.803	0.834	0.781	10.76
56)	T	Styrene	1.030	1.153	1.166	1.532	1.413	1.331	1.377	1.286	13.64
57)	P	Bromoform	0.284	0.312	0.250	0.286	0.288	0.273	0.291	0.283	6.64
58)	T	Isopropylbenzene	2.123	1.861	1.953	2.640	2.404	2.374	2.496	2.264	12.82
59)	S	Bromofluorobenzen	0.539	0.556	0.554	0.569	0.569	0.545	0.545	0.554	2.13
60)	P	1,1,2,2-Tetrachlo	0.389	0.417	0.392	0.453	0.415	0.394	0.407	0.410	5.43
61)	T	Bromobenzene	0.511	0.549	0.504	0.592	0.548	0.515	0.544	0.538	5.65
62)	T	1,2,3-Trichloropr	0.438	0.442	0.376	0.453	0.398	0.381	0.394	0.412	7.63
63)	T	n-Propylbenzene	2.369	2.468	2.495	3.121	2.843	2.717	2.830	2.692	9.83
64)	T	2-Chlorotoluene	1.469	1.598	1.542	1.899	1.713	1.631	1.716	1.653	8.48
65)	T	1,3,5-Trimethylbe	1.618	1.802	1.828	2.387	2.153	2.066	2.150	2.001	13.13
66)	T	4-Chlorotoluene	1.691	1.883	1.811	2.228	2.013	1.864	1.930	1.917	8.83
67)	T	tert-Butylbenzene	1.439	1.399	1.451	2.030	1.842	1.795	1.876	1.690	15.07
68)	T	1,2,4-Trimethylbe	1.516	1.767	1.837	2.440	2.175	2.065	2.183	1.997	15.53
69)	T	sec-Butylbenzene	2.046	2.192	2.233	3.051	2.723	2.633	2.727	2.515	14.46
70)	T	1,3-Dichlorobenze	1.031	1.124	1.051	1.263	1.132	1.070	1.119	1.113	6.91
71)	T	4-Isopropyltoluen	1.714	1.848	1.958	2.689	2.404	2.318	2.423	2.193	16.26
72)	T	1,4-Dichlorobenze	0.999	1.107	1.027	1.277	1.124	1.064	1.106	1.101	8.21
73)	T	n-Butylbenzene	0.827	0.838	0.877	1.273	1.136	1.100	1.129	1.026	17.17
74)	T	1,2-Dichlorobenze	0.850	0.967	0.953	1.166	1.024	0.963	1.001	0.989	9.62
75)	T	1,2-Dibromo-3-chl	0.095	0.083	0.074	0.087	0.081	0.080	0.085	0.084	7.90
76)	T	1,2,4-Trichlorobe	0.547	0.561	0.667	0.780	0.767	0.747	0.811	0.697	15.41
77)	T	Hexachlorobutadie	0.383	0.414	0.426	0.554	0.501	0.490	0.534	0.472	13.75
78)	T	Naphthalene	1.212	1.279	1.222	1.530	1.495	1.498	1.584	1.403	11.31
79)	T	1,2,3-Trichlorobe	0.486	0.561	0.567	0.765	0.700	0.681	0.741	0.643	16.37
80)	T	1,1,2-Trichloro-1	0.558	0.404	0.419	0.492	0.416	0.426	0.446	0.452	12.20
81)	T	Methyl acetate	0.177	0.228	0.174	0.213	0.171	0.179	0.180	0.189	11.79
82)	T	Cyclohexane		1.202	0.949	1.111	0.943	0.951	0.983	1.023	10.57
83)	T	Methylcyclohexane	0.643	0.666	0.640	0.884	0.773	0.790	0.797	0.742	12.64

(#) = Out of Range ### Number of calibration levels exceeded format ###

FS101016.M Tue Oct 18 13:51:25 2016 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\10-10-16\
Data File : F2664.D
Acq On : 10 Oct 2016 17:57
Operator : XING
Sample : ICV100,ICV161010,S,5g,0
Misc :
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 11 12:08:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:06:11 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	105	0.00
2	T	Dichlorodifluoromethane	0.467	0.378	19.1	94	0.00
3	P	Chloromethane	0.419	0.337	19.6	93	0.00
4	C	Vinyl chloride	0.488	0.410	16.0	93	0.00
5	T	Bromomethane	0.288	0.232	19.4	94	0.00
6	T	Chloroethane	0.262	0.212	19.1	91	0.01
7	T	Trichlorofluoromethane	0.798	0.688	13.8	94	0.00
8	T	Acrolein	0.012	0.011	8.3	109	0.00
9	MC	1,1-Dichloroethene	0.398	0.368	7.5	100	0.00
10	T	Acetone	0.101	0.085	15.8	99	0.00
11	T	Carbon disulfide	1.365	1.244	8.9	96	-0.01
12	T	Vinyl acetate	1.428	1.390	2.7	100	0.00
13	T	Methylene chloride	0.466	0.393	15.7	105	-0.01
14	T	Acrylonitrile	0.118	0.122	-3.4	121	0.00
15	T	tert-Butyl alcohol (TBA)	0.048	0.041	14.6	100	0.01
16	T	trans-1,2-Dichloroethene	0.545	0.499	8.4	102	0.00
17	T	Methyl tert-butyl ether (MT	1.373	1.290	6.0	101	0.00
18	P	1,1-Dichloroethane	0.970	0.891	8.1	101	0.00
19	T	Diisopropyl ether (DIPE)	1.531	1.480	3.3	99	0.00
20	T	cis-1,2-Dichloroethene	0.537	0.517	3.7	101	0.00
21	T	2,2-Dichloropropane	0.584	0.483	17.3	90	0.00
22	T	2-Butanone (MEK)	0.168	0.157	6.5	101	0.01
23	T	Bromochloromethane	0.247	0.240	2.8	103	0.00
25	C	Chloroform	0.946	0.881	6.9	101	0.00
26	T	1,1,1-Trichloroethane	0.869	0.763	12.2	92	0.00
27	T	Carbon tetrachloride	0.861	0.812	5.7	96	0.00
28	T	1,1-Dichloropropene	0.726	0.708	2.5	102	0.00
29	T	1,2-Dichloroethane (EDC)	0.704	0.667	5.3	101	0.00
30	S	1,2-Dichloroethane-d4	0.413	0.388	6.1	101	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	103	0.00
32	M	Benzene	1.469	1.436	2.2	102	0.00
33	M	Trichloroethene	0.410	0.398	2.9	100	-0.01
34	C	1,2-Dichloropropane	0.359	0.355	1.1	100	0.00
35	T	Dibromomethane	0.199	0.195	2.0	100	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	120	0.00
37	T	Bromodichloromethane	0.476	0.482	-1.3	100	0.00
38	T	2-Chloroethyl vinyl ether	0.153	0.161	-5.2	96	0.00
39	T	cis-1,3-Dichloropropene	0.511	0.544	-6.5	99	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.239	0.243	-1.7	101	0.01
41	S	Toluene-d8	0.983	0.988	-0.5	102	0.00
42	MC	Toluene	0.944	0.903	4.3	98	0.00
43	T	trans-1,3-Dichloropropene	0.464	0.481	-3.7	96	0.00
44	T	1,1,2-Trichloroethane	0.223	0.211	5.4	97	0.00
45	T	Tetrachloroethene	0.443	0.425	4.1	96	0.00
46	T	1,3-Dichloropropane	0.467	0.459	1.7	97	0.00

47	T	2-Hexanone	0.170	0.173	-1.8	100	0.00
48	T	Dibromochloromethane	0.343	0.352	-2.6	97	0.00
49	T	1,2-Dibromoethane (EDB)	0.270	0.268	0.7	98	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00
51	MP	Chlorobenzene	1.311	1.255	4.3	96	0.00
52	T	1,1,1,2-Tetrachloroethane	0.471	0.488	-3.6	98	0.00
53	C	Ethylbenzene	2.237	2.263	-1.2	94	0.00
54	T	m,p-Xylene	0.859	0.874	-1.7	95	0.00
55	T	o-Xylene	0.781	0.818	-4.7	96	0.00
56	T	Styrene	1.286	1.372	-6.7	95	0.00
57	P	Bromoform	0.283	0.281	0.7	95	0.00
58	T	Isopropylbenzene	2.264	2.388	-5.5	97	0.00
59	S	Bromofluorobenzene	0.554	0.566	-2.2	97	0.00
60	P	1,1,2,2-Tetrachloroethane	0.410	0.408	0.5	96	0.00
61	T	Bromobenzene	0.538	0.533	0.9	95	0.00
62	T	1,2,3-Trichloropropane	0.412	0.395	4.1	97	0.00
63	T	n-Propylbenzene	2.692	2.762	-2.6	95	0.00
64	T	2-Chlorotoluene	1.653	1.670	-1.0	95	0.00
65	T	1,3,5-Trimethylbenzene	2.001	2.135	-6.7	97	0.00
66	T	4-Chlorotoluene	1.917	1.954	-1.9	95	0.00
67	T	tert-Butylbenzene	1.690	1.857	-9.9	98	0.00
68	T	1,2,4-Trimethylbenzene	1.997	2.151	-7.7	97	0.00
69	T	sec-Butylbenzene	2.515	2.732	-8.6	98	0.00
70	T	1,3-Dichlorobenzene	1.113	1.119	-0.5	96	0.00
71	T	4-Isopropyltoluene	2.193	2.420	-10.4	98	0.00
72	T	1,4-Dichlorobenzene	1.101	1.114	-1.2	97	0.00
73	T	n-Butylbenzene	1.026	1.143	-11.4	98	0.00
74	T	1,2-Dichlorobenzene	0.989	1.018	-2.9	97	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.083	1.2	101	-0.01
76	T	1,2,4-Trichlorobenzene	0.697	0.778	-11.6	99	0.00
77	T	Hexachlorobutadiene	0.472	0.511	-8.3	99	0.00
78	T	Naphthalene	1.403	1.556	-10.9	102	0.00
79	T	1,2,3-Trichlorobenzene	0.643	0.717	-11.5	100	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.452	0.392	13.3	92	0.00
81	T	Methyl acetate	0.189	0.171	9.5	98	0.00
82	T	Cyclohexane	1.023	0.946	7.5	98	0.00
83	T	Methylcyclohexane	0.742	0.784	-5.7	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS101016.M Tue Oct 18 13:52:04 2016 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2800.D
Acq On : 17 Oct 2016 12:44
Operator : XING
Sample : CCV100,CCV161017a,S,5g,0
Misc :
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 17 13:38:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	74	0.00
2	T	Dichlorodifluoromethane	0.467	0.550	-17.8	96	0.00
3	P	Chloromethane	0.419	0.463	-10.5	90	0.00
4	C	Vinyl chloride	0.488	0.545	-11.7	87	0.00
5	T	Bromomethane	0.288	0.261	9.4	74	0.00
6	T	Chloroethane	0.262	0.225	14.1	68	0.01
7	T	Trichlorofluoromethane	0.798	0.888	-11.3	85	0.00
8	T	Acrolein	0.012	0.010	16.7	68	0.00
9	MC	1,1-Dichloroethene	0.398	0.366	8.0	70	0.00
10	T	Acetone	0.101	0.095	5.9	78	0.00
11	T	Carbon disulfide	1.365	1.264	7.4	69	0.00
12	T	Vinyl acetate	1.428	1.699	-19.0	86	0.00
13	T	Methylene chloride	0.466	0.402	13.7	76	0.00
14	T	Acrylonitrile	0.118	0.139	-17.8	97	0.01
15	T	tert-Butyl alcohol (TBA)	0.048	0.046	4.2	79	0.01
16	T	trans-1,2-Dichloroethene	0.545	0.549	-0.7	79	0.00
17	T	Methyl tert-butyl ether (MT	1.373	1.527	-11.2	84	0.00
18	P	1,1-Dichloroethane	0.970	1.047	-7.9	84	0.00
19	T	Diisopropyl ether (DIPE)	1.531	1.752	-14.4	83	0.00
20	T	cis-1,2-Dichloroethene	0.537	0.574	-6.9	79	0.01
21	T	2,2-Dichloropropane	0.584	0.634	-8.6	84	0.00
22	T	2-Butanone (MEK)	0.168	0.188	-11.9	85	0.01
23	T	Bromochloromethane	0.247	0.264	-6.9	80	0.00
25	C	Chloroform	0.946	1.053	-11.3	85	0.01
26	T	1,1,1-Trichloroethane	0.869	1.009	-16.1	86	0.00
27	T	Carbon tetrachloride	0.861	1.017	-18.1	84	0.01
28	T	1,1-Dichloropropene	0.726	0.816	-12.4	83	0.00
29	T	1,2-Dichloroethane (EDC)	0.704	0.844	-19.9	90	0.00
30	S	1,2-Dichloroethane-d4	0.413	0.481	-16.5	88	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	75	0.00
32	M	Benzene	1.469	1.528	-4.0	80	0.00
33	M	Trichloroethene	0.410	0.442	-7.8	81	0.00
34	C	1,2-Dichloropropane	0.359	0.387	-7.8	80	0.00
35	T	Dibromomethane	0.199	0.221	-11.1	83	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	80	0.00
37	T	Bromodichloromethane	0.476	0.563	-18.3	85	0.00
38	T	2-Chloroethyl vinyl ether	0.153	0.182	-19.0	79	0.00
39	T	cis-1,3-Dichloropropene	0.511	0.609	-19.2	81	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.239	0.277	-15.9	84	0.01
41	S	Toluene-d8	0.983	1.015	-3.3	76	0.00
42	MC	Toluene	0.944	0.975	-3.3	78	0.00
43	T	trans-1,3-Dichloropropene	0.464	0.544	-17.2	80	0.00
44	T	1,1,2-Trichloroethane	0.223	0.232	-4.0	78	0.00
45	T	Tetrachloroethene	0.443	0.462	-4.3	77	0.00
46	T	1,3-Dichloropropane	0.467	0.509	-9.0	79	0.00

47	T	2-Hexanone	0.170	0.203	-19.4	85	0.00
48	T	Dibromochloromethane	0.343	0.401	-16.9	81	0.00
49	T	1,2-Dibromoethane (EDB)	0.270	0.297	-10.0	79	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	76	0.00
51	MP	Chlorobenzene	1.311	1.273	2.9	76	0.00
52	T	1,1,1,2-Tetrachloroethane	0.471	0.513	-8.9	81	0.00
53	C	Ethylbenzene	2.237	2.375	-6.2	78	0.00
54	T	m,p-Xylene	0.859	0.898	-4.5	76	0.00
55	T	o-Xylene	0.781	0.828	-6.0	76	0.00
56	T	Styrene	1.286	1.383	-7.5	75	0.00
57	P	Bromoform	0.283	0.298	-5.3	79	0.00
58	T	Isopropylbenzene	2.264	2.492	-10.1	79	0.00
59	S	Bromofluorobenzene	0.554	0.578	-4.3	78	0.00
60	P	1,1,2,2-Tetrachloroethane	0.410	0.423	-3.2	78	0.00
61	T	Bromobenzene	0.538	0.543	-0.9	76	0.00
62	T	1,2,3-Trichloropropane	0.412	0.424	-2.9	81	0.00
63	T	n-Propylbenzene	2.692	2.891	-7.4	78	0.00
64	T	2-Chlorotoluene	1.653	1.759	-6.4	78	0.00
65	T	1,3,5-Trimethylbenzene	2.001	2.232	-11.5	79	0.00
66	T	4-Chlorotoluene	1.917	2.094	-9.2	79	0.00
67	T	tert-Butylbenzene	1.690	1.905	-12.7	79	0.00
68	T	1,2,4-Trimethylbenzene	1.997	2.249	-12.6	79	0.00
69	T	sec-Butylbenzene	2.515	2.775	-10.3	78	0.00
70	T	1,3-Dichlorobenzene	1.113	1.135	-2.0	77	0.00
71	T	4-Isopropyltoluene	2.193	2.498	-13.9	79	0.00
72	T	1,4-Dichlorobenzene	1.101	1.127	-2.4	77	0.00
73	T	n-Butylbenzene	1.026	1.175	-14.5	79	0.00
74	T	1,2-Dichlorobenzene	0.989	1.024	-3.5	76	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.094	-11.9	89	0.00
76	T	1,2,4-Trichlorobenzene	0.697	0.782	-12.2	78	0.00
77	T	Hexachlorobutadiene	0.472	0.536	-13.6	82	0.00
78	T	Naphthalene	1.403	1.610	-14.8	82	0.00
79	T	1,2,3-Trichlorobenzene	0.643	0.734	-14.2	80	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.452	0.396	12.4	73	0.00
81	T	Methyl acetate	0.189	0.162	14.3	72	0.00
82	T	Cyclohexane	1.023	0.990	3.2	80	0.00
83	T	Methylcyclohexane	0.742	0.827	-11.5	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS101016.M Mon Oct 17 13:38:07 2016 RP1

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2965.D
Acq On : 24 Oct 2016 12:06
Operator : XING
Sample : CCV100,CCV161024-01,S,5g,0
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 24 14:10:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	70	0.00
2	T	Dichlorodifluoromethane	0.467	0.432	7.5	71	0.00
3	P	Chloromethane	0.419	0.341	18.6	62	0.00
4	C	Vinyl chloride	0.488	0.455	6.8	68	0.00
5	T	Bromomethane	0.288	0.243	15.6	65	-0.01
6	T	Chloroethane	0.262	0.254	3.1	72	0.00
7	T	Trichlorofluoromethane	0.798	0.784	1.8	70	0.00
8	T	Acrolein	0.012	0.012	0.0	73	0.00
9	MC	1,1-Dichloroethene	0.398	0.422	-6.0	76	0.00
10	T	Acetone	0.101	0.104	-3.0	80	0.00
11	T	Carbon disulfide	1.365	1.437	-5.3	73	0.00
12	T	Vinyl acetate	1.428	1.303	8.8	62	0.02
13	T	Methylene chloride	0.466	0.406	12.9	71	0.00
14	T	Acrylonitrile	0.118	0.139	-17.8	91	0.01
15	T	tert-Butyl alcohol (TBA)	0.048	0.043	10.4	69	0.01
16	T	trans-1,2-Dichloroethene	0.545	0.535	1.8	72	0.00
17	T	Methyl tert-butyl ether (MT	1.373	1.498	-9.1	78	0.00
18	P	1,1-Dichloroethane	0.970	0.977	-0.7	73	0.00
19	T	Diisopropyl ether (DIPE)	1.531	1.499	2.1	66	0.00
20	T	cis-1,2-Dichloroethene	0.537	0.551	-2.6	71	0.00
21	T	2,2-Dichloropropane	0.584	0.671	-14.9	83	0.00
22	T	2-Butanone (MEK)	0.168	0.165	1.8	70	0.01
23	T	Bromochloromethane	0.247	0.258	-4.5	73	0.00
25	C	Chloroform	0.946	1.043	-10.3	79	0.00
26	T	1,1,1-Trichloroethane	0.869	1.041	-19.8	83	0.00
27	T	Carbon tetrachloride	0.861	1.016	-18.0	79	0.00
28	T	1,1-Dichloropropene	0.726	0.763	-5.1	73	0.00
29	T	1,2-Dichloroethane (EDC)	0.704	0.832	-18.2	83	0.00
30	S	1,2-Dichloroethane-d4	0.413	0.469	-13.6	80	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	69	0.00
32	M	Benzene	1.469	1.437	2.2	69	0.00
33	M	Trichloroethene	0.410	0.445	-8.5	75	0.00
34	C	1,2-Dichloropropane	0.359	0.352	1.9	66	0.00
35	T	Dibromomethane	0.199	0.219	-10.1	75	0.00
36	T	1,4-Dioxane	0.003	0.003	0.0	83	0.00
37	T	Bromodichloromethane	0.476	0.557	-17.0	77	0.00
38	T	2-Chloroethyl vinyl ether	0.153	0.182	-19.0	72	0.00
39	T	cis-1,3-Dichloropropene	0.511	0.597	-16.8	73	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.239	0.254	-6.3	71	0.01
41	S	Toluene-d8	0.983	1.059	-7.7	73	0.00
42	MC	Toluene	0.944	0.977	-3.5	71	0.00
43	T	trans-1,3-Dichloropropene	0.464	0.543	-17.0	73	0.00
44	T	1,1,2-Trichloroethane	0.223	0.235	-5.4	72	0.00
45	T	Tetrachloroethene	0.443	0.492	-11.1	75	0.00
46	T	1,3-Dichloropropane	0.467	0.516	-10.5	73	0.00

47	T	2-Hexanone	0.170	0.192	-12.9	74	0.00
48	T	Dibromochloromethane	0.343	0.401	-16.9	74	0.00
49	T	1,2-Dibromoethane (EDB)	0.270	0.308	-14.1	76	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
51	MP	Chlorobenzene	1.311	1.214	7.4	74	0.00
52	T	1,1,1,2-Tetrachloroethane	0.471	0.481	-2.1	77	0.00
53	C	Ethylbenzene	2.237	2.247	-0.4	75	0.00
54	T	m,p-Xylene	0.859	0.864	-0.6	75	0.00
55	T	o-Xylene	0.781	0.794	-1.7	74	0.00
56	T	Styrene	1.286	1.367	-6.3	75	0.00
57	P	Bromoform	0.283	0.305	-7.8	82	0.00
58	T	Isopropylbenzene	2.264	2.386	-5.4	77	0.00
59	S	Bromofluorobenzene	0.554	0.611	-10.3	83	0.00
60	P	1,1,2,2-Tetrachloroethane	0.410	0.384	6.3	72	0.00
61	T	Bromobenzene	0.538	0.544	-1.1	77	0.00
62	T	1,2,3-Trichloropropane	0.412	0.410	0.5	80	0.00
63	T	n-Propylbenzene	2.692	2.822	-4.8	77	0.00
64	T	2-Chlorotoluene	1.653	1.714	-3.7	78	0.00
65	T	1,3,5-Trimethylbenzene	2.001	2.222	-11.0	80	0.00
66	T	4-Chlorotoluene	1.917	2.080	-8.5	80	-0.01
67	T	tert-Butylbenzene	1.690	1.845	-9.2	78	0.00
68	T	1,2,4-Trimethylbenzene	1.997	2.242	-12.3	80	0.00
69	T	sec-Butylbenzene	2.515	2.752	-9.4	78	0.00
70	T	1,3-Dichlorobenzene	1.113	1.143	-2.7	78	0.00
71	T	4-Isopropyltoluene	2.193	2.512	-14.5	81	0.00
72	T	1,4-Dichlorobenzene	1.101	1.149	-4.4	79	0.00
73	T	n-Butylbenzene	1.026	1.163	-13.4	79	0.00
74	T	1,2-Dichlorobenzene	0.989	1.046	-5.8	79	0.00
75	T	1,2-Dibromo-3-chloropropane	0.084	0.093	-10.7	90	-0.01
76	T	1,2,4-Trichlorobenzene	0.697	0.772	-10.8	78	0.00
77	T	Hexachlorobutadiene	0.472	0.540	-14.4	83	0.00
78	T	Naphthalene	1.403	1.527	-8.8	79	0.00
79	T	1,2,3-Trichlorobenzene	0.643	0.722	-12.3	80	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.452	0.424	6.2	79	0.00
81	T	Methyl acetate	0.189	0.163	13.8	74	0.00
82	T	Cyclohexane	1.023	0.829	19.0	68	0.00
83	T	Methylcyclohexane	0.742	0.698	5.9	70	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

FS101016.M Mon Oct 24 14:10:27 2016 RP1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E5688.D Date Analyzed: 10/07/2016

Instrument ID: MSD_E Time Analyzed: 13:38

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	318451		6.41		490965		7.23		422021		10.58	
	UPPER LIMIT	636902		6.91		981930		7.73		844042		11.08	
	LOWER LIMIT	159225.5		5.91		245482.5		6.73		211010.5		10.08	
	LAB SAMPLE ID												
01	ICC00.5	275102		6.40		443791		7.23		379042		10.58	
02	ICC001	261470		6.41		423679		7.23		359332		10.58	
03	ICC005	255357		6.41		372495		7.23		334992		10.58	
04	ICC020	288409		6.41		429458		7.23		381955		10.58	
05	ICC150	328452		6.41		504457		7.23		427143		10.58	
06	ICC200	350582		6.40		522406		7.23		466420		10.58	
07	ICV100	357574		6.40		564032		7.23		481879		10.58	
08													
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22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E5922.D Date Analyzed: 10/20/2016

Instrument ID: MSD_E Time Analyzed: 5:14

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	299014		6.41		462993		7.23		386235		10.58	
	UPPER LIMIT	598028		6.91		925986		7.73		772470		11.08	
	LOWER LIMIT	149507		5.91		231496.5		6.73		193117.5		10.08	
	LAB SAMPLE ID												
01	BLKA161019a	261357		6.41		409976		7.23		339365		10.58	
02	LCSA161019a	283300		6.40		444842		7.23		375419		10.58	
03	E16-09642-001MS	259022		6.41		407380		7.23		354983		10.58	
04	E16-09642-001MSD	285734		6.41		442287		7.23		361836		10.58	
05	E16-09642-001	276060		6.40		435204		7.23		361796		10.58	
06	E16-09537-044	262410		6.40		418643		7.23		341753		10.58	
07	E16-09537-060	255022		6.41		383499		7.23		335976		10.58	
08	E16-09469-001	273985		6.41		434853		7.23		387400		10.58	
09	E16-09469-002	231865		6.41		364549		7.23		315302		10.58	
10	E16-09469-003	243050		6.40		395882		7.23		348630		10.58	
11	E16-09469-004	231638		6.41		363905		7.23		311644		10.58	
12	E16-09619-001	259931		6.41		419815		7.23		353372		10.58	
13	E16-09632-001	266541		6.41		434302		7.23		377813		10.58	
14	E16-09632-002	270964		6.41		425952		7.23		363717		10.58	
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F2660.D

Date Analyzed: 10/10/2016

Instrument ID: MSD_F

Time Analyzed: 15:51

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	289439		6.04		396026		6.86		334869		10.20	
	UPPER LIMIT	578878		6.54		792052		7.36		669738		10.70	
	LOWER LIMIT	144719.5		5.54		198013		6.36		167434.5		9.70	
	LAB SAMPLE ID												
01	ICC1	242765		6.04		349659		6.86		292207		10.20	
02	ICC2	237110		6.04		334402		6.86		279813		10.20	
03	ICC5	254991		6.04		360159		6.86		302692		10.20	
04	ICC20	241242		6.04		332749		6.86		272621		10.20	
05	ICC200	289299		6.04		386382		6.86		322330		10.20	
06	ICC150	320327		6.04		428458		6.86		343835		10.20	
07	ICV161010	305269		6.04		408404		6.86		326687		10.20	
08													
09													
10													
11													
12													
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14													
15													
16													
17													
18													
19													
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F2800.D

Date Analyzed: 10/17/2016

Instrument ID: MSD_F

Time Analyzed: 12:44

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	215204	6.04	298857	6.86	255892	10.20
	UPPER LIMIT	430408	6.54	597714	7.36	511784	10.70
	LOWER LIMIT	107602	5.54	149428.5	6.36	127946	9.70
	LAB SAMPLE ID						
01	BLKS161017-01	181530	6.04	269440	6.86	227675	10.20
02	E16-09502-008	176642	6.05	266023	6.86	228080	10.20
03	E16-09519-005DUP	4757*	6.04	6766*	6.86	6376*	10.20
04	E16-09519-013	169560	6.04	254555	6.86	217771	10.20
05	E16-09519-019	155542	6.04	233087	6.86	205342	10.20
06	E16-09519-020	165613	6.04	253332	6.86	219691	10.20
07	E16-09555-001	171714	6.05	257939	6.86	219523	10.20
08	LCSS161017-01	200638	6.04	282699	6.86	239263	10.20
09	E16-09555-001MS	193169	6.04	265831	6.86	237332	10.20
10	E16-09555-001MSD	194171	6.04	267075	6.86	220572	10.20
11	E16-09537-033	180575	6.04	265586	6.86	234117	10.20
12	E16-09537-035	182249	6.04	271277	6.86	233106	10.20
13	E16-09537-040	167465	6.04	252520	6.86	217980	10.20
14	E16-09537-041	141548	6.04	220748	6.86	193383	10.20
15	E16-09537-048	145299	6.04	229129	6.86	195720	10.20
16	E16-09537-049	144451	6.04	228924	6.86	197828	10.20
17	E16-09536-002	139478	6.04	220203	6.86	195551	10.20
18	E16-09536-003	146663	6.04	234707	6.86	202070	10.20
19	E16-09536-010	131365	6.04	212761	6.86	187063	10.20
20	E16-09536-011	126796	6.04	202996	6.86	189934	10.20
21							
22							

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): F2965.D Date Analyzed: 10/24/2016

Instrument ID: MSD_F Time Analyzed: 12:06

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	201568		6.04		274071		6.86		259463		10.20	
	UPPER LIMIT	403136		6.54		548142		7.36		518926		10.70	
	LOWER LIMIT	100784		5.54		137035.5		6.36		129731.5		9.70	
	LAB SAMPLE ID												
01	BLKS161024-01	169473		6.04		249742		6.86		222908		10.20	
02	E16-09714-001DUP	49214*		6.04		73291*		6.86		69571*		10.20	
03	E16-09803-001	158845		6.04		235857		6.86		206799		10.20	
04	E16-09803-002	171918		6.04		255759		6.86		226199		10.20	
05	E16-09803-003	151417		6.04		227812		6.86		210657		10.20	
06	LCSS161024-01	187943		6.04		261131		6.86		247899		10.20	
07	E16-09803-001MS	182109		6.04		256108		6.86		235224		10.20	
08	E16-09803-001MSD	212785		6.04		294260		6.86		268985		10.20	
09	E16-09852-001	197140		6.04		292850		6.86		257624		10.20	
10	E16-09852-002	202613		6.04		284187		6.86		246741		10.20	
11	E16-09852-003	189602		6.04		272202		6.86		234231		10.20	
12	E16-09852-004	200256		6.04		284389		6.86		253090		10.20	
13	E16-09852-005	189049		6.04		283889		6.86		249740		10.20	
14	E16-09852-006	181406		6.04		255727		6.86		224406		10.20	
15	E16-09537-034	190414		6.04		281395		6.86		254671		10.20	
16	E16-09537-036	188331		6.04		281794		6.86		255287		10.20	
17	E16-09803-012	178760		6.04		269193		6.86		241227		10.20	
18	E16-09803-013	180344		6.04		271195		6.86		245393		10.20	
19	E16-09803-014	173269		6.04		262367		6.86		235966		10.20	
20	E16-09803-015	175279		6.04		265710		6.86		238828		10.20	
21	E16-09803-016	174081		6.04		265724		6.86		233549		10.20	
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2812.D
Acq On : 17 Oct 2016 18:58
Operator : XING
Sample : E-30_(3-3.5),E16-09537-033,S,5.4g,11.8
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 18 11:18:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	180575	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	265586	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	234117	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	84989	56.98	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 113.96%			
41) Toluene-d8	8.526	98	263932	50.54	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.08%			
59) Bromofluorobenzene	11.602	95	124936	48.19	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 96.38%			

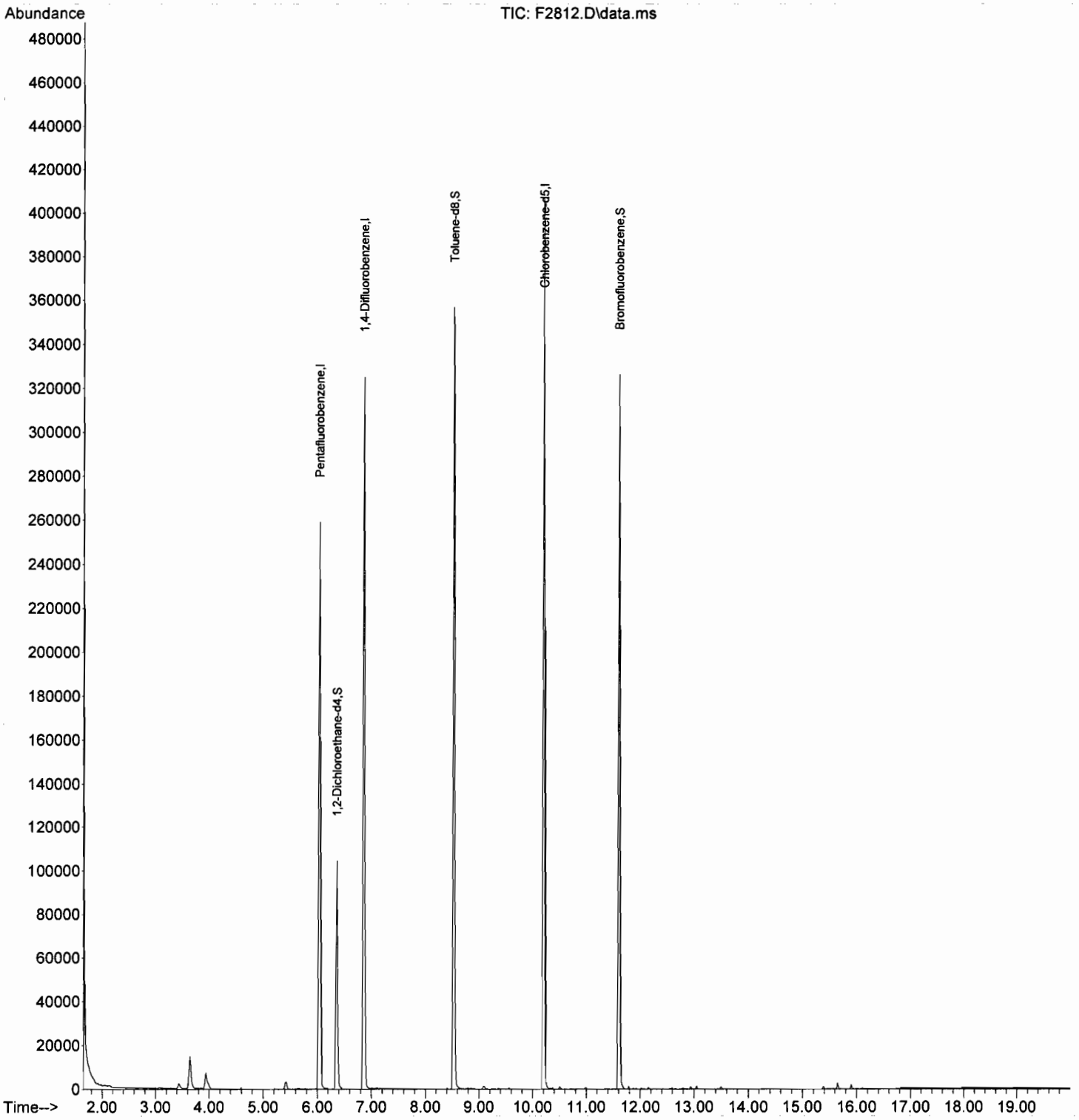
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2812.D
Acq On : 17 Oct 2016 18:58
Operator : XING
Sample : E-30_(3-3.5),E16-09537-033,S,5.4g,11.8
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 18 11:18:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2981.D
Acq On : 24 Oct 2016 20:28
Operator : XING
Sample : E-30_(4.5-5)/4,E16-09537-034,S,6.7g,11.8
Misc : AMEC-SMRST/AMTRA,10/11/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 25 10:03:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	190414	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	281395	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	254671	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	95704	60.85	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 121.70%			
41) Toluene-d8	8.526	98	280448	50.68	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.36%			
59) Bromofluorobenzene	11.602	95	138409	49.08	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 98.16%			

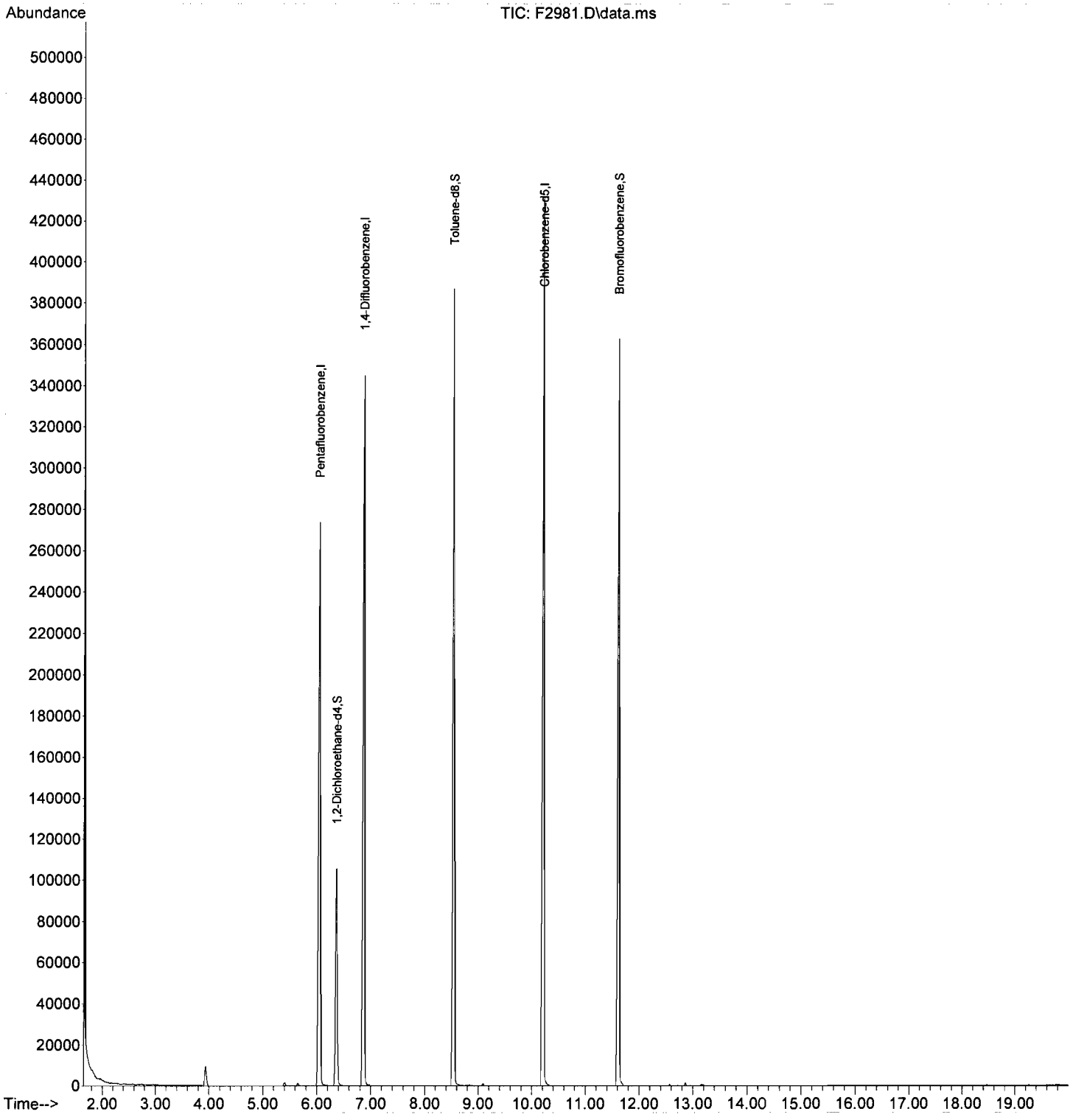
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2981.D
Acq On : 24 Oct 2016 20:28
Operator : XING
Sample : E-30_(4.5-5)/4,E16-09537-034,S,6.7g,11.8
Misc : AMEC-SMRST/AMTRA,10/11/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 25 10:03:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2813.D
Acq On : 17 Oct 2016 19:30
Operator : XING
Sample : E-31_(3-3.5),E16-09537-035,S,5.6g,19.0
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 18 11:19:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	182249	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	271277	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	233106	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	89394	59.39	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 118.78%			
41) Toluene-d8	8.526	98	264819	49.65	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 99.30%			
59) Bromofluorobenzene	11.602	95	126871	49.15	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 98.30%			

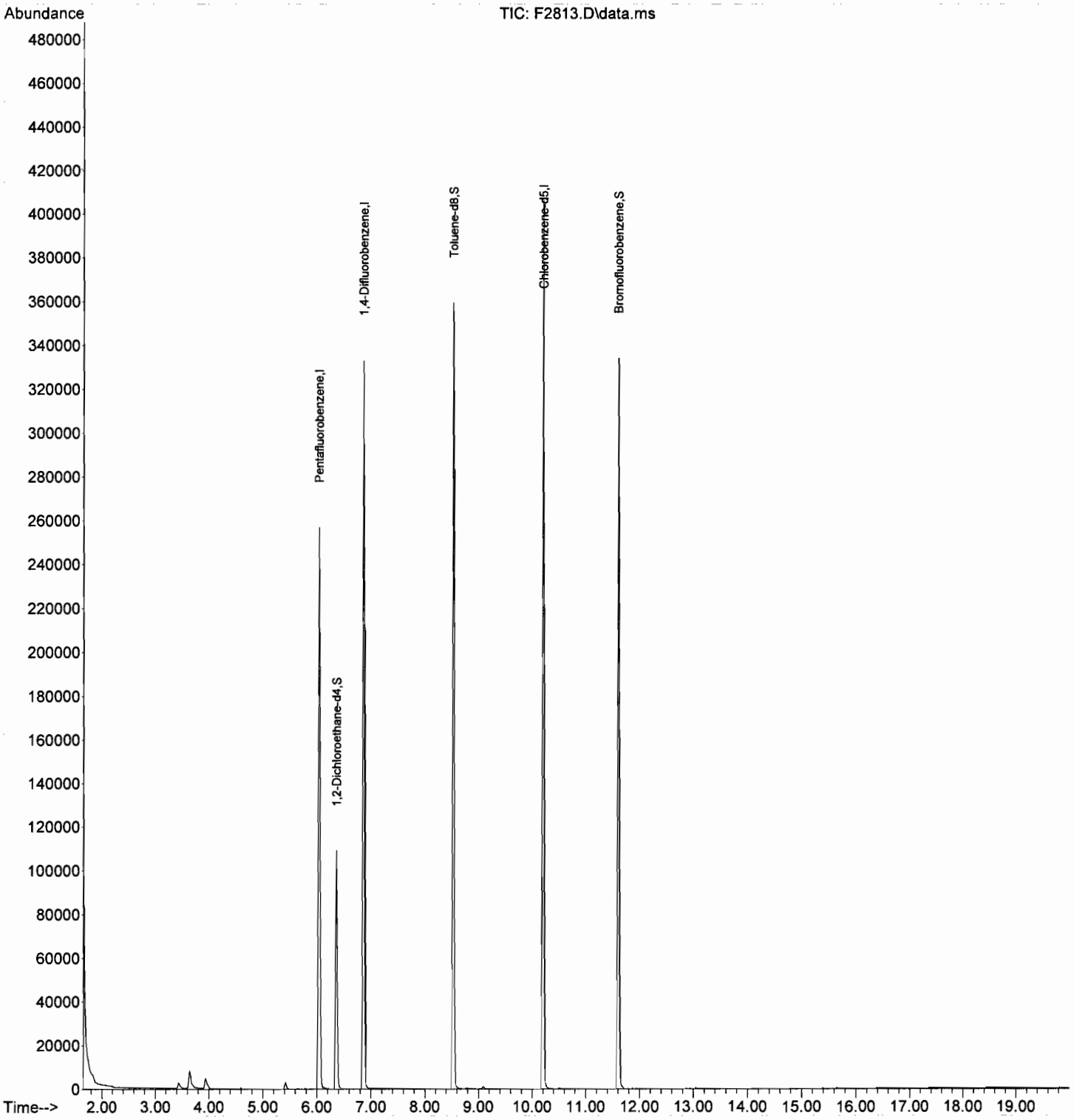
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2813.D
Acq On : 17 Oct 2016 19:30
Operator : XING
Sample : E-31_(3-3.5),E16-09537-035,S,5.6g,19.0
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Oct 18 11:19:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2982.D
Acq On : 24 Oct 2016 20:59
Operator : XING
Sample : E-31_(4.5-5)/4,E16-09537-036,S,5.9g,17.5
Misc : AMEC-SMRST/AMTRA,10/11/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	188331	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	281794	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	255287	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	90532	58.20	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 116.40%			
41) Toluene-d8	8.526	98	283217	51.11	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 102.22%			
59) Bromofluorobenzene	11.602	95	135954	48.09	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 96.18%			

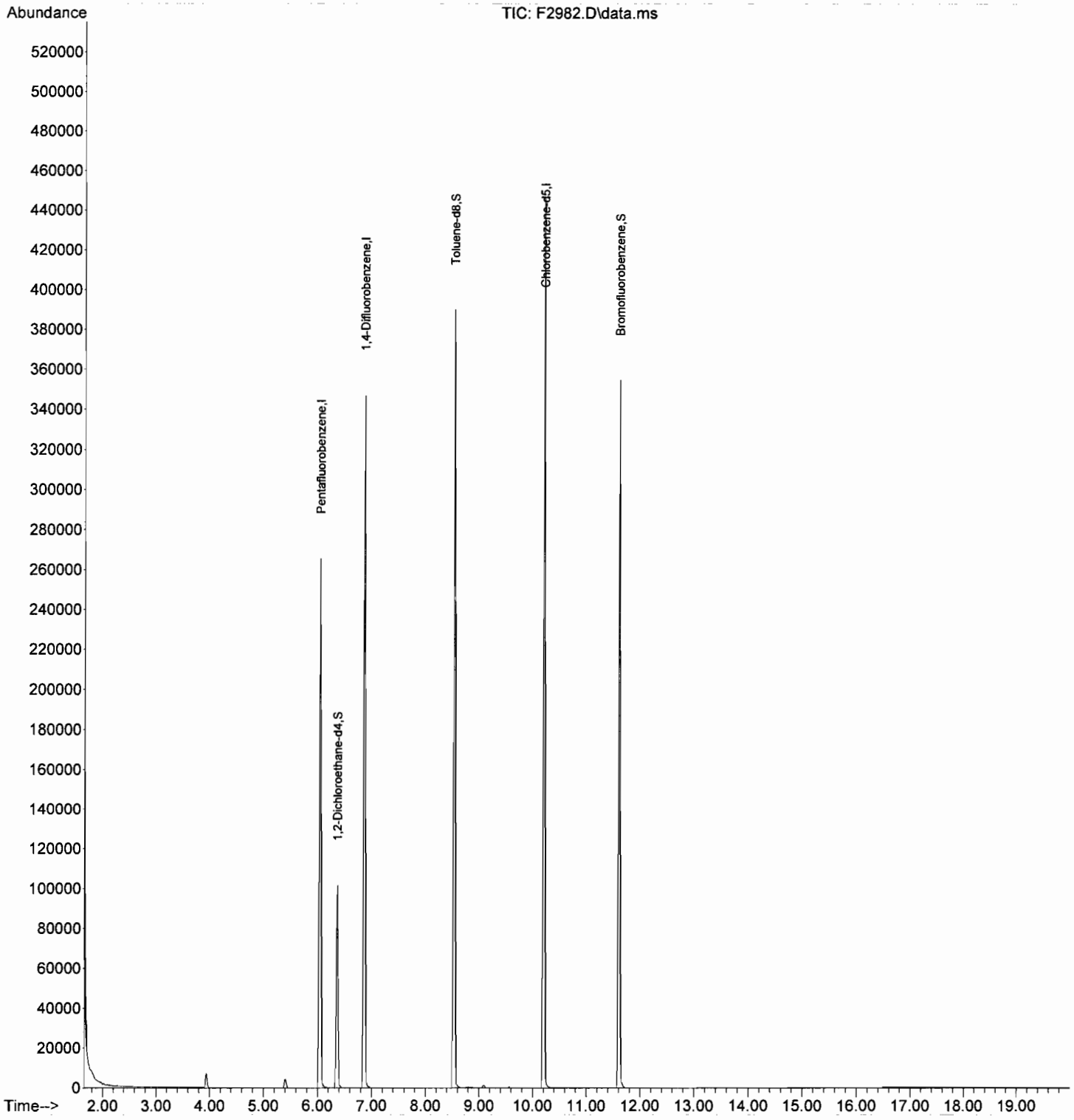
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2982.D
Acq On : 24 Oct 2016 20:59
Operator : XING
Sample : E-31_(4.5-5)/4,E16-09537-036,S,5.9g,17.5
Misc : AMEC-SMRST/AMTRA,10/11/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2814.D
Acq On : 17 Oct 2016 20:01
Operator : XING
Sample : E-33_(4.5-5),E16-09537-040,S,4.1g,7.30
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 21 10:55:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	167465	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	252520	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	217980	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	82664	59.76	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 119.52%			
41) Toluene-d8	8.526	98	248879	50.12	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.24%			
59) Bromofluorobenzene	11.602	95	117643	48.73	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 97.46%			

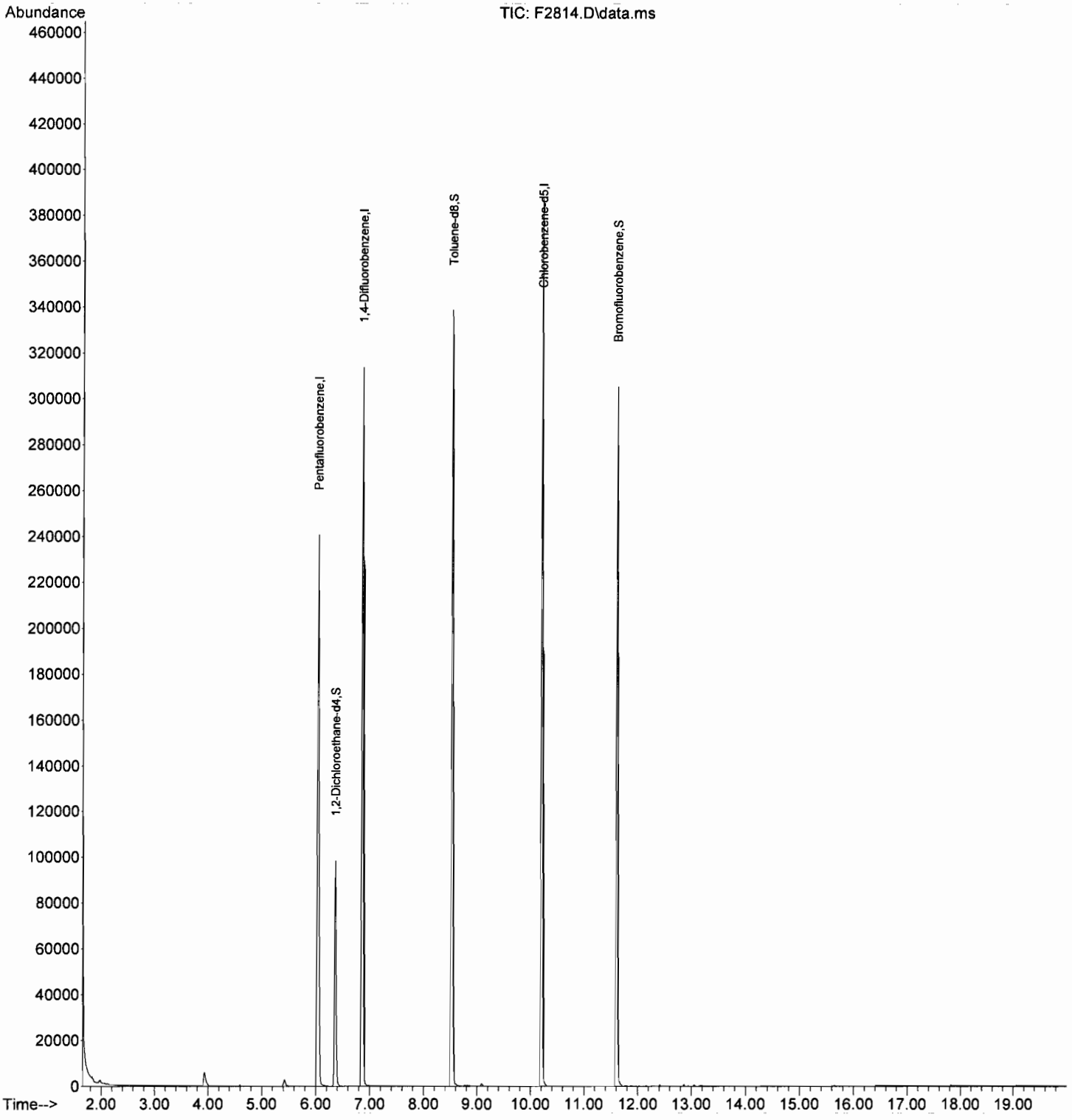
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2814.D
Acq On : 17 Oct 2016 20:01
Operator : XING
Sample : E-33_(4.5-5),E16-09537-040,S,4.1g,7.30
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Oct 21 10:55:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2815.D
Acq On : 17 Oct 2016 20:32
Operator : XING
Sample : E-33_(5.5-6),E16-09537-041,S,4.7g,3.10
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 18 11:21:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	141548	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	220748	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	193383	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	84156	71.98	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 143.96%			
41) Toluene-d8	8.526	98	217690	50.15	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.30%			
59) Bromofluorobenzene	11.602	95	108824	50.82	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 101.64%			

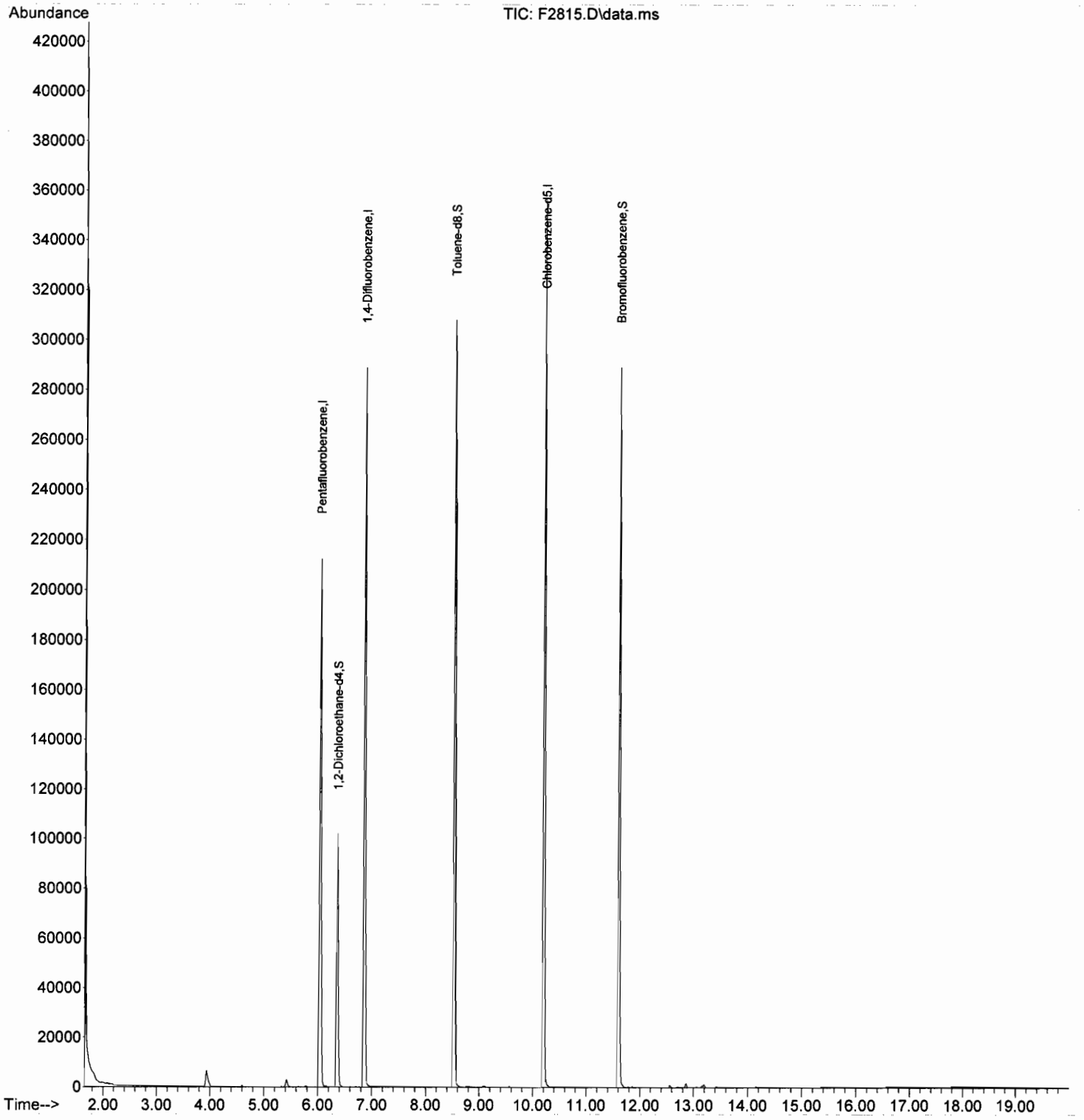
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2815.D
Acq On : 17 Oct 2016 20:32
Operator : XING
Sample : E-33_(5.5-6),E16-09537-041,S,4.7g,3.10
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Oct 18 11:21:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5931.D
Acq On : 20 Oct 2016 10:34
Operator : BARBARA
Sample : EB-101116,E16-09537-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 20 10:57:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.40	168	262410	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	418643	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	341753	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	167782	55.09	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 110.18%			
41) Toluene-d8	8.91	98	454591	45.74	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 91.48%			
59) Bromofluorobenzene	11.99	95	205781	49.31	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 98.62%			

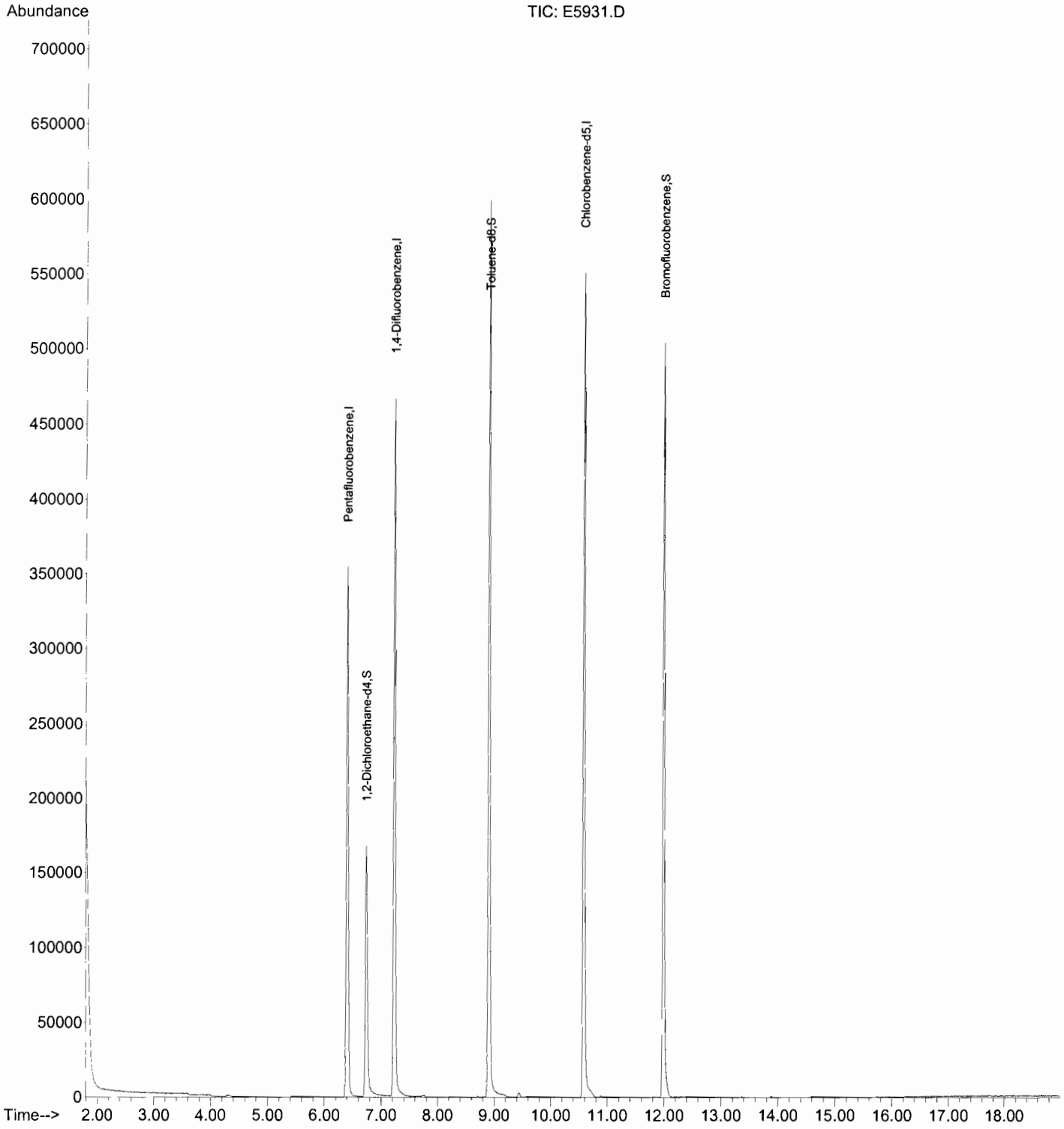
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5931.D
Acq On : 20 Oct 2016 10:34
Operator : BARBARA
Sample : EB-101116,E16-09537-044,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/11/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Quant Time: Oct 20 10:57:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2816.D
Acq On : 17 Oct 2016 21:03
Operator : XING
Sample : E-32_(4.5-5),E16-09537-048,S,4.4g,7.40
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 18 11:21:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	145299	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	229129	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	195720	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	83503	69.58	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 139.16%			
41) Toluene-d8	8.526	98	227046	50.39	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 100.78%			
59) Bromofluorobenzene	11.602	95	106934	49.34	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 98.68%			

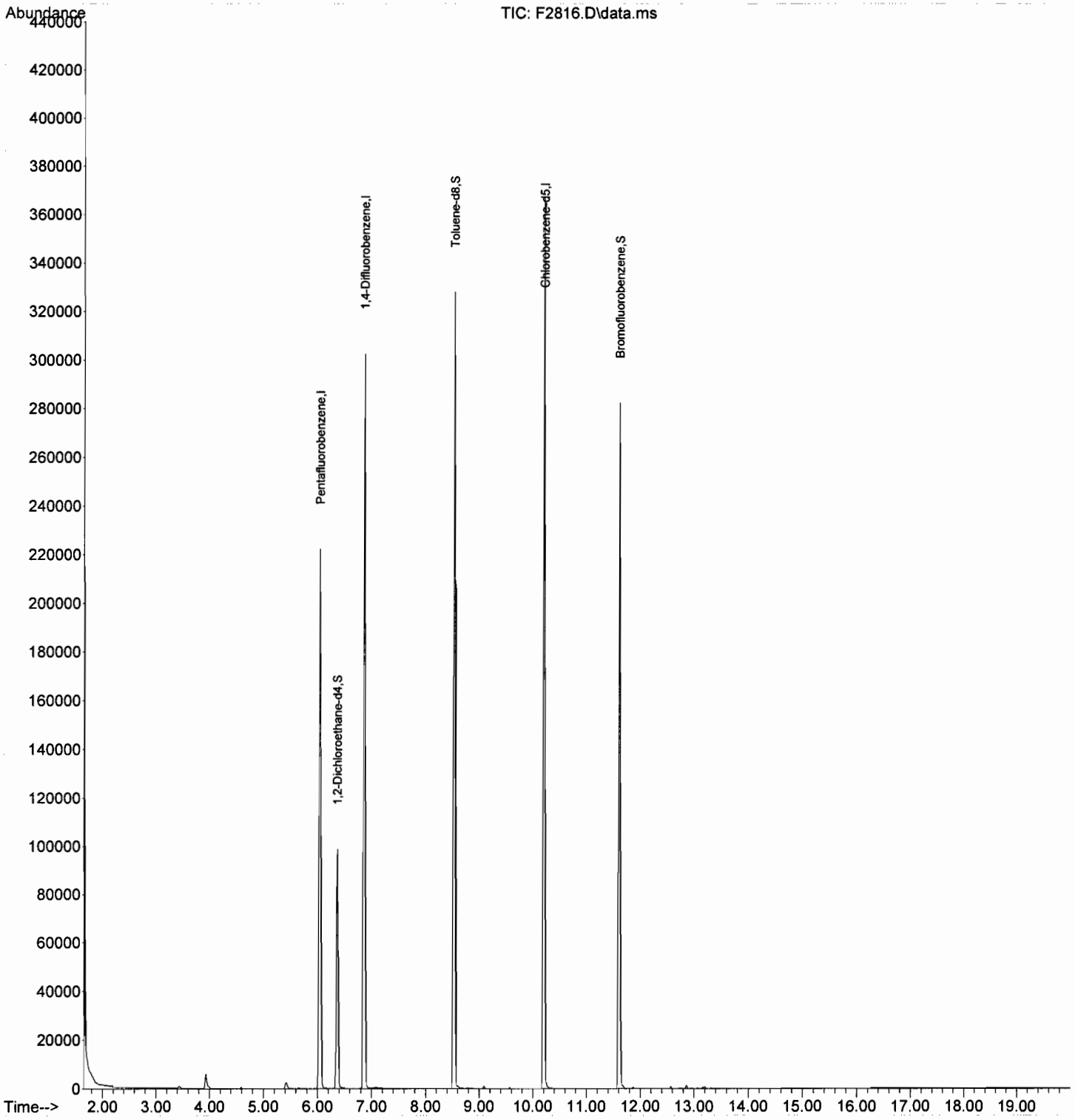
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2816.D
Acq On : 17 Oct 2016 21:03
Operator : XING
Sample : E-32_(4.5-5),E16-09537-048,S,4.4g,7.40
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Oct 18 11:21:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2817.D
Acq On : 17 Oct 2016 21:34
Operator : XING
Sample : E-32_(5.5-6),E16-09537-049,S,4g,8.10
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/12/16,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 18 11:22:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

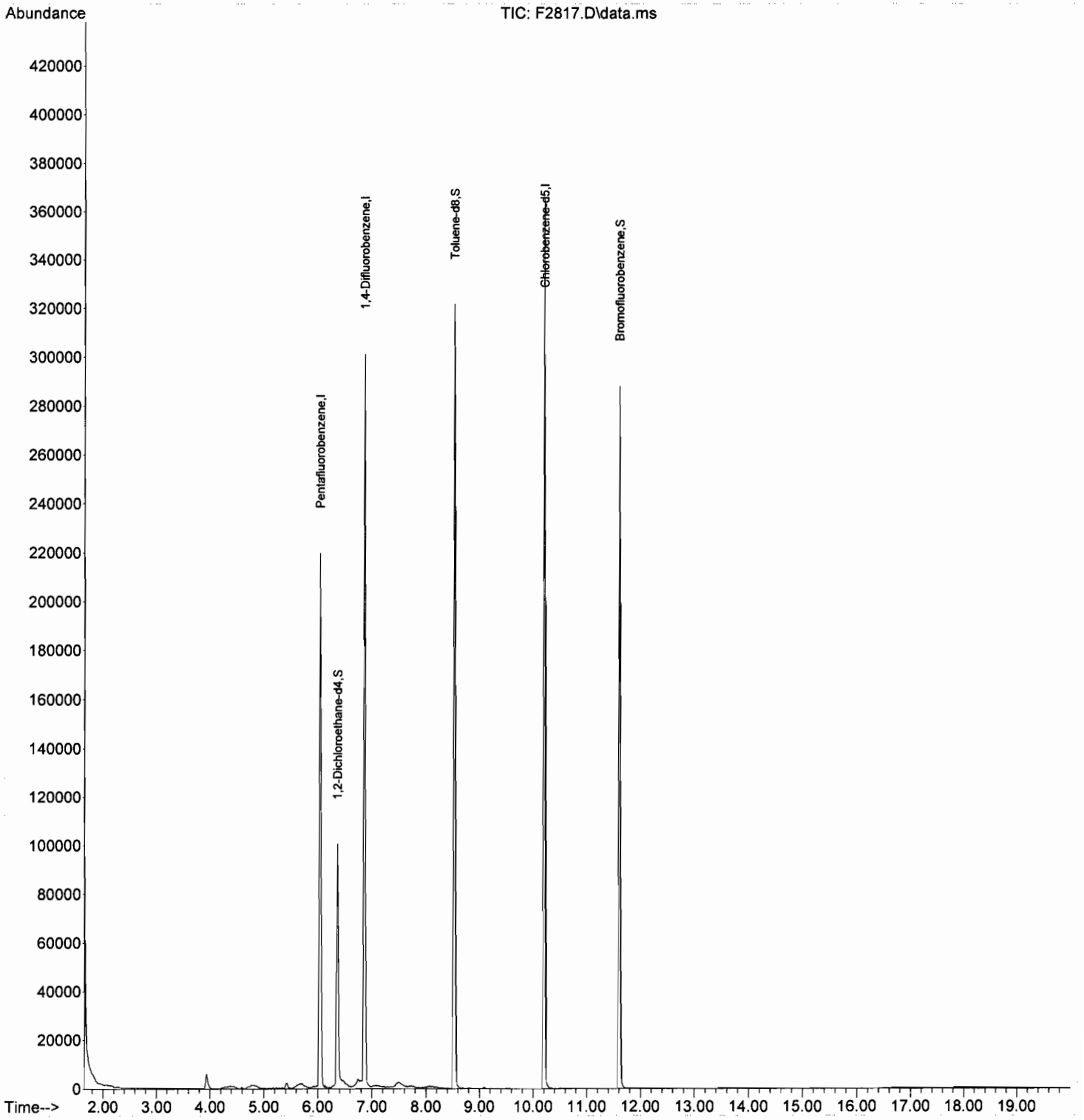
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	144451	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	228924	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	197828	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	82861	69.45	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 138.90%			
41) Toluene-d8	8.526	98	227346	50.51	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 101.02%			
59) Bromofluorobenzene	11.602	95	110223	50.31	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 100.62%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2817.D
Acq On : 17 Oct 2016 21:34
Operator : XING
Sample : E-32_(5.5-6),E16-09537-049,S,4g,8.10
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/12/16,1
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Oct 18 11:22:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5932.D
Acq On : 20 Oct 2016 11:04
Operator : BARBARA
Sample : TRIP_BLANK,E16-09537-060,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/10/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 12:34:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.41	168	255022	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	383499	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	335976	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	136761	46.20	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 92.40%			
41) Toluene-d8	8.91	98	445221	48.90	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.80%			
59) Bromofluorobenzene	11.99	95	197383	48.12	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 96.24%			

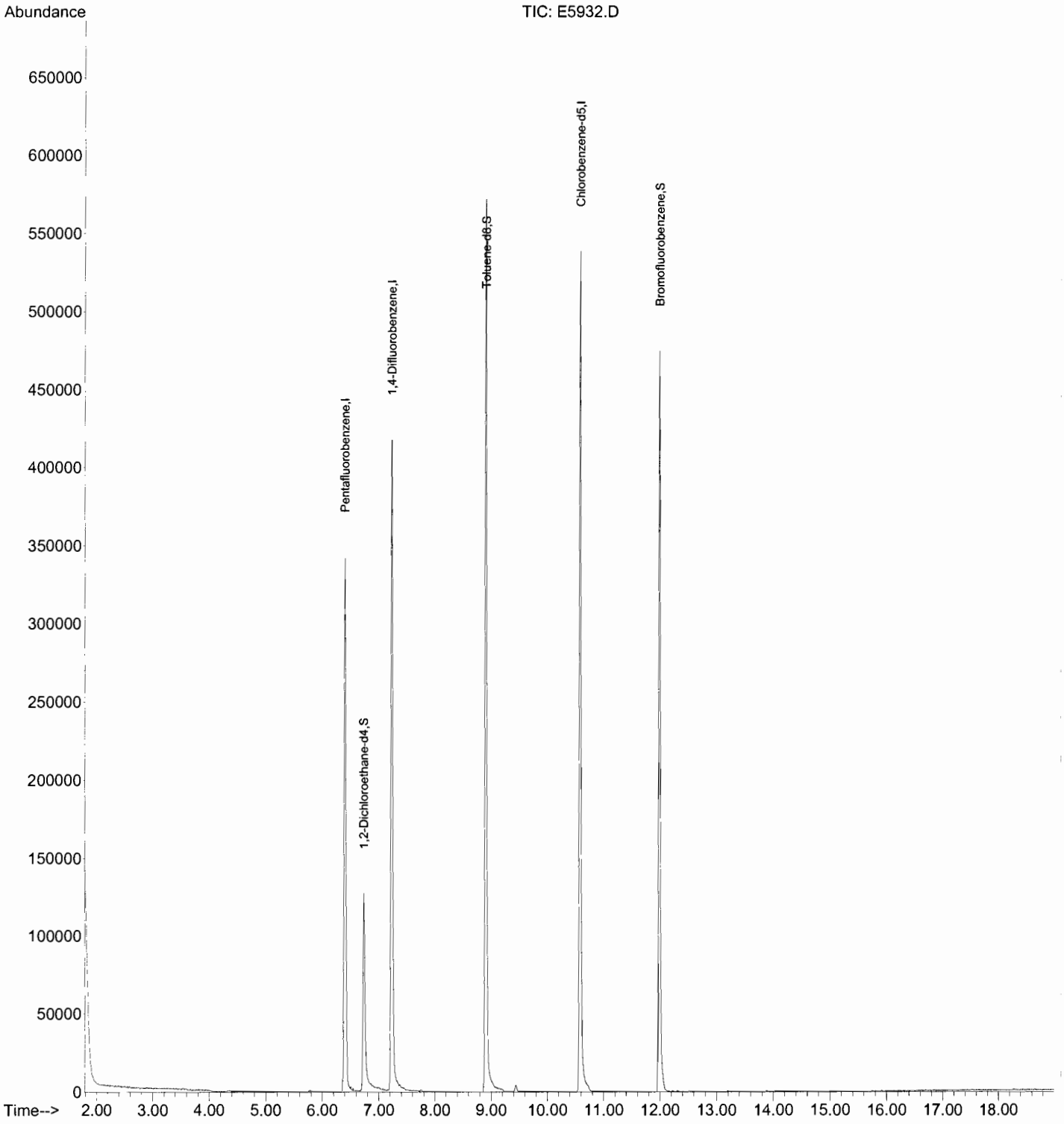
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5932.D
Acq On : 20 Oct 2016 11:04
Operator : BARBARA
Sample : TRIP_BLANK,E16-09537-060,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/10/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 12:34:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA161019a
Client ID: BLKA161019
Date Received: NA
Date Analyzed: 10/20/2016
Data file: E5925.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.500	0.381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5925.D
Acq On : 20 Oct 2016 6:43
Operator : BARBARA
Sample : BLKA161019,BLKA161019a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 20 09:34:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.41	168	261357	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	409976	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	339365	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	158596	52.28	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 104.56%			
41) Toluene-d8	8.91	98	459978	47.26	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.52%			
59) Bromofluorobenzene	11.99	95	202720	48.92	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 97.84%			

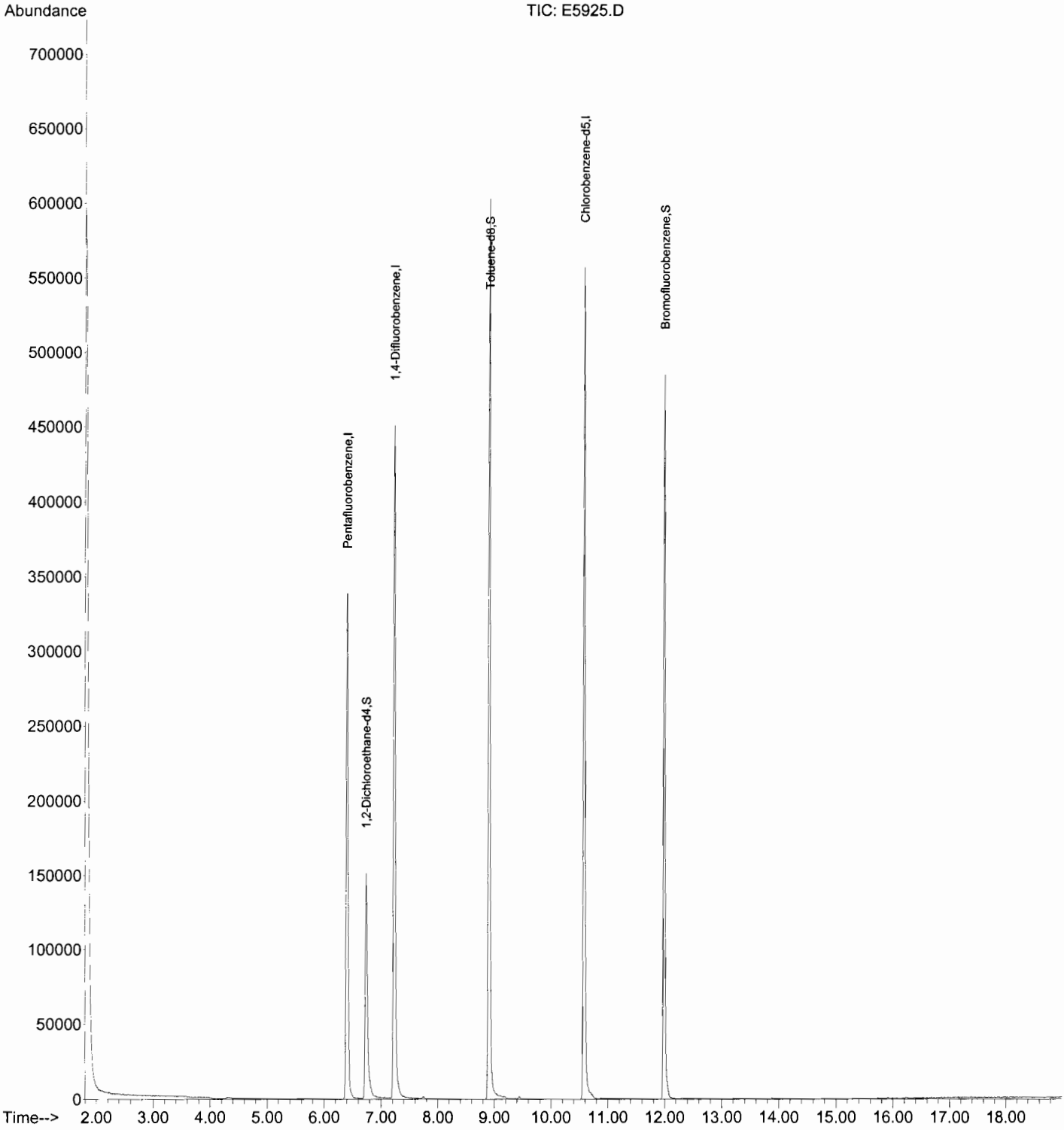
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5925.D
Acq On : 20 Oct 2016 6:43
Operator : BARBARA
Sample : BLKA161019,BLKA161019a,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Oct 20 09:34:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS161017-01
Client ID: BLKS161017-01
Date Received:
Date Analyzed: 10/17/2016
Data file: F2802.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.001	0.000353

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2802.D
Acq On : 17 Oct 2016 13:45
Operator : XING
Sample : BLKS161017-01,BLKS161017-01,S,5g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 11:34:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	181530	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	269440	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	227675	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	85304	56.89	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 113.78%			
41) Toluene-d8	8.526	98	260137	49.10	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 98.20%			
59) Bromofluorobenzene	11.602	95	120906	47.95	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 95.90%			

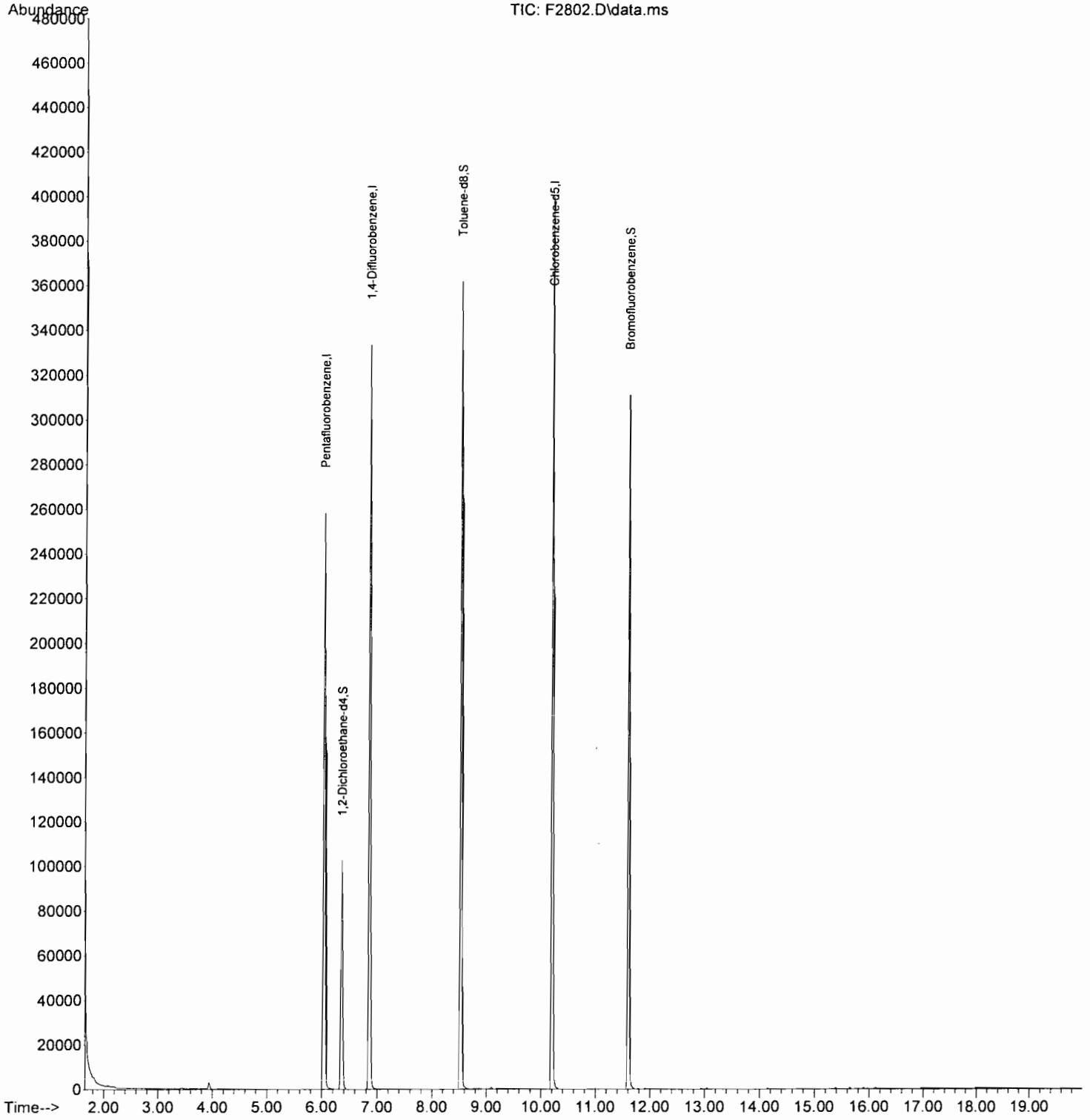
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-17-16\
Data File : F2802.D
Acq On : 17 Oct 2016 13:45
Operator : XING
Sample : BLKS161017-01,BLKS161017-01,S,5g,0
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 18 11:34:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKS161024-01
Client ID: BLKS161024-01
Date Received:
Date Analyzed: 10/24/2016
Data file: F2967.D

GC/MS Column: DB-624
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.001	0.000353

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2967.D
Acq On : 24 Oct 2016 13:11
Operator : XING
Sample : BLKS161024-01,BLKS161024-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

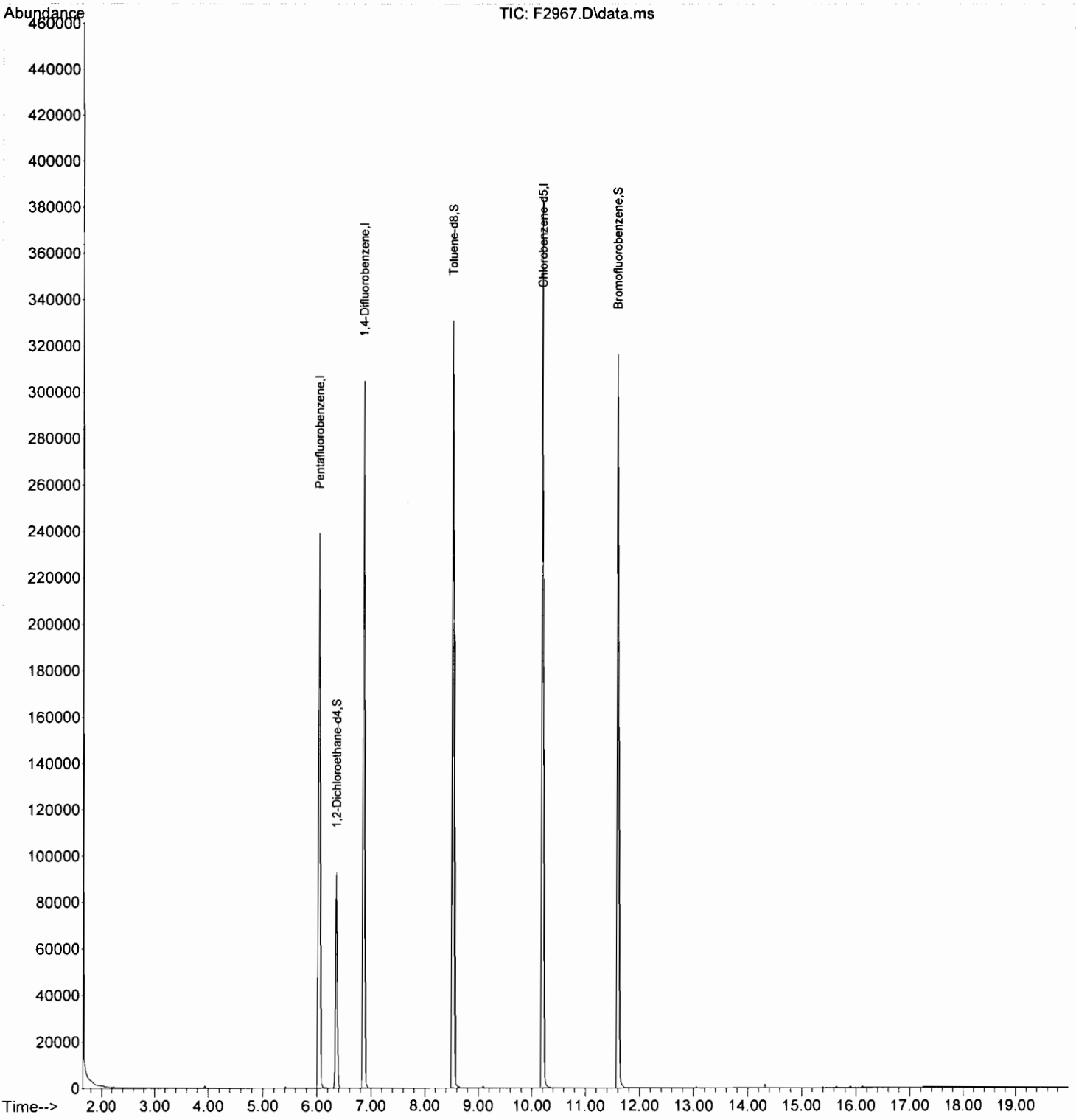
Quant Time: Oct 24 14:11:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.039	168	169473	50.00	UG	0.00
31) 1,4-Difluorobenzene	6.861	114	249742	50.00	UG	0.00
50) Chlorobenzene-d5	10.201	117	222908	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.364	65	80654	57.62	UG	0.00
Spiked Amount 50.000	Range 37 - 158		Recovery = 115.24%			
41) Toluene-d8	8.526	98	240392	48.95	UG	0.00
Spiked Amount 50.000	Range 45 - 154		Recovery = 97.90%			
59) Bromofluorobenzene	11.602	95	120248	48.71	UG	0.00
Spiked Amount 50.000	Range 46 - 150		Recovery = 97.42%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\10-24-16\
Data File : F2967.D
Acq On : 24 Oct 2016 13:11
Operator : XING
Sample : BLKS161024-01,BLKS161024-01,S,5g,0
Misc :
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 24 14:11:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\FS101016.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 11 12:30:33 2016
Response via : Initial Calibration



PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/12/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA161010-14	AQUEOUS	80		86		77		102	
PCB	LCSA161010-14	AQUEOUS	74		84		72		91	
COMPOSITE_	E16-09038-022MS	AQUEOUS	72		92		69		103	
COMPOSITE_	E16-09038-023MS	AQUEOUS	73		94		70		111	
DISCRETE	E16-09038-016	AQUEOUS	64		72		62		78	
DISCRETE	E16-09038-017	AQUEOUS	60		79		59		77	
COMPOSIT	E16-09038-018	AQUEOUS	68		78		66		79	
COMPOSIT	E16-09038-019	AQUEOUS	63		82		62		78	
COMPOSIT	E16-09038-020	AQUEOUS	62		74		59		78	
COMPOSIT	E16-09038-021	AQUEOUS	63		87		62		83	
COMPOSIT	E16-09038-024	AQUEOUS	71		82		68		97	
COMPOSIT	E16-09038-025	AQUEOUS	61		82		59		77	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/18/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA161017-25	AQUEOUS	72		66		69		66	
PCB	LCSA161017-25	AQUEOUS	74		70		69		69	
MW-P74-1	E16-09408-001	AQUEOUS	60		66		60		67	
FB-10101	E16-09408-002	AQUEOUS	78		74		74		72	
EB-10101	E16-09537-021	AQUEOUS	63		70		60		73	
EB-10111	E16-09537-044	AQUEOUS	72		78		69		74	
EB-10121	E16-09581-020	AQUEOUS	67		73		66		70	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/18/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-13	SOIL	92		91		89		96	
PCB	LCSS161017-13	SOIL	87		88		83		94	
PCB	E16-09507-001MS	SOLID	55		70		69		80	
PCB	E16-09507-001MS	SOLID	56		79		71		78	
WC-CONCR	E16-09507-001	SOLID	58		74		74		82	
WC-4	E16-09508-001	SOIL	65		95		78		91	
PX-4B	E16-09509-008	SOIL	93		93		92		92	
E-54_(0.	E16-09537-001	SOIL	100		99		84		119	
E-42_(0.	E16-09537-003	SOIL	89		95		87		97	
E-42_(2-	E16-09537-004	SOIL	84		93		86		92	
E-51_(0.	E16-09537-007	SOIL	89		106		89		96	
E-51_(2-	E16-09537-008	SOIL	92		103		91		93	
E-51_(3-	E16-09537-009	SOIL	89		95		89		95	
E-49_(0.	E16-09537-010	SOIL	88		94		87		85	
E-52_(0.	E16-09537-011	SOIL	89		111		90		105	
E-37_(0.	E16-09537-012	SOIL	88		107		88		87	
E-44_(0.	E16-09537-013	SOIL	88		97		88		87	
E-44_(2-	E16-09537-014	SOIL	89		99		89		96	
E-60_(0.	E16-09537-016	SOIL	90		106		91		98	
E-36_(0.	E16-09537-017	SOIL	87		109		88		116	
E-36_(2-	E16-09537-018	SOIL	76		107		81		101	
E-47_(0.	E16-09537-019	SOIL	84		96		85		88	
E-54_(0.	E16-09537-001DL	SOIL	107		111		88		109	
E-42_(3-	E16-09537-005	SOIL	86		100		85		98	
E-60_(0.	E16-09537-016DL	SOIL	93		113		91		107	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/18/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-14	SOIL	87		98		90		90	
PCB	LCSS161017-14	SOIL	83		95		80		86	
E-43_(0.	E16-09537-022	SOIL	74		98		84		111	
E-43_(2-	E16-09537-023	SOIL	79		84		83		124	
E-43_(3-	E16-09537-024	SOIL	81		88		82		99	
E-55_(4.	E16-09537-026	SOIL	81		91		82		93	
E-34_(3-	E16-09537-027	SOIL	82		93		83		89	
E-57_(4.	E16-09537-029	SOIL	82		93		82		86	
E-57_(6-	E16-09537-030	SOIL	83		97		84		90	
E-56_(4.	E16-09537-031	SOIL	83		98		83		88	
E-56_(6-	E16-09537-032	SOIL	85		101		86		92	
E-33_(0.	E16-09537-037	SOIL	75		92		81		99	
E-33_(2-	E16-09537-038	SOIL	77		92		82		97	
E-33_(3-	E16-09537-039	SOIL	79		93		82		95	
E-33_(4.	E16-09537-040	SOIL	81		94		82		89	
E-33_(5.	E16-09537-041	SOIL	82		97		83		90	
E-40_(4.	E16-09537-042	SOIL	83		98		83		90	
E-39_(4.	E16-09537-043	SOIL	85		102		86		92	
E-32_(0.	E16-09537-045	SOIL	77		94		81		99	
E-32_(2-	E16-09537-046	SOIL	79		97		84		99	
E-32_(3-	E16-09537-047	SOIL	80		97		83		92	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/18/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-14	SOIL	87		98		90		90	
PCB	LCSS161017-14	SOIL	83		95		80		86	
PCB	E16-09537-020MS	SOIL	100		120		100		120	
PCB	E16-09537-020MS	SOIL	100		120		120		100	
X-1_(0.5	E16-09537-020	SOIL	100		120		120		100	
E-43_(0.	E16-09537-022DL	SOIL	95		121		91		122	
E-33_(0.	E16-09537-037DL	SOIL	88		107		86		122	
E-33_(2-	E16-09537-038DL	SOIL	91		110		88		104	
E-32_(0.	E16-09537-045DL	SOIL	87		105		85		101	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-23	SOIL	85		99		89		89	
PCB	LCSS161017-23	SOIL	84		102		82		90	
PCB	E16-09537-048MS	SOIL	83		102		82		90	
PCB	E16-09537-048MS	SOIL	84		103		83		90	
E-32_(4.	E16-09537-048	SOIL	82		101		82		90	
E-32_(5.	E16-09537-049	SOIL	82		100		82		90	
E-41_(0.	E16-09537-050	SOIL	79		98		82		98	
E-41_(2-	E16-09537-051	SOIL	81		100		82		94	
X-2_(2-2	E16-09537-054	SOIL	80		99		81		90	
E-50_(4.	E16-09537-055	SOIL	72		107		79		101	
E-51_(4.	E16-09537-056	SOIL	84		100		84		98	
E-50_(0.	E16-09537-058	SOIL	0	D	0	D	0	D	0	D
E-41_(0.	E16-09537-050DL	SOIL	91		109		93		104	
E-50_(2-	E16-09537-059	SOIL	81		94		83		102	
WC-1	E16-09555-001	SOIL	81		94		82		105	
WC-2	E16-09555-002	SOIL	81		96		82		90	
E-35_(2-	E16-09581-002	SOIL	78		79		82		109	
E-53_(0.	E16-09581-007	SOIL	84		89		88		109	
E-53_(0.	E16-09581-008	SOIL	79		82		83		93	
E-59_(0.	E16-09581-009	SOIL	76		81		81		112	
E-48_(0.	E16-09581-010	SOIL	76		96		85		113	
E-35_(0.	E16-09581-001	SOIL	77		75		81		93	
E-46_(0.	E16-09581-011	SOIL	86		106		96		123	
E-45_(0.	E16-09581-003	SOIL	76		83		79		128	
E-48_(0.	E16-09581-010DL	SOIL	90		104		91		112	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-23	SOIL	85		99		89		89	
PCB	LCSS161017-23	SOIL	84		102		82		90	
WC-SM	E16-09573-001DL	SOIL	85		105		85		100	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/26/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
BB-ST2-S	E16-09848-073		89		118		89		108	
PX-1	E16-09793-001	SOIL	81		98		84		95	
PX-2	E16-09793-002	SOIL	84		110		86		93	
PX-3	E16-09793-003	SOIL	83		106		86		97	
PX-4	E16-09793-004	SOIL	85		98		88		94	
PX-5	E16-09793-005	SOIL	83		108		85		97	
E-54_(2-	E16-09537-002	SOIL	77		106		80		98	
E-42_(4-	E16-09537-006	SOIL	81		97		83		94	
E-43_(4.	E16-09537-025	SOIL	81		96		83		94	
E-41_(5-	E16-09537-053	SOIL	88		112		91		100	
E-44_(4.	E16-09537-057	SOIL	84		102		87		101	
20161024	E16-09856-001	SOIL	84		109		87		108	
E-45_(2-	E16-09581-004	SOIL	79		104		81		104	
E-45_(4.	E16-09581-006	SOIL	81		95		84		92	
E-46_(2-	E16-09581-012	SOIL	81		94		84		99	
E-46_(4.	E16-09581-014	SOIL	82		102		85		103	
PCB	BLKS161025-09	SOIL	86		91		91		99	
PCB	LCSS161025-09	SOIL	80		95		80		88	
PCB	E16-09793-001MS	SOIL	87		101		89		93	
PCB	E16-09793-001MS	SOIL	84		102		86		100	
SOIL	E16-09799-001	SOIL	88		99		88		94	
BB-ST1-S	E16-09848-072		103		104		108		109	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSA161017-25
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3810.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	357.5	72		32-132
Aroclor-1260	500	0.0	387.8	78		46-137

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161017-13
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3817.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	479.6	96		40-137
Aroclor-1260	500	0.0	528.3	106		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161017-14
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0810.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	436.2	87		40-137
Aroclor-1260	500	0.0	451.6	90		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161017-23
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0845.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	467.9	94		40-137
Aroclor-1260	500	0.0	491.0	98		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161025-09
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4086.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	587.5	118		40-137
Aroclor-1260	500	0.0	647.0	129		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09038-020
Date Received: 09/28/2016
Date Extracted: 10/10/2016
Date Analyzed: 10/12/2016
MS Data file: Y0762.D
MSD Data file: Y0763.D

GC Column: DB-5/DB1701P
Sample wt/vol: 500ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	382.6	77		374.2	75		2		15-144/21
Aroclor-1260	500	11.7	437.5	85		430.7	84		2		35-160/21

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09507-001
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
MS Data file: R3818.D
MSD Data file: R3819.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.10g
Matrix-Units: Solid-ug/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	333.3	67		369.6	74		10		12-163/25
Aroclor-1260	500	0.0	448.8	90		421.1	84		6		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09537-020
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
MS Data file: Y0836.D
MSD Data file: Y0837.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.23g
Matrix-Units: Soil-µg/Kg
% Moisture: 14.8
Dilution Factor: 200
Dilution Factor: 200

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	NC	NC	NC	0.0	0	NC	NC	NC	12-163/25
Aroclor-1260	500	84052.0	72894.0	-2232	*$	88890.0	968	*$	20		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09537-048
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
MS Data file: Y0846.D
MSD Data file: Y0847.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.67g
Matrix-Units: Soil-µg/Kg
% Moisture: 7.40
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	459.9	92		474.0	95		3		12-163/25
Aroclor-1260	500	27.1	517.1	98		528.9	100		2		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09793-001
Date Received: 10/20/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
MS Data file: R4087.D
MSD Data file: R4088.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.65g
Matrix-Units: Soil-µg/Kg
% Moisture: 10.1
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	637.8	128		617.4	123		3		12-163/25
Aroclor-1260	500	0.0	673.6	135		722.5	145		7		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

PCB METHOD BLANK SUMMARY

Lab File ID:	Y0760.D	Instrument ID:	GC-Y
Date Extracted:	10/10/2016	Matrix:	AQUEOUS
Date Analyzed:	10/12/2016	Time Analyzed:	09:05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA161010-14	10/12/2016	09:22
COMPOSITE_	E16-09038-022MS	10/12/2016	09:44
COMPOSITE_	E16-09038-023MSD	10/12/2016	10:01
DISCRETE	E16-09038-016	10/12/2016	10:18
DISCRETE	E16-09038-017	10/12/2016	10:36
COMPOSIT	E16-09038-018	10/12/2016	10:53
COMPOSIT	E16-09038-019	10/12/2016	11:11
COMPOSIT	E16-09038-020	10/12/2016	11:28
COMPOSIT	E16-09038-021	10/12/2016	11:45
COMPOSIT	E16-09038-024	10/12/2016	12:03
COMPOSIT	E16-09038-025	10/12/2016	12:20

PCB METHOD BLANK SUMMARY

Lab File ID:	R3809.D	Instrument ID:	GC-R
Date Extracted:	10/17/2016	Matrix:	AQUEOUS
Date Analyzed:	10/18/2016	Time Analyzed:	15:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA161017-25	10/18/2016	16:16
MW-P74-1	E16-09408-001	10/18/2016	16:37
FB-10101	E16-09408-002	10/18/2016	16:54
EB-10101	E16-09537-021	10/18/2016	17:12
EB-10111	E16-09537-044	10/18/2016	17:29
EB-10121	E16-09581-020	10/18/2016	17:47

PCB METHOD BLANK SUMMARY

Lab File ID: R3816.D Instrument ID: GC-R

Date Extracted: 10/17/2016 Matrix: SOIL

Date Analyzed: 10/18/2016 Time Analyzed: 18:22

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-13	10/18/2016	18:39
PCB	E16-09507-001MS	10/18/2016	18:57
PCB	E16-09507-001MSD	10/18/2016	19:14
WC-CONCR	E16-09507-001	10/18/2016	19:32
WC-4	E16-09508-001	10/18/2016	19:49
PX-4B	E16-09509-008	10/18/2016	20:42
E-54_(0.	E16-09537-001	10/18/2016	20:59
E-42_(0.	E16-09537-003	10/18/2016	21:17
E-42_(2-	E16-09537-004	10/18/2016	21:34
E-51_(0.	E16-09537-007	10/18/2016	23:19
E-51_(2-	E16-09537-008	10/18/2016	23:36
E-51_(3-	E16-09537-009	10/18/2016	23:54
E-49_(0.	E16-09537-010	10/19/2016	00:11
E-52_(0.	E16-09537-011	10/19/2016	00:29
E-37_(0.	E16-09537-012	10/19/2016	00:46
E-44_(0.	E16-09537-013	10/19/2016	01:04
E-44_(2-	E16-09537-014	10/19/2016	01:21
E-60_(0.	E16-09537-016	10/19/2016	01:39
E-36_(0.	E16-09537-017	10/19/2016	02:14
E-36_(2-	E16-09537-018	10/19/2016	02:49
E-47_(0.	E16-09537-019	10/19/2016	03:24
E-54_(0.	E16-09537-001DL	10/19/2016	08:46
E-42_(3-	E16-09537-005	10/19/2016	09:39
E-60_(0.	E16-09537-016DL	10/19/2016	09:56

PCB METHOD BLANK SUMMARY

Lab File ID: Y0809.D

Instrument ID: GC-Y

Date Extracted: 10/17/2016

Matrix: SOIL

Date Analyzed: 10/18/2016

Time Analyzed: 16:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-14	10/18/2016	16:27
E-43_(0.	E16-09537-022	10/18/2016	18:28
E-43_(2-	E16-09537-023	10/18/2016	18:45
E-43_(3-	E16-09537-024	10/18/2016	19:03
E-55_(4.	E16-09537-026	10/18/2016	19:20
E-34_(3-	E16-09537-027	10/18/2016	19:37
E-57_(4.	E16-09537-029	10/18/2016	19:55
E-57_(6-	E16-09537-030	10/18/2016	20:12
E-56_(4.	E16-09537-031	10/18/2016	20:29
E-56_(6-	E16-09537-032	10/18/2016	20:47
E-33_(0.	E16-09537-037	10/18/2016	22:13
E-33_(2-	E16-09537-038	10/18/2016	22:30
E-33_(3-	E16-09537-039	10/18/2016	22:48
E-33_(4.	E16-09537-040	10/18/2016	23:05
E-33_(5.	E16-09537-041	10/18/2016	23:22
E-40_(4.	E16-09537-042	10/18/2016	23:40
E-39_(4.	E16-09537-043	10/18/2016	23:57
E-32_(0.	E16-09537-045	10/19/2016	00:14
E-32_(2-	E16-09537-046	10/19/2016	00:32
E-32_(3-	E16-09537-047	10/19/2016	00:49

PCB METHOD BLANK SUMMARY

Lab File ID:	Y0809.D	Instrument ID:	GC-Y
Date Extracted:	10/17/2016	Matrix:	SOIL
Date Analyzed:	10/18/2016	Time Analyzed:	16:10

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-14	10/18/2016	16:27
PCB	E16-09537-020MS	10/19/2016	08:35
PCB	E16-09537-020MSD	10/19/2016	08:52
X-1_(0.5	E16-09537-020	10/19/2016	09:09
E-43_(0.	E16-09537-022DL	10/19/2016	09:27
E-33_(0.	E16-09537-037DL	10/19/2016	09:44
E-33_(2-	E16-09537-038DL	10/19/2016	10:01
E-32_(0.	E16-09537-045DL	10/19/2016	10:19

PCB METHOD BLANK SUMMARY

Lab File ID: Y0844.D Instrument ID: GC-Y

Date Extracted: 10/17/2016 Matrix: SOIL

Date Analyzed: 10/19/2016 Time Analyzed: 11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-23	10/19/2016	11:33
PCB	E16-09537-048MS	10/19/2016	11:50
PCB	E16-09537-048MSD	10/19/2016	12:08
E-32_(4.	E16-09537-048	10/19/2016	12:25
E-32_(5.	E16-09537-049	10/19/2016	12:42
E-41_(0.	E16-09537-050	10/19/2016	13:00
E-41_(2-	E16-09537-051	10/19/2016	13:17
X-2_(2-2	E16-09537-054	10/19/2016	13:34
E-50_(4.	E16-09537-055	10/19/2016	13:52
E-51_(4.	E16-09537-056	10/19/2016	14:09
E-50_(0.	E16-09537-058	10/19/2016	15:23
E-41_(0.	E16-09537-050DL	10/19/2016	16:03
E-50_(2-	E16-09537-059	10/19/2016	16:37
WC-1	E16-09555-001	10/19/2016	16:55
WC-2	E16-09555-002	10/19/2016	17:12
E-35_(2-	E16-09581-002	10/19/2016	18:04
E-53_(0.	E16-09581-007	10/19/2016	18:38
E-53_(0.	E16-09581-008	10/19/2016	18:56
E-59_(0.	E16-09581-009	10/19/2016	19:13
E-48_(0.	E16-09581-010	10/19/2016	19:30
E-35_(0.	E16-09581-001	10/20/2016	10:28
E-46_(0.	E16-09581-011	10/20/2016	10:45
E-45_(0.	E16-09581-003	10/20/2016	11:02
E-48_(0.	E16-09581-010DL	10/20/2016	11:20

PCB METHOD BLANK SUMMARY

Lab File ID:	Y0844.D	Instrument ID:	GC-Y
Date Extracted:	10/17/2016	Matrix:	SOIL
Date Analyzed:	10/19/2016	Time Analyzed:	11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-23	10/19/2016	11:33
WC-SM	E16-09573-001DL	10/20/2016	11:37

PCB METHOD BLANK SUMMARY

Lab File ID:	R4085.D	Instrument ID:	GC-R
Date Extracted:	10/25/2016	Matrix:	-
Date Analyzed:	10/27/2016	Time Analyzed:	08:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
BB-ST2-S	E16-09848-073	10/27/2016	00:07
PX-1	E16-09793-001	10/27/2016	00:42
PX-2	E16-09793-002	10/27/2016	01:17
PX-3	E16-09793-003	10/27/2016	01:52
PX-4	E16-09793-004	10/27/2016	02:27
PX-5	E16-09793-005	10/27/2016	03:01
E-54_(2-	E16-09537-002	10/27/2016	03:36
E-42_(4-	E16-09537-006	10/27/2016	03:54
E-43_(4.	E16-09537-025	10/27/2016	04:11
E-41_(5-	E16-09537-053	10/27/2016	04:29
E-44_(4.	E16-09537-057	10/27/2016	04:46
20161024	E16-09856-001	10/27/2016	05:03
E-45_(2-	E16-09581-004	10/27/2016	05:21
E-45_(4.	E16-09581-006	10/27/2016	05:38
E-46_(2-	E16-09581-012	10/27/2016	05:56
E-46_(4.	E16-09581-014	10/27/2016	06:13
PCB	LCSS161025-09	10/27/2016	08:55
PCB	E16-09793-001MS	10/27/2016	09:13
PCB	E16-09793-001MSD	10/27/2016	09:30
SOIL	E16-09799-001	10/27/2016	10:05
BB-ST1-S	E16-09848-072	10/27/2016	10:22

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.03	3.03	3.03	3.03	3.04	3.03	2.96	3.10
Aroclor-1016 {2}	3.85	3.85	3.85	3.85	3.85	3.85	3.78	3.92
Aroclor-1016 {3}	4.39	4.40	4.40	4.40	4.40	4.40	4.33	4.47
Aroclor-1016 {4}	4.90	4.90	4.90	4.90	4.90	4.90	4.83	4.97
Aroclor-1016 {5}	5.29	5.29	5.29	5.29	5.29	5.29	5.22	5.36
Aroclor-1221			1.95				1.88	2.02
Aroclor-1221 {2}			2.83				2.76	2.90
Aroclor-1221 {3}			2.95				2.88	3.02
Aroclor-1221 {4}			3.03				2.96	3.10
Aroclor-1221 {5}			3.62				3.55	3.69
Aroclor-1232			3.03				2.96	3.10
Aroclor-1232 {2}			3.85				3.78	3.92
Aroclor-1232 {3}			4.51				4.44	4.58
Aroclor-1232 {4}			5.10				5.03	5.17
Aroclor-1232 {5}			5.29				5.22	5.36
Aroclor-1242			3.85				3.78	3.92
Aroclor-1242 {2}			4.78				4.71	4.85
Aroclor-1242 {3}			5.10				5.03	5.17
Aroclor-1242 {4}			5.79				5.72	5.86
Aroclor-1242 {5}			6.07				6.00	6.14
Aroclor-1248			4.25				4.17	4.33
Aroclor-1248 {2}			4.78				4.70	4.86
Aroclor-1248 {3}			5.10				5.02	5.18
Aroclor-1248 {4}			5.79				5.71	5.87
Aroclor-1248 {5}			6.07				5.99	6.15
Aroclor-1254			6.19				6.11	6.27
Aroclor-1254 {2}			6.62				6.54	6.70
Aroclor-1254 {3}			6.79				6.70	6.88
Aroclor-1254 {4}			7.23				7.14	7.32
Aroclor-1254 {5}			8.07				7.98	8.16
Aroclor-1260	8.07	8.06	8.06	8.06	8.06	8.07	7.17	8.97
Aroclor-1260 {2}	8.74	8.74	8.74	8.73	8.74	8.74	7.84	9.64
Aroclor-1260 {3}	9.21	9.21	9.21	9.21	9.21	9.21	8.31	10.11
Aroclor-1260 {4}	9.70	9.70	9.69	9.69	9.69	9.69	8.79	10.59
Aroclor-1260 {5}	10.75	10.75	10.75	10.75	10.75	10.75	9.85	11.65

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	491014	579943	625620	612734	596105	581083	9.16
Aroclor-1016 {2}	752234	865462	845296	831053	792257	817260	5.52
Aroclor-1016 {3}	978759	1192176	1134924	1111425	1078138	1099084	7.20
Aroclor-1016 {4}	503644	558117	552031	528304	503814	529182	4.87
Aroclor-1016 {5}	772440	885842	905386	896982	879382	868007	6.26
Aroclor-1221			330955				
Aroclor-1221 {2}			524118				
Aroclor-1221 {3}			331582				
Aroclor-1221 {4}			1183134				
Aroclor-1221 {5}			242831				
Aroclor-1232			774050				
Aroclor-1232 {2}			427464				
Aroclor-1232 {3}			398104				
Aroclor-1232 {4}			408494				
Aroclor-1232 {5}			565165				
Aroclor-1242			772812				
Aroclor-1242 {2}			558750				
Aroclor-1242 {3}			658547				
Aroclor-1242 {4}			1252589				
Aroclor-1242 {5}			1154570				
Aroclor-1248			1683740				
Aroclor-1248 {2}			969193				
Aroclor-1248 {3}			1212917				
Aroclor-1248 {4}			2172911				
Aroclor-1248 {5}			1525846				
Aroclor-1254			2481449				
Aroclor-1254 {2}			1566129				
Aroclor-1254 {3}			3056941				
Aroclor-1254 {4}			3186703				
Aroclor-1254 {5}			3108056				
Aroclor-1260	2335344	2625739	2678500	2649292	2685068	2594789	5.66
Aroclor-1260 {2}	1178434	1257909	1275058	1256075	1235419	1240579	3.02
Aroclor-1260 {3}	2968230	3409371	3549851	3520945	3577307	3405141	7.41
Aroclor-1260 {4}	1457030	1625114	1672954	1679539	1720836	1631095	6.32
Aroclor-1260 {5}	685104	784132	829026	826856	841999	793423	8.11
					Average %RSD		6.35

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.73	3.72	3.73	3.72	3.73	3.73	3.66	3.80
Aroclor-1016 {2}	4.34	4.33	4.33	4.33	4.34	4.33	4.26	4.40
Aroclor-1016 {3}	5.10	5.09	5.09	5.09	5.10	5.10	5.03	5.17
Aroclor-1016 {4}	5.31	5.30	5.30	5.30	5.31	5.30	5.23	5.37
Aroclor-1016 {5}	5.48	5.48	5.48	5.48	5.48	5.48	5.41	5.55
Aroclor-1221			2.37				2.30	2.44
Aroclor-1221 {2}			3.40				3.33	3.47
Aroclor-1221 {3}			3.64				3.57	3.71
Aroclor-1221 {4}			3.73				3.66	3.80
Aroclor-1221 {5}			5.10				5.03	5.17
Aroclor-1232			3.63				3.56	3.70
Aroclor-1232 {2}			4.65				4.58	4.72
Aroclor-1232 {3}			5.09				5.02	5.16
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			6.08				6.01	6.15
Aroclor-1242			4.72				4.65	4.79
Aroclor-1242 {2}			5.48				5.41	5.55
Aroclor-1242 {3}			6.08				6.01	6.15
Aroclor-1242 {4}			6.24				6.17	6.31
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.09				5.01	5.17
Aroclor-1248 {2}			5.68				5.60	5.76
Aroclor-1248 {3}			6.08				6.00	6.16
Aroclor-1248 {4}			6.24				6.16	6.32
Aroclor-1248 {5}			6.59				6.51	6.67
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.11				8.02	8.20
Aroclor-1254 {4}			8.29				8.20	8.38
Aroclor-1254 {5}			9.11				9.02	9.20
Aroclor-1260	7.86	7.86	7.86	7.85	7.85	7.86	6.96	8.76
Aroclor-1260 {2}	8.11	8.11	8.11	8.11	8.11	8.11	7.21	9.01
Aroclor-1260 {3}	9.71	9.70	9.70	9.70	9.70	9.70	8.80	10.60
Aroclor-1260 {4}	10.22	10.21	10.21	10.21	10.21	10.21	9.31	11.11
Aroclor-1260 {5}	10.81	10.80	10.80	10.80	10.80	10.80	9.90	11.70

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	426403	426642	396228	371630	359410	396062	7.78
Aroclor-1016 {2}	864011	887401	781794	737306	703504	794803	9.98
Aroclor-1016 {3}	1972319	1932857	1823089	1797534	1768300	1858820	4.78
Aroclor-1016 {4}	911060	914387	803776	776981	738814	829003	9.63
Aroclor-1016 {5}	643701	671039	612066	601557	589151	623503	5.36
Aroclor-1221			215372				
Aroclor-1221 {2}			329916				
Aroclor-1221 {3}			210241				
Aroclor-1221 {4}			776851				
Aroclor-1221 {5}			142408				
Aroclor-1232			126868				
Aroclor-1232 {2}			141929				
Aroclor-1232 {3}			929490				
Aroclor-1232 {4}			430081				
Aroclor-1232 {5}			452267				
Aroclor-1242			366894				
Aroclor-1242 {2}			640028				
Aroclor-1242 {3}			838724				
Aroclor-1242 {4}			714656				
Aroclor-1242 {5}			1375081				
Aroclor-1248			1136613				
Aroclor-1248 {2}			1742197				
Aroclor-1248 {3}			1260506				
Aroclor-1248 {4}			1153184				
Aroclor-1248 {5}			629450				
Aroclor-1254			1697548				
Aroclor-1254 {2}			1354206				
Aroclor-1254 {3}			947246				
Aroclor-1254 {4}			1300799				
Aroclor-1254 {5}			2205060				
Aroclor-1260	765096	821046	706809	686497	686944	733278	8.00
Aroclor-1260 {2}	1215391	1225936	1052349	1018750	1010835	1104652	9.70
Aroclor-1260 {3}	1113832	1089294	977222	952962	967974	1020257	7.37
Aroclor-1260 {4}	2246474	2259912	2163090	2112331	2178672	2192096	2.79
Aroclor-1260 {5}	1444735	1632071	1581478	1539906	1574551	1554548	4.48
					Average %RSD		6.99

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.35				8.23	8.47
Aroclor-1262 {2}			9.21				9.09	9.33
Aroclor-1262 {3}			9.84				9.72	9.96
Aroclor-1262 {4}			9.92				9.80	10.04
Aroclor-1262 {5}			10.75				10.63	10.87
Aroclor-1268			9.84				9.72	9.96
Aroclor-1268 {2}			9.92				9.80	10.04
Aroclor-1268 {3}			10.39				10.27	10.51
Aroclor-1268 {4}			10.52				10.40	10.64
Aroclor-1268 {5}			11.35				11.23	11.47

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.70				9.58	9.82
Aroclor-1262 {2}			10.21				10.09	10.33
Aroclor-1262 {3}			10.71				10.59	10.83
Aroclor-1262 {4}			10.80				10.68	10.92
Aroclor-1262 {5}			11.40				11.28	11.52
Aroclor-1268			10.71				10.59	10.83
Aroclor-1268 {2}			10.79				10.67	10.91
Aroclor-1268 {3}			11.04				10.92	11.16
Aroclor-1268 {4}			11.84				11.72	11.96
Aroclor-1268 {5}			12.26				12.14	12.38

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3214023				
Aroclor-1262 {2}			6477252				
Aroclor-1262 {3}			2175071				
Aroclor-1262 {4}			3008681				
Aroclor-1262 {5}			2257799				
Aroclor-1268			6368540				
Aroclor-1268 {2}			7166504				
Aroclor-1268 {3}			5747507				
Aroclor-1268 {4}			1409634				
Aroclor-1268 {5}			17232745				

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1790083				
Aroclor-1262 {2}			3965767				
Aroclor-1262 {3}			1363732				
Aroclor-1262 {4}			2783342				
Aroclor-1262 {5}			503618				
Aroclor-1268			3713532				
Aroclor-1268 {2}			3714475				
Aroclor-1268 {3}			3010293				
Aroclor-1268 {4}			1313352				
Aroclor-1268 {5}			9784435				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/12/2016 **Instrument ID:** GC-Y

Data File: Y0759.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	617080	6.19
Aroclor-1016 {2}	3.85	3.78	3.92	817260	806398	1.33
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1139593	3.69
Aroclor-1016 {4}	4.90	4.83	4.97	529182	549189	3.78
Aroclor-1016 {5}	5.29	5.22	5.36	868007	887458	2.24
Aroclor-1260	8.07	7.17	8.97	2594789	2566721	1.08
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1095460	11.70
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3294914	3.24
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1544358	5.32
Aroclor-1260 {5}	10.75	9.85	11.65	793423	729272	8.09

Data File: Y0759.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.74	3.66	3.80	396062	406290	2.58
Aroclor-1016 {2}	4.34	4.26	4.40	794803	802286	0.94
Aroclor-1016 {3}	5.11	5.03	5.17	1858820	1828461	1.63
Aroclor-1016 {4}	5.31	5.23	5.37	829003	776012	6.39
Aroclor-1016 {5}	5.49	5.41	5.55	623503	600958	3.62
Aroclor-1260	7.86	6.96	8.76	733278	699405	4.62
Aroclor-1260 {2}	8.12	7.21	9.01	1104652	1025676	7.15
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	979507	3.99
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2132394	2.72
Aroclor-1260 {5}	10.81	9.90	11.70	1554548	1597158	2.74

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/12/2016 **Instrument ID:** GC-Y

Data File: Y0772.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	620325	6.75
Aroclor-1016 {2}	3.85	3.78	3.92	817260	791811	3.11
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1150897	4.71
Aroclor-1016 {4}	4.90	4.83	4.97	529182	574583	8.58
Aroclor-1016 {5}	5.30	5.22	5.36	868007	917463	5.70
Aroclor-1260	8.07	7.17	8.97	2594789	2744680	5.78
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1187200	4.30
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3698762	8.62
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1759760	7.89
Aroclor-1260 {5}	10.76	9.85	11.65	793423	846130	6.64

Data File: Y0772.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	399592	0.89
Aroclor-1016 {2}	4.34	4.26	4.40	794803	798511	0.47
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1830994	1.50
Aroclor-1016 {4}	5.31	5.23	5.37	829003	788455	4.89
Aroclor-1016 {5}	5.48	5.41	5.55	623503	611301	1.96
Aroclor-1260	7.85	6.96	8.76	733278	716448	2.30
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1072551	2.91
Aroclor-1260 {3}	9.70	8.80	10.60	1020257	1025323	0.50
Aroclor-1260 {4}	10.21	9.31	11.11	2192096	2271665	3.63
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1654285	6.42

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.13	3.13	3.13	3.13	3.13	3.13	3.06	3.20
Aroclor-1016 {2}	3.95	3.95	3.94	3.94	3.94	3.94	3.87	4.01
Aroclor-1016 {3}	4.49	4.49	4.49	4.49	4.49	4.49	4.42	4.56
Aroclor-1016 {4}	4.88	4.99	4.99	4.99	4.99	4.97	4.90	5.04
Aroclor-1016 {5}	5.39	5.39	5.38	5.38	5.38	5.39	5.32	5.46
Aroclor-1221			2.06				1.99	2.13
Aroclor-1221 {2}			2.93				2.86	3.00
Aroclor-1221 {3}			3.06				2.99	3.13
Aroclor-1221 {4}			3.13				3.06	3.20
Aroclor-1221 {5}			3.71				3.64	3.78
Aroclor-1232			3.13				3.06	3.20
Aroclor-1232 {2}			3.94				3.87	4.01
Aroclor-1232 {3}			4.60				4.53	4.67
Aroclor-1232 {4}			5.19				5.12	5.26
Aroclor-1232 {5}			5.38				5.31	5.45
Aroclor-1242			3.95				3.88	4.02
Aroclor-1242 {2}			4.88				4.81	4.95
Aroclor-1242 {3}			5.20				5.13	5.27
Aroclor-1242 {4}			5.89				5.82	5.96
Aroclor-1242 {5}			6.16				6.09	6.23
Aroclor-1248			4.34				4.26	4.42
Aroclor-1248 {2}			4.88				4.80	4.96
Aroclor-1248 {3}			5.19				5.11	5.27
Aroclor-1248 {4}			5.89				5.81	5.97
Aroclor-1248 {5}			6.16				6.08	6.24
Aroclor-1254			6.28				6.20	6.36
Aroclor-1254 {2}			6.72				6.64	6.80
Aroclor-1254 {3}			6.88				6.79	6.97
Aroclor-1254 {4}			7.32				7.23	7.41
Aroclor-1254 {5}			8.17				8.08	8.26
Aroclor-1260	8.17	8.17	8.16	8.16	8.16	8.17	7.27	9.07
Aroclor-1260 {2}	8.84	8.84	8.84	8.84	8.84	8.84	7.94	9.74
Aroclor-1260 {3}	9.32	9.32	9.32	9.32	9.32	9.32	8.42	10.22
Aroclor-1260 {4}	9.80	9.80	9.80	9.80	9.80	9.80	8.90	10.70
Aroclor-1260 {5}	10.88	10.87	10.87	10.86	10.86	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	267841	268688	258898	244596	229070	253819	6.65
Aroclor-1016 {2}	378625	380994	344057	328707	308851	348247	9.02
Aroclor-1016 {3}	480102	468941	459297	434731	407079	450030	6.50
Aroclor-1016 {4}	182766	253952	211546	201622	158281	201634	17.66
Aroclor-1016 {5}	454025	361999	355852	346934	323306	368423	13.59
Aroclor-1221			124482				
Aroclor-1221 {2}			218373				
Aroclor-1221 {3}			140243				
Aroclor-1221 {4}			469731				
Aroclor-1221 {5}			123351				
Aroclor-1232			323958				
Aroclor-1232 {2}			203199				
Aroclor-1232 {3}			186780				
Aroclor-1232 {4}			209522				
Aroclor-1232 {5}			259245				
Aroclor-1242			374674				
Aroclor-1242 {2}			255908				
Aroclor-1242 {3}			345557				
Aroclor-1242 {4}			527463				
Aroclor-1242 {5}			444736				
Aroclor-1248			737823				
Aroclor-1248 {2}			430267				
Aroclor-1248 {3}			549289				
Aroclor-1248 {4}			889638				
Aroclor-1248 {5}			649797				
Aroclor-1254			842729				
Aroclor-1254 {2}			644103				
Aroclor-1254 {3}			1222977				
Aroclor-1254 {4}			1321508				
Aroclor-1254 {5}			1211120				
Aroclor-1260	1107171	1085104	1031083	989327	955273	1033592	6.15
Aroclor-1260 {2}	512952	493631	488404	464802	447212	481400	5.34
Aroclor-1260 {3}	1436466	1210861	1197527	1143817	1100948	1217924	10.66
Aroclor-1260 {4}	720328	632484	629899	600666	588319	634339	8.14
Aroclor-1260 {5}	269425	279232	275165	249132	244586	263508	5.95
					Average %RSD		8.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.47	3.47	3.47	3.47	3.47	3.47	3.40	3.54
Aroclor-1016 {2}	4.06	4.06	4.06	4.05	4.06	4.06	3.99	4.13
Aroclor-1016 {3}	4.75	4.76	4.75	4.75	4.75	4.75	4.68	4.82
Aroclor-1016 {4}	4.97	4.98	4.97	4.97	4.97	4.97	4.90	5.04
Aroclor-1016 {5}	5.13	5.14	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1221			2.26				2.19	2.33
Aroclor-1221 {2}			3.18				3.11	3.25
Aroclor-1221 {3}			3.40				3.33	3.47
Aroclor-1221 {4}			3.47				3.40	3.54
Aroclor-1221 {5}			4.76				4.69	4.83
Aroclor-1232			3.47				3.40	3.54
Aroclor-1232 {2}			4.43				4.36	4.50
Aroclor-1232 {3}			4.97				4.90	5.04
Aroclor-1232 {4}			5.13				5.06	5.20
Aroclor-1232 {5}			5.74				5.67	5.81
Aroclor-1242			4.43				4.36	4.50
Aroclor-1242 {2}			5.13				5.06	5.20
Aroclor-1242 {3}			5.74				5.67	5.81
Aroclor-1242 {4}			5.90				5.83	5.97
Aroclor-1242 {5}			6.42				6.35	6.49
Aroclor-1248			4.75				4.67	4.83
Aroclor-1248 {2}			5.33				5.25	5.41
Aroclor-1248 {3}			5.74				5.66	5.82
Aroclor-1248 {4}			5.90				5.82	5.98
Aroclor-1248 {5}			6.22				6.14	6.30
Aroclor-1254			6.74				6.66	6.82
Aroclor-1254 {2}			7.30				7.22	7.38
Aroclor-1254 {3}			7.79				7.70	7.88
Aroclor-1254 {4}			7.91				7.82	8.00
Aroclor-1254 {5}			8.76				8.67	8.85
Aroclor-1260	7.79	7.79	7.79	7.79	7.79	7.79	6.89	8.69
Aroclor-1260 {2}	8.18	8.18	8.18	8.17	8.17	8.18	7.28	9.08
Aroclor-1260 {3}	9.40	9.40	9.39	9.39	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.89	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.46	10.47	10.46	10.46	10.46	10.46	9.56	11.36

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	226419	212128	188990	177876	167596	194602	12.48
Aroclor-1016 {2}	483016	436451	366487	347326	332421	393140	16.31
Aroclor-1016 {3}	974937	903424	809396	793329	784620	853141	9.73
Aroclor-1016 {4}	413865	418283	348368	330133	315838	365297	13.08
Aroclor-1016 {5}	319873	288026	278044	263429	252307	280336	9.27
Aroclor-1221			106257				
Aroclor-1221 {2}			147304				
Aroclor-1221 {3}			102972				
Aroclor-1221 {4}			360830				
Aroclor-1221 {5}			69170				
Aroclor-1232			238433				
Aroclor-1232 {2}			95028				
Aroclor-1232 {3}			193436				
Aroclor-1232 {4}			153846				
Aroclor-1232 {5}			215153				
Aroclor-1242			171387				
Aroclor-1242 {2}			288102				
Aroclor-1242 {3}			377897				
Aroclor-1242 {4}			383422				
Aroclor-1242 {5}			633147				
Aroclor-1248			520961				
Aroclor-1248 {2}			796079				
Aroclor-1248 {3}			569539				
Aroclor-1248 {4}			520331				
Aroclor-1248 {5}			296634				
Aroclor-1254			807866				
Aroclor-1254 {2}			614978				
Aroclor-1254 {3}			503616				
Aroclor-1254 {4}			575892				
Aroclor-1254 {5}			901476				
Aroclor-1260	645199	561054	473970	446668	430505	511479	17.62
Aroclor-1260 {2}	616918	639557	558157	528523	515275	571686	9.53
Aroclor-1260 {3}	371151	388900	441666	426190	416915	408964	6.98
Aroclor-1260 {4}	1026926	1056095	914477	916652	915464	965923	7.22
Aroclor-1260 {5}	917138	875386	833588	853875	844038	864805	3.82
					Average %RSD		10.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.46				8.34	8.58
Aroclor-1262 {2}			9.32				9.20	9.44
Aroclor-1262 {3}			9.96				9.84	10.08
Aroclor-1262 {4}			10.04				9.92	10.16
Aroclor-1262 {5}			10.87				10.75	10.99
Aroclor-1268			9.95				9.83	10.07
Aroclor-1268 {2}			10.04				9.92	10.16
Aroclor-1268 {3}			10.51				10.39	10.63
Aroclor-1268 {4}			10.64				10.52	10.76
Aroclor-1268 {5}			11.48				11.36	11.60

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.40				9.28	9.52
Aroclor-1262 {2}			9.88				9.76	10.00
Aroclor-1262 {3}			10.45				10.33	10.57
Aroclor-1262 {4}			10.51				10.39	10.63
Aroclor-1262 {5}			11.10				10.98	11.22
Aroclor-1268			10.44				10.32	10.56
Aroclor-1268 {2}			10.51				10.39	10.63
Aroclor-1268 {3}			10.79				10.67	10.91
Aroclor-1268 {4}			11.52				11.40	11.64
Aroclor-1268 {5}			12.00				11.88	12.12

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1172015				
Aroclor-1262 {2}			2219989				
Aroclor-1262 {3}			832860				
Aroclor-1262 {4}			888066				
Aroclor-1262 {5}			803623				
Aroclor-1268			2137084				
Aroclor-1268 {2}			2073940				
Aroclor-1268 {3}			1756518				
Aroclor-1268 {4}			475451				
Aroclor-1268 {5}			5454688				

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			786732				
Aroclor-1262 {2}			1736325				
Aroclor-1262 {3}			1075997				
Aroclor-1262 {4}			738818				
Aroclor-1262 {5}			227213				
Aroclor-1268			1635466				
Aroclor-1268 {2}			1661627				
Aroclor-1268 {3}			1364310				
Aroclor-1268 {4}			859435				
Aroclor-1268 {5}			4654711				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3808.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	274795	8.26
Aroclor-1016 {2}	3.96	3.87	4.01	348247	362998	4.24
Aroclor-1016 {3}	4.51	4.42	4.56	450030	494420	9.86
Aroclor-1016 {4}	5.01	4.90	5.04	201634	228844	13.50
Aroclor-1016 {5}	5.41	5.32	5.46	368423	392675	6.58
Aroclor-1260	8.18	7.27	9.07	1033592	1067855	3.31
Aroclor-1260 {2}	8.86	7.94	9.74	481400	501051	4.08
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1207150	0.88
Aroclor-1260 {4}	9.82	8.90	10.70	634339	619444	2.35
Aroclor-1260 {5}	10.89	9.97	11.77	263508	260498	1.14

Data File: R3808.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.49	3.40	3.54	194602	198490	2.00
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372380	5.28
Aroclor-1016 {3}	4.77	4.68	4.82	853141	816808	4.26
Aroclor-1016 {4}	4.99	4.90	5.04	365297	357253	2.20
Aroclor-1016 {5}	5.15	5.06	5.20	280336	286965	2.36
Aroclor-1260	7.80	6.89	8.69	511479	484396	5.30
Aroclor-1260 {2}	8.19	7.28	9.08	571686	571313	0.07
Aroclor-1260 {3}	9.41	8.50	10.30	408964	449882	10.01
Aroclor-1260 {4}	9.89	8.98	10.78	965923	949197	1.73
Aroclor-1260 {5}	10.48	9.56	11.36	864805	875961	1.29

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3827.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	275475	8.53
Aroclor-1016 {2}	3.96	3.87	4.01	348247	356383	2.34
Aroclor-1016 {3}	4.51	4.42	4.56	450030	478985	6.43
Aroclor-1016 {4}	5.01	4.90	5.04	201634	229727	13.93
Aroclor-1016 {5}	5.40	5.32	5.46	368423	375891	2.03
Aroclor-1260	8.18	7.27	9.07	1033592	1043657	0.97
Aroclor-1260 {2}	8.85	7.94	9.74	481400	484180	0.58
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1226904	0.74
Aroclor-1260 {4}	9.81	8.90	10.70	634339	644267	1.57
Aroclor-1260 {5}	10.88	9.97	11.77	263508	270673	2.72

Data File: R3827.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	195194	0.30
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372382	5.28
Aroclor-1016 {3}	4.76	4.68	4.82	853141	818414	4.07
Aroclor-1016 {4}	4.98	4.90	5.04	365297	351467	3.79
Aroclor-1016 {5}	5.14	5.06	5.20	280336	280411	0.03
Aroclor-1260	7.79	6.89	8.69	511479	476781	6.78
Aroclor-1260 {2}	8.18	7.28	9.08	571686	562185	1.66
Aroclor-1260 {3}	9.40	8.50	10.30	408964	439428	7.45
Aroclor-1260 {4}	9.88	8.98	10.78	965923	945554	2.11
Aroclor-1260 {5}	10.47	9.56	11.36	864805	864949	0.02

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-Y

Data File: Y0808.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	653288	12.43
Aroclor-1016 {2}	3.85	3.78	3.92	817260	827634	1.27
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1176342	7.03
Aroclor-1016 {4}	4.90	4.83	4.97	529182	604938	14.32
Aroclor-1016 {5}	5.30	5.22	5.36	868007	919467	5.93
Aroclor-1260	8.07	7.17	8.97	2594789	2631538	1.42
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1187002	4.32
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3489263	2.47
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1598838	1.98
Aroclor-1260 {5}	10.76	9.85	11.65	793423	807816	1.81

Data File: Y0808.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	408308	3.09
Aroclor-1016 {2}	4.34	4.26	4.40	794803	811958	2.16
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1814123	2.40
Aroclor-1016 {4}	5.31	5.23	5.37	829003	796245	3.95
Aroclor-1016 {5}	5.48	5.41	5.55	623503	614908	1.38
Aroclor-1260	7.86	6.96	8.76	733278	710174	3.15
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1066361	3.47
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1003912	1.60
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2204231	0.55
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1594093	2.54

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-Y

Data File: Y0823.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	647720	11.47
Aroclor-1016 {2}	3.86	3.78	3.92	817260	823484	0.76
Aroclor-1016 {3}	4.41	4.33	4.47	1099084	1175487	6.95
Aroclor-1016 {4}	4.91	4.83	4.97	529182	588318	11.17
Aroclor-1016 {5}	5.30	5.22	5.36	868007	925314	6.60
Aroclor-1260	8.08	7.17	8.97	2594789	2757576	6.27
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1234641	0.48
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3767739	10.65
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1779522	9.10
Aroclor-1260 {5}	10.76	9.85	11.65	793423	890571	12.24

Data File: Y0823.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	406791	2.71
Aroclor-1016 {2}	4.34	4.26	4.40	794803	829492	4.36
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1879279	1.10
Aroclor-1016 {4}	5.31	5.23	5.37	829003	818873	1.22
Aroclor-1016 {5}	5.48	5.41	5.55	623503	631824	1.33
Aroclor-1260	7.86	6.96	8.76	733278	731965	0.18
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1104704	0.00
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1044390	2.37
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2337854	6.65
Aroclor-1260 {5}	10.81	9.90	11.70	1554548	1699664	9.33

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0834.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	598455	2.99
Aroclor-1016 {2}	3.86	3.78	3.92	817260	797038	2.47
Aroclor-1016 {3}	4.41	4.33	4.47	1099084	1165046	6.00
Aroclor-1016 {4}	4.90	4.83	4.97	529182	594176	12.28
Aroclor-1016 {5}	5.30	5.22	5.36	868007	923188	6.36
Aroclor-1260	8.07	7.17	8.97	2594789	2742535	5.69
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1167850	5.86
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3744360	9.96
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1751302	7.37
Aroclor-1260 {5}	10.76	9.85	11.65	793423	885771	11.64

Data File: Y0834.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	416480	5.16
Aroclor-1016 {2}	4.34	4.26	4.40	794803	843789	6.16
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1903135	2.38
Aroclor-1016 {4}	5.31	5.23	5.37	829003	831653	0.32
Aroclor-1016 {5}	5.48	5.41	5.55	623503	641486	2.88
Aroclor-1260	7.86	6.96	8.76	733278	745624	1.68
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1115266	0.96
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1058105	3.71
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2376456	8.41
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1724612	10.94

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0835.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	667602	14.89
Aroclor-1016 {2}	3.85	3.78	3.92	817260	812123	0.63
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1210716	10.16
Aroclor-1016 {4}	4.90	4.83	4.97	529182	603892	14.12
Aroclor-1016 {5}	5.30	5.22	5.36	868007	954278	9.94
Aroclor-1260	8.07	7.17	8.97	2594789	2913057	12.27
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1202995	3.03
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3888284	14.19
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1857294	13.87
Aroclor-1260 {5}	10.76	9.85	11.65	793423	897281	13.09

Data File: Y0835.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.74	3.66	3.80	396062	424298	7.13
Aroclor-1016 {2}	4.35	4.26	4.40	794803	830713	4.52
Aroclor-1016 {3}	5.11	5.03	5.17	1858820	1911456	2.83
Aroclor-1016 {4}	5.32	5.23	5.37	829003	818487	1.27
Aroclor-1016 {5}	5.49	5.41	5.55	623503	639233	2.52
Aroclor-1260	7.87	6.96	8.76	733278	760724	3.74
Aroclor-1260 {2}	8.12	7.21	9.01	1104652	1127523	2.07
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1096487	7.47
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2398829	9.43
Aroclor-1260 {5}	10.81	9.90	11.70	1554548	1736119	11.68

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0843.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	672649	15.76
Aroclor-1016 {2}	3.86	3.78	3.92	817260	805812	1.40
Aroclor-1016 {3}	4.41	4.33	4.47	1099084	1216094	10.65
Aroclor-1016 {4}	4.91	4.83	4.97	529182	622648	17.66
Aroclor-1016 {5}	5.30	5.22	5.36	868007	969507	11.69
Aroclor-1260	8.08	7.17	8.97	2594789	2873680	10.75
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1186996	4.32
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3922801	15.20
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1826294	11.97
Aroclor-1260 {5}	10.76	9.85	11.65	793423	924942	16.58

Data File: Y0843.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	429580	8.46
Aroclor-1016 {2}	4.34	4.26	4.40	794803	859103	8.09
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1944447	4.61
Aroclor-1016 {4}	5.31	5.23	5.37	829003	851746	2.74
Aroclor-1016 {5}	5.48	5.41	5.55	623503	660070	5.86
Aroclor-1260	7.86	6.96	8.76	733278	805896	9.90
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1159961	5.01
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1105188	8.32
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2486634	13.44
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1802869	15.97

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0843.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	672649	15.76
Aroclor-1016 {2}	3.86	3.78	3.92	817260	805812	1.40
Aroclor-1016 {3}	4.41	4.33	4.47	1099084	1216094	10.65
Aroclor-1016 {4}	4.91	4.83	4.97	529182	622648	17.66
Aroclor-1016 {5}	5.30	5.22	5.36	868007	969507	11.69
Aroclor-1260	8.08	7.17	8.97	2594789	2873680	10.75
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1186996	4.32
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3922801	15.20
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1826294	11.97
Aroclor-1260 {5}	10.76	9.85	11.65	793423	924942	16.58

Data File: Y0843.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	429580	8.46
Aroclor-1016 {2}	4.34	4.26	4.40	794803	859103	8.09
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1944447	4.61
Aroclor-1016 {4}	5.31	5.23	5.37	829003	851746	2.74
Aroclor-1016 {5}	5.48	5.41	5.55	623503	660070	5.86
Aroclor-1260	7.86	6.96	8.76	733278	805896	9.90
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1159961	5.01
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1105188	8.32
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2486634	13.44
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1802869	15.97

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0857.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	604842	4.09
Aroclor-1016 {2}	3.86	3.78	3.92	817260	796484	2.54
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1087467	1.06
Aroclor-1016 {4}	4.91	4.83	4.97	529182	534315	0.97
Aroclor-1016 {5}	5.30	5.22	5.36	868007	840835	3.13
Aroclor-1260	8.07	7.17	8.97	2594789	2461774	5.13
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1143329	7.84
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3334392	2.08
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1587286	2.69
Aroclor-1260 {5}	10.76	9.85	11.65	793423	828807	4.46

Data File: Y0857.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	390736	1.34
Aroclor-1016 {2}	4.34	4.26	4.40	794803	796423	0.20
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1804753	2.91
Aroclor-1016 {4}	5.31	5.23	5.37	829003	788446	4.89
Aroclor-1016 {5}	5.48	5.41	5.55	623503	609209	2.29
Aroclor-1260	7.86	6.96	8.76	733278	679853	7.29
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1020510	7.62
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	971090	4.82
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2196062	0.18
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1597134	2.74

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0872.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	583320	0.38
Aroclor-1016 {2}	3.85	3.78	3.92	817260	796931	2.49
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1099051	0.00
Aroclor-1016 {4}	4.91	4.83	4.97	529182	535165	1.13
Aroclor-1016 {5}	5.30	5.22	5.36	868007	858009	1.15
Aroclor-1260	8.07	7.17	8.97	2594789	2474229	4.65
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1145314	7.68
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3367276	1.11
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1598117	2.02
Aroclor-1260 {5}	10.76	9.85	11.65	793423	790242	0.40

Data File: Y0872.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	387522	2.16
Aroclor-1016 {2}	4.34	4.26	4.40	794803	794030	0.10
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1796684	3.34
Aroclor-1016 {4}	5.31	5.23	5.37	829003	778705	6.07
Aroclor-1016 {5}	5.48	5.41	5.55	623503	595734	4.45
Aroclor-1260	7.86	6.96	8.76	733278	686954	6.32
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1027452	6.99
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	963502	5.56
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2137622	2.49
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1557445	0.19

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.13	3.13	3.13	3.13	3.13	3.13	3.06	3.20
Aroclor-1016 {2}	3.95	3.95	3.94	3.94	3.94	3.94	3.87	4.01
Aroclor-1016 {3}	4.49	4.49	4.49	4.49	4.49	4.49	4.42	4.56
Aroclor-1016 {4}	4.88	4.99	4.99	4.99	4.99	4.97	4.90	5.04
Aroclor-1016 {5}	5.39	5.39	5.38	5.38	5.38	5.39	5.32	5.46
Aroclor-1221			2.06				1.99	2.13
Aroclor-1221 {2}			2.93				2.86	3.00
Aroclor-1221 {3}			3.06				2.99	3.13
Aroclor-1221 {4}			3.13				3.06	3.20
Aroclor-1221 {5}			3.71				3.64	3.78
Aroclor-1232			3.13				3.06	3.20
Aroclor-1232 {2}			3.94				3.87	4.01
Aroclor-1232 {3}			4.60				4.53	4.67
Aroclor-1232 {4}			5.19				5.12	5.26
Aroclor-1232 {5}			5.38				5.31	5.45
Aroclor-1242			3.95				3.88	4.02
Aroclor-1242 {2}			4.88				4.81	4.95
Aroclor-1242 {3}			5.20				5.13	5.27
Aroclor-1242 {4}			5.89				5.82	5.96
Aroclor-1242 {5}			6.16				6.09	6.23
Aroclor-1248			4.34				4.26	4.42
Aroclor-1248 {2}			4.88				4.80	4.96
Aroclor-1248 {3}			5.19				5.11	5.27
Aroclor-1248 {4}			5.89				5.81	5.97
Aroclor-1248 {5}			6.16				6.08	6.24
Aroclor-1254			6.28				6.20	6.36
Aroclor-1254 {2}			6.72				6.64	6.80
Aroclor-1254 {3}			6.88				6.79	6.97
Aroclor-1254 {4}			7.32				7.23	7.41
Aroclor-1254 {5}			8.17				8.08	8.26
Aroclor-1260	8.17	8.17	8.16	8.16	8.16	8.17	7.27	9.07
Aroclor-1260 {2}	8.84	8.84	8.84	8.84	8.84	8.84	7.94	9.74
Aroclor-1260 {3}	9.32	9.32	9.32	9.32	9.32	9.32	8.42	10.22
Aroclor-1260 {4}	9.80	9.80	9.80	9.80	9.80	9.80	8.90	10.70
Aroclor-1260 {5}	10.88	10.87	10.87	10.86	10.86	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	267841	268688	258898	244596	229070	253819	6.65
Aroclor-1016 {2}	378625	380994	344057	328707	308851	348247	9.02
Aroclor-1016 {3}	480102	468941	459297	434731	407079	450030	6.50
Aroclor-1016 {4}	182766	253952	211546	201622	158281	201634	17.66
Aroclor-1016 {5}	454025	361999	355852	346934	323306	368423	13.59
Aroclor-1221			124482				
Aroclor-1221 {2}			218373				
Aroclor-1221 {3}			140243				
Aroclor-1221 {4}			469731				
Aroclor-1221 {5}			123351				
Aroclor-1232			323958				
Aroclor-1232 {2}			203199				
Aroclor-1232 {3}			186780				
Aroclor-1232 {4}			209522				
Aroclor-1232 {5}			259245				
Aroclor-1242			374674				
Aroclor-1242 {2}			255908				
Aroclor-1242 {3}			345557				
Aroclor-1242 {4}			527463				
Aroclor-1242 {5}			444736				
Aroclor-1248			737823				
Aroclor-1248 {2}			430267				
Aroclor-1248 {3}			549289				
Aroclor-1248 {4}			889638				
Aroclor-1248 {5}			649797				
Aroclor-1254			842729				
Aroclor-1254 {2}			644103				
Aroclor-1254 {3}			1222977				
Aroclor-1254 {4}			1321508				
Aroclor-1254 {5}			1211120				
Aroclor-1260	1107171	1085104	1031083	989327	955273	1033592	6.15
Aroclor-1260 {2}	512952	493631	488404	464802	447212	481400	5.34
Aroclor-1260 {3}	1436466	1210861	1197527	1143817	1100948	1217924	10.66
Aroclor-1260 {4}	720328	632484	629899	600666	588319	634339	8.14
Aroclor-1260 {5}	269425	279232	275165	249132	244586	263508	5.95
					Average %RSD		8.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.47	3.47	3.47	3.47	3.47	3.47	3.40	3.54
Aroclor-1016 {2}	4.06	4.06	4.06	4.05	4.06	4.06	3.99	4.13
Aroclor-1016 {3}	4.75	4.76	4.75	4.75	4.75	4.75	4.68	4.82
Aroclor-1016 {4}	4.97	4.98	4.97	4.97	4.97	4.97	4.90	5.04
Aroclor-1016 {5}	5.13	5.14	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1221			2.26				2.19	2.33
Aroclor-1221 {2}			3.18				3.11	3.25
Aroclor-1221 {3}			3.40				3.33	3.47
Aroclor-1221 {4}			3.47				3.40	3.54
Aroclor-1221 {5}			4.76				4.69	4.83
Aroclor-1232			3.47				3.40	3.54
Aroclor-1232 {2}			4.43				4.36	4.50
Aroclor-1232 {3}			4.97				4.90	5.04
Aroclor-1232 {4}			5.13				5.06	5.20
Aroclor-1232 {5}			5.74				5.67	5.81
Aroclor-1242			4.43				4.36	4.50
Aroclor-1242 {2}			5.13				5.06	5.20
Aroclor-1242 {3}			5.74				5.67	5.81
Aroclor-1242 {4}			5.90				5.83	5.97
Aroclor-1242 {5}			6.42				6.35	6.49
Aroclor-1248			4.75				4.67	4.83
Aroclor-1248 {2}			5.33				5.25	5.41
Aroclor-1248 {3}			5.74				5.66	5.82
Aroclor-1248 {4}			5.90				5.82	5.98
Aroclor-1248 {5}			6.22				6.14	6.30
Aroclor-1254			6.74				6.66	6.82
Aroclor-1254 {2}			7.30				7.22	7.38
Aroclor-1254 {3}			7.79				7.70	7.88
Aroclor-1254 {4}			7.91				7.82	8.00
Aroclor-1254 {5}			8.76				8.67	8.85
Aroclor-1260	7.79	7.79	7.79	7.79	7.79	7.79	6.89	8.69
Aroclor-1260 {2}	8.18	8.18	8.18	8.17	8.17	8.18	7.28	9.08
Aroclor-1260 {3}	9.40	9.40	9.39	9.39	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.89	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.46	10.47	10.46	10.46	10.46	10.46	9.56	11.36

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	226419	212128	188990	177876	167596	194602	12.48
Aroclor-1016 {2}	483016	436451	366487	347326	332421	393140	16.31
Aroclor-1016 {3}	974937	903424	809396	793329	784620	853141	9.73
Aroclor-1016 {4}	413865	418283	348368	330133	315838	365297	13.08
Aroclor-1016 {5}	319873	288026	278044	263429	252307	280336	9.27
Aroclor-1221			106257				
Aroclor-1221 {2}			147304				
Aroclor-1221 {3}			102972				
Aroclor-1221 {4}			360830				
Aroclor-1221 {5}			69170				
Aroclor-1232			238433				
Aroclor-1232 {2}			95028				
Aroclor-1232 {3}			193436				
Aroclor-1232 {4}			153846				
Aroclor-1232 {5}			215153				
Aroclor-1242			171387				
Aroclor-1242 {2}			288102				
Aroclor-1242 {3}			377897				
Aroclor-1242 {4}			383422				
Aroclor-1242 {5}			633147				
Aroclor-1248			520961				
Aroclor-1248 {2}			796079				
Aroclor-1248 {3}			569539				
Aroclor-1248 {4}			520331				
Aroclor-1248 {5}			296634				
Aroclor-1254			807866				
Aroclor-1254 {2}			614978				
Aroclor-1254 {3}			503616				
Aroclor-1254 {4}			575892				
Aroclor-1254 {5}			901476				
Aroclor-1260	645199	561054	473970	446668	430505	511479	17.62
Aroclor-1260 {2}	616918	639557	558157	528523	515275	571686	9.53
Aroclor-1260 {3}	371151	388900	441666	426190	416915	408964	6.98
Aroclor-1260 {4}	1026926	1056095	914477	916652	915464	965923	7.22
Aroclor-1260 {5}	917138	875386	833588	853875	844038	864805	3.82
					Average %RSD		10.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.46				8.34	8.58
Aroclor-1262 {2}			9.32				9.20	9.44
Aroclor-1262 {3}			9.96				9.84	10.08
Aroclor-1262 {4}			10.04				9.92	10.16
Aroclor-1262 {5}			10.87				10.75	10.99
Aroclor-1268			9.95				9.83	10.07
Aroclor-1268 {2}			10.04				9.92	10.16
Aroclor-1268 {3}			10.51				10.39	10.63
Aroclor-1268 {4}			10.64				10.52	10.76
Aroclor-1268 {5}			11.48				11.36	11.60

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.40				9.28	9.52
Aroclor-1262 {2}			9.88				9.76	10.00
Aroclor-1262 {3}			10.45				10.33	10.57
Aroclor-1262 {4}			10.51				10.39	10.63
Aroclor-1262 {5}			11.10				10.98	11.22
Aroclor-1268			10.44				10.32	10.56
Aroclor-1268 {2}			10.51				10.39	10.63
Aroclor-1268 {3}			10.79				10.67	10.91
Aroclor-1268 {4}			11.52				11.40	11.64
Aroclor-1268 {5}			12.00				11.88	12.12

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1172015				
Aroclor-1262 {2}			2219989				
Aroclor-1262 {3}			832860				
Aroclor-1262 {4}			888066				
Aroclor-1262 {5}			803623				
Aroclor-1268			2137084				
Aroclor-1268 {2}			2073940				
Aroclor-1268 {3}			1756518				
Aroclor-1268 {4}			475451				
Aroclor-1268 {5}			5454688				

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			786732				
Aroclor-1262 {2}			1736325				
Aroclor-1262 {3}			1075997				
Aroclor-1262 {4}			738818				
Aroclor-1262 {5}			227213				
Aroclor-1268			1635466				
Aroclor-1268 {2}			1661627				
Aroclor-1268 {3}			1364310				
Aroclor-1268 {4}			859435				
Aroclor-1268 {5}			4654711				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4083.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	273468	7.74
Aroclor-1016 {2}	3.96	3.87	4.01	348247	344111	1.19
Aroclor-1016 {3}	4.51	4.42	4.56	450030	471190	4.70
Aroclor-1016 {4}	5.01	4.90	5.04	201634	236256	17.17
Aroclor-1016 {5}	5.40	5.32	5.46	368423	374873	1.75
Aroclor-1260	8.18	7.27	9.07	1033592	1049615	1.55
Aroclor-1260 {2}	8.86	7.94	9.74	481400	477780	0.75
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1230565	1.04
Aroclor-1260 {4}	9.81	8.90	10.70	634339	641558	1.14
Aroclor-1260 {5}	10.88	9.97	11.77	263508	277287	5.23

Data File: R4083.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	207206	6.48
Aroclor-1016 {2}	4.07	3.99	4.13	393140	392677	0.12
Aroclor-1016 {3}	4.76	4.68	4.82	853141	861619	0.99
Aroclor-1016 {4}	4.98	4.90	5.04	365297	374021	2.39
Aroclor-1016 {5}	5.14	5.06	5.20	280336	297830	6.24
Aroclor-1260	7.79	6.89	8.69	511479	512116	0.12
Aroclor-1260 {2}	8.18	7.28	9.08	571686	603439	5.55
Aroclor-1260 {3}	9.39	8.50	10.30	408964	471201	15.22
Aroclor-1260 {4}	9.88	8.98	10.78	965923	1018474	5.44
Aroclor-1260 {5}	10.46	9.56	11.36	864805	911960	5.45

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4084.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	277555	9.35
Aroclor-1016 {2}	3.96	3.87	4.01	348247	347528	0.21
Aroclor-1016 {3}	4.51	4.42	4.56	450030	478990	6.44
Aroclor-1016 {4}	5.01	4.90	5.04	201634	241311	19.68
Aroclor-1016 {5}	5.40	5.32	5.46	368423	383740	4.16
Aroclor-1260	8.18	7.27	9.07	1033592	1062065	2.75
Aroclor-1260 {2}	8.85	7.94	9.74	481400	480622	0.16
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1243247	2.08
Aroclor-1260 {4}	9.81	8.90	10.70	634339	648570	2.24
Aroclor-1260 {5}	10.88	9.97	11.77	263508	288330	9.42

Data File: R4084.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	207146	6.45
Aroclor-1016 {2}	4.06	3.99	4.13	393140	392541	0.15
Aroclor-1016 {3}	4.76	4.68	4.82	853141	857226	0.48
Aroclor-1016 {4}	4.98	4.90	5.04	365297	371787	1.78
Aroclor-1016 {5}	5.14	5.06	5.20	280336	297181	6.01
Aroclor-1260	7.79	6.89	8.69	511479	520179	1.70
Aroclor-1260 {2}	8.18	7.28	9.08	571686	606130	6.02
Aroclor-1260 {3}	9.39	8.50	10.30	408964	476280	16.46
Aroclor-1260 {4}	9.88	8.98	10.78	965923	1029469	6.58
Aroclor-1260 {5}	10.46	9.56	11.36	864805	918879	6.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4091.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	246644	2.83
Aroclor-1016 {2}	3.97	3.87	4.01	348247	315099	9.52
Aroclor-1016 {3}	4.51	4.42	4.56	450030	423953	5.79
Aroclor-1016 {4}	5.01	4.90	5.04	201634	212094	5.19
Aroclor-1016 {5}	5.40	5.32	5.46	368423	332397	9.78
Aroclor-1260	8.18	7.27	9.07	1033592	900656	12.86
Aroclor-1260 {2}	8.86	7.94	9.74	481400	407779	15.29
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1030711	15.37
Aroclor-1260 {4}	9.82	8.90	10.70	634339	542534	14.47
Aroclor-1260 {5}	10.88	9.97	11.77	263508	237264	9.96

Data File: R4091.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.49	3.40	3.54	194602	187515	3.64
Aroclor-1016 {2}	4.07	3.99	4.13	393140	355838	9.49
Aroclor-1016 {3}	4.77	4.68	4.82	853141	779098	8.68
Aroclor-1016 {4}	4.99	4.90	5.04	365297	336523	7.88
Aroclor-1016 {5}	5.15	5.06	5.20	280336	267632	4.53
Aroclor-1260	7.80	6.89	8.69	511479	453231	11.39
Aroclor-1260 {2}	8.18	7.28	9.08	571686	532821	6.80
Aroclor-1260 {3}	9.40	8.50	10.30	408964	408192	0.19
Aroclor-1260 {4}	9.89	8.98	10.78	965923	924765	4.26
Aroclor-1260 {5}	10.47	9.56	11.36	864805	879546	1.70

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3808.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	274795	8.26
Aroclor-1016 {2}	3.96	3.87	4.01	348247	362998	4.24
Aroclor-1016 {3}	4.51	4.42	4.56	450030	494420	9.86
Aroclor-1016 {4}	5.01	4.90	5.04	201634	228844	13.50
Aroclor-1016 {5}	5.41	5.32	5.46	368423	392675	6.58
Aroclor-1260	8.18	7.27	9.07	1033592	1067855	3.31
Aroclor-1260 {2}	8.86	7.94	9.74	481400	501051	4.08
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1207150	0.88
Aroclor-1260 {4}	9.82	8.90	10.70	634339	619444	2.35
Aroclor-1260 {5}	10.89	9.97	11.77	263508	260498	1.14

Data File: R3808.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.49	3.40	3.54	194602	198490	2.00
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372380	5.28
Aroclor-1016 {3}	4.77	4.68	4.82	853141	816808	4.26
Aroclor-1016 {4}	4.99	4.90	5.04	365297	357253	2.20
Aroclor-1016 {5}	5.15	5.06	5.20	280336	286965	2.36
Aroclor-1260	7.80	6.89	8.69	511479	484396	5.30
Aroclor-1260 {2}	8.19	7.28	9.08	571686	571313	0.07
Aroclor-1260 {3}	9.41	8.50	10.30	408964	449882	10.01
Aroclor-1260 {4}	9.89	8.98	10.78	965923	949197	1.73
Aroclor-1260 {5}	10.48	9.56	11.36	864805	875961	1.29

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3827.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	275475	8.53
Aroclor-1016 {2}	3.96	3.87	4.01	348247	356383	2.34
Aroclor-1016 {3}	4.51	4.42	4.56	450030	478985	6.43
Aroclor-1016 {4}	5.01	4.90	5.04	201634	229727	13.93
Aroclor-1016 {5}	5.40	5.32	5.46	368423	375891	2.03
Aroclor-1260	8.18	7.27	9.07	1033592	1043657	0.97
Aroclor-1260 {2}	8.85	7.94	9.74	481400	484180	0.58
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1226904	0.74
Aroclor-1260 {4}	9.81	8.90	10.70	634339	644267	1.57
Aroclor-1260 {5}	10.88	9.97	11.77	263508	270673	2.72

Data File: R3827.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	195194	0.30
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372382	5.28
Aroclor-1016 {3}	4.76	4.68	4.82	853141	818414	4.07
Aroclor-1016 {4}	4.98	4.90	5.04	365297	351467	3.79
Aroclor-1016 {5}	5.14	5.06	5.20	280336	280411	0.03
Aroclor-1260	7.79	6.89	8.69	511479	476781	6.78
Aroclor-1260 {2}	8.18	7.28	9.08	571686	562185	1.66
Aroclor-1260 {3}	9.40	8.50	10.30	408964	439428	7.45
Aroclor-1260 {4}	9.88	8.98	10.78	965923	945554	2.11
Aroclor-1260 {5}	10.47	9.56	11.36	864805	864949	0.02

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-R

Data File: R3841.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	276242	8.83
Aroclor-1016 {2}	3.96	3.87	4.01	348247	358856	3.05
Aroclor-1016 {3}	4.51	4.42	4.56	450030	485056	7.78
Aroclor-1016 {4}	5.01	4.90	5.04	201634	232042	15.08
Aroclor-1016 {5}	5.40	5.32	5.46	368423	384328	4.32
Aroclor-1260	8.18	7.27	9.07	1033592	1073714	3.88
Aroclor-1260 {2}	8.86	7.94	9.74	481400	491919	2.19
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1249310	2.58
Aroclor-1260 {4}	9.81	8.90	10.70	634339	650435	2.54
Aroclor-1260 {5}	10.88	9.97	11.77	263508	282244	7.11

Data File: R3841.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	199340	2.43
Aroclor-1016 {2}	4.07	3.99	4.13	393140	380232	3.28
Aroclor-1016 {3}	4.76	4.68	4.82	853141	836458	1.96
Aroclor-1016 {4}	4.98	4.90	5.04	365297	363089	0.60
Aroclor-1016 {5}	5.14	5.06	5.20	280336	290655	3.68
Aroclor-1260	7.79	6.89	8.69	511479	492252	3.76
Aroclor-1260 {2}	8.18	7.28	9.08	571686	583092	2.00
Aroclor-1260 {3}	9.40	8.50	10.30	408964	456851	11.71
Aroclor-1260 {4}	9.89	8.98	10.78	965923	972315	0.66
Aroclor-1260 {5}	10.47	9.56	11.36	864805	876967	1.41

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-R

Data File: R3842.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	264989	4.40
Aroclor-1016 {2}	3.97	3.87	4.01	348247	351717	1.00
Aroclor-1016 {3}	4.52	4.42	4.56	450030	474940	5.54
Aroclor-1016 {4}	5.02	4.90	5.04	201634	238187	18.13
Aroclor-1016 {5}	5.41	5.32	5.46	368423	376449	2.18
Aroclor-1260	8.19	7.27	9.07	1033592	1061236	2.67
Aroclor-1260 {2}	8.86	7.94	9.74	481400	491384	2.07
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1213867	0.33
Aroclor-1260 {4}	9.82	8.90	10.70	634339	621441	2.03
Aroclor-1260 {5}	10.89	9.97	11.77	263508	272677	3.48

Data File: R3842.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.50	3.40	3.54	194602	196365	0.91
Aroclor-1016 {2}	4.08	3.99	4.13	393140	368718	6.21
Aroclor-1016 {3}	4.78	4.68	4.82	853141	807918	5.30
Aroclor-1016 {4}	5.00	4.90	5.04	365297	352545	3.49
Aroclor-1016 {5}	5.16	5.06	5.20	280336	281963	0.58
Aroclor-1260	7.81	6.89	8.69	511479	474842	7.16
Aroclor-1260 {2}	8.20	7.28	9.08	571686	565837	1.02
Aroclor-1260 {3}	9.41	8.50	10.30	408964	440667	7.75
Aroclor-1260 {4}	9.90	8.98	10.78	965923	921696	4.58
Aroclor-1260 {5}	10.48	9.56	11.36	864805	827587	4.30

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-R

Data File: R3848.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	266522	5.00
Aroclor-1016 {2}	3.97	3.87	4.01	348247	351835	1.03
Aroclor-1016 {3}	4.51	4.42	4.56	450030	472542	5.00
Aroclor-1016 {4}	5.01	4.90	5.04	201634	229715	13.93
Aroclor-1016 {5}	5.40	5.32	5.46	368423	371770	0.91
Aroclor-1260	8.18	7.27	9.07	1033592	1024756	0.85
Aroclor-1260 {2}	8.86	7.94	9.74	481400	485915	0.94
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1233122	1.25
Aroclor-1260 {4}	9.81	8.90	10.70	634339	643862	1.50
Aroclor-1260 {5}	10.88	9.97	11.77	263508	271574	3.06

Data File: R3848.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	193032	0.81
Aroclor-1016 {2}	4.07	3.99	4.13	393140	366674	6.73
Aroclor-1016 {3}	4.76	4.68	4.82	853141	805294	5.61
Aroclor-1016 {4}	4.98	4.90	5.04	365297	348311	4.65
Aroclor-1016 {5}	5.14	5.06	5.20	280336	278715	0.58
Aroclor-1260	7.79	6.89	8.69	511479	474251	7.28
Aroclor-1260 {2}	8.18	7.28	9.08	571686	563905	1.36
Aroclor-1260 {3}	9.40	8.50	10.30	408964	445773	9.00
Aroclor-1260 {4}	9.88	8.98	10.78	965923	933203	3.39
Aroclor-1260 {5}	10.47	9.56	11.36	864805	851526	1.54

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA161010-14	10/12/2016	09:05	2.57		11.84		2.85		12.50	
PCB	LCSA161010-14	10/12/2016	09:22	2.57		11.84		2.84		12.49	
COMPOSITE_	E16-09038-022MS	10/12/2016	09:44	2.57		11.84		2.85		12.49	
COMPOSITE_	E16-09038-023MSD	10/12/2016	10:01	2.57		11.84		2.84		12.49	
DISCRETE	E16-09038-016	10/12/2016	10:18	2.57		11.84		2.84		12.49	
DISCRETE	E16-09038-017	10/12/2016	10:36	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-018	10/12/2016	10:53	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-019	10/12/2016	11:11	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-020	10/12/2016	11:28	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-021	10/12/2016	11:45	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-024	10/12/2016	12:03	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-025	10/12/2016	12:20	2.57		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 11.98 **TCMX 2** 2.74 **DCB 2** 12.26

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA161017-25	10/18/2016	15:58	2.71		11.98		2.74		12.26	
PCB	LCSA161017-25	10/18/2016	16:16	2.71		11.98		2.74		12.25	
MW-P74-1	E16-09408-001	10/18/2016	16:37	2.71		11.98		2.75		12.25	
FB-10101	E16-09408-002	10/18/2016	16:54	2.70		11.98		2.74		12.25	
EB-10101	E16-09537-021	10/18/2016	17:12	2.70		11.98		2.74		12.25	
EB-10111	E16-09537-044	10/18/2016	17:29	2.70		11.98		2.74		12.25	
EB-10121	E16-09581-020	10/18/2016	17:47	2.70		11.98		2.74		12.25	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 11.98 **TCMX 2** 2.74 **DCB 2** 12.25

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-13	10/18/2016	18:22	2.71		11.98		2.74		12.25	
PCB	LCSS161017-13	10/18/2016	18:39	2.71		11.98		2.74		12.25	
PCB	E16-09507-001MS	10/18/2016	18:57	2.72		11.98		2.76		12.25	
PCB	E16-09507-001MSD	10/18/2016	19:14	2.72		11.98		2.76		12.25	
WC-CONCR	E16-09507-001	10/18/2016	19:32	2.72		11.98		2.76		12.25	
WC-4	E16-09508-001	10/18/2016	19:49	2.71		11.98		2.75		12.25	
PX-4B	E16-09509-008	10/18/2016	20:42	2.71		11.97		2.74		12.25	
E-54_(0.	E16-09537-001	10/18/2016	20:59	2.71		11.97		2.74		12.24	
E-42_(0.	E16-09537-003	10/18/2016	21:17	2.71		11.98		2.74		12.24	
E-42_(2-	E16-09537-004	10/18/2016	21:34	2.71		11.98		2.74		12.25	
E-51_(0.	E16-09537-007	10/18/2016	23:19	2.71		11.98		2.74		12.24	
E-51_(2-	E16-09537-008	10/18/2016	23:36	2.71		11.98		2.74		12.24	
E-51_(3-	E16-09537-009	10/18/2016	23:54	2.71		11.97		2.74		12.24	
E-49_(0.	E16-09537-010	10/19/2016	00:11	2.71		11.98		2.74		12.24	
E-52_(0.	E16-09537-011	10/19/2016	00:29	2.71		11.98		2.74		12.24	
E-37_(0.	E16-09537-012	10/19/2016	00:46	2.71		11.98		2.74		12.24	
E-44_(0.	E16-09537-013	10/19/2016	01:04	2.71		11.98		2.74		12.24	
E-44_(2-	E16-09537-014	10/19/2016	01:21	2.71		11.98		2.74		12.24	
E-60_(0.	E16-09537-016	10/19/2016	01:39	2.71		11.98		2.74		12.25	
E-36_(0.	E16-09537-017	10/19/2016	02:14	2.71		11.98		2.74		12.24	
E-36_(2-	E16-09537-018	10/19/2016	02:49	2.71		11.97		2.74		12.24	
E-47_(0.	E16-09537-019	10/19/2016	03:24	2.71		11.98		2.74		12.24	
E-54_(0.	E16-09537-001DL	10/19/2016	08:46	2.70		11.98		2.73		12.24	
E-42_(3-	E16-09537-005	10/19/2016	09:39	2.71		11.98		2.74		12.24	
E-60_(0.	E16-09537-016DL	10/19/2016	09:56	2.70		11.98		2.74		12.24	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-14	10/18/2016	16:10	2.57		11.84		2.85		12.50	
PCB	LCSS161017-14	10/18/2016	16:27	2.58		11.84		2.84		12.49	
E-43_(0.	E16-09537-022	10/18/2016	18:28	2.58		11.84		2.84		12.49	
E-43_(2-	E16-09537-023	10/18/2016	18:45	2.58		11.84		2.84		12.49	
E-43_(3-	E16-09537-024	10/18/2016	19:03	2.58		11.84		2.84		12.49	
E-55_(4.	E16-09537-026	10/18/2016	19:20	2.58		11.84		2.84		12.49	
E-34_(3-	E16-09537-027	10/18/2016	19:37	2.58		11.84		2.84		12.49	
E-57_(4.	E16-09537-029	10/18/2016	19:55	2.58		11.84		2.84		12.49	
E-57_(6-	E16-09537-030	10/18/2016	20:12	2.58		11.84		2.84		12.49	
E-56_(4.	E16-09537-031	10/18/2016	20:29	2.58		11.84		2.84		12.49	
E-56_(6-	E16-09537-032	10/18/2016	20:47	2.58		11.84		2.84		12.49	
E-33_(0.	E16-09537-037	10/18/2016	22:13	2.58		11.84		2.84		12.49	
E-33_(2-	E16-09537-038	10/18/2016	22:30	2.58		11.84		2.84		12.49	
E-33_(3-	E16-09537-039	10/18/2016	22:48	2.58		11.84		2.84		12.49	
E-33_(4.	E16-09537-040	10/18/2016	23:05	2.58		11.84		2.84		12.49	
E-33_(5.	E16-09537-041	10/18/2016	23:22	2.58		11.84		2.84		12.49	
E-40_(4.	E16-09537-042	10/18/2016	23:40	2.57		11.84		2.84		12.49	
E-39_(4.	E16-09537-043	10/18/2016	23:57	2.58		11.84		2.84		12.49	
E-32_(0.	E16-09537-045	10/19/2016	00:14	2.58		11.84		2.84		12.49	
E-32_(2-	E16-09537-046	10/19/2016	00:32	2.58		11.84		2.84		12.49	
E-32_(3-	E16-09537-047	10/19/2016	00:49	2.57		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-14	10/18/2016	16:10	2.57		11.84		2.85		12.50	
PCB	LCSS161017-14	10/18/2016	16:27	2.58		11.84		2.84		12.49	
PCB	E16-09537-020MS	10/19/2016	08:35	2.58		11.84		2.85		12.50	
PCB	E16-09537-020MSD	10/19/2016	08:52	2.58		11.84		2.85		12.50	
X-1_(0.5	E16-09537-020	10/19/2016	09:09	2.58		11.84		2.85		12.49	
E-43_(0.	E16-09537-022DL	10/19/2016	09:27	2.59		11.84		2.85		12.49	
E-33_(0.	E16-09537-037DL	10/19/2016	09:44	2.59		11.84		2.85		12.49	
E-33_(2-	E16-09537-038DL	10/19/2016	10:01	2.58		11.84		2.85		12.49	
E-32_(0.	E16-09537-045DL	10/19/2016	10:19	2.58		11.84		2.85		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1	2.57	DCB 1	11.84	TCMX 2	2.85	DCB 2	12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-23	10/19/2016	11:16	2.57		11.84		2.85		12.50	
PCB	LCSS161017-23	10/19/2016	11:33	2.57		11.84		2.84		12.49	
PCB	E16-09537-048MS	10/19/2016	11:50	2.58		11.84		2.84		12.49	
PCB	E16-09537-048MSD	10/19/2016	12:08	2.57		11.84		2.84		12.49	
E-32_(4.	E16-09537-048	10/19/2016	12:25	2.57		11.84		2.84		12.49	
E-32_(5.	E16-09537-049	10/19/2016	12:42	2.58		11.84		2.84		12.49	
E-41_(0.	E16-09537-050	10/19/2016	13:00	2.58		11.84		2.84		12.49	
E-41_(2-	E16-09537-051	10/19/2016	13:17	2.57		11.84		2.84		12.49	
X-2_(2-2	E16-09537-054	10/19/2016	13:34	2.57		11.84		2.84		12.49	
E-50_(4.	E16-09537-055	10/19/2016	13:52	2.57		11.84		2.84		12.49	
E-51_(4.	E16-09537-056	10/19/2016	14:09	2.58		11.84		2.84		12.49	
E-50_(0.	E16-09537-058	10/19/2016	15:23	0.00	D	0.00	D	0.00	D	0.00	D
E-41_(0.	E16-09537-050DL	10/19/2016	16:03	2.57		11.84		2.85		12.50	
E-50_(2-	E16-09537-059	10/19/2016	16:37	2.58		11.84		2.84		12.49	
WC-1	E16-09555-001	10/19/2016	16:55	2.58		11.84		2.84		12.49	
WC-2	E16-09555-002	10/19/2016	17:12	2.58		11.84		2.84		12.49	
E-35_(2-	E16-09581-002	10/19/2016	18:04	2.58		11.84		2.84		12.49	
E-53_(0.	E16-09581-007	10/19/2016	18:38	2.58		11.84		2.84		12.49	
E-53_(0.	E16-09581-008	10/19/2016	18:56	2.58		11.84		2.84		12.49	
E-59_(0.	E16-09581-009	10/19/2016	19:13	2.58		11.84		2.84		12.49	
E-48_(0.	E16-09581-010	10/19/2016	19:30	2.58		11.84		2.84		12.49	
E-35_(0.	E16-09581-001	10/20/2016	10:28	2.58		11.84		2.84		12.49	
E-46_(0.	E16-09581-011	10/20/2016	10:45	2.58		11.84		2.84		12.49	
E-45_(0.	E16-09581-003	10/20/2016	11:02	2.57		11.84		2.84		12.49	
E-48_(0.	E16-09581-010DL	10/20/2016	11:20	2.58		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-23	10/19/2016	11:16	2.57		11.84		2.85		12.50	
PCB	LCSS161017-23	10/19/2016	11:33	2.57		11.84		2.84		12.49	
WC-SM	E16-09573-001DL	10/20/2016	11:37	2.58		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.68 **DCB 1** 11.97 **TCMX 2** 2.71 **DCB 2** 12.23

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
BB-ST2-S	E16-09848-073	10/27/2016	00:07	2.68		11.97		2.71		12.23	
PX-1	E16-09793-001	10/27/2016	00:42	2.68		11.97		2.71		12.24	
PX-2	E16-09793-002	10/27/2016	01:17	2.68		11.97		2.71		12.23	
PX-3	E16-09793-003	10/27/2016	01:52	2.68		11.97		2.71		12.23	
PX-4	E16-09793-004	10/27/2016	02:27	2.70		11.97		2.73		12.24	
PX-5	E16-09793-005	10/27/2016	03:01	2.68		11.97		2.71		12.23	
E-54_(2-	E16-09537-002	10/27/2016	03:36	2.68		11.97		2.71		12.23	
E-42_(4-	E16-09537-006	10/27/2016	03:54	2.68		11.97		2.71		12.23	
E-43_(4.	E16-09537-025	10/27/2016	04:11	2.68		11.97		2.71		12.24	
E-41_(5-	E16-09537-053	10/27/2016	04:29	2.68		11.97		2.71		12.23	
E-44_(4.	E16-09537-057	10/27/2016	04:46	2.68		11.97		2.71		12.23	
20161024	E16-09856-001	10/27/2016	05:03	2.68		11.97		2.71		12.23	
E-45_(2-	E16-09581-004	10/27/2016	05:21	2.68		11.97		2.71		12.23	
E-45_(4.	E16-09581-006	10/27/2016	05:38	2.68		11.97		2.71		12.24	
E-46_(2-	E16-09581-012	10/27/2016	05:56	2.68		11.97		2.71		12.23	
E-46_(4.	E16-09581-014	10/27/2016	06:13	2.68		11.97		2.71		12.23	
PCB	BLKS161025-09	10/27/2016	08:38	2.71		11.98		2.75		12.24	
PCB	LCSS161025-09	10/27/2016	08:55	2.71		11.97		2.74		12.24	
PCB	E16-09793-001MS	10/27/2016	09:13	2.71		11.97		2.74		12.24	
PCB	E16-09793-001MSD	10/27/2016	09:30	2.70		11.97		2.74		12.23	
SOIL	E16-09799-001	10/27/2016	10:05	2.71		11.97		2.74		12.24	
BB-ST1-S	E16-09848-072	10/27/2016	10:22	2.71		11.97		2.74		12.24	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3824.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:59
Operator : JS
Sample : E-54_(0.,E16-09537-001,S,5.27g,9.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:05:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	3205.1E6	2026.1E6	199.731	168.366
Spiked Amount 200.000			Recovery	=	99.87%	84.18%
2) S DCB	11.97	12.24	1033.7E6	1151.4E6	197.358m	238.595
Spiked Amount 200.000			Recovery	=	98.68%	119.30%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.18	7.79	3811.0E6	2381.3E6	3687.143	4655.775 #
34) L8 Aroclor-1260 {2}	8.85	8.18	2689.3E6	2938.5E6	5586.358	5140.048
35) L8 Aroclor-1260 {3}	9.33	9.40	8023.9E6	3734.3E6	6588.174	9131.222 #
36) L8 Aroclor-1260 {4}	9.81	9.88	5151.4E6	6944.9E6	8120.964	7189.916
37) L8 Aroclor-1260 {5}	10.88	10.47	2841.1E6	6927.6E6	10781.768	8010.625 #
Sum Aroclor-1260			22516.7E6	22926.7E6	34764.407	34127.585
Average Aroclor-1260					6952.881	6825.517
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

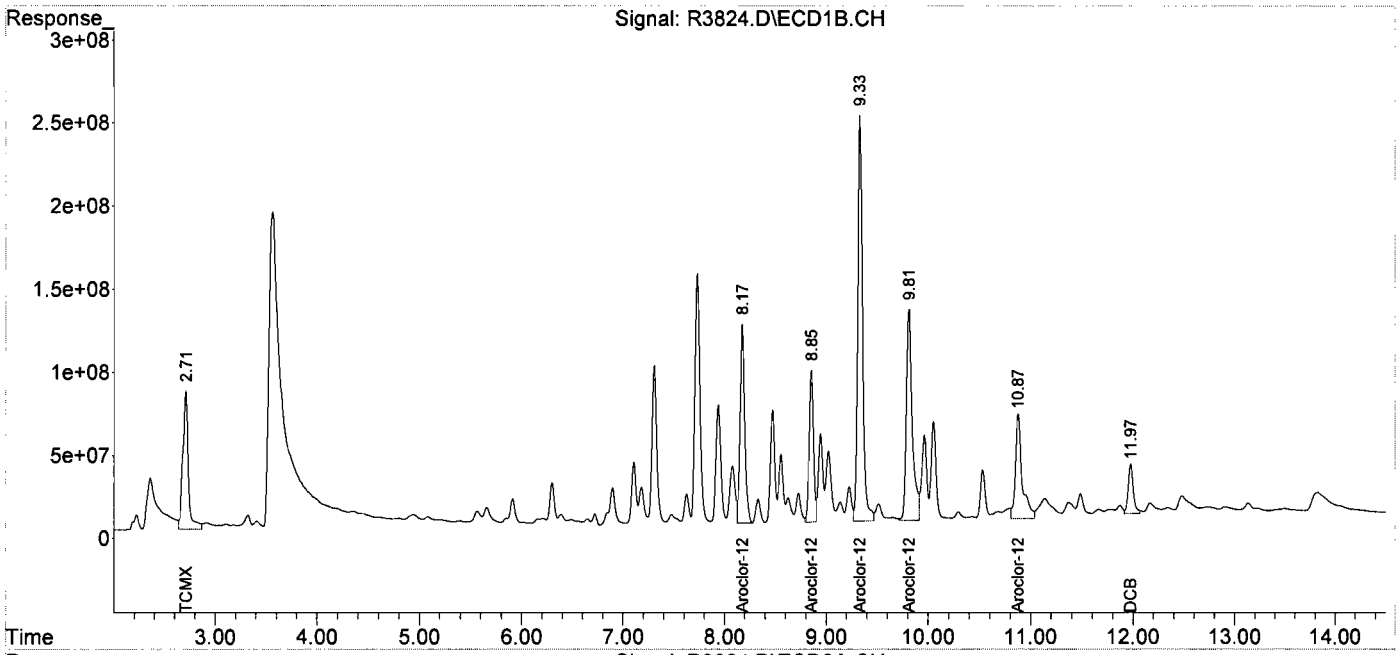
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

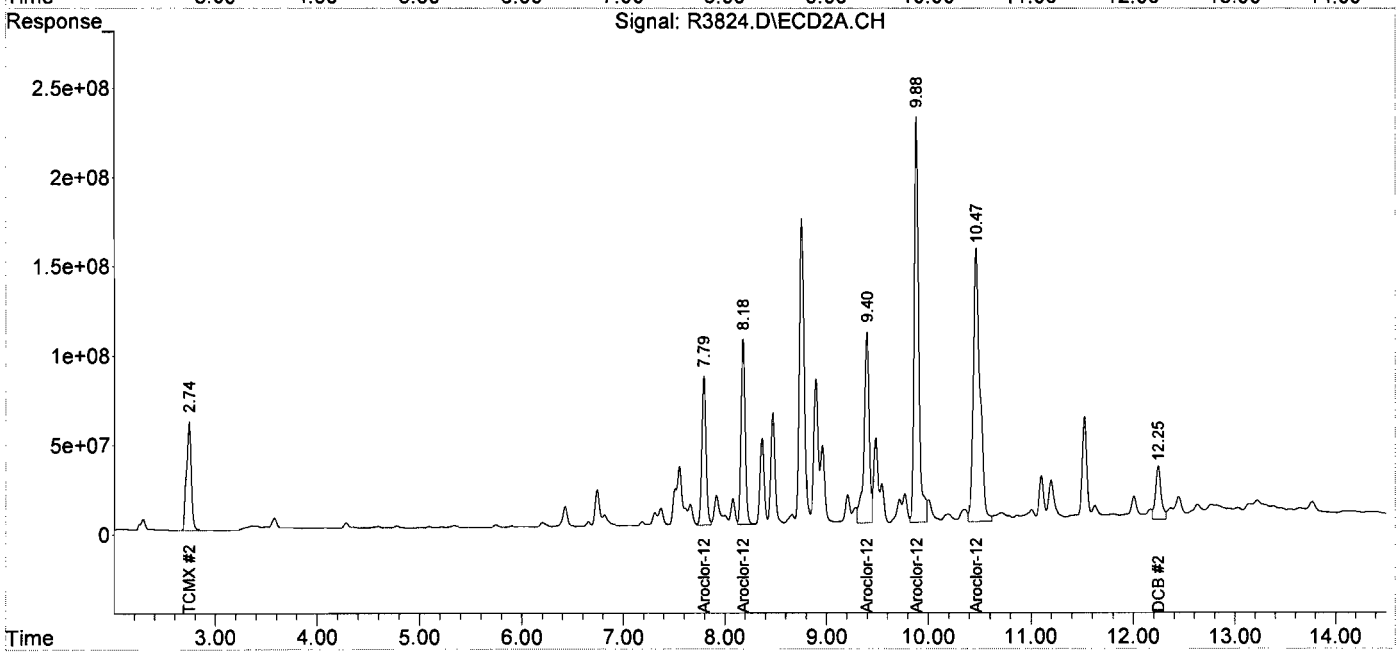
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3824.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:59
Operator : JS
Sample : E-54_(0.,E16-09537-001,S,5.27g,9.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:05:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3843.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 8:46
Operator : JS
Sample : E-54_(0.,E16-09537-001DL,S,5.27g,9.50,20
Misc : 161017-13,10/17/16,10/12/16,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:02:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	2.73	344.7E6	211.1E6	21.479	17.539
Spiked Amount 200.000			Recovery =		10.74%	8.77%
2) S DCB	11.98	12.24	116.2E6	104.8E6	22.187	21.712m
Spiked Amount 200.000			Recovery =		11.09%	10.86%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.18	7.80	728.4E6	264.4E6	704.733	516.955 #
34) L8 Aroclor-1260 {2}	8.85	8.18	338.2E6	353.9E6	702.620	619.013
35) L8 Aroclor-1260 {3}	9.33	9.40	925.2E6	378.3E6	759.651	924.979
36) L8 Aroclor-1260 {4}	9.81	9.89	571.0E6	736.5E6	900.203	762.511
37) L8 Aroclor-1260 {5}	10.88	10.47	315.9E6	710.5E6	1198.809	821.564 #
Sum Aroclor-1260			2878.8E6	2443.6E6	4266.017	3645.022
Average Aroclor-1260					853.203	729.004
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

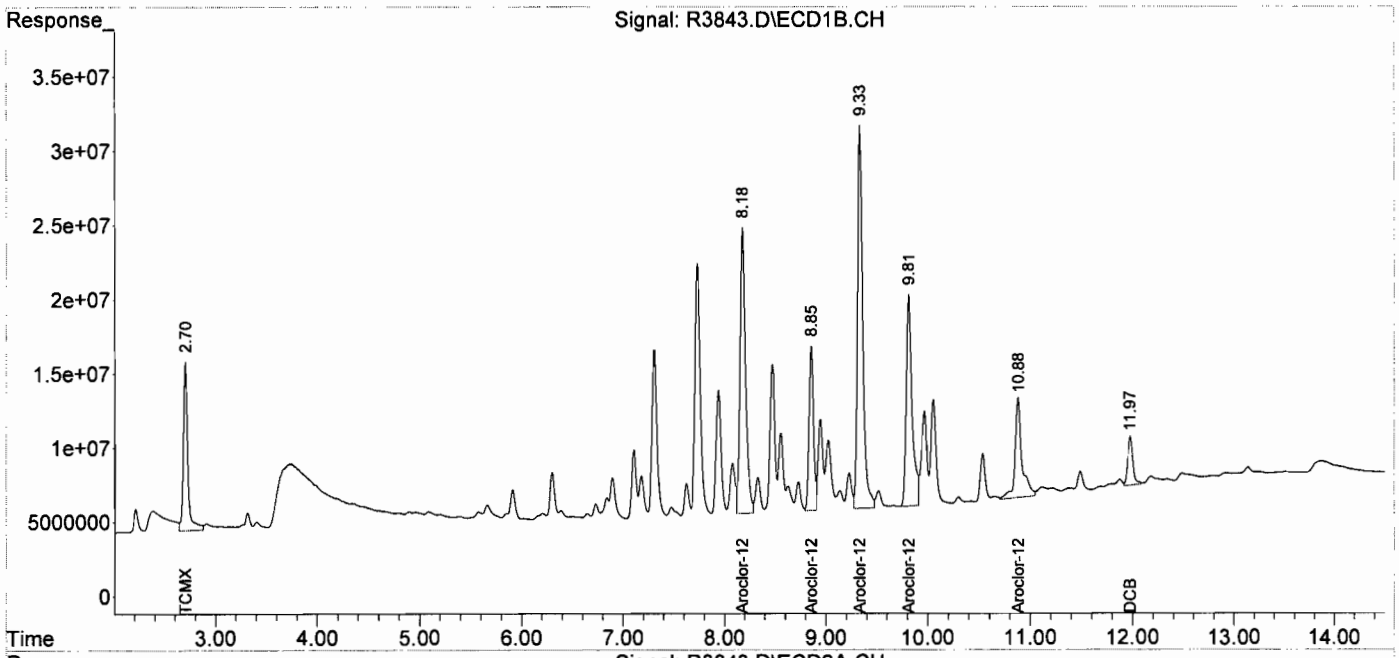
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

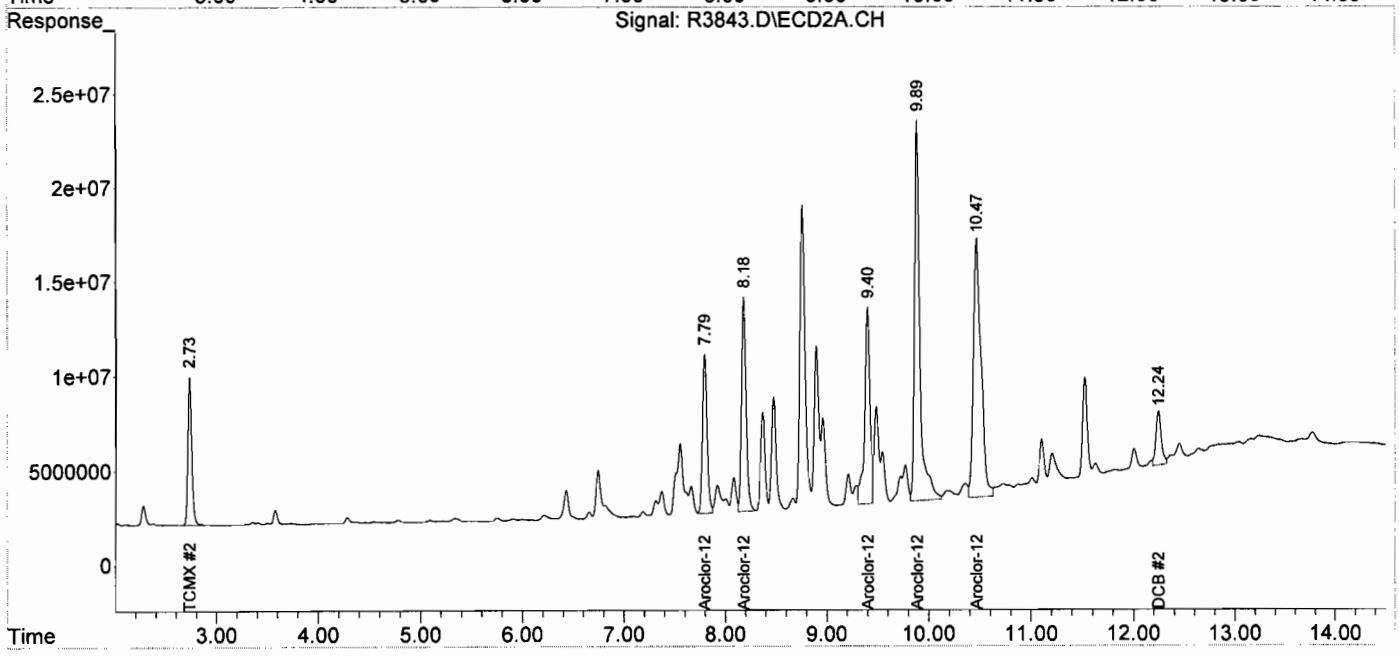
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3843.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 8:46
Operator : JS
Sample : E-54_(0.,E16-09537-001DL,S,5.27g,9.50,20
Misc : 161017-13,10/17/16,10/12/16,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:02:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4073.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 3:36
Operator : JS
Sample : E-54_(2-,E16-09537-002,S,5.86g,7.40,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:48:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2465.6E6	1931.6E6	153.650	160.517
Spiked Amount 200.000			Recovery	=	76.83%	80.26%
2) S DCB	11.97	12.23	1106.2E6	949.7E6	211.198	196.808m
Spiked Amount 200.000			Recovery	=	105.60%	98.40%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.17	7.78	698.2E6	480.8E6	675.469	939.989 #
34) L8 Aroclor-1260 {2}	8.85	8.17	556.9E6	599.2E6	1156.853m	1048.127
35) L8 Aroclor-1260 {3}	9.33	9.38	1609.6E6	836.7E6	1321.615m	2045.783m#
36) L8 Aroclor-1260 {4}	9.81	9.88	1123.8E6	1418.9E6	1771.577m	1468.936
37) L8 Aroclor-1260 {5}	10.87	10.46	521.8E6	1519.4E6	1980.045m	1756.951
Sum Aroclor-1260			4510.2E6	4854.9E6	6905.559	7259.786
Average Aroclor-1260					1381.112	1451.957
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

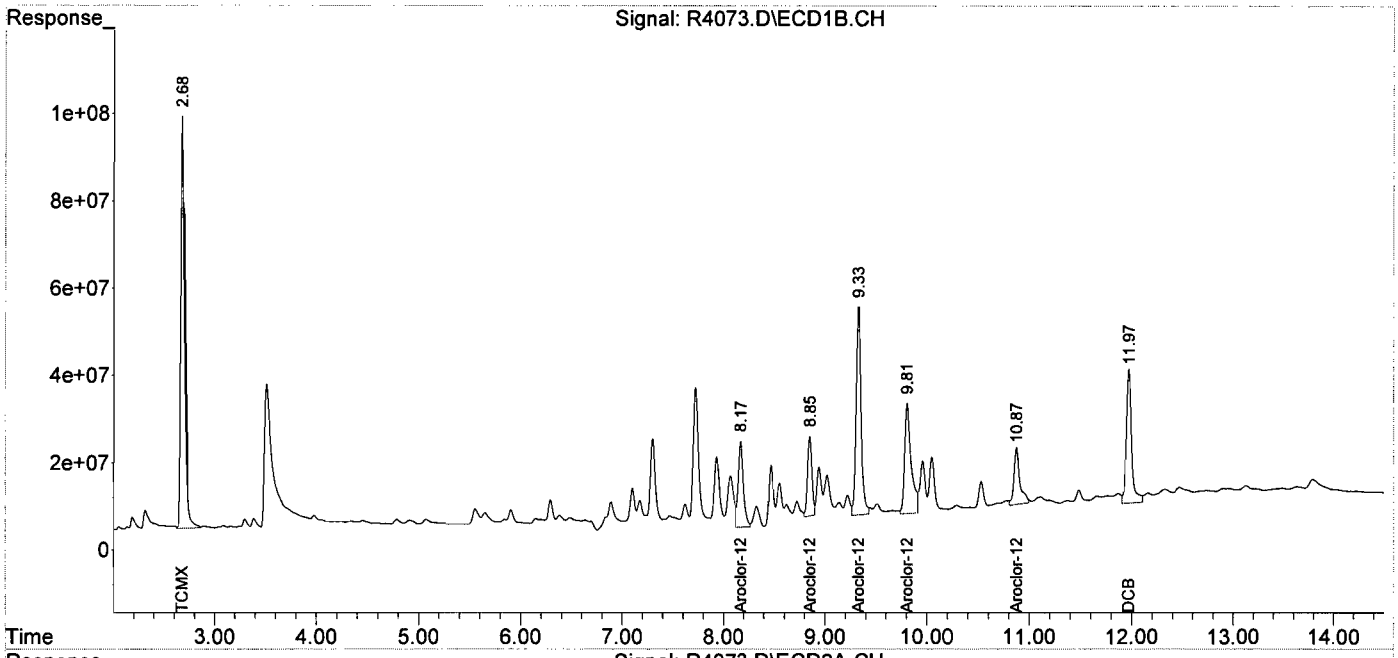
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

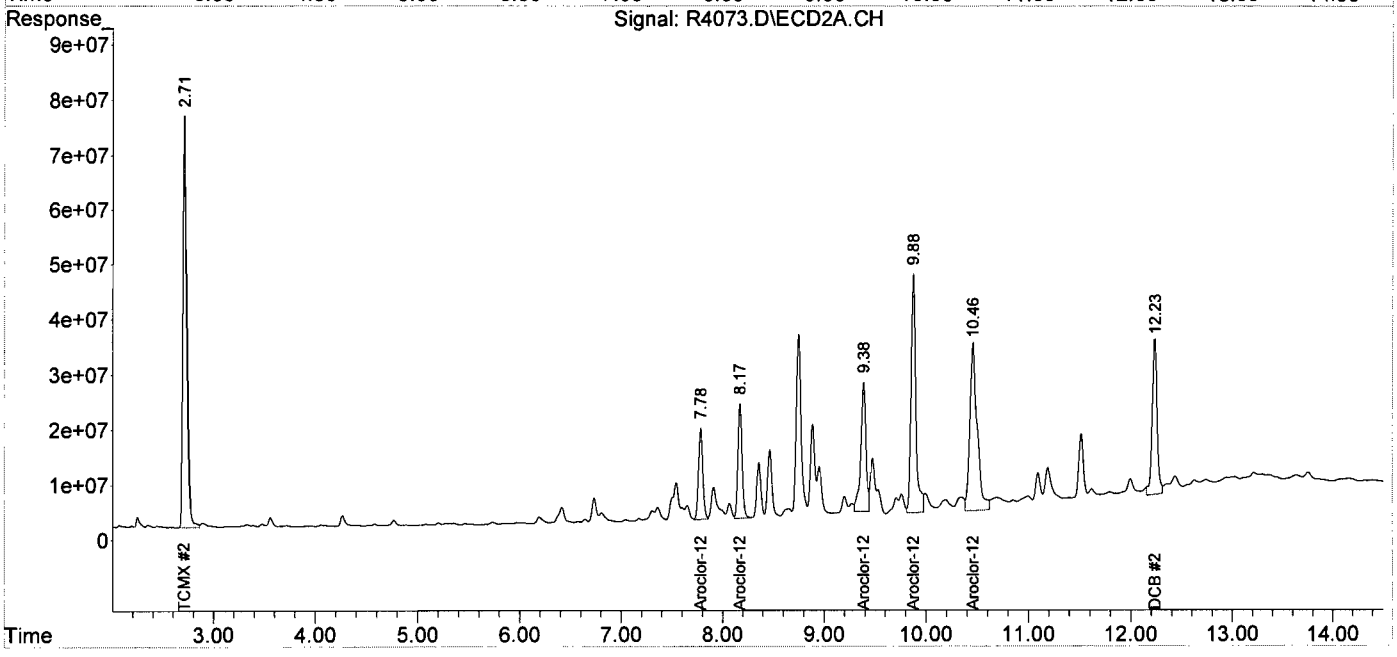
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4073.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 3:36
Operator : JS
Sample : E-54_(2-,E16-09537-002,S,5.86g,7.40,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:48:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3825.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 21:17
Operator : JS
Sample : E-42_(0.,E16-09537-003,S,5.72g,12.6,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:08:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.71	2.74	2841.4E6	2085.0E6	177.062	173.265	
Spiked Amount 200.000			Recovery	=	88.53%	86.63%	
2) S DCB	11.98	12.24	999.8E6	934.4E6	190.881m	193.637m	
Spiked Amount 200.000			Recovery	=	95.44%	96.82%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.17	7.79	924.1E6	627.3E6	894.077	1226.402	#
34) L8 Aroclor-1260 {2}	8.86	8.18	706.3E6	749.2E6	1467.088m	1310.515	
35) L8 Aroclor-1260 {3}	9.33	9.40	1916.6E6	949.2E6	1573.643m	2321.007	#
36) L8 Aroclor-1260 {4}	9.81	9.88	1223.7E6	1697.8E6	1929.066m	1757.679	
37) L8 Aroclor-1260 {5}	10.88	10.47	523.3E6	1689.3E6	1985.835m	1953.402	
Sum Aroclor-1260			5293.9E6	5712.8E6	7849.709	8569.006	
Average Aroclor-1260					1569.942	1713.801	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

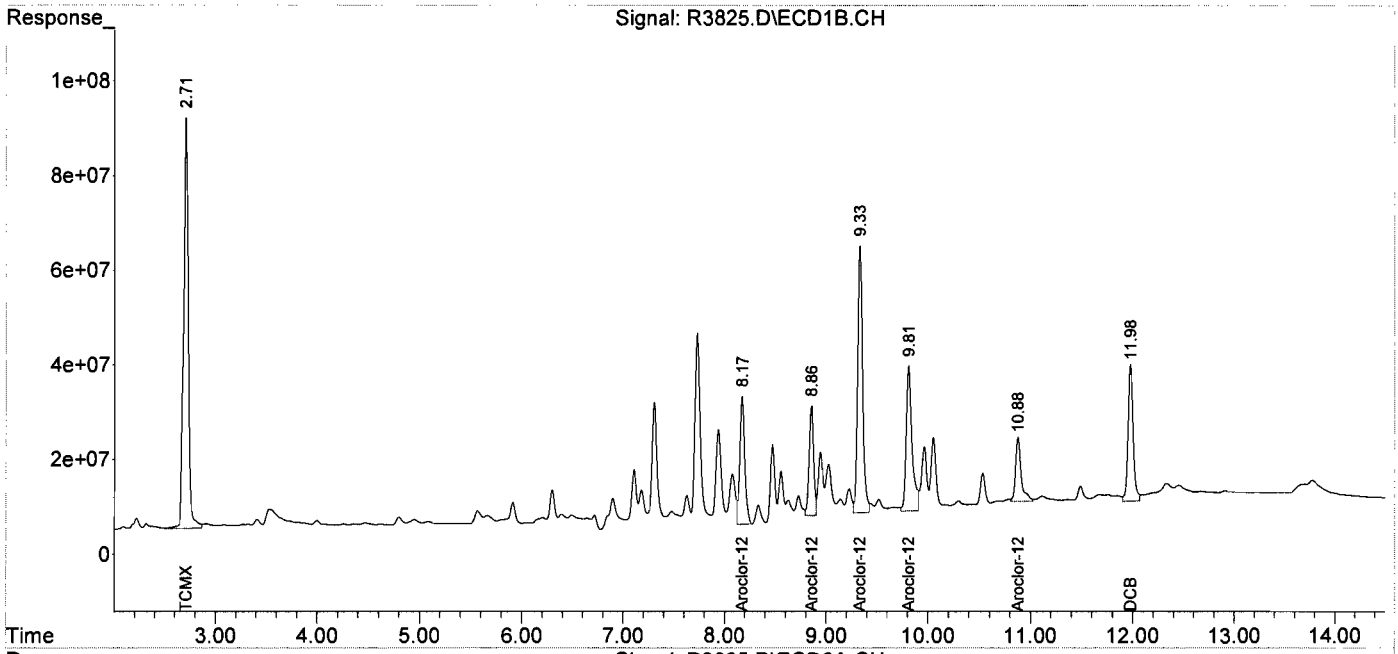
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

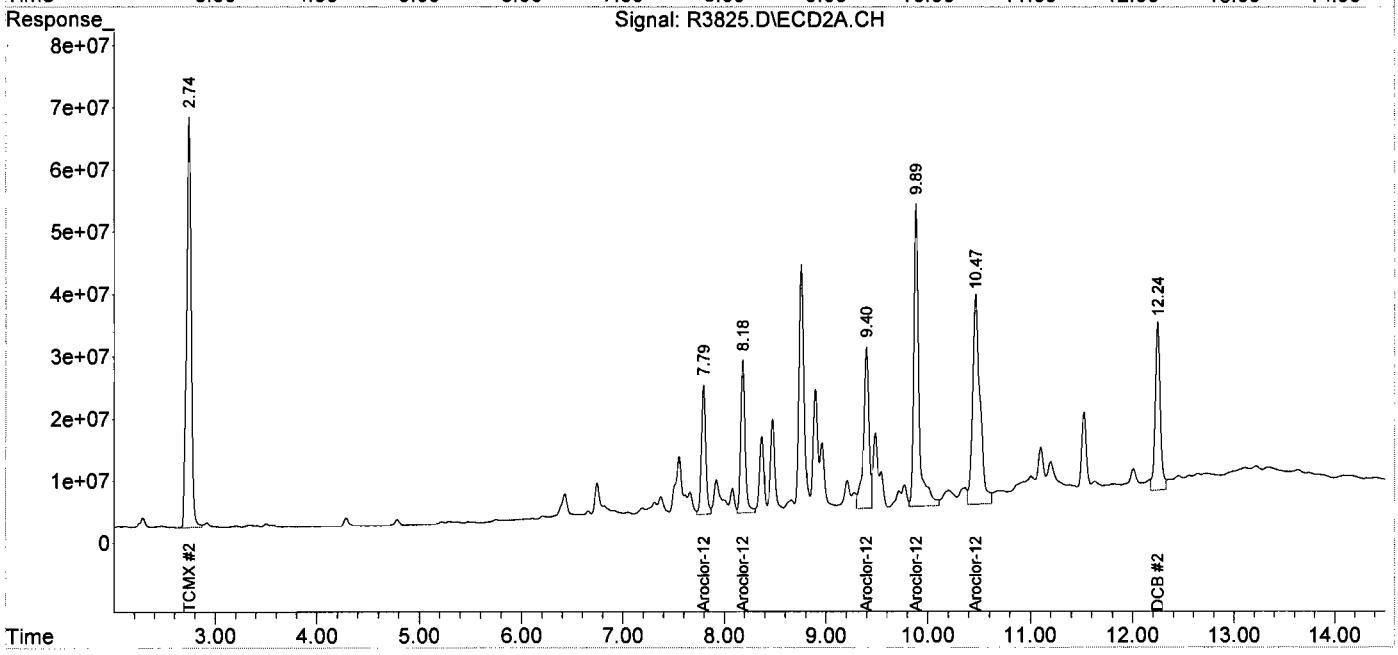
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3825.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 21:17
Operator : JS
Sample : E-42_(0.,E16-09537-003,S,5.72g,12.6,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:08:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3826.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 21:34
Operator : JS
Sample : E-42_(2-,E16-09537-004,S,5.46g,6.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:14:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2708.7E6	2061.3E6	168.795	171.294
Spiked Amount 200.000			Recovery	=	84.40%	85.65%
2) S DCB	11.98	12.25	978.1E6	883.5E6	186.738	183.079m
Spiked Amount 200.000			Recovery	=	93.37%	91.54%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.17	7.80	927.9E6	596.5E6	897.708	1166.234 #
34) L8 Aroclor-1260 {2}	8.86	8.18	693.5E6	711.2E6	1440.498m	1243.985
35) L8 Aroclor-1260 {3}	9.33	9.40	1911.6E6	989.5E6	1569.576m	2419.621 #
36) L8 Aroclor-1260 {4}	9.81	9.89	1156.1E6	1749.9E6	1822.486m	1811.594
37) L8 Aroclor-1260 {5}	10.88	10.47	521.6E6	1730.8E6	1979.585m	2001.329
Sum Aroclor-1260			5210.7E6	5777.8E6	7709.853	8642.763
Average Aroclor-1260					1541.971	1728.553
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

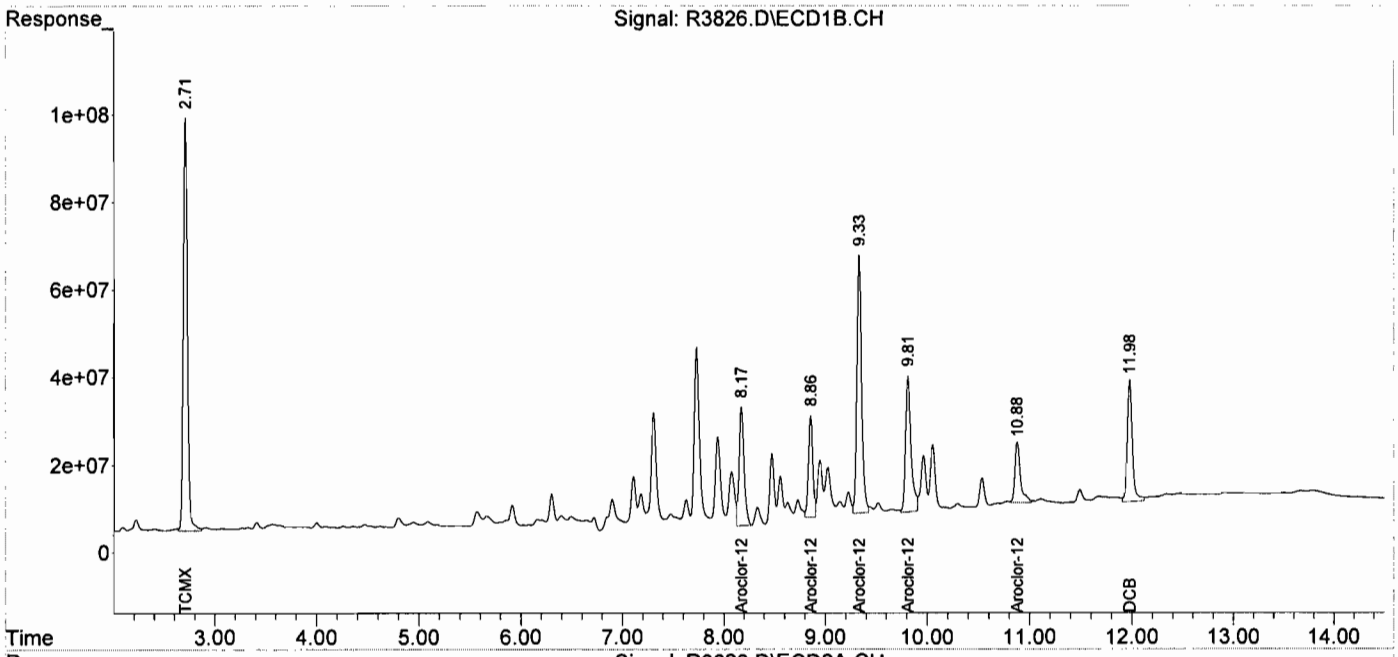
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

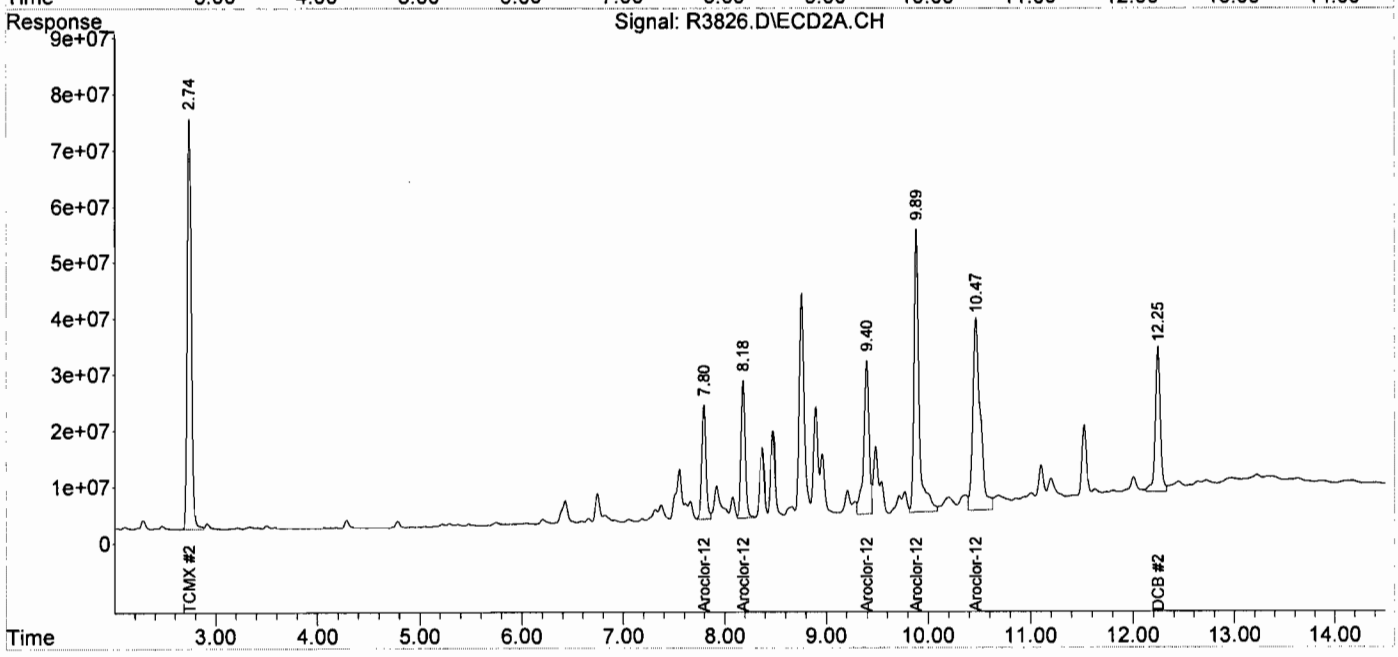
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3826.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 21:34
Operator : JS
Sample : E-42_(2-,E16-09537-004,S,5.46g,6.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:14:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3846.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:39
Operator : JS
Sample : E-42_(3-,E16-09537-005,S,5.48g,6.40,20
Misc : 161017-13,10/17/16,10/12/16,2
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:34:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	1373.2E6	1020.6E6	85.571	84.809
Spiked Amount 200.000			Recovery	=	42.79%	42.40%
2) S DCB	11.98	12.24	524.9E6	474.6E6	100.213m	98.358m
Spiked Amount 200.000			Recovery	=	50.11%	49.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.17	7.79	571.3E6	314.1E6	552.764	614.140
34) L8 Aroclor-1260 {2}	8.85	8.18	381.0E6	363.4E6	791.398m	635.674
35) L8 Aroclor-1260 {3}	9.33	9.40	1069.2E6	521.8E6	877.887m	1275.874 #
36) L8 Aroclor-1260 {4}	9.81	9.88	626.6E6	882.1E6	987.742m	913.247
37) L8 Aroclor-1260 {5}	10.88	10.46	333.3E6	903.6E6	1264.737m	1044.862
Sum Aroclor-1260			2981.3E6	2985.0E6	4474.529	4483.796
Average Aroclor-1260					894.906	896.759
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

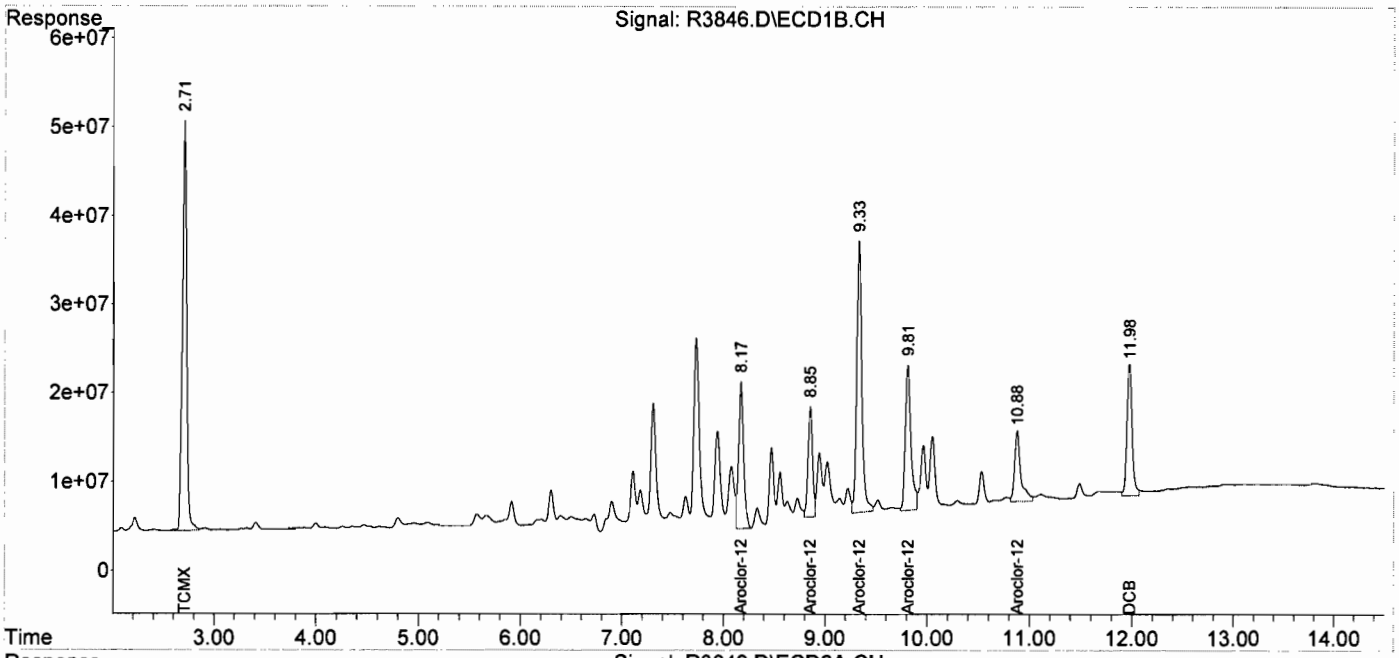
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

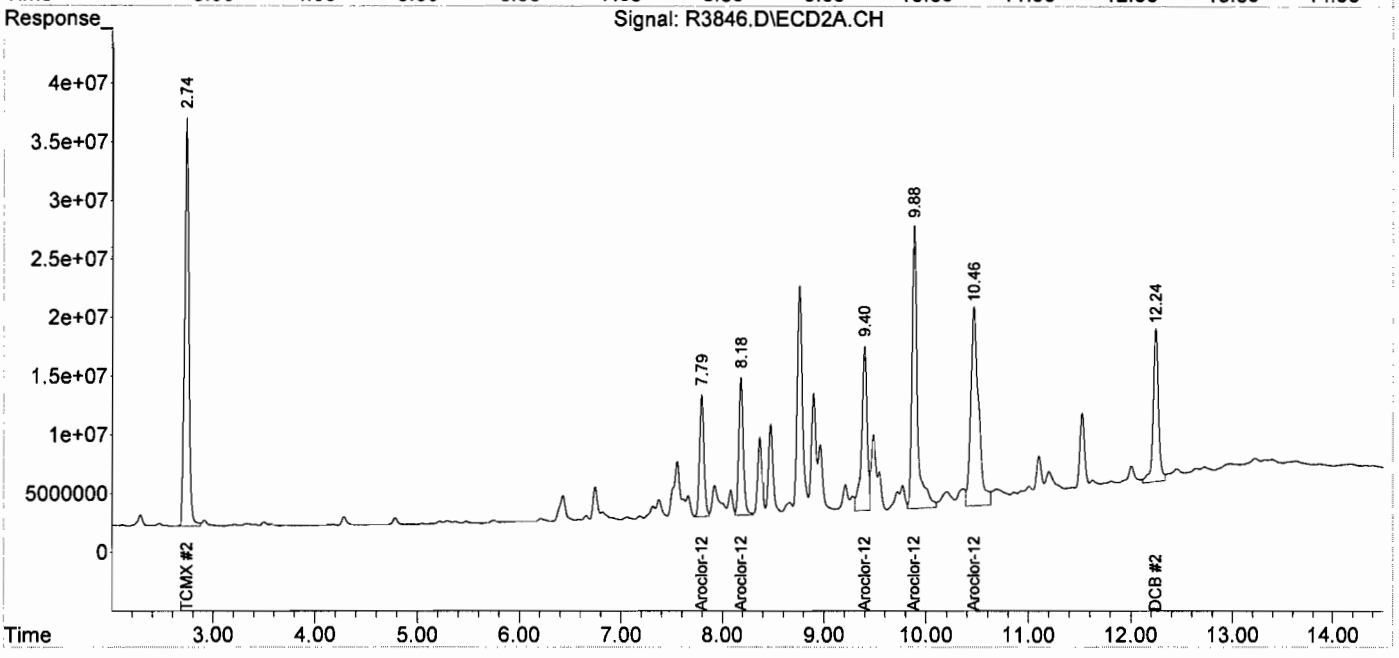
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3846.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:39
Operator : JS
Sample : E-42_(3-,E16-09537-005,S,5.48g,6.40,20
Misc : 161017-13,10/17/16,10/12/16,2
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:34:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 3:54
Operator : JS
Sample : E-42_(4-,E16-09537-006,S,5.84g,4.20,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:48:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2601.6E6	2004.6E6	162.121	166.578
Spiked Amount 200.000			Recovery	=	81.06%	83.29%
2) S DCB	11.97	12.23	1018.9E6	909.9E6	194.528m	188.545m
Spiked Amount 200.000			Recovery	=	97.26%	94.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

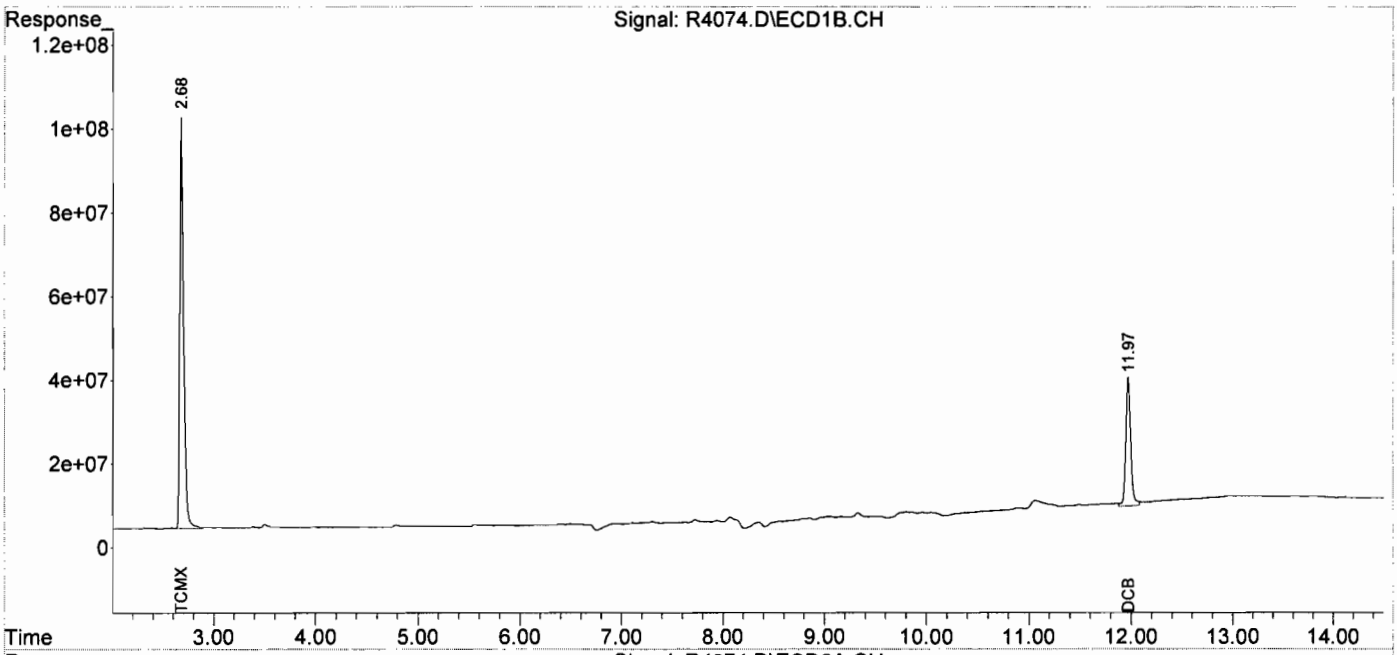
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

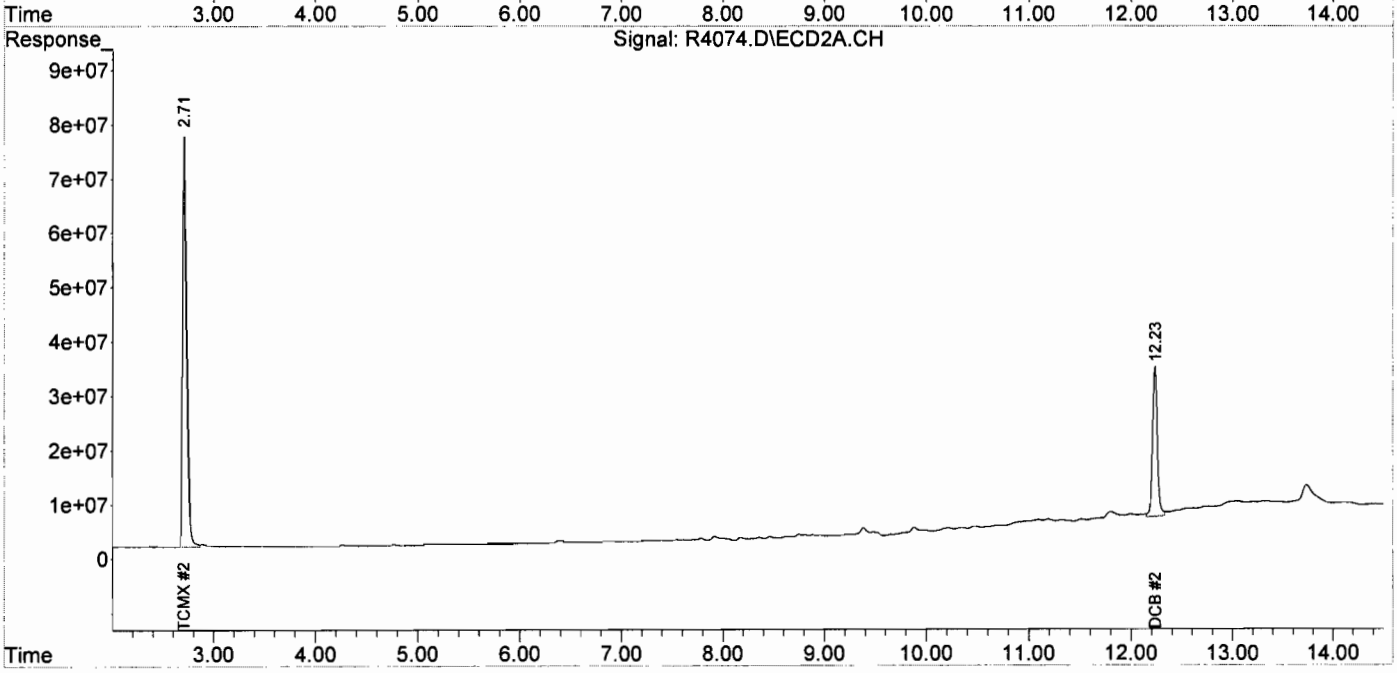
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4074.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 3:54
Operator : JS
Sample : E-42_(4-,E16-09537-006,S,5.84g,4.20,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:48:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3829.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:19
Operator : JS
Sample : E-51_(0.,E16-09537-007,S,5.42g,9.10,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:18:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2853.9E6	2134.0E6	177.845	177.332
Spiked Amount 200.000			Recovery	=	88.92%	88.67%
2) S DCB	11.98	12.24	1108.7E6	925.1E6	211.681	191.694m
Spiked Amount 200.000			Recovery	=	105.84%	95.85%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

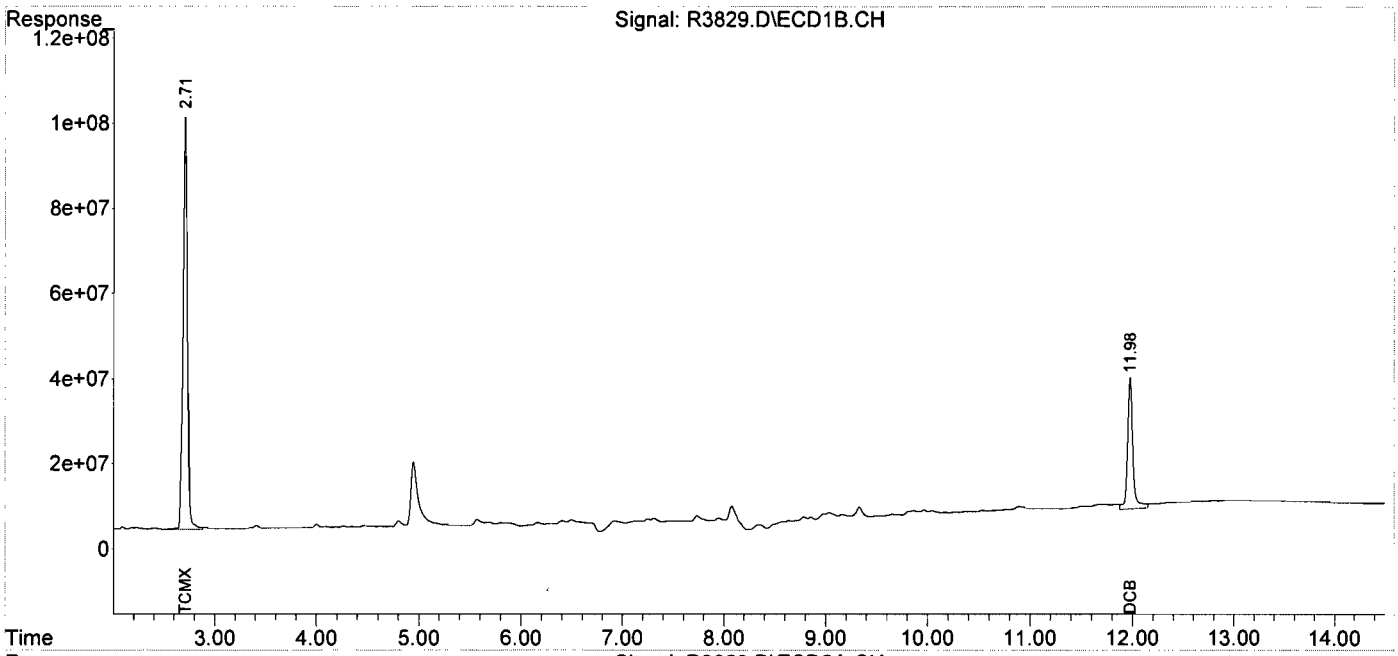
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

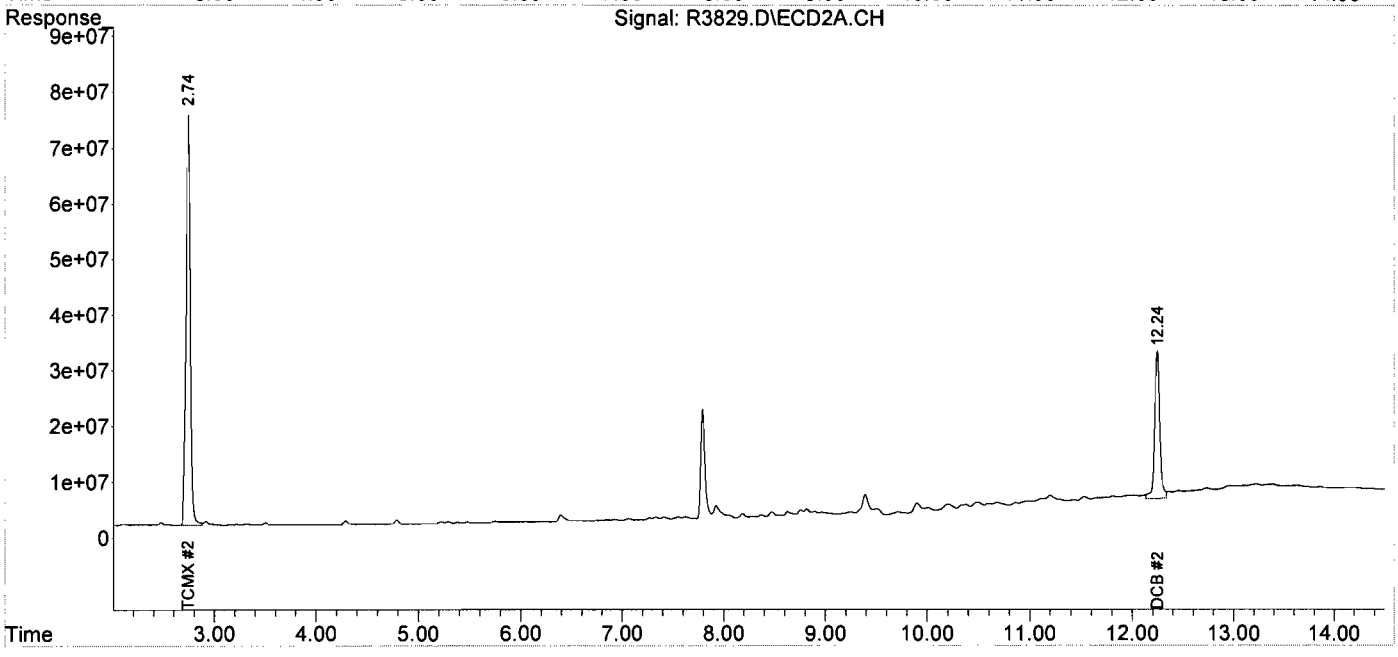
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3829.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:19
Operator : JS
Sample : E-51_(0.,E16-09537-007,S,5.42g,9.10,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:18:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3830.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:36
Operator : JS
Sample : E-51_(2-,E16-09537-008,S,5.52g,7.60,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:19:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2936.6E6	2182.8E6	182.997	181.388
Spiked Amount 200.000			Recovery	=	91.50%	90.69%
2) S DCB	11.98	12.24	1076.2E6	898.6E6	205.473m	186.219m
Spiked Amount 200.000			Recovery	=	102.74%	93.11%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

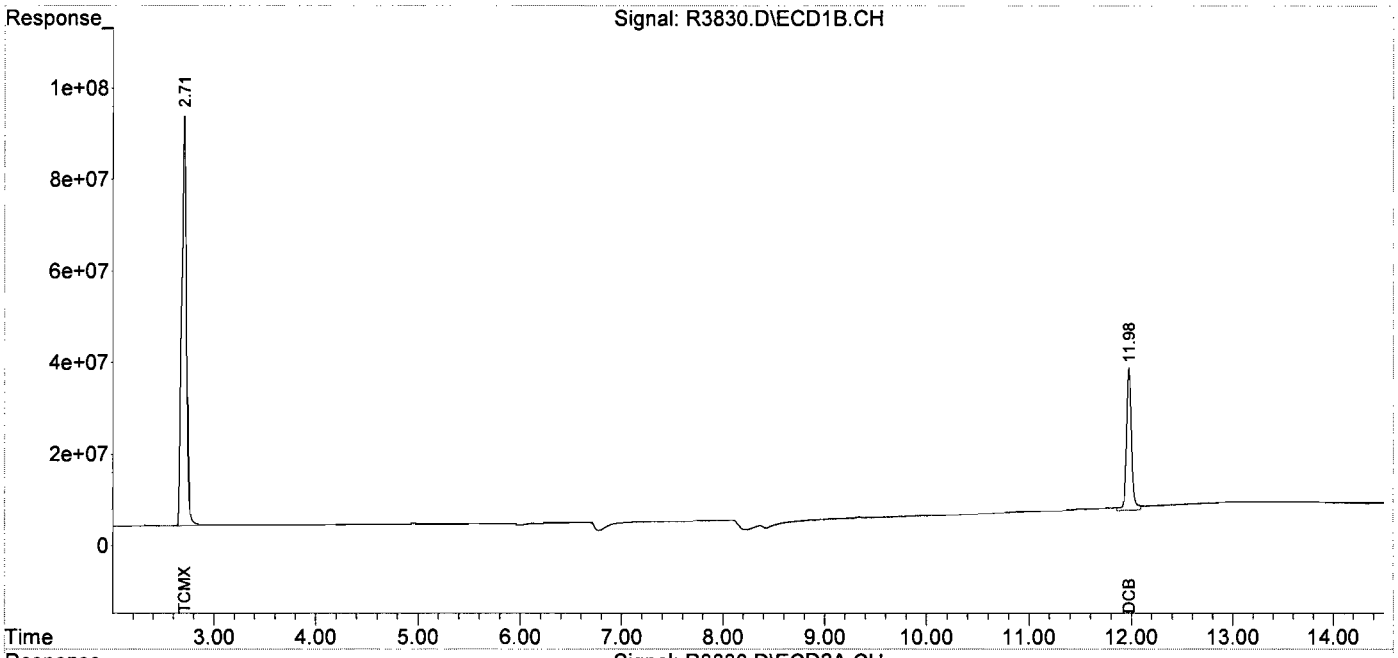
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

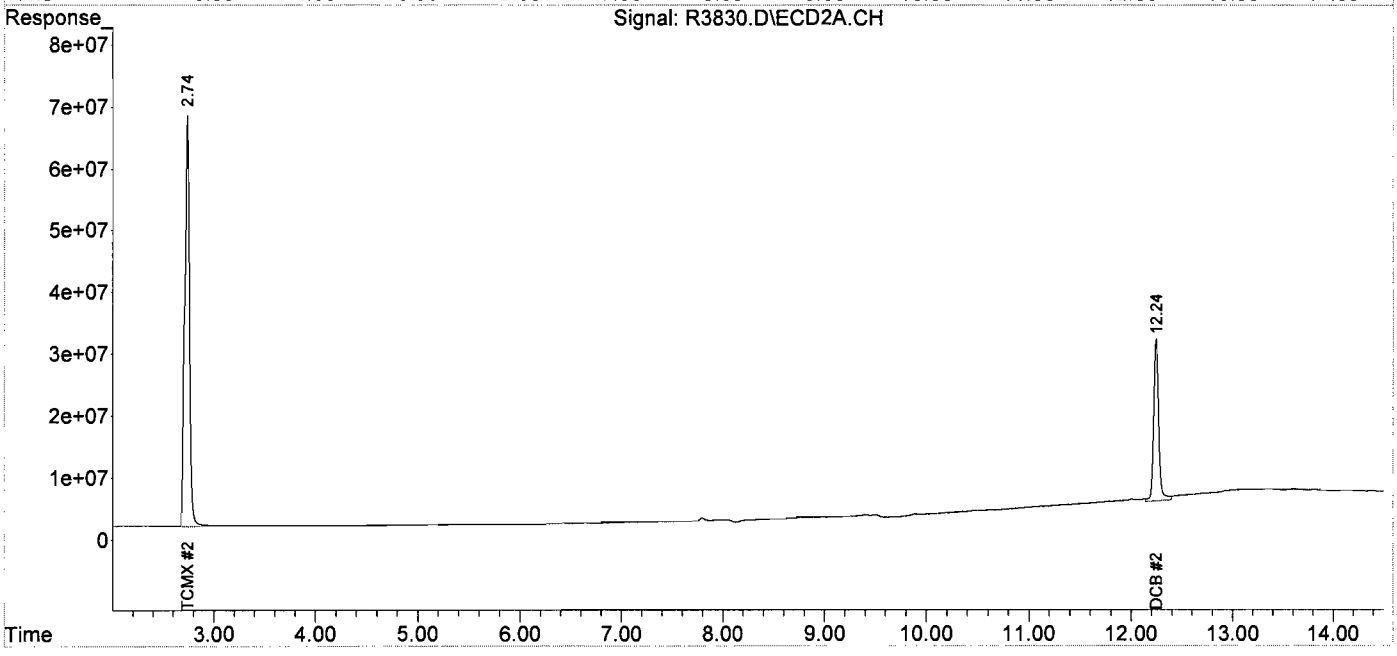
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3830.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:36
Operator : JS
Sample : E-51_(2-,E16-09537-008,S,5.52g,7.60,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:19:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3831.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:54
Operator : JS
Sample : E-51_(3-,E16-09537-009,S,5.81g,5.80,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:21:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2868.2E6	2139.2E6	178.733	177.764
Spiked Amount 200.000			Recovery	=	89.37%	88.88%
2) S DCB	11.97	12.24	998.4E6	918.3E6	190.615m	190.293
Spiked Amount 200.000			Recovery	=	95.31%	95.15%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.80	0	23226221	N.D. d	45.410m#
34) L8 Aroclor-1260 {2}	8.86	8.19	11272674	17177011	23.416m	30.046 #
35) L8 Aroclor-1260 {3}	9.33	9.40	31873252	12776049	26.170m	31.240m
36) L8 Aroclor-1260 {4}	9.82	9.89	15146302	22160286	23.877m	22.942m
37) L8 Aroclor-1260 {5}	10.88	10.47	8519567	22811053	32.331m	26.377m
Sum Aroclor-1260			66811795	98150620	105.795	156.015
Average Aroclor-1260					26.449	31.203
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

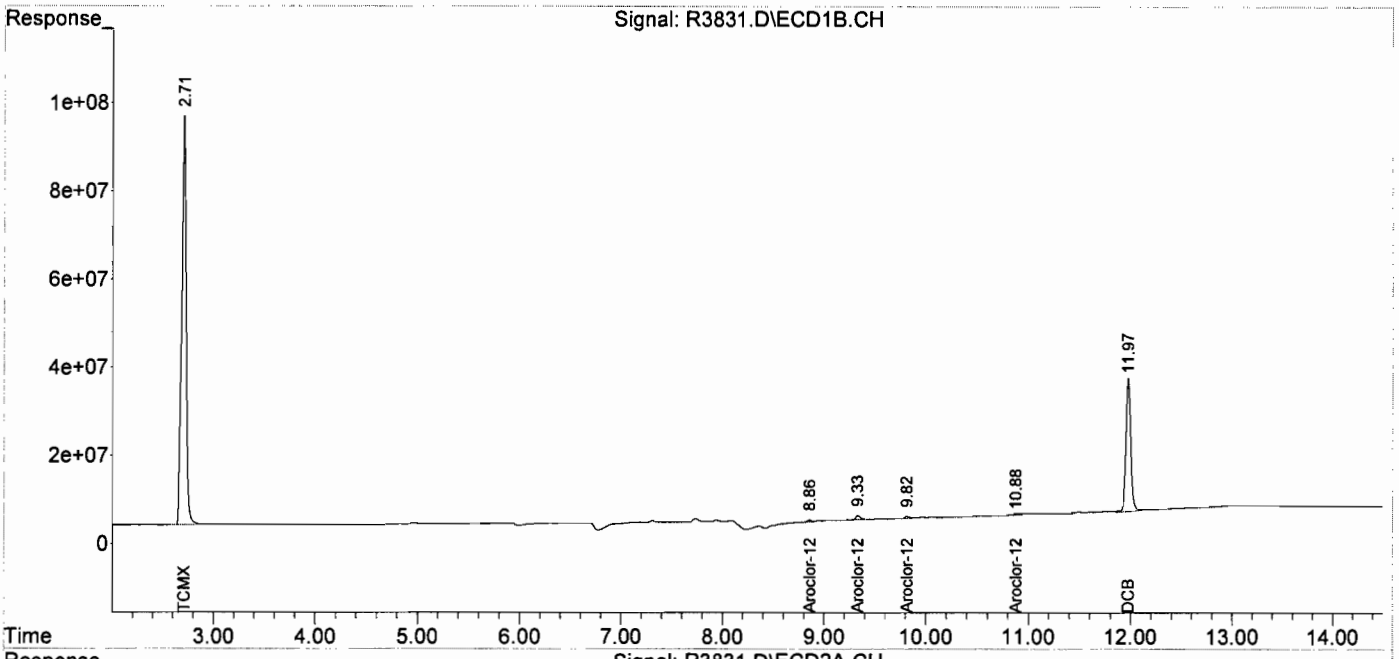
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

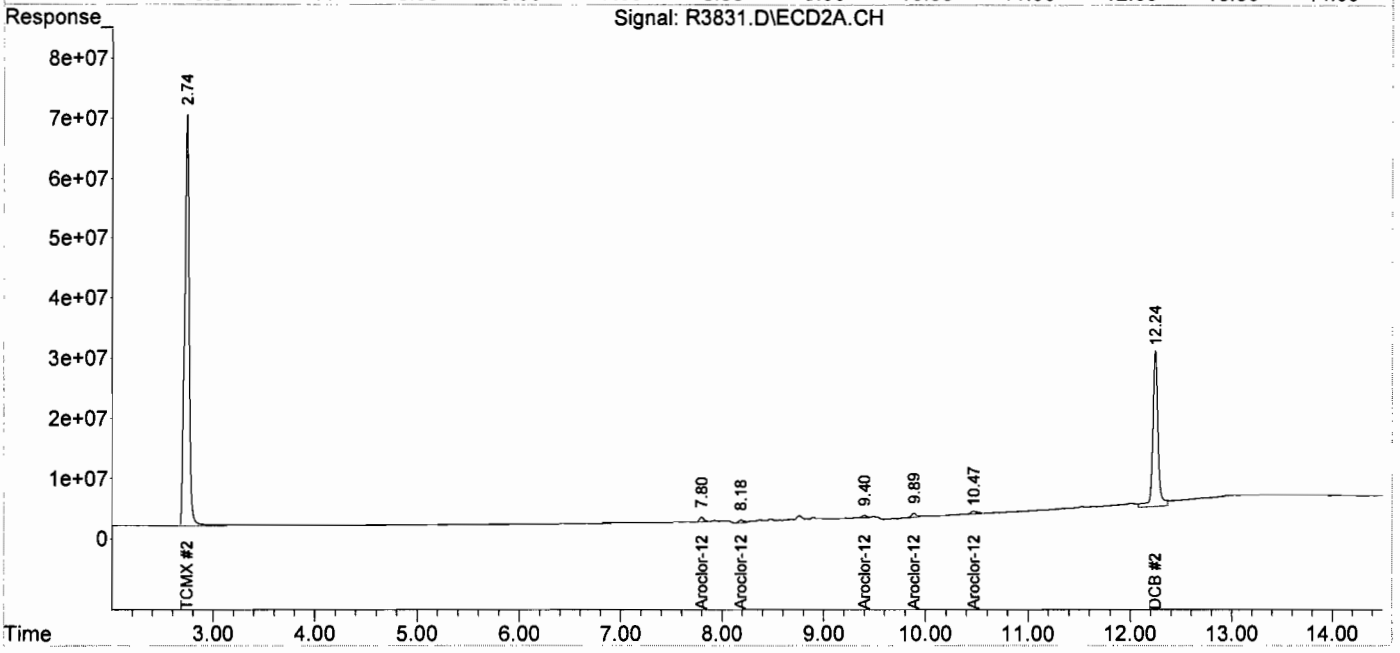
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3831.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:54
Operator : JS
Sample : E-51_(3-,E16-09537-009,S,5.81g,5.80,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:21:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3832.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:11
Operator : JS
Sample : E-49_(0.,E16-09537-010,S,5.31g,5.20,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:23:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2827.0E6	2087.9E6	176.169	173.505
Spiked Amount 200.000			Recovery	=	88.08%	86.75%
2) S DCB	11.98	12.24	984.3E6	817.4E6	187.917	169.380m
Spiked Amount 200.000			Recovery	=	93.96%	84.69%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.15	7.79	36132712	20576046	34.958m	40.229m
34) L8 Aroclor-1260 {2}	8.86	8.19	21499438	28262616	44.660m	49.437
35) L8 Aroclor-1260 {3}	9.33	9.39	64587457	27166277	53.031m	66.427m#
36) L8 Aroclor-1260 {4}	9.82	9.89	35954379	47636582	56.680m	49.317m
37) L8 Aroclor-1260 {5}	10.88	10.47	18687163	45534823	70.917m	52.653m#
Sum Aroclor-1260			176.9E6	169.2E6	260.246	258.063
Average Aroclor-1260					52.049	51.613
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

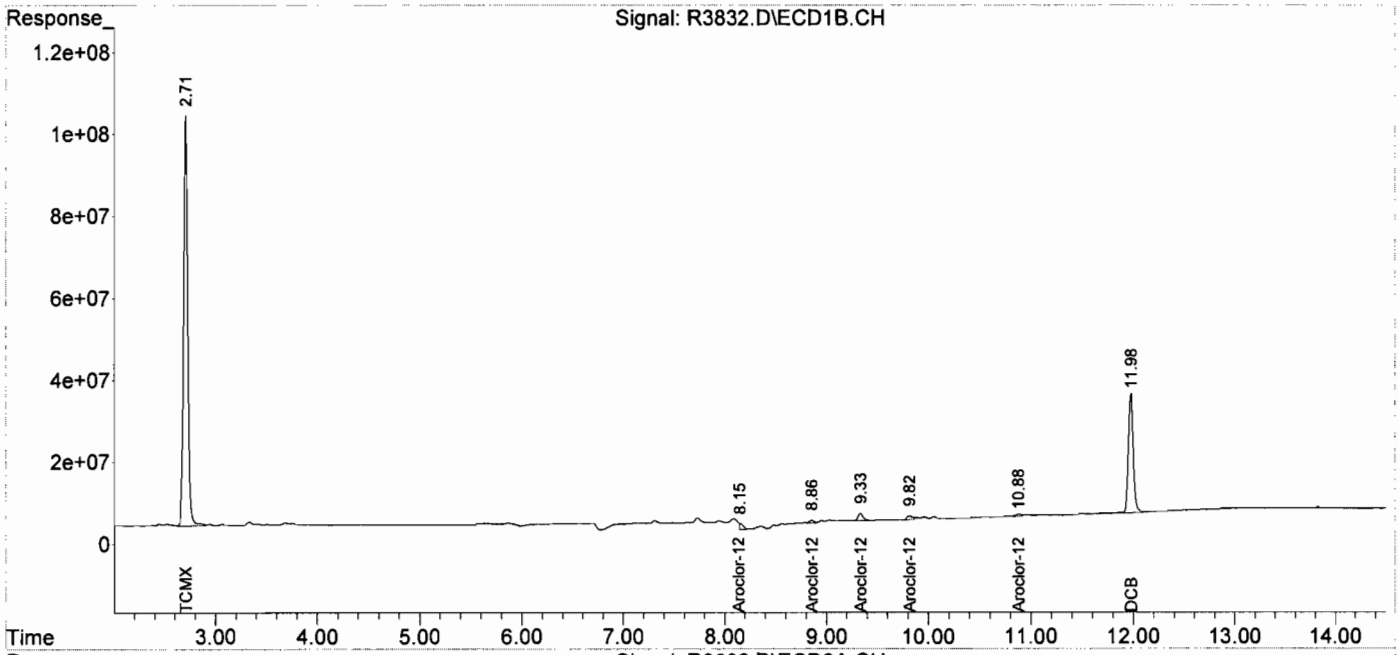
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

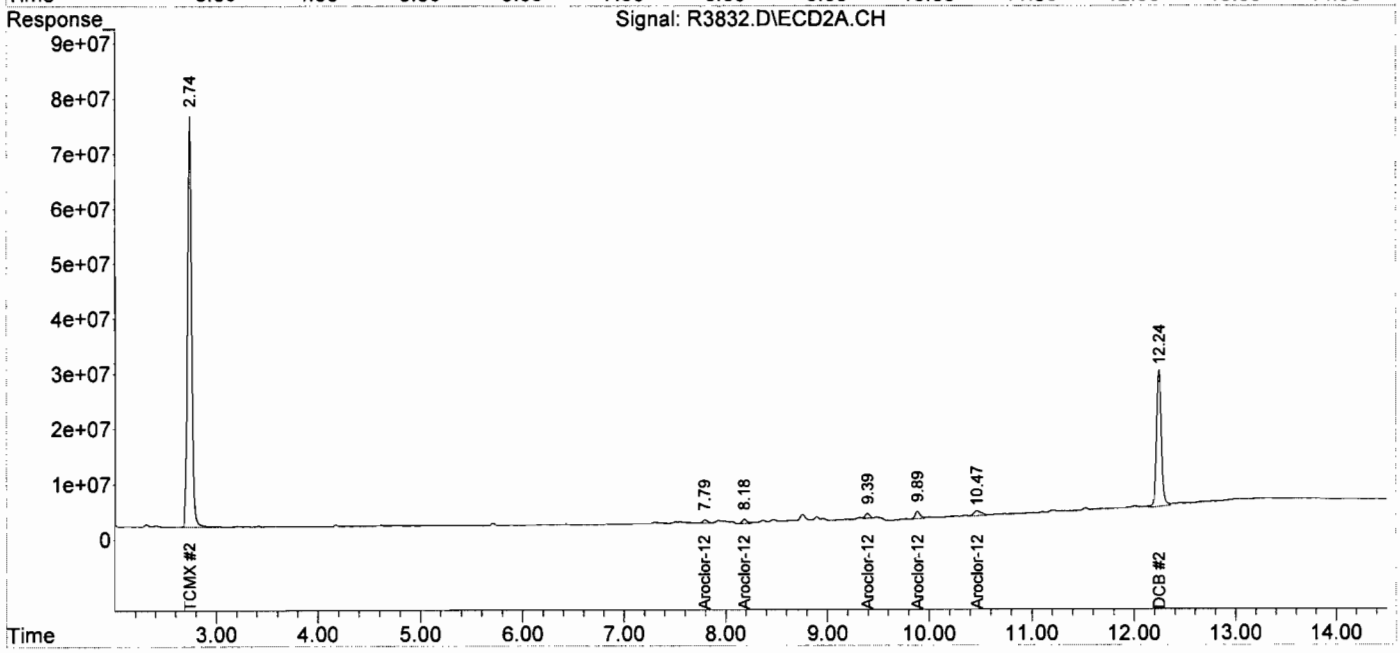
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3832.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:11
Operator : JS
Sample : E-49_(0.,E16-09537-010,S,5.31g,5.20,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:23:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3833.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:29
Operator : JS
Sample : E-52_(0.,E16-09537-011,S,5.43g,8.70,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:24:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2864.8E6	2159.6E6	178.524	179.464
Spiked Amount 200.000			Recovery	=	89.26%	89.73%
2) S DCB	11.98	12.24	1163.3E6	1008.3E6	222.106	208.948m
Spiked Amount 200.000			Recovery	=	111.05%	104.47%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

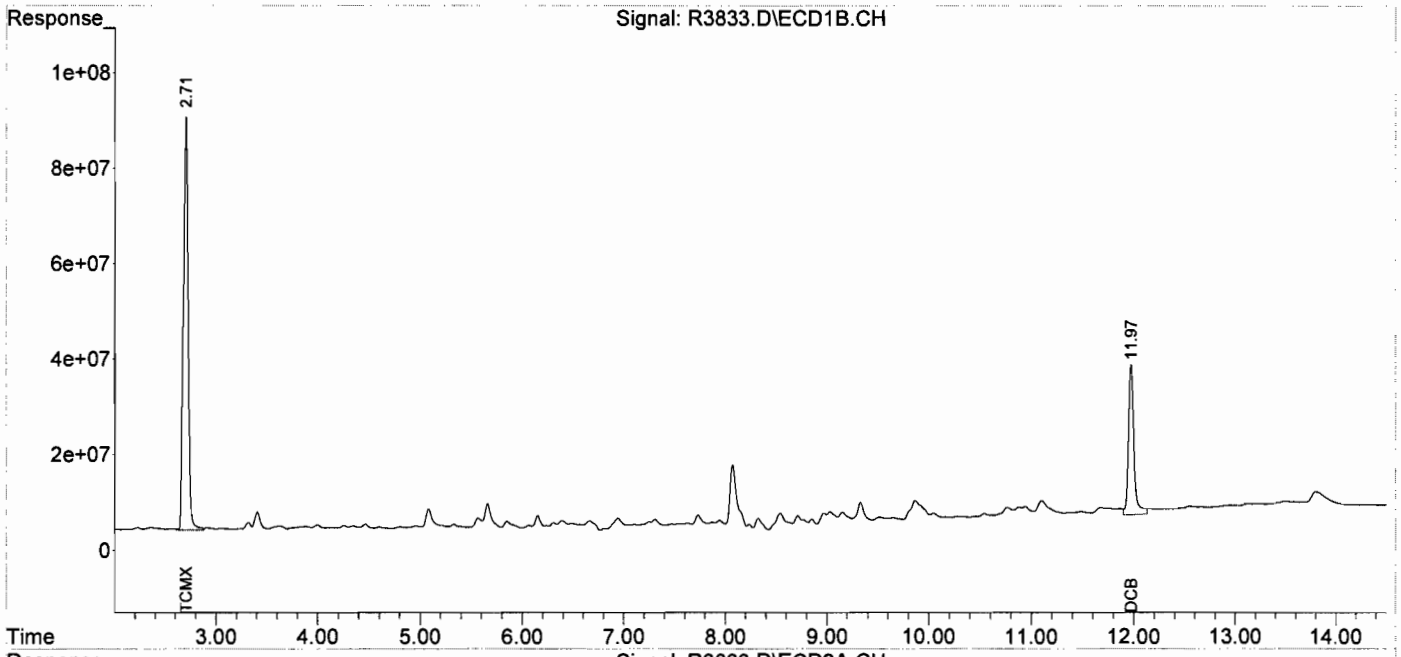
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

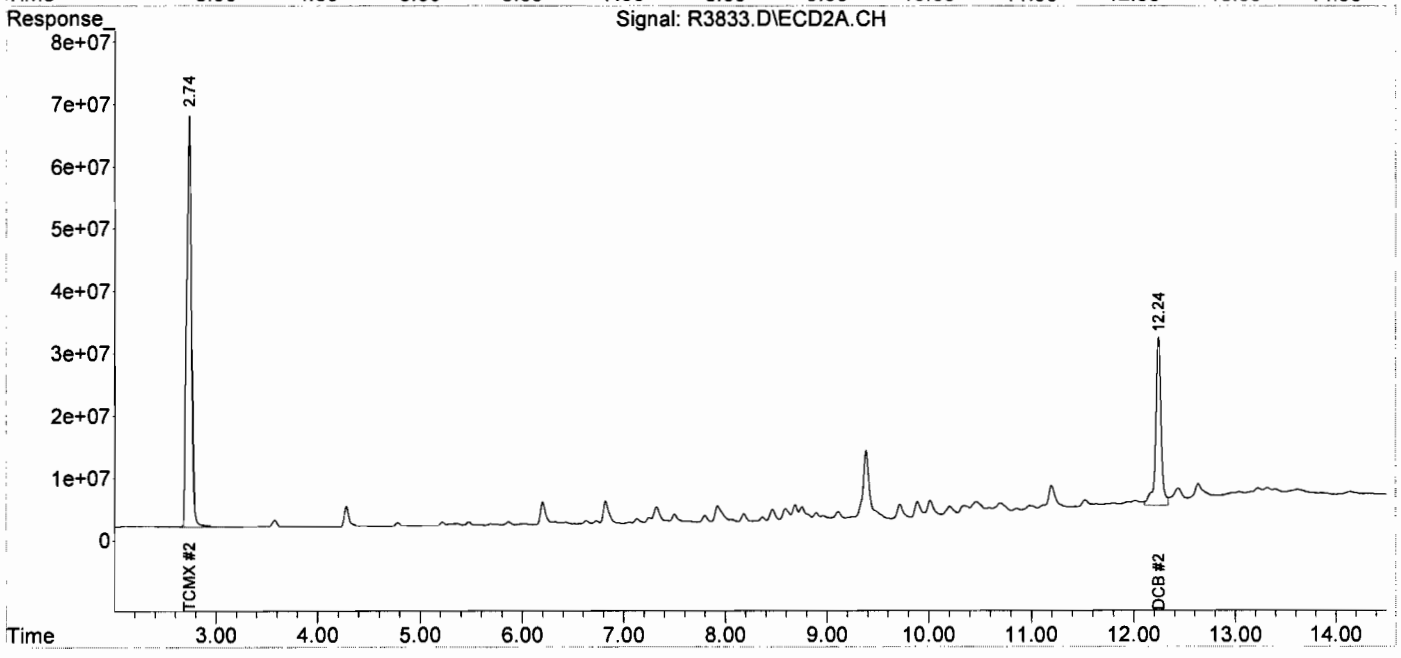
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3833.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:29
Operator : JS
Sample : E-52_(0.,E16-09537-011,S,5.43g,8.70,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:24:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3834.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:46
Operator : JS
Sample : E-37_(0.,E16-09537-012,S,5.55g,4.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2818.6E6	2105.9E6	175.646	175.001
Spiked Amount 200.000			Recovery	=	87.82%	87.50%
2) S DCB	11.98	12.24	1122.3E6	842.8E6	214.261	174.646m
Spiked Amount 200.000			Recovery	=	107.13%	87.32%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.79	0	6908021	N.D. d	13.506m#
34) L8 Aroclor-1260 {2}	8.86	8.19	8833882	13926888	18.350m	24.361 #
35) L8 Aroclor-1260 {3}	9.33	9.39	21814344	9503014	17.911m	23.237m#
36) L8 Aroclor-1260 {4}	9.81	9.89	7296587	14949773	11.503m	15.477m#
37) L8 Aroclor-1260 {5}	10.88	10.46	5415230	16529968	20.551m	19.114m
Sum Aroclor-1260			43360043	61817664	68.315	95.695
Average Aroclor-1260					17.079	19.139
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

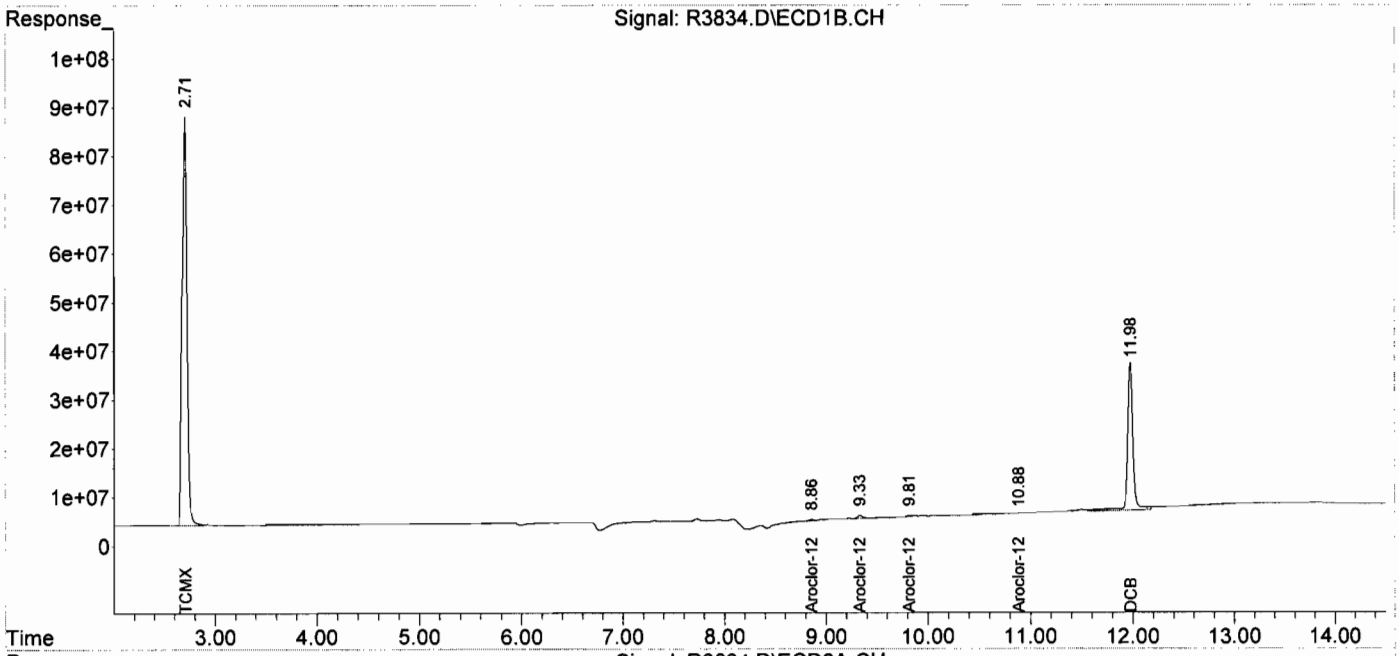
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

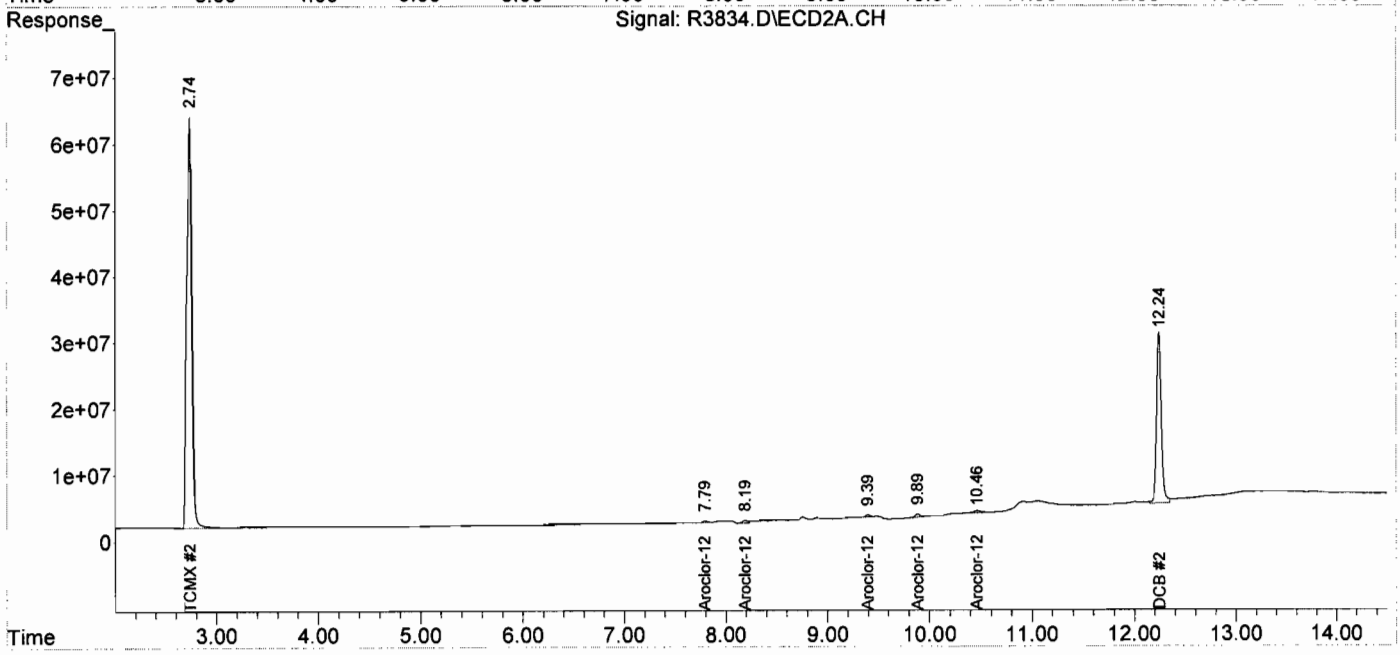
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3834.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:46
Operator : JS
Sample : E-37_(0.,E16-09537-012,S,5.55g,4.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3835.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:04
Operator : JS
Sample : E-44_(0.,E16-09537-013,S,5.79g,8.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:28:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2819.6E6	2107.7E6	175.707	175.148
Spiked Amount 200.000			Recovery	=	87.85%	87.57%
2) S DCB	11.98	12.24	1015.3E6	840.2E6	193.835m	174.118m
Spiked Amount 200.000			Recovery	=	96.92%	87.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.17	7.80	97165198	75882726	94.007	148.359 #
34) L8 Aroclor-1260 {2}	8.86	8.18	54232443	77432009	112.656m	135.445
35) L8 Aroclor-1260 {3}	9.33	9.40	162.1E6	60455370	133.083m	147.826m
36) L8 Aroclor-1260 {4}	9.81	9.89	94505923	116.4E6	148.983m	120.481m
37) L8 Aroclor-1260 {5}	10.88	10.47	35895141	126.1E6	136.220m	145.859m
Sum Aroclor-1260			443.9E6	456.3E6	624.950	697.971
Average Aroclor-1260					124.990	139.594
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

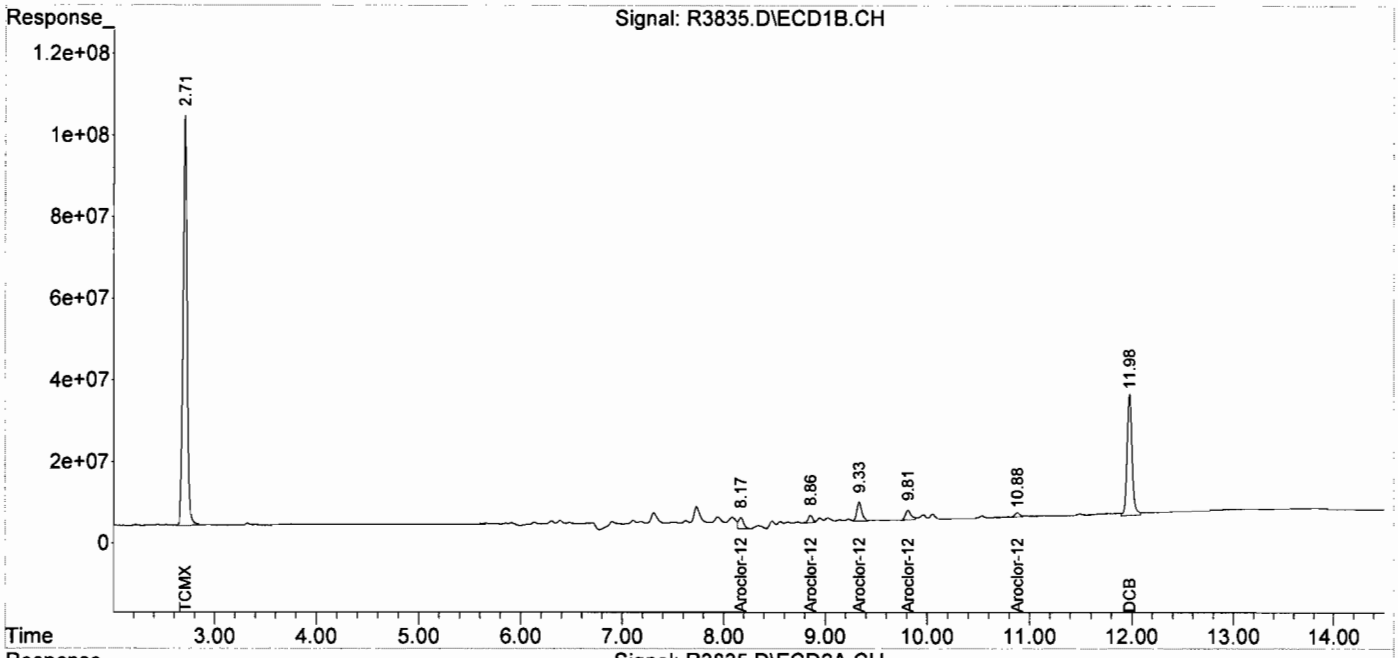
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

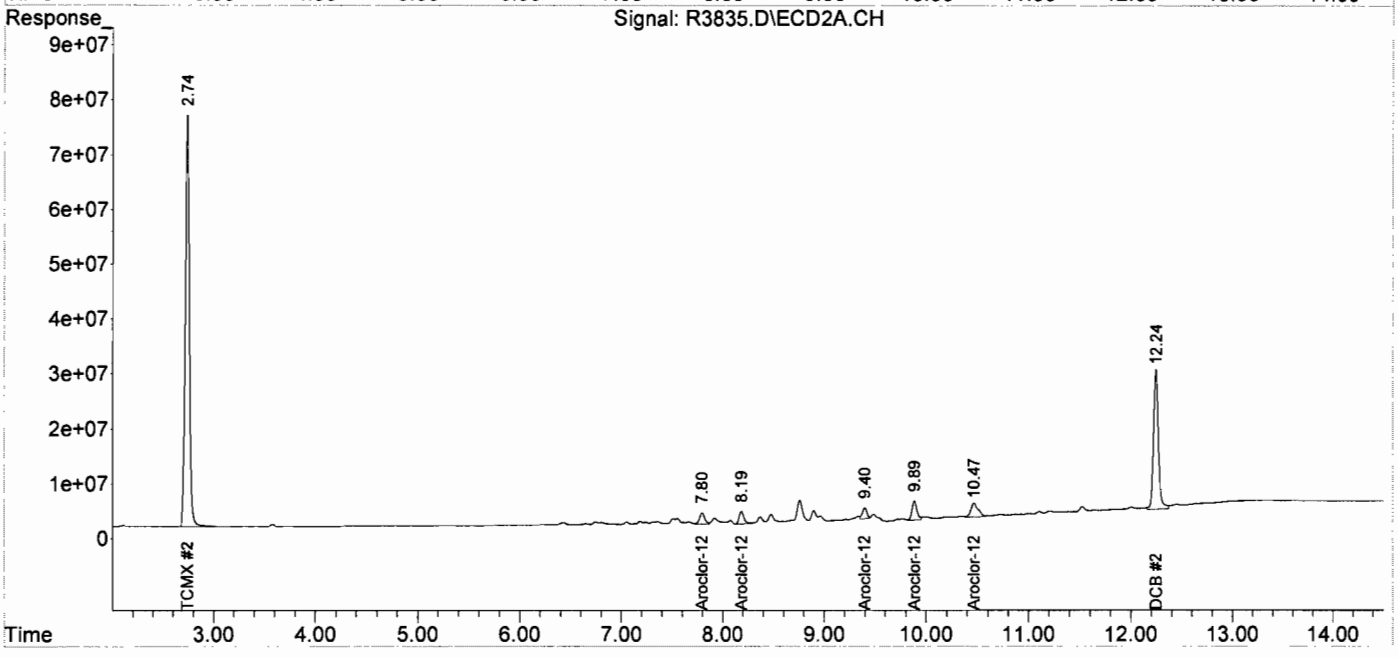
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3835.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:04
Operator : JS
Sample : E-44_(0.,E16-09537-013,S,5.79g,8.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:28:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3836.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:21
Operator : JS
Sample : E-44_(2-,E16-09537-014,S,5.68g,7.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:40:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2851.0E6	2130.7E6	177.665	177.056
Spiked Amount 200.000			Recovery	=	88.83%	88.53%
2) S DCB	11.98	12.24	1033.3E6	926.4E6	197.281m	191.978m
Spiked Amount 200.000			Recovery	=	98.64%	95.99%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.16	7.79	49891511	35267083	48.270	68.951m#
34) L8 Aroclor-1260 {2}	8.85	8.18	29388656	43032363	61.048m	75.273
35) L8 Aroclor-1260 {3}	9.33	9.40	85080196	58714774	69.857m	143.569m#
36) L8 Aroclor-1260 {4}	9.82	9.88	48097083	55732768	75.822m	57.699m
37) L8 Aroclor-1260 {5}	10.88	10.47	18453761	54803043	70.031m	63.370m
Sum Aroclor-1260			230.9E6	247.6E6	325.029	408.863
Average Aroclor-1260					65.006	81.773
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

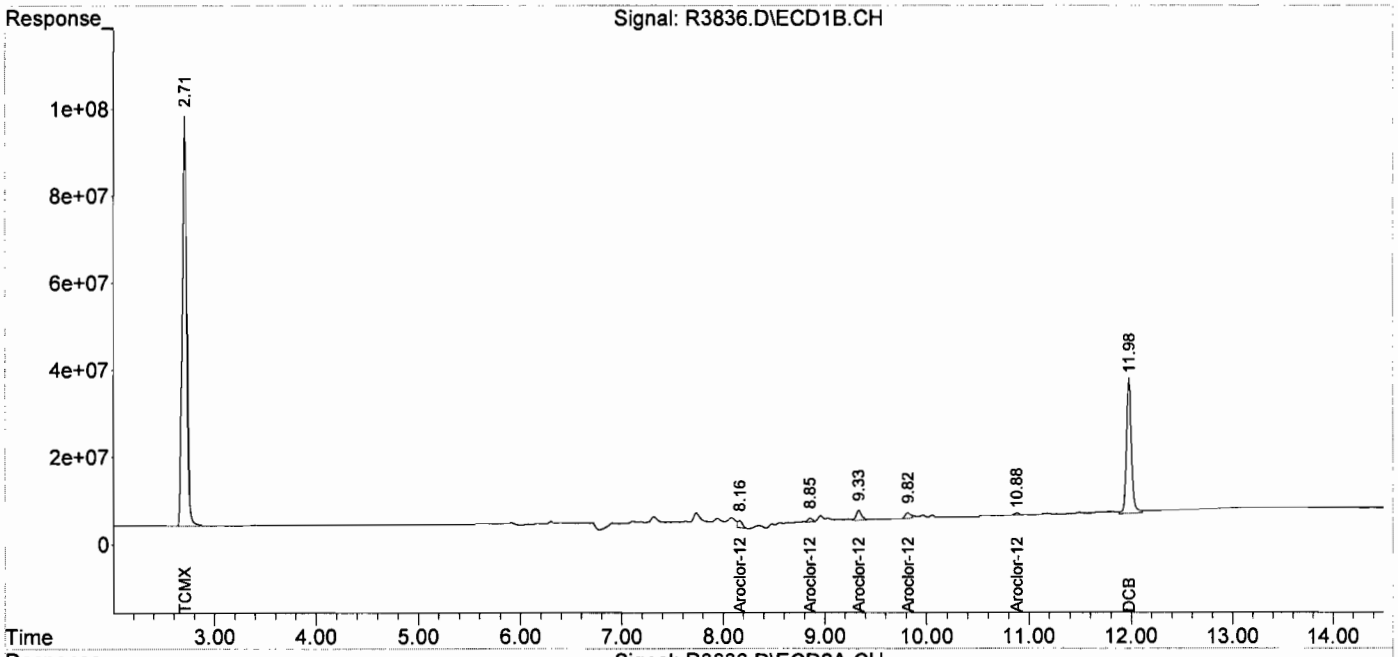
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

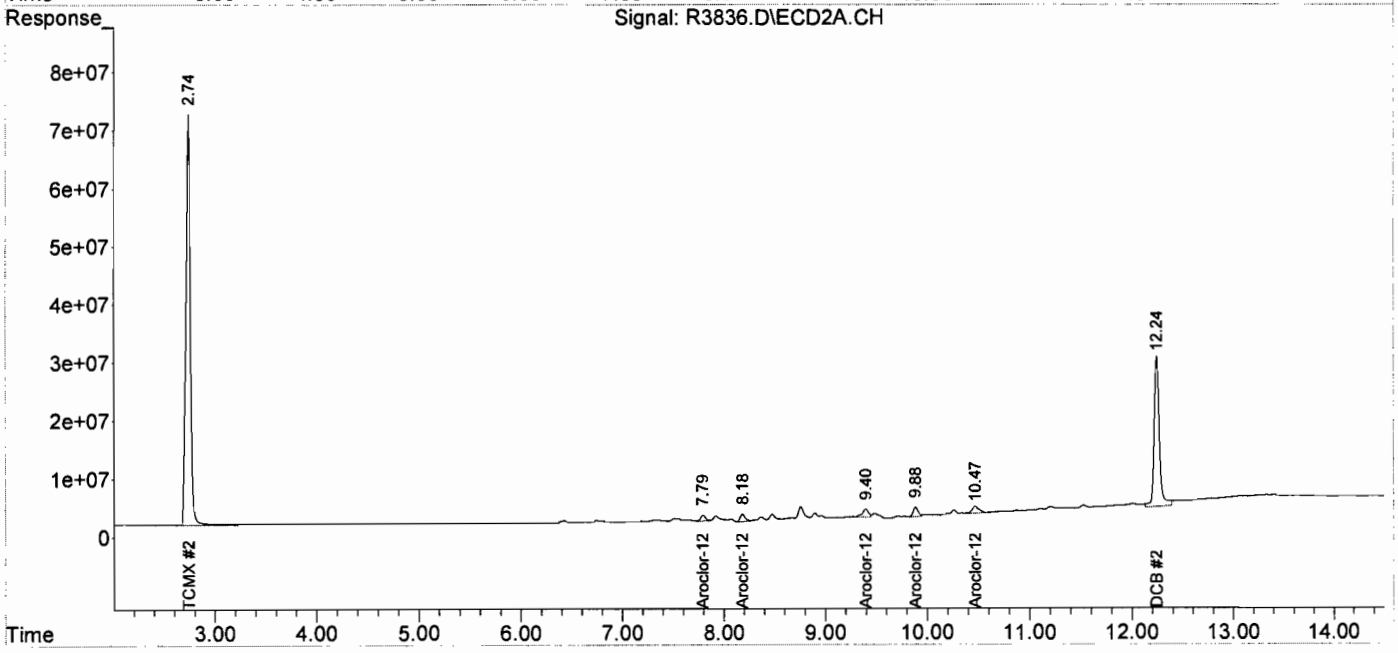
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3836.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:21
Operator : JS
Sample : E-44_(2-,E16-09537-014,S,5.68g,7.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 34 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:40:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3837.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:39
Operator : JS
Sample : E-60_(0.,E16-09537-016,S,5.82g,13.3,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:41:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2886.7E6	2185.6E6	179.888	181.619
Spiked Amount 200.000			Recovery	=	89.94%	90.81%
2) S DCB	11.98	12.25	1105.2E6	950.2E6	211.000	196.898m
Spiked Amount 200.000			Recovery	=	105.50%	98.45%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.18	7.79	2662.3E6	1638.9E6	2575.809	3204.190
34) L8 Aroclor-1260 {2}	8.86	8.18	1777.4E6	1937.6E6	3692.141	3389.213
35) L8 Aroclor-1260 {3}	9.33	9.40	5446.9E6	2137.7E6	4472.286	5227.054
36) L8 Aroclor-1260 {4}	9.81	9.88	2982.5E6	4450.2E6	4701.694	4607.180
37) L8 Aroclor-1260 {5}	10.88	10.47	1452.9E6	4182.3E6	5513.769	4836.164
Sum Aroclor-1260			14322.0E6	14346.6E6	20955.699	21263.802
Average Aroclor-1260					4191.140	4252.760
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

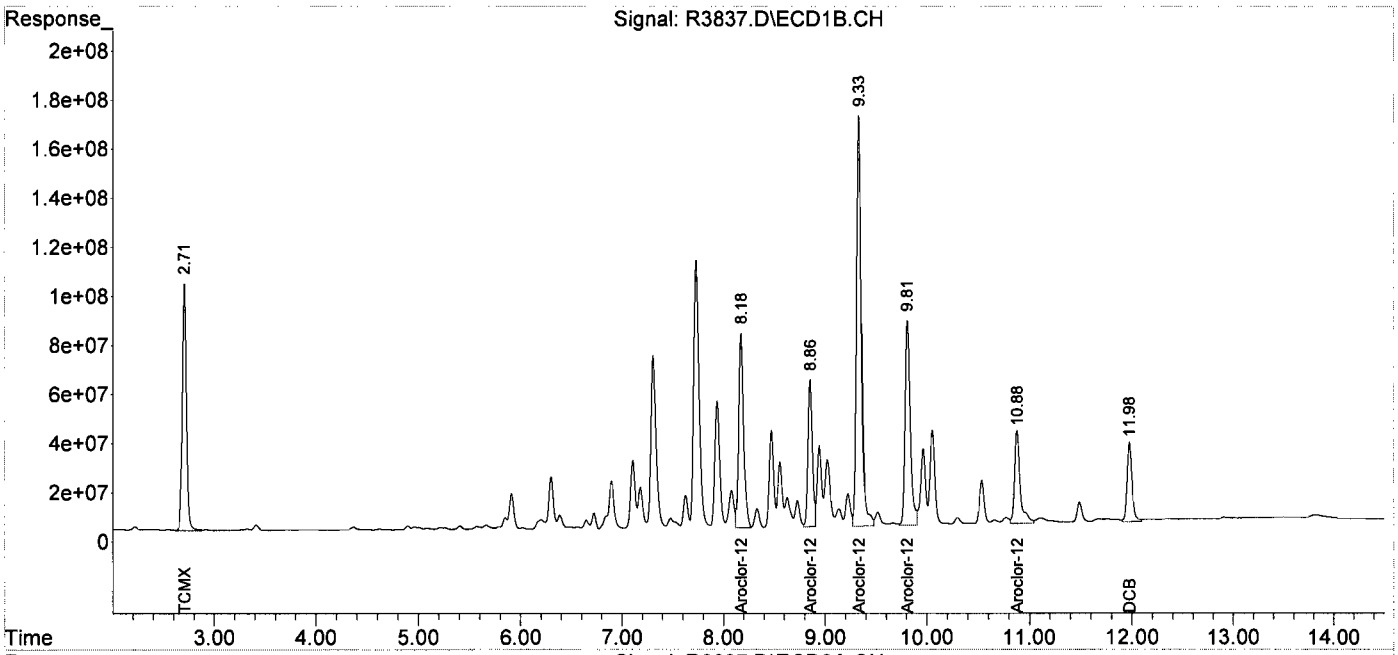
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

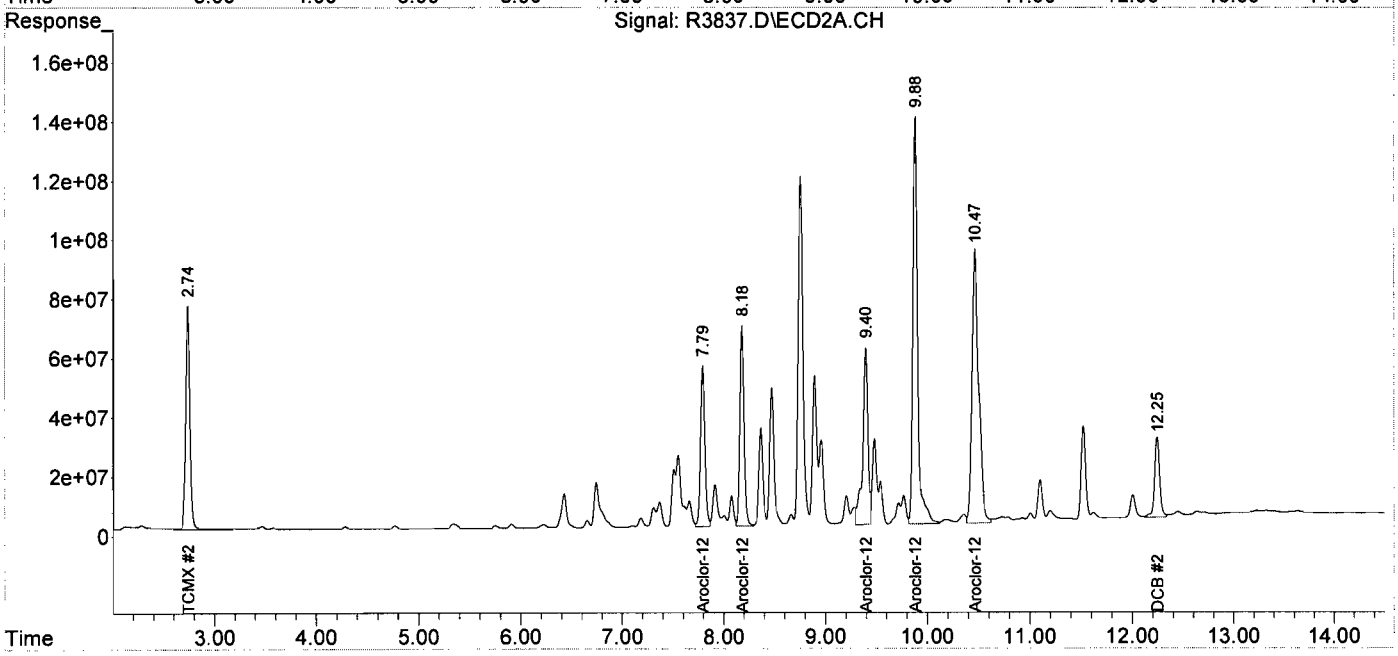
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3837.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 1:39
Operator : JS
Sample : E-60_(0.,E16-09537-016,S,5.82g,13.3,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 10:41:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3847.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:56
Operator : JS
Sample : E-60_(0.,E16-09537-016DL,S,5.82g,13.3,20
Misc : 161017-13,10/17/16,10/12/16,10 (Sig #1); 161017-13,10/17/16,10/12/16,1 (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:35:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	2.74	299.0E6	218.4E6	18.631	18.146
Spiked Amount 200.000			Recovery	=	9.32%	9.07%
2) S DCB	11.98	12.24	118.1E6	102.8E6	22.554m	21.306m
Spiked Amount 200.000			Recovery	=	11.28%	10.65%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.18	7.79	460.8E6	180.9E6	445.785	353.719
34) L8 Aroclor-1260 {2}	8.86	8.18	211.2E6	239.5E6	438.682	418.850
35) L8 Aroclor-1260 {3}	9.33	9.40	593.6E6	225.8E6	487.413	552.213
36) L8 Aroclor-1260 {4}	9.81	9.88	324.9E6	446.9E6	512.112	462.666
37) L8 Aroclor-1260 {5}	10.88	10.46	155.7E6	420.0E6	591.010	485.681
Sum Aroclor-1260			1746.2E6	1513.1E6	2475.002	2273.129
Average Aroclor-1260					495.000	454.626
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

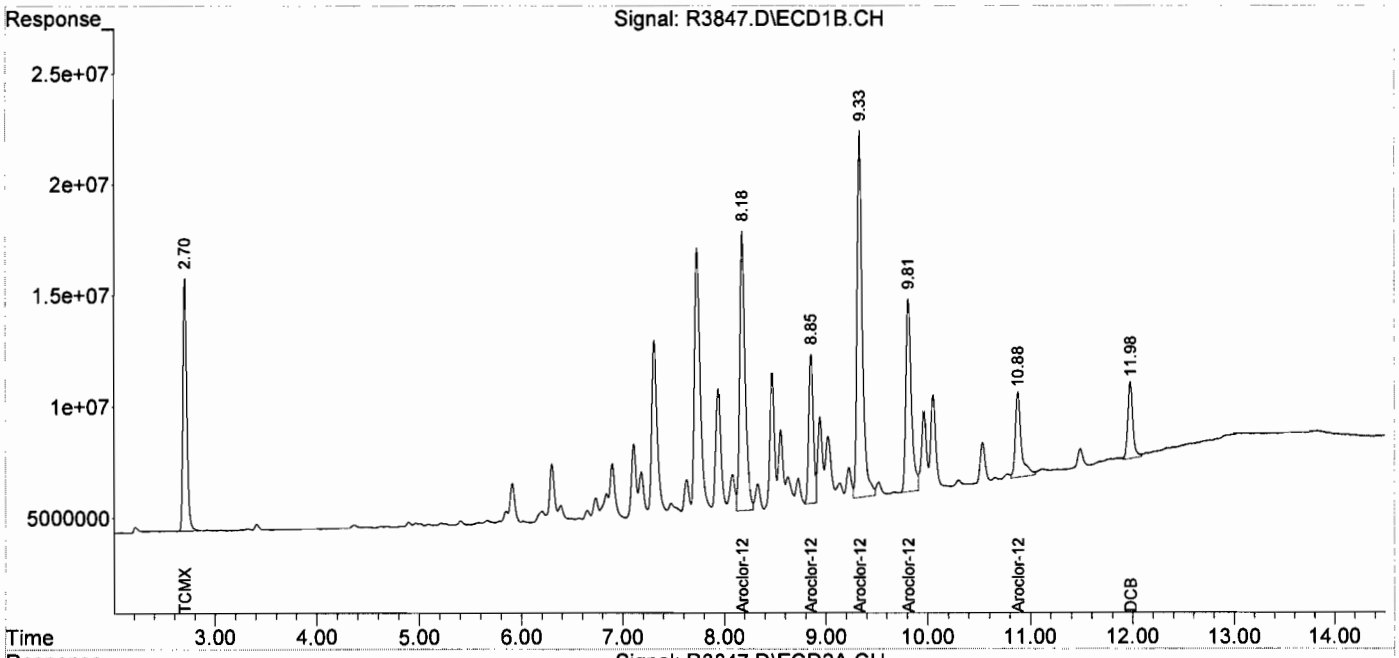
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

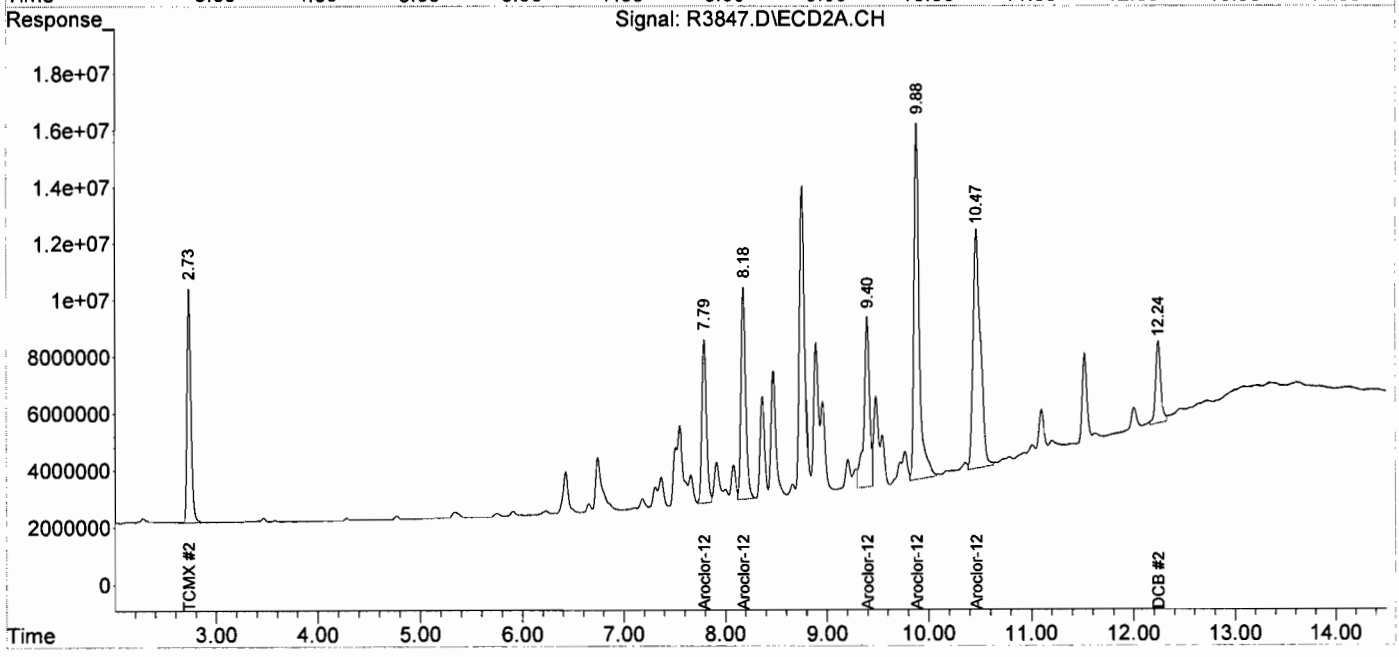
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : R3847.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:56
Operator : JS
Sample : E-60_(0.,E16-09537-016DL,S,5.82g,13.3,20
Misc : 161017-13,10/17/16,10/12/16,10 (Sig #1); 161017-13,10/17/16,10/12/16,1 (Sig #2)
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:35:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3838.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 2:14
Operator : JS
Sample : E-36_(0.,E16-09537-017,S,5.53g,10.9,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:27:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2782.5E6	2105.9E6	173.393m	174.997
Spiked Amount 200.000			Recovery	=	86.70%	87.50%
2) S DCB	11.98	12.24	1138.9E6	1119.2E6	217.431	231.933
Spiked Amount 200.000			Recovery	=	108.72%	115.97%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

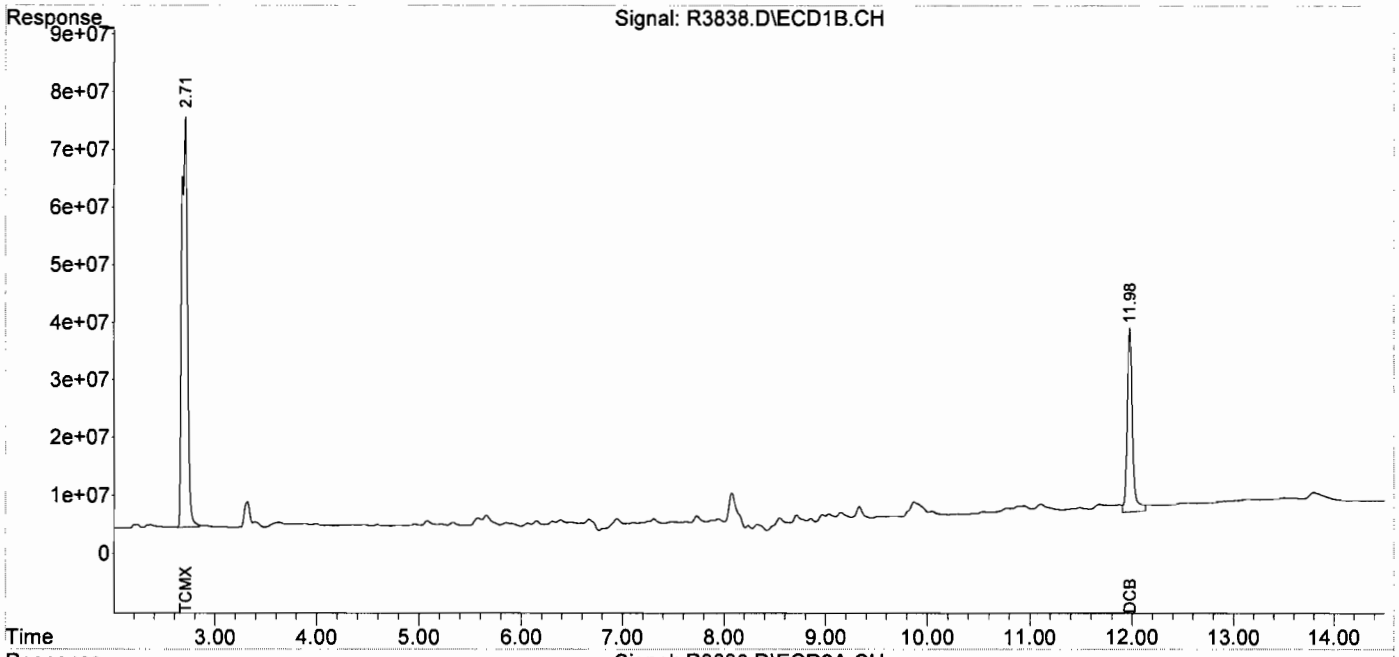
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

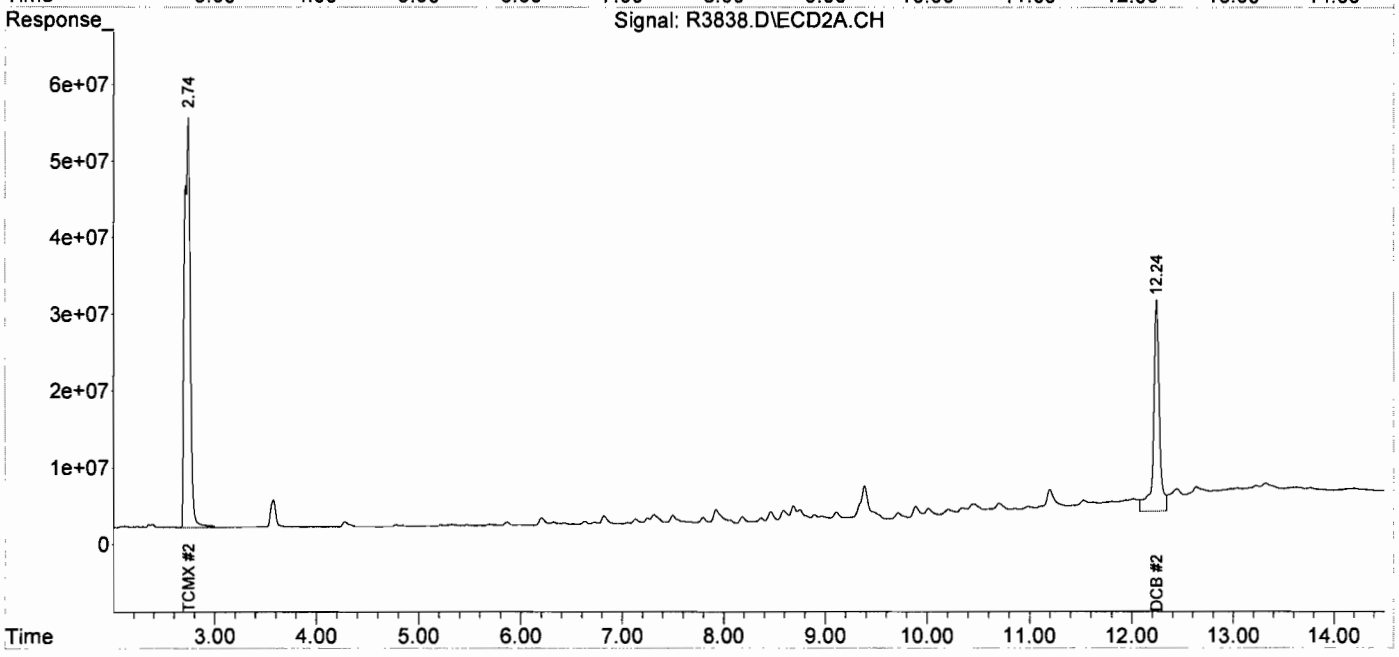
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3838.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 2:14
Operator : JS
Sample : E-36_(0.,E16-09537-017,S,5.53g,10.9,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 36 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:27:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3839.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 2:49
Operator : JS
Sample : E-36_(2-,E16-09537-018,S,5.51g,8.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:28:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2422.5E6	1936.9E6	150.959	160.951
Spiked Amount 200.000			Recovery	=	75.48%	80.48%
2) S DCB	11.97	12.24	1119.1E6	978.0E6	213.663	202.675
Spiked Amount 200.000			Recovery	=	106.83%	101.34%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

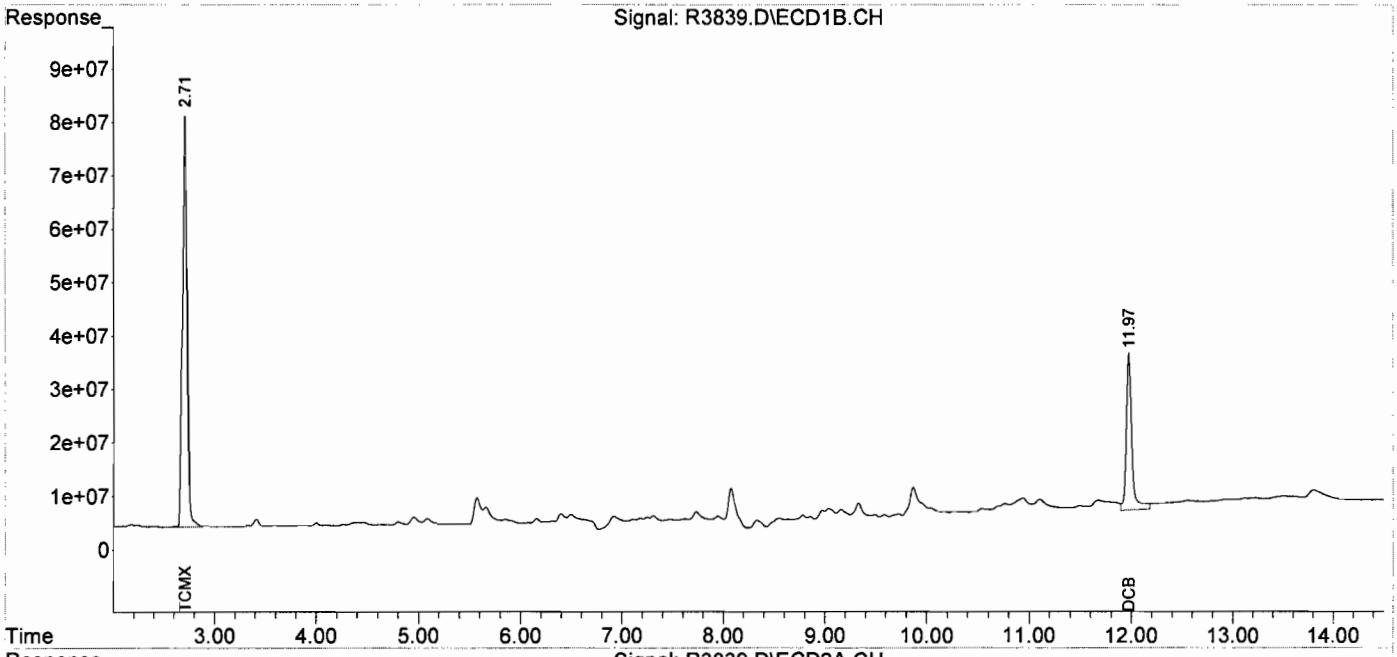
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

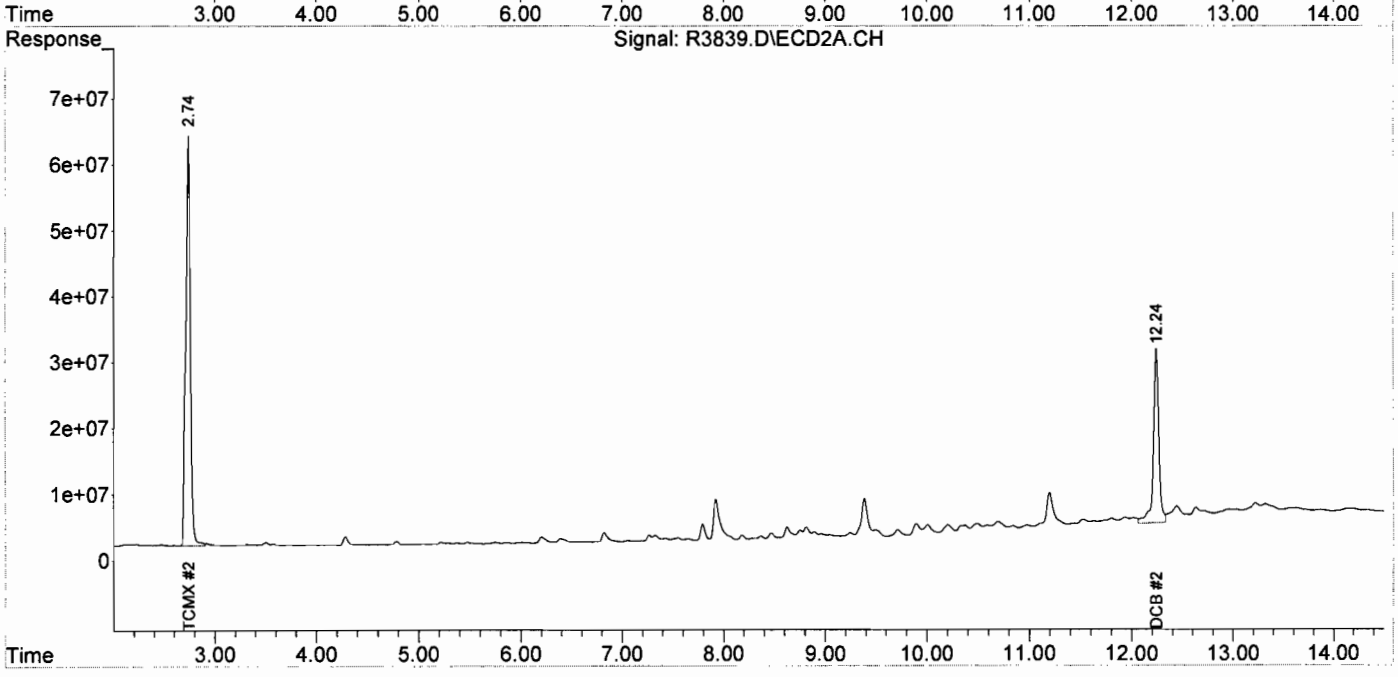
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3839.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 2:49
Operator : JS
Sample : E-36_(2-,E16-09537-018,S,5.51g,8.50,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:28:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3840.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 3:24
Operator : JS
Sample : E-47_(0.,E16-09537-019,S,5.44g,6.40,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:31:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2699.4E6	2055.3E6	168.216	170.793
Spiked Amount 200.000			Recovery	=	84.11%	85.40%
2) S DCB	11.98	12.24	1007.9E6	847.6E6	192.428	175.644m
Spiked Amount 200.000			Recovery	=	96.21%	87.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.30	6.75	448.2E6	273.8E6	531.898	338.974 #
29) L7 Aroclor-1254 {2}	6.72	7.31	324.9E6	520.7E6	504.440	846.731 #
30) L7 Aroclor-1254 {3}	6.90	7.79	946.1E6	517.3E6	773.644	1027.253 #
31) L7 Aroclor-1254 {4}	7.33	7.91	1280.3E6	811.9E6	968.847	1409.837 #
32) L7 Aroclor-1254 {5}	8.18	8.76	991.2E6	1383.9E6	818.422	1535.127 #
Sum Aroclor-1254			3990.9E6	3507.7E6	3597.252	5157.921
Average Aroclor-1254					719.450	1031.584
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

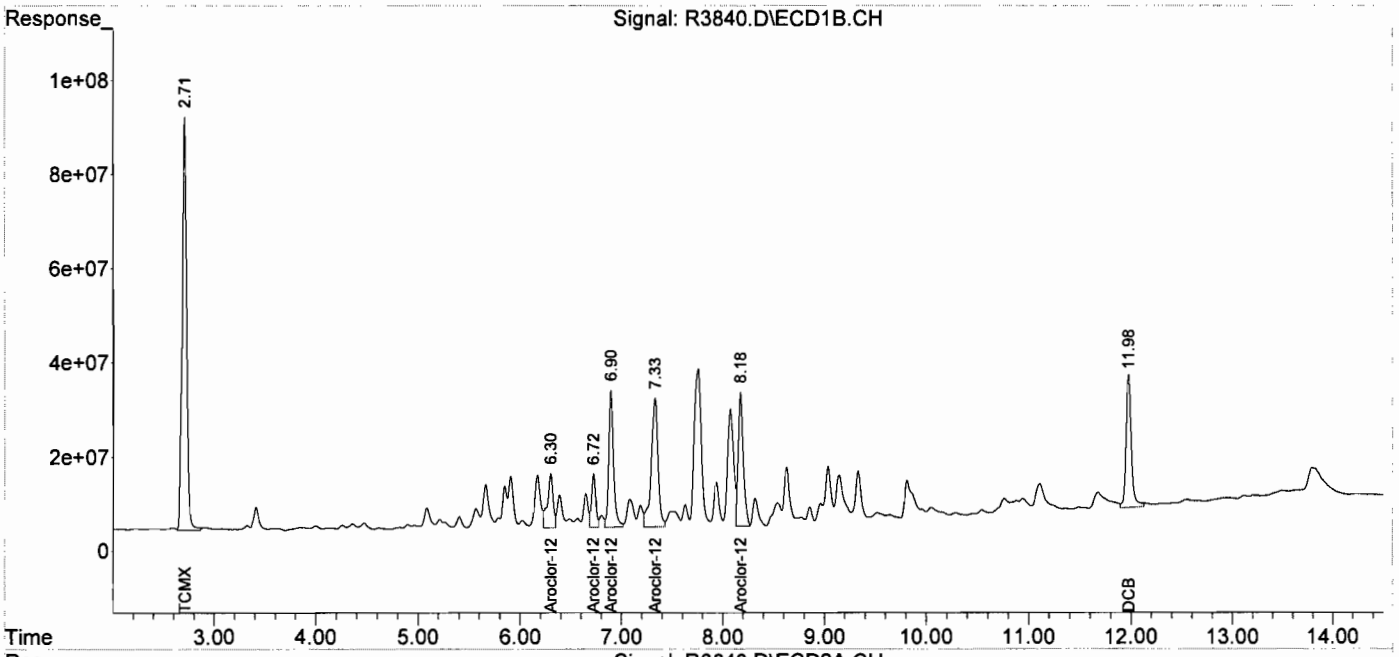
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

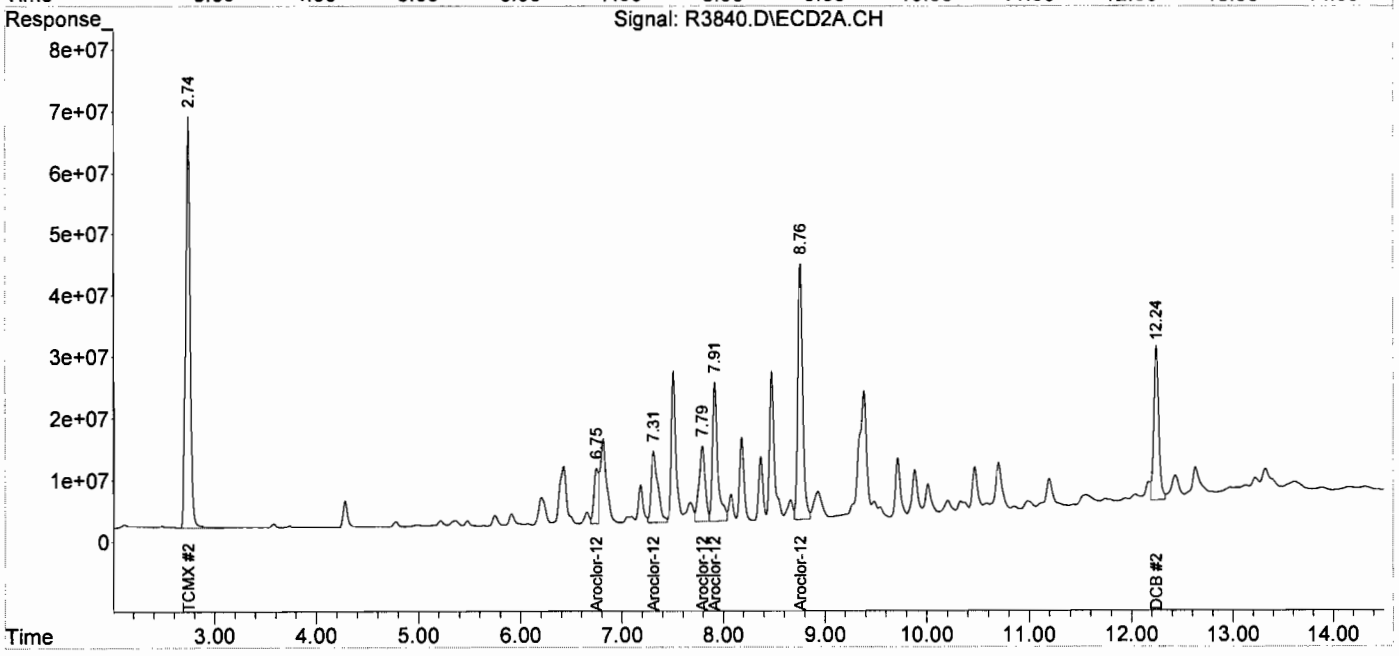
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3840.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 3:24
Operator : JS
Sample : E-47_(0.,E16-09537-019,S,5.44g,6.40,20
Misc : 161017-13,10/17/16,10/12/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 11:31:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0838.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:09
Operator : JS
Sample : X-1_(0.5,E16-09537-020,S,5.23g,14.8,20
Misc : 161017-14,10/17/16,10/12/16,200
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:23:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.85	38513845	31306040	0.948	1.169
Spiked Amount 200.000			Recovery	=	0.47%	0.58%
2) S DCB	11.84	12.49	20251820	11310442	1.269m	1.067
Spiked Amount 200.000			Recovery	=	0.63%	0.53%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.08	7.86	1156.6E6	344.3E6	445.738	469.558
34) L8 Aroclor-1260 {2}	8.74	8.11	486.1E6	385.5E6	391.866	348.984
35) L8 Aroclor-1260 {3}	9.22	9.71	1499.0E6	427.6E6	440.231	419.146
36) L8 Aroclor-1260 {4}	9.70	10.22	725.8E6	912.8E6	444.982	416.394
37) L8 Aroclor-1260 {5}	10.76	10.80	373.6E6	695.2E6	470.845	447.205
Sum Aroclor-1260			4241.2E6	2765.4E6	2193.662	2101.287
Average Aroclor-1260					438.732	420.257
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

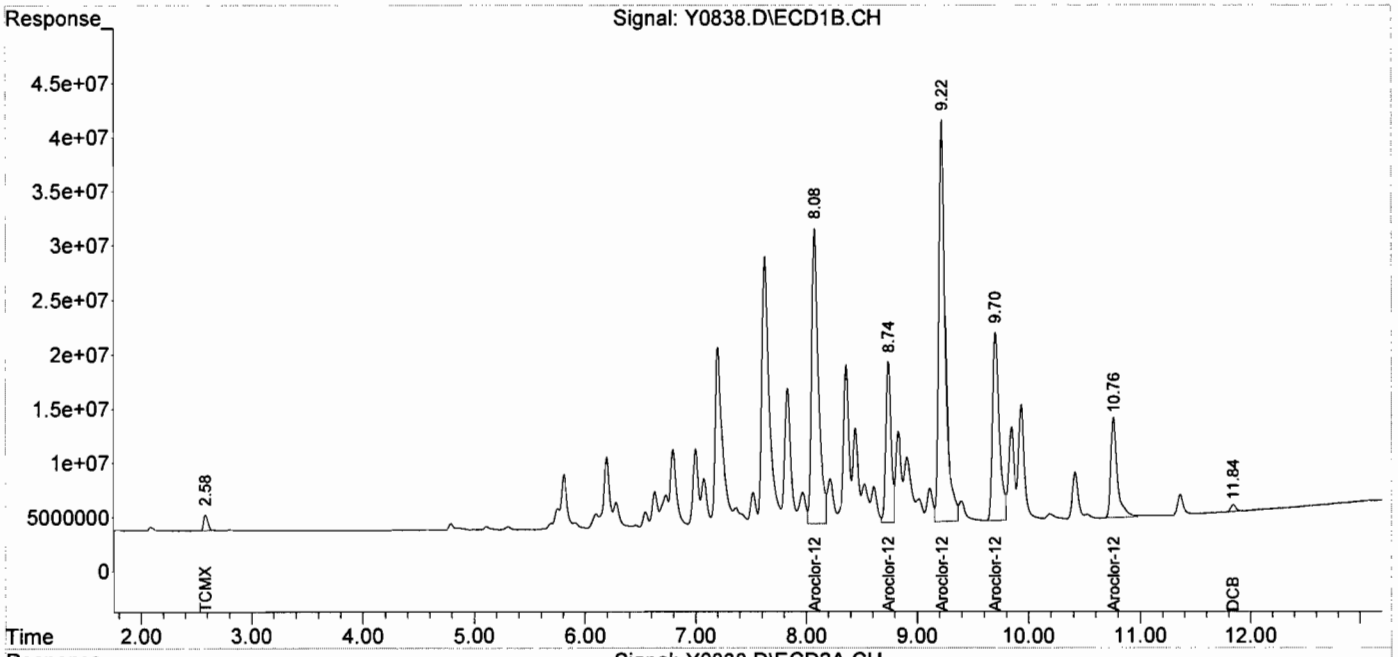
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

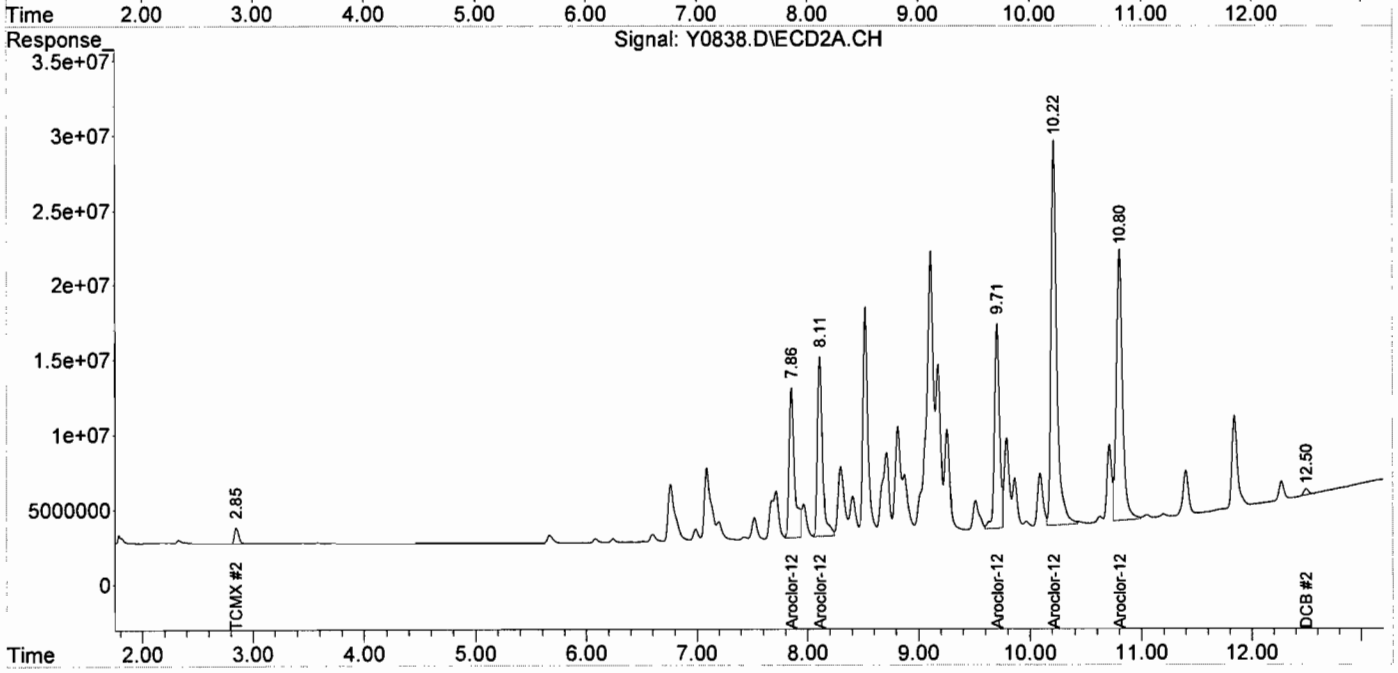
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0838.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:09
Operator : JS
Sample : X-1_(0.5,E16-09537-020,S,5.23g,14.8,20
Misc : 161017-14,10/17/16,10/12/16,200
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:23:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3813.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:12
Operator : JS
Sample : EB-10101,E16-09537-021,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:51:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	2.74	2025.8E6	1452.8E6	126.240	120.724
Spiked Amount 200.000			Recovery	=	63.12%	60.36%
2) S DCB	11.98	12.25	730.4E6	700.7E6	139.451	145.200
Spiked Amount 200.000			Recovery	=	69.73%	72.60%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

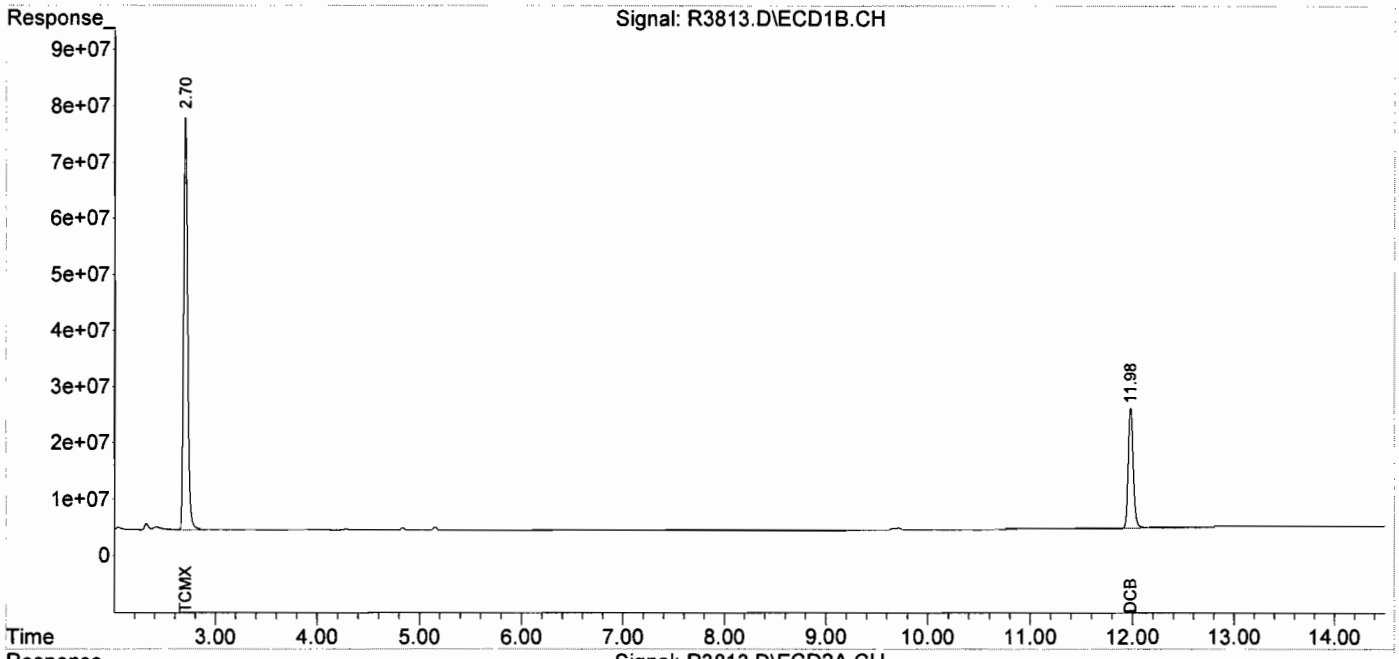
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

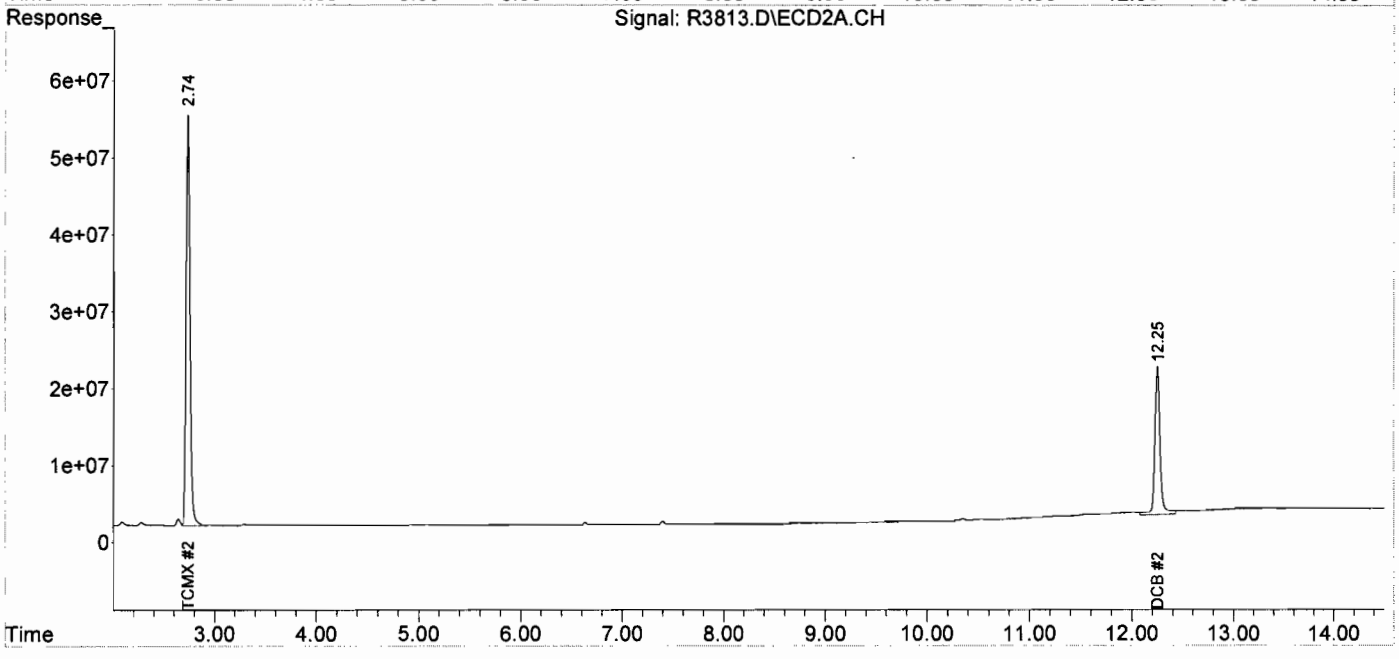
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3813.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:12
Operator : JS
Sample : EB-10101,E16-09537-021,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:51:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0814.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:28
Operator : JS
Sample : E-43_(0.,E16-09537-022,S,5.71g,16.3,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	5977.9E6	4490.8E6	147.130	167.753
Spiked Amount 200.000			Recovery	=	73.56%	83.88%
2) S DCB	11.84	12.49	3125.3E6	2358.0E6	195.872	222.375
Spiked Amount 200.000			Recovery	=	97.94%	111.19%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	7545.8E6	3294.6E6	2908.064	4492.978 #
34) L8 Aroclor-1260 {2}	8.74	8.11	6057.4E6	5648.6E6	4882.727	5113.490
35) L8 Aroclor-1260 {3}	9.21	9.70	21005.8E6	6997.4E6	6168.862	6858.462
36) L8 Aroclor-1260 {4}	9.69	10.21	10057.0E6	15975.1E6	6165.803	7287.594
37) L8 Aroclor-1260 {5}	10.75	10.80	6458.1E6	13172.7E6	8139.516	8473.623
Sum Aroclor-1260			51124.2E6	45088.4E6	28264.972	32226.146
Average Aroclor-1260					5652.994	6445.229
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

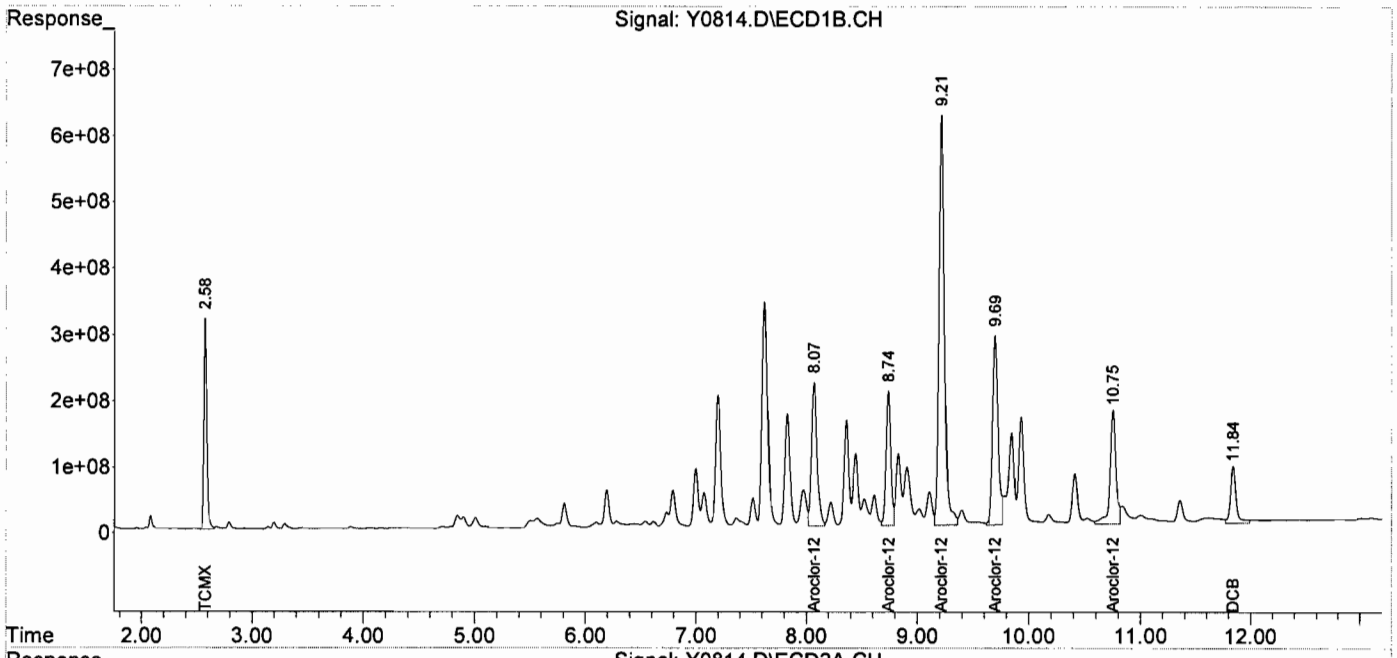
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

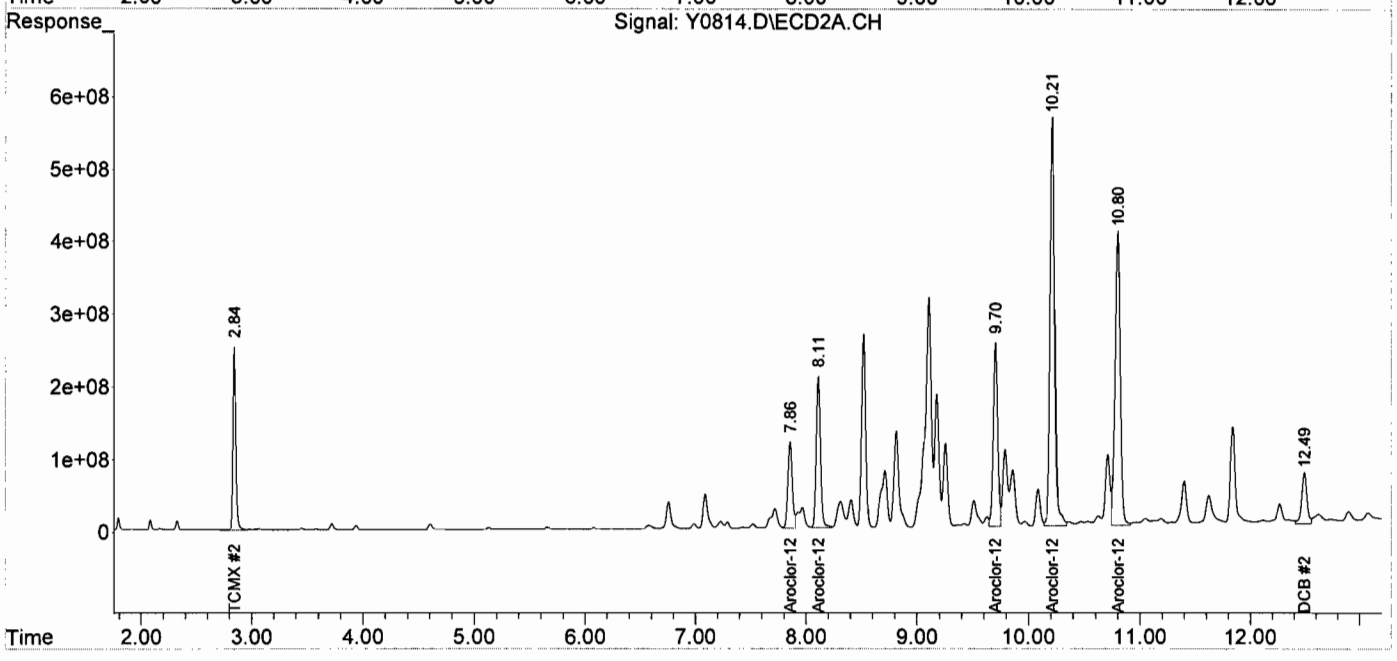
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0814.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:28
Operator : JS
Sample : E-43_(0.,E16-09537-022,S,5.71g,16.3,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0839.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:27
Operator : JS
Sample : E-43_(0.,E16-09537-022DL,S,5.71g,16.3,20
Misc : 161017-14,10/17/16,10/12/16,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:26:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.59	2.85	768.0E6	485.6E6	18.902	18.138
Spiked Amount 200.000			Recovery	=	9.45%	9.07%
2) S DCB	11.84	12.49	384.9E6	259.6E6	24.125	24.478m
Spiked Amount 200.000			Recovery	=	12.06%	12.24%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	1346.5E6	404.1E6	518.915	551.037
34) L8 Aroclor-1260 {2}	8.74	8.11	924.4E6	684.1E6	745.163	619.298
35) L8 Aroclor-1260 {3}	9.22	9.71	3052.3E6	820.2E6	896.366	803.964
36) L8 Aroclor-1260 {4}	9.70	10.22	1483.4E6	1678.7E6	909.460	765.780
37) L8 Aroclor-1260 {5}	10.76	10.80	912.2E6	1506.2E6	1149.734	968.883
Sum Aroclor-1260			7718.8E6	5093.3E6	4219.638	3708.962
Average Aroclor-1260					843.928	741.792
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

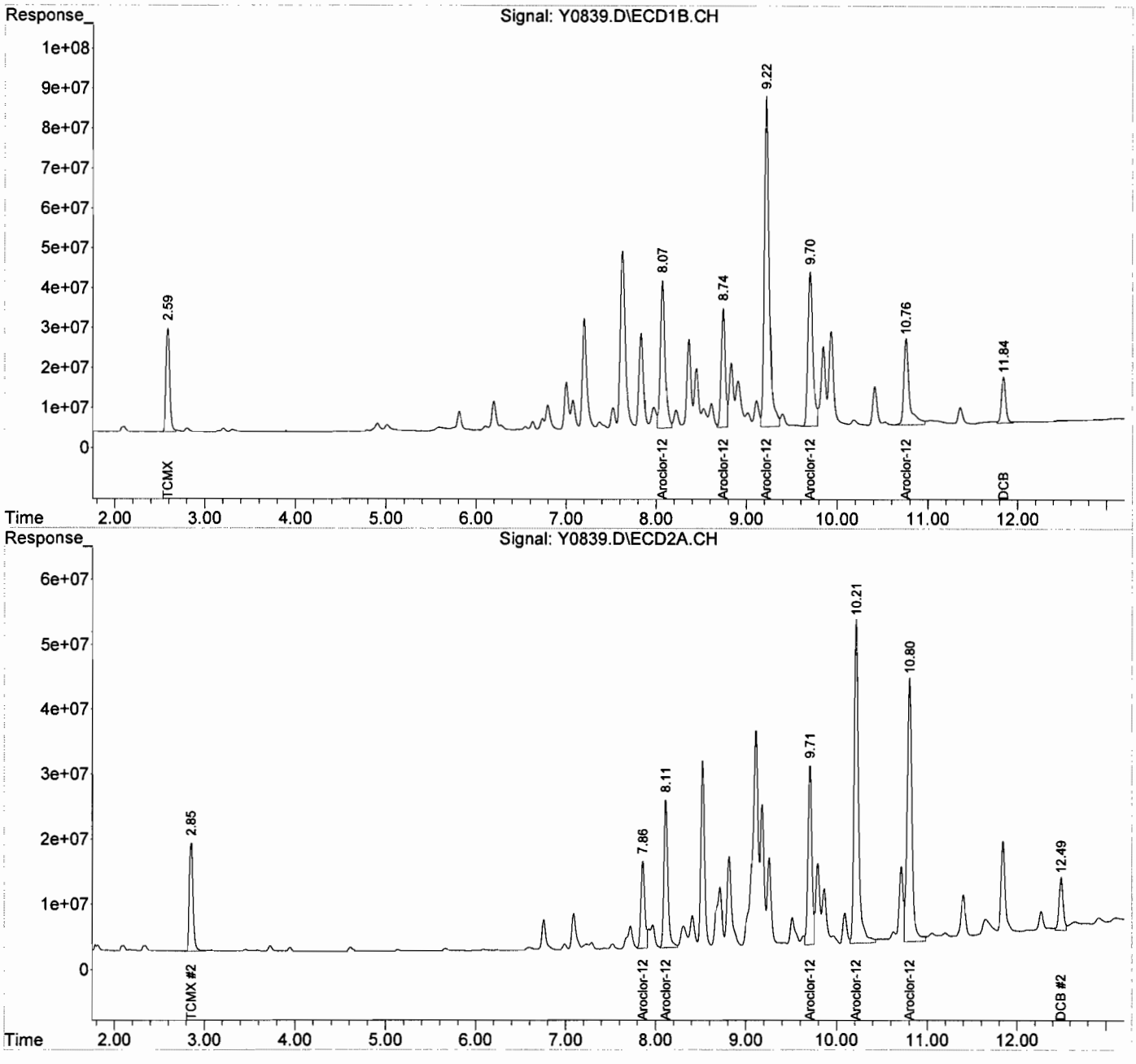
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0839.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:27
Operator : JS
Sample : E-43_(0.,E16-09537-022DL,S,5.71g,16.3,20
Misc : 161017-14,10/17/16,10/12/16,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:26:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0815.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:45
Operator : JS
Sample : E-43_(2-,E16-09537-023,S,5.25g,15.2,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:54:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6435.9E6	4459.1E6	158.401	166.569
Spiked Amount 200.000			Recovery	=	79.20%	83.28%
2) S DCB	11.84	12.49	2688.3E6	2622.3E6	168.483	247.303m#
Spiked Amount 200.000			Recovery	=	84.24%	123.65%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	441.6E6	243.4E6	170.173	331.893 #
34) L8 Aroclor-1260 {2}	8.74	8.11	465.5E6	411.2E6	375.206m	372.244
35) L8 Aroclor-1260 {3}	9.22	9.70	1496.4E6	475.0E6	439.447m	465.609
36) L8 Aroclor-1260 {4}	9.70	10.21	647.8E6	795.0E6	397.138m	362.673
37) L8 Aroclor-1260 {5}	10.76	10.80	370.7E6	740.7E6	467.187m	476.450m
Sum Aroclor-1260			3421.9E6	2665.3E6	1849.151	2008.869
Average Aroclor-1260					369.830	401.774
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

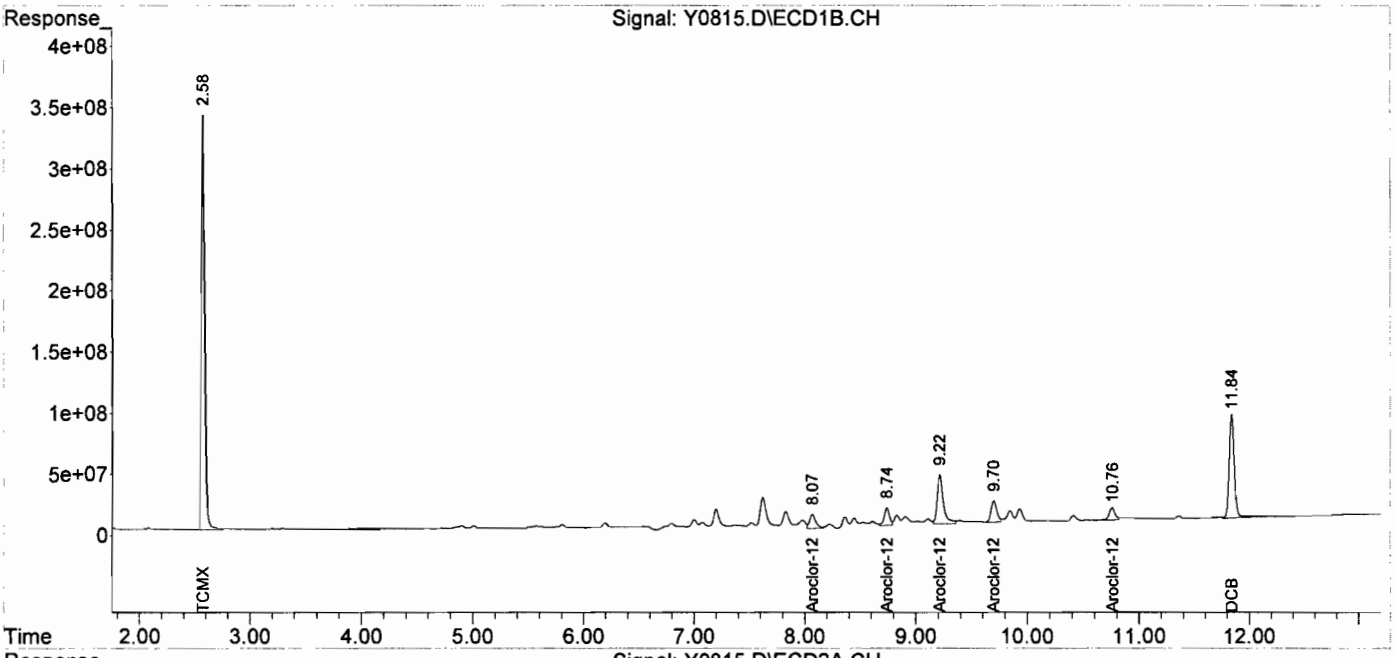
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

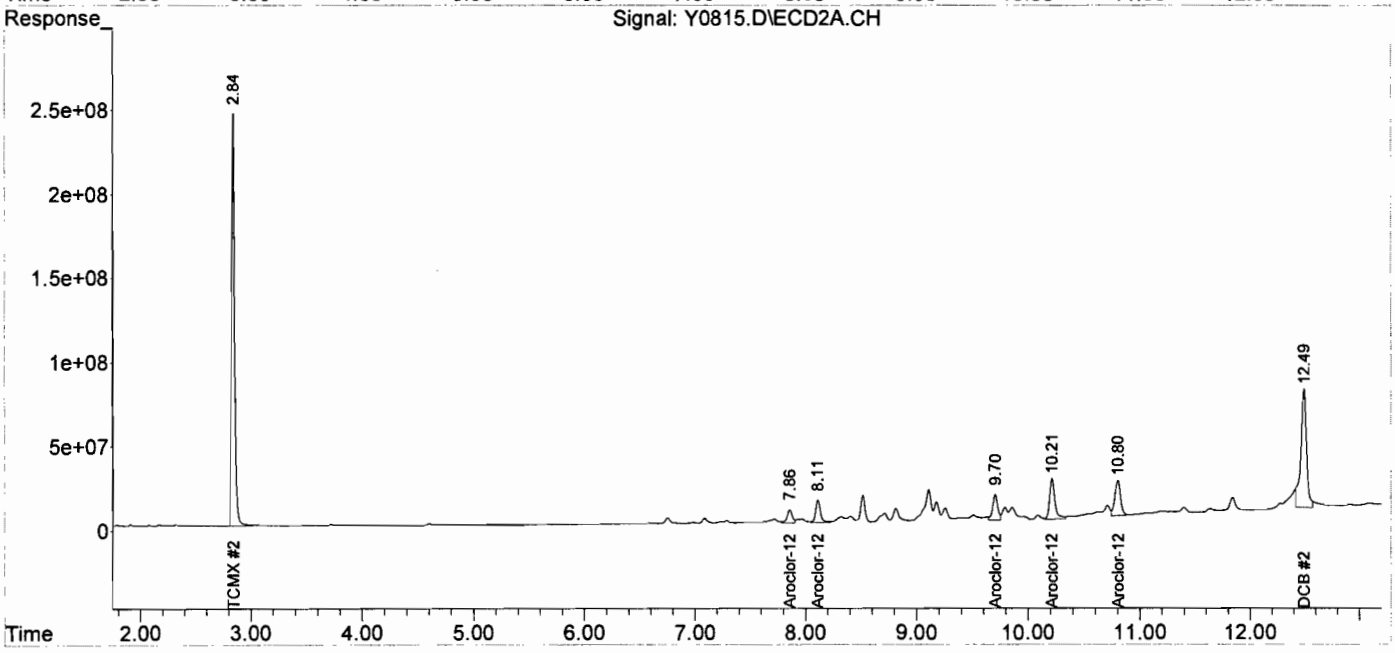
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0815.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:45
Operator : JS
Sample : E-43_(2-,E16-09537-023,S,5.25g,15.2,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:54:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0816.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:03
Operator : JS
Sample : E-43_(3-,E16-09537-024,S,5.52g,13.8,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:56:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6566.7E6	4395.3E6	161.621	164.184
Spiked Amount 200.000			Recovery	=	80.81%	82.09%
2) S DCB	11.84	12.49	2813.0E6	2101.8E6	176.299	198.214
Spiked Amount 200.000			Recovery	=	88.15%	99.11%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	57518291	69102111	22.167	94.237 #
34) L8 Aroclor-1260 {2}	8.74	8.11	110.2E6	113.3E6	88.812m	102.601
35) L8 Aroclor-1260 {3}	9.22	9.71	299.0E6	89666634	87.809m	87.886m
36) L8 Aroclor-1260 {4}	9.70	10.22	143.8E6	160.4E6	88.176m	73.168
37) L8 Aroclor-1260 {5}	10.75	10.80	77616030	170.4E6	97.824	109.635
Sum Aroclor-1260			688.1E6	602.9E6	384.789	467.527
Average Aroclor-1260					76.958	93.505
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

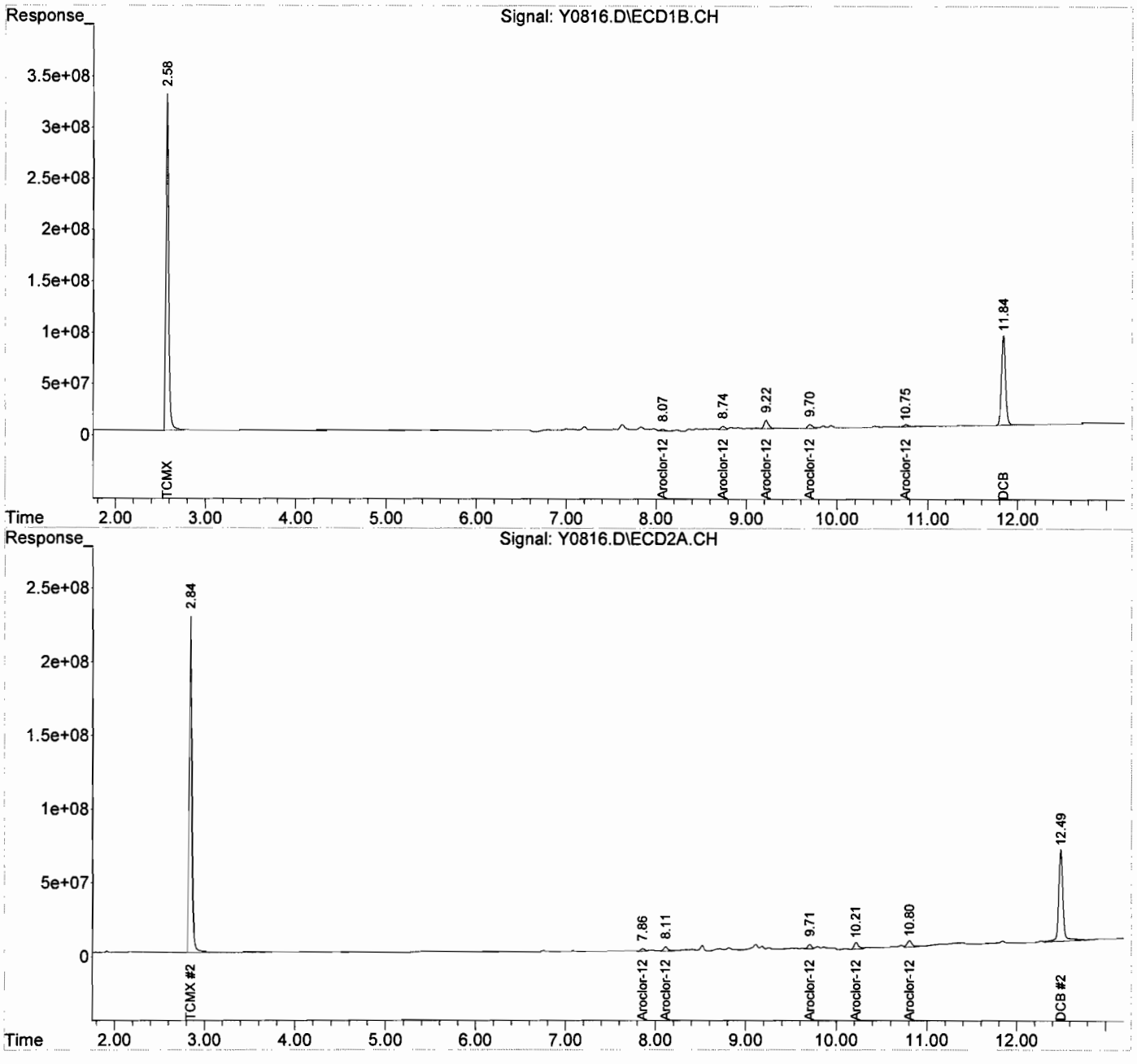
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0816.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:03
Operator : JS
Sample : E-43_(3-,E16-09537-024,S,5.52g,13.8,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:56:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4075.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:11
Operator : JS
Sample : E-43_(4.,E16-09537-025,S,5.62g,4.10,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:54:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2584.5E6	2003.9E6	161.056	166.524
Spiked Amount 200.000			Recovery	=	80.53%	83.26%
2) S DCB	11.97	12.24	1006.6E6	910.3E6	192.172m	188.646m
Spiked Amount 200.000			Recovery	=	96.09%	94.32%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

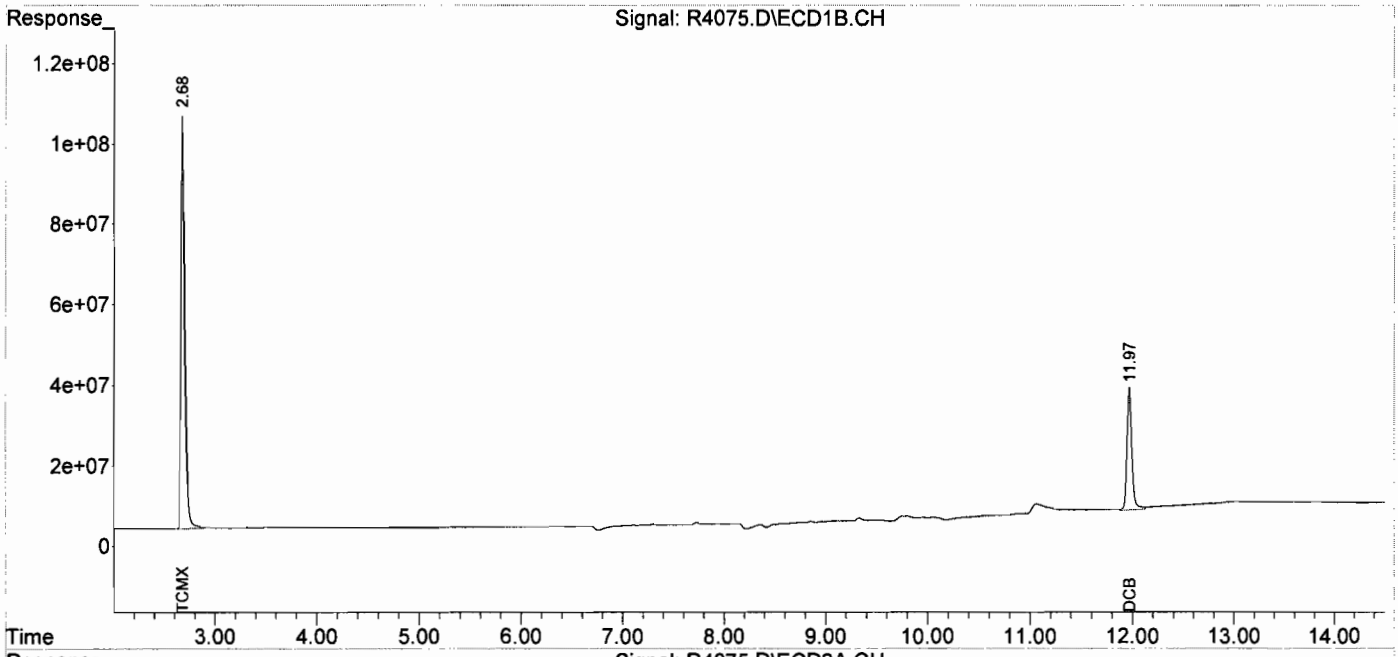
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

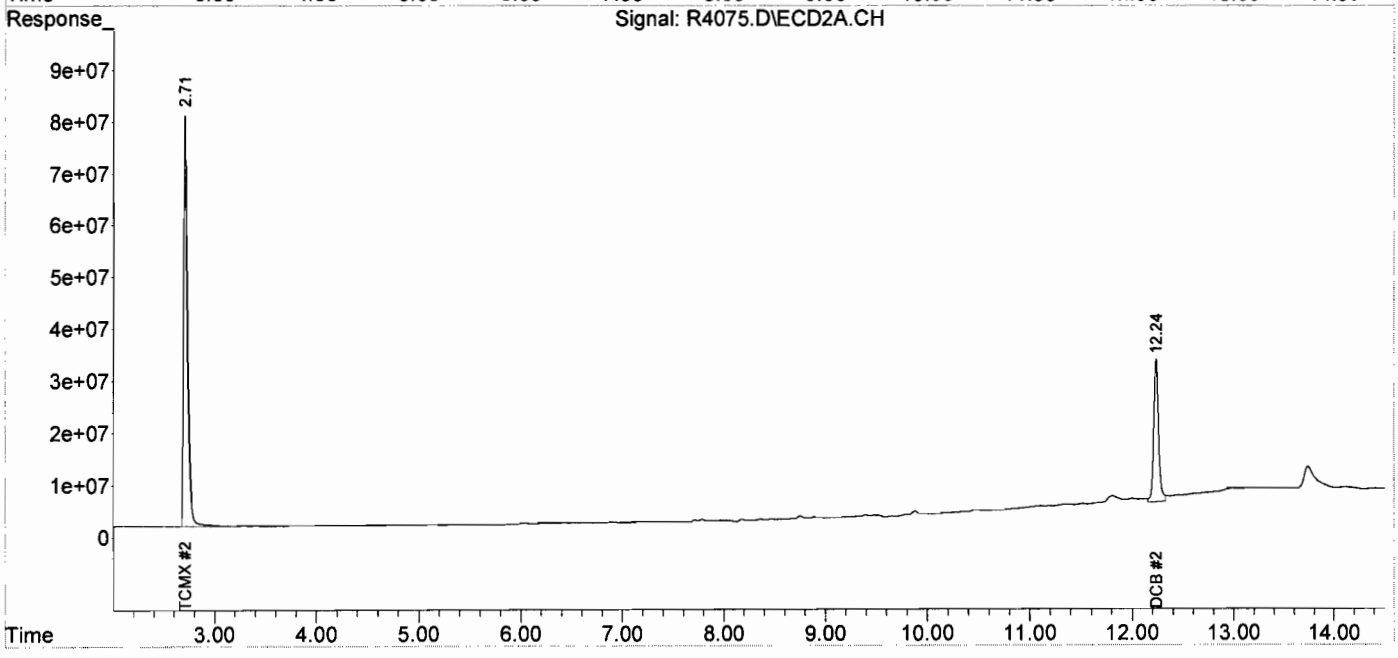
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4075.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:11
Operator : JS
Sample : E-43_(4.,E16-09537-025,S,5.62g,4.10,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:54:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0817.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:20
Operator : JS
Sample : E-55_(4.,E16-09537-026,S,5.35g,5.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:56:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6601.8E6	4391.7E6	162.484	164.052
Spiked Amount 200.000			Recovery	=	81.24%	82.03%
2) S DCB	11.84	12.49	2898.8E6	1976.0E6	181.675	186.354
Spiked Amount 200.000			Recovery	=	90.84%	93.18%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

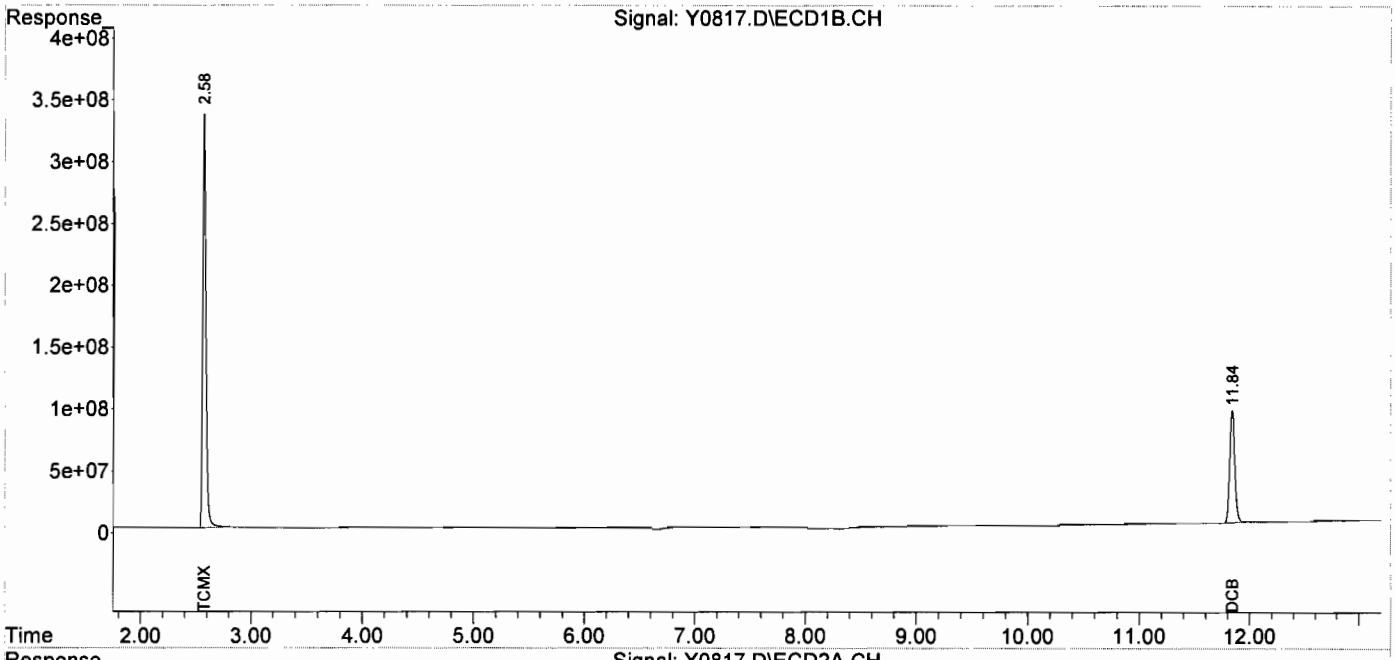
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

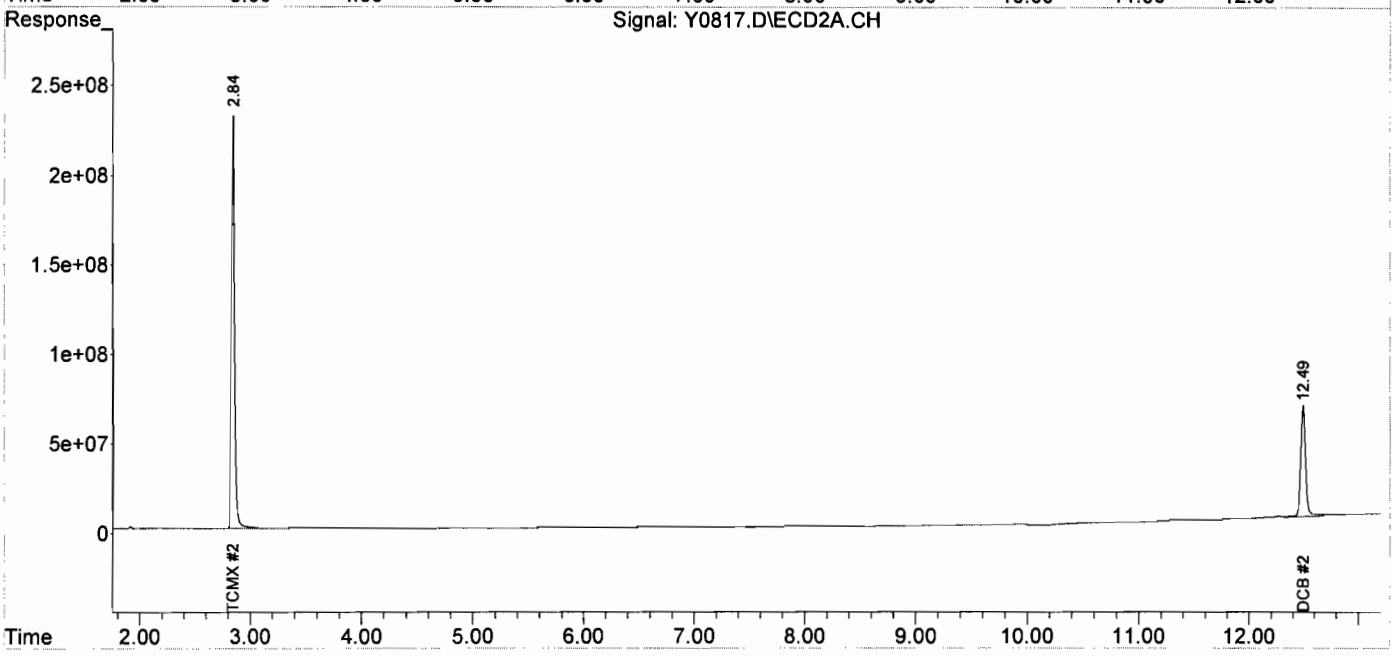
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0817.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:20
Operator : JS
Sample : E-55_(4.,E16-09537-026,S,5.35g,5.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:56:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0818.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:37
Operator : JS
Sample : E-34_(3-,E16-09537-027,S,5.04g,8.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:58:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6654.8E6	4467.2E6	163.790	166.872
Spiked Amount 200.000			Recovery	=	81.89%	83.44%
2) S DCB	11.84	12.49	2979.4E6	1880.7E6	186.726	177.363
Spiked Amount 200.000			Recovery	=	93.36%	88.68%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	61902866	31537616	23.857	43.009m#
34) L8 Aroclor-1260 {2}	8.74	8.11	61882629	50079830	49.882m	45.335m
35) L8 Aroclor-1260 {3}	9.22	9.71	170.1E6	54336139	49.953m	53.257m
36) L8 Aroclor-1260 {4}	9.70	10.22	80706959	84819989	49.480m	38.694
37) L8 Aroclor-1260 {5}	10.76	10.81	41277351	84663560	52.024m	54.462m
Sum Aroclor-1260			415.9E6	305.4E6	225.196	234.757
Average Aroclor-1260					45.039	46.951
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

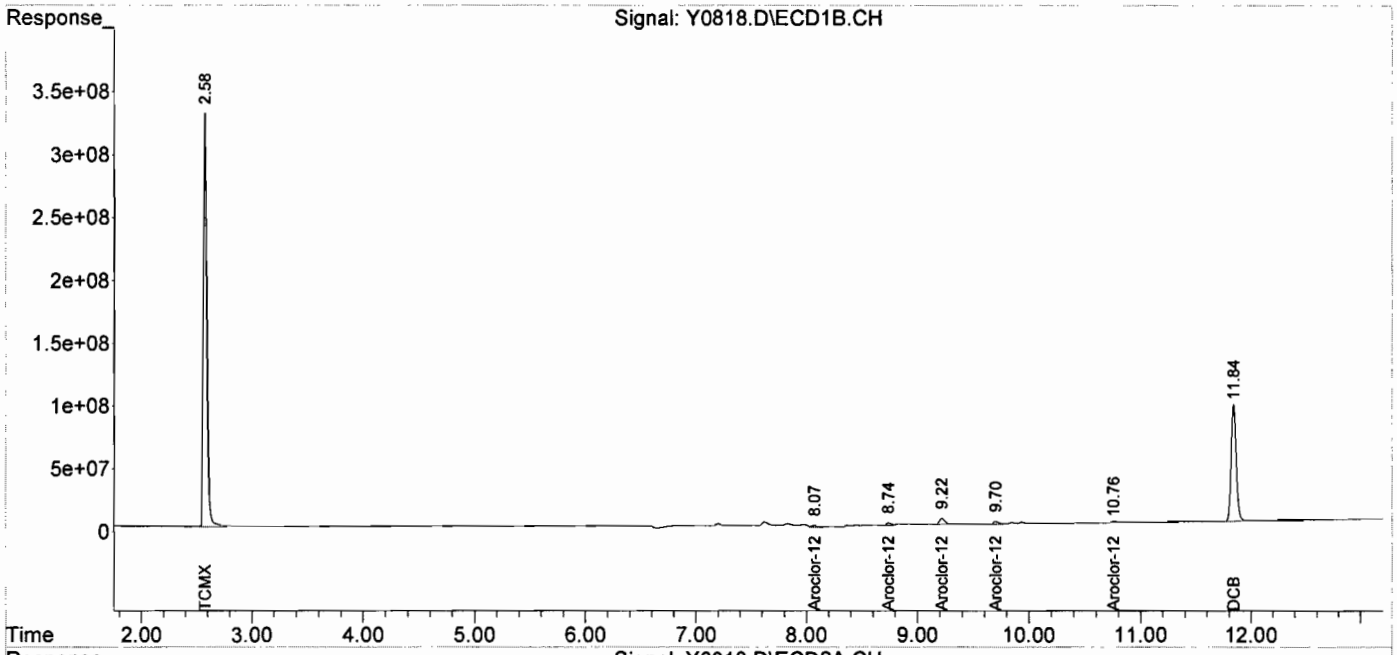
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

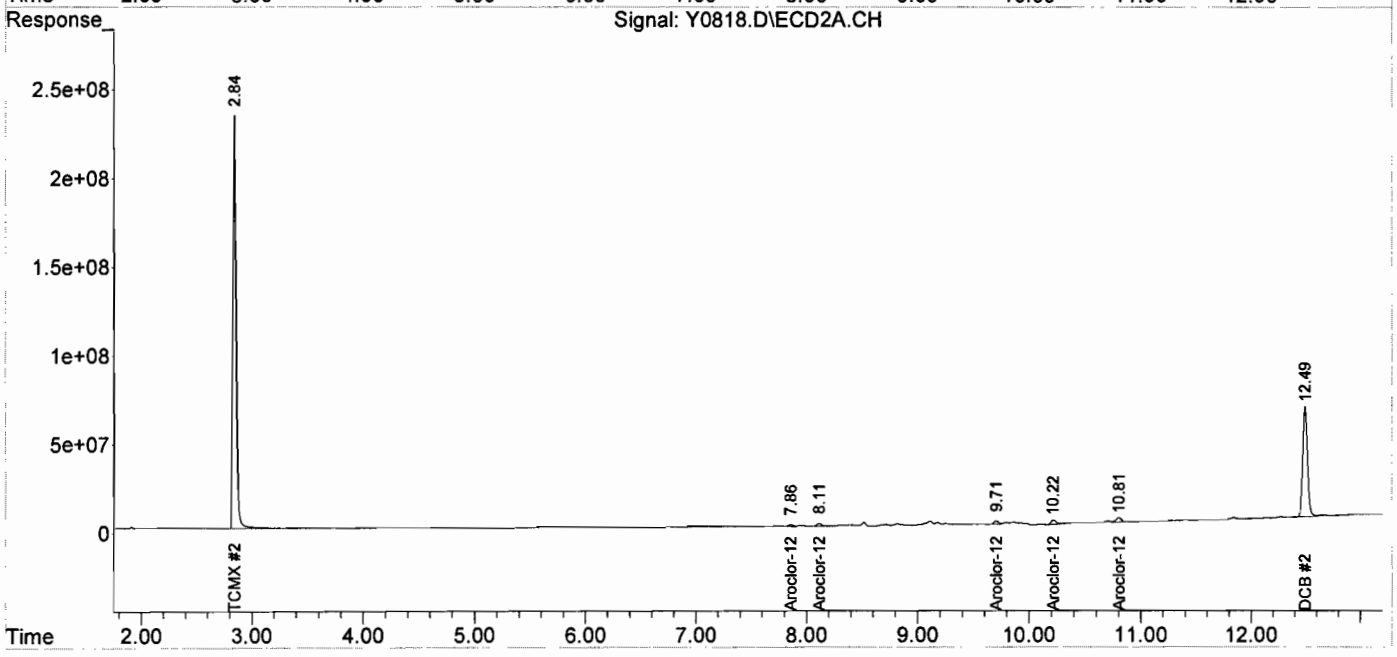
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0818.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:37
Operator : JS
Sample : E-34_(3-,E16-09537-027,S,5.04g,8.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:58:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0819.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:55
Operator : JS
Sample : E-57_(4.,E16-09537-029,S,5.39g,6.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6661.0E6	4404.0E6	163.941	164.512
Spiked Amount 200.000			Recovery	=	81.97%	82.26%
2) S DCB	11.84	12.49	2966.1E6	1821.6E6	185.890	171.792
Spiked Amount 200.000			Recovery	=	92.94%	85.90%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.86	0	14922382	N.D. d	20.350m#
34) L8 Aroclor-1260 {2}	8.74	8.11	28283427	25987089	22.799m	23.525m
35) L8 Aroclor-1260 {3}	9.22	9.70	77531981	25406761	22.769m	24.902m
36) L8 Aroclor-1260 {4}	9.70	10.22	28775695	40225344	17.642	18.350
37) L8 Aroclor-1260 {5}	10.76	10.80	20391221	38817021	25.700	24.970m
Sum Aroclor-1260			155.0E6	145.4E6	88.910	112.098
Average Aroclor-1260					22.227	22.420
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

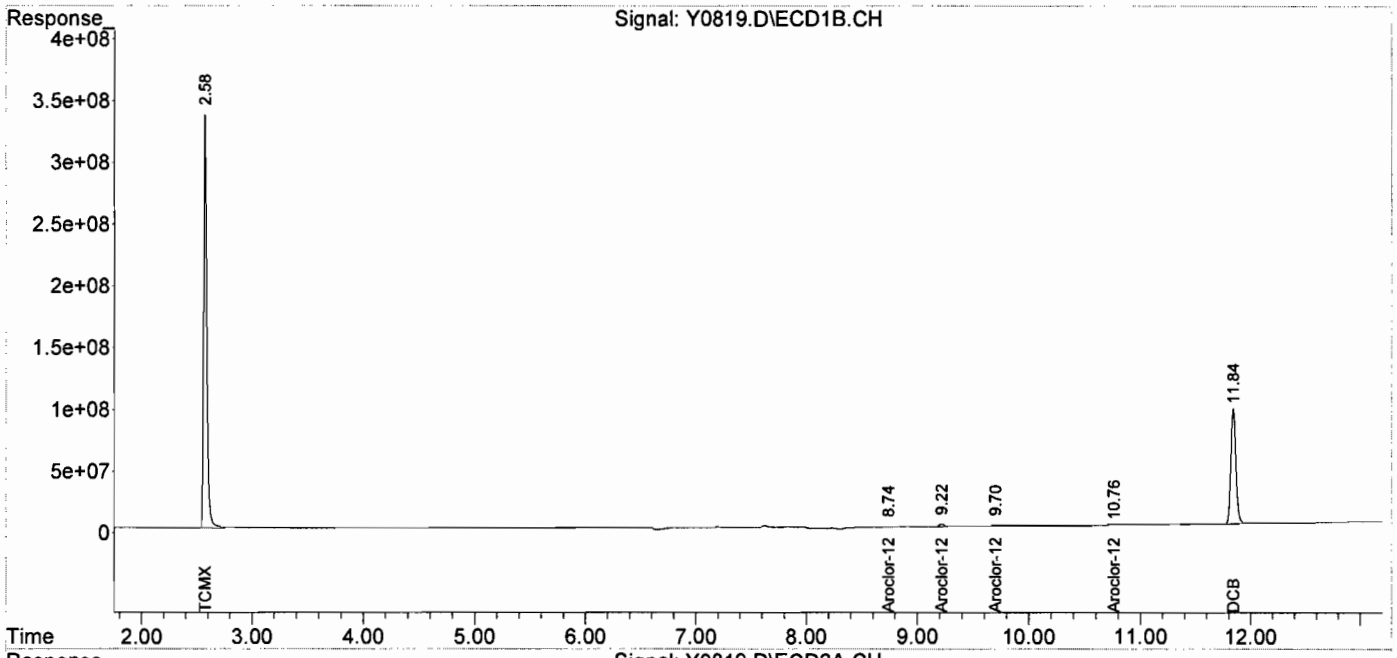
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

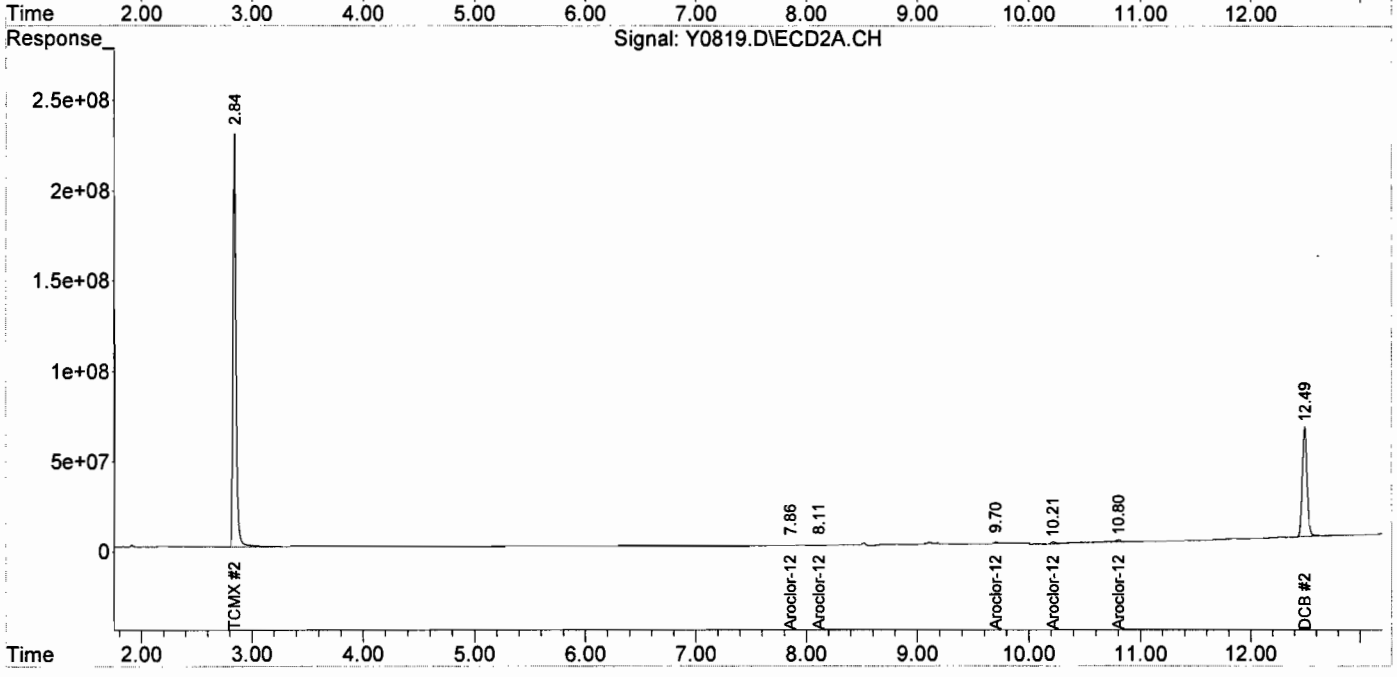
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0819.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 19:55
Operator : JS
Sample : E-57_(4.,E16-09537-029,S,5.39g,6.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0820.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:12
Operator : JS
Sample : E-57_(6-,E16-09537-030,S,5.88g,11.6,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:00:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6780.3E6	4512.4E6	166.877	168.559
Spiked Amount 200.000			Recovery	=	83.44%	84.28%
2) S DCB	11.84	12.49	3101.8E6	1898.4E6	194.399	179.036
Spiked Amount 200.000			Recovery	=	97.20%	89.52%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.86	0	3103721	N.D. d	4.233m#
34) L8 Aroclor-1260 {2}	8.74	8.11	8118572	6448727	6.544m	5.838m
35) L8 Aroclor-1260 {3}	9.22	9.70	21344990	6965387	6.268m	6.827m
36) L8 Aroclor-1260 {4}	9.70	10.23	7297352	14082629	4.474m	6.424 #
37) L8 Aroclor-1260 {5}	10.76	10.80	4763824	11265092	6.004m	7.247m
Sum Aroclor-1260			41524738	41865557	23.291	30.568
Average Aroclor-1260					5.823	6.114
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

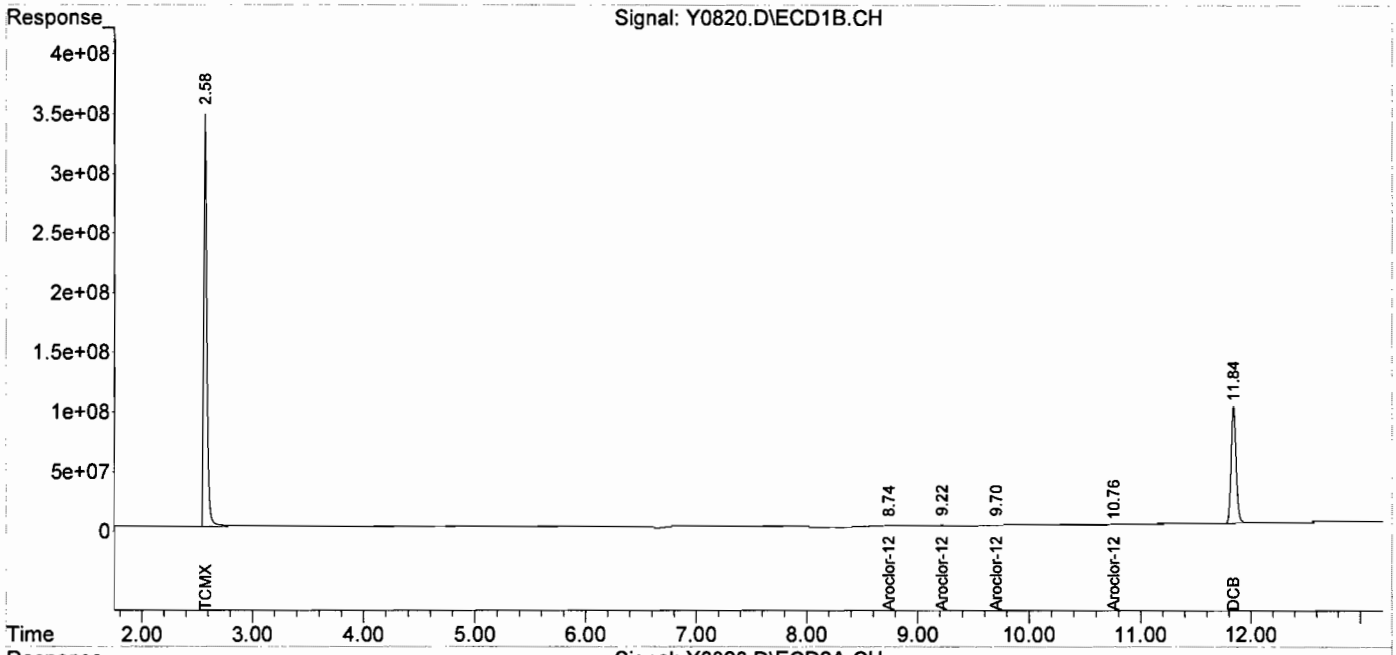
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

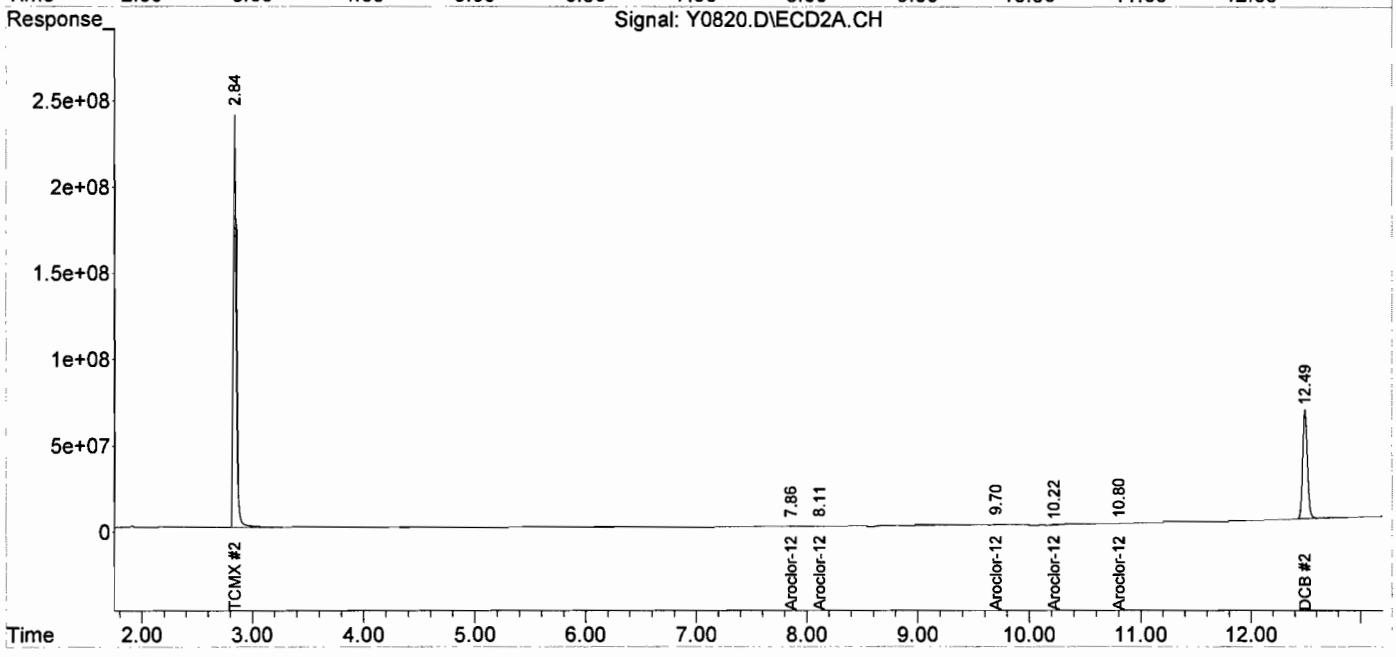
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0820.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:12
Operator : JS
Sample : E-57_(6-,E16-09537-030,S,5.88g,11.6,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:00:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0821.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:29
Operator : JS
Sample : E-56_(4.,E16-09537-031,S,5.43g,6.20,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:03:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6709.9E6	4451.0E6	165.144	166.266
Spiked Amount 200.000			Recovery	=	82.57%	83.13%
2) S DCB	11.84	12.49	3115.5E6	1866.7E6	195.256	176.047
Spiked Amount 200.000			Recovery	=	97.63%	88.02%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.86	0	21493150	N.D. d	29.311m#
34) L8 Aroclor-1260 {2}	8.74	8.11	35073729	36372571	28.272m	32.927m
35) L8 Aroclor-1260 {3}	9.22	9.70	101.3E6	29791202	29.761	29.200m
36) L8 Aroclor-1260 {4}	9.70	10.22	48104842	54249705	29.492	24.748
37) L8 Aroclor-1260 {5}	10.76	10.81	19103760	47335906	24.078m	30.450m#
Sum Aroclor-1260			203.6E6	189.2E6	111.603	146.635
Average Aroclor-1260					27.901	29.327
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

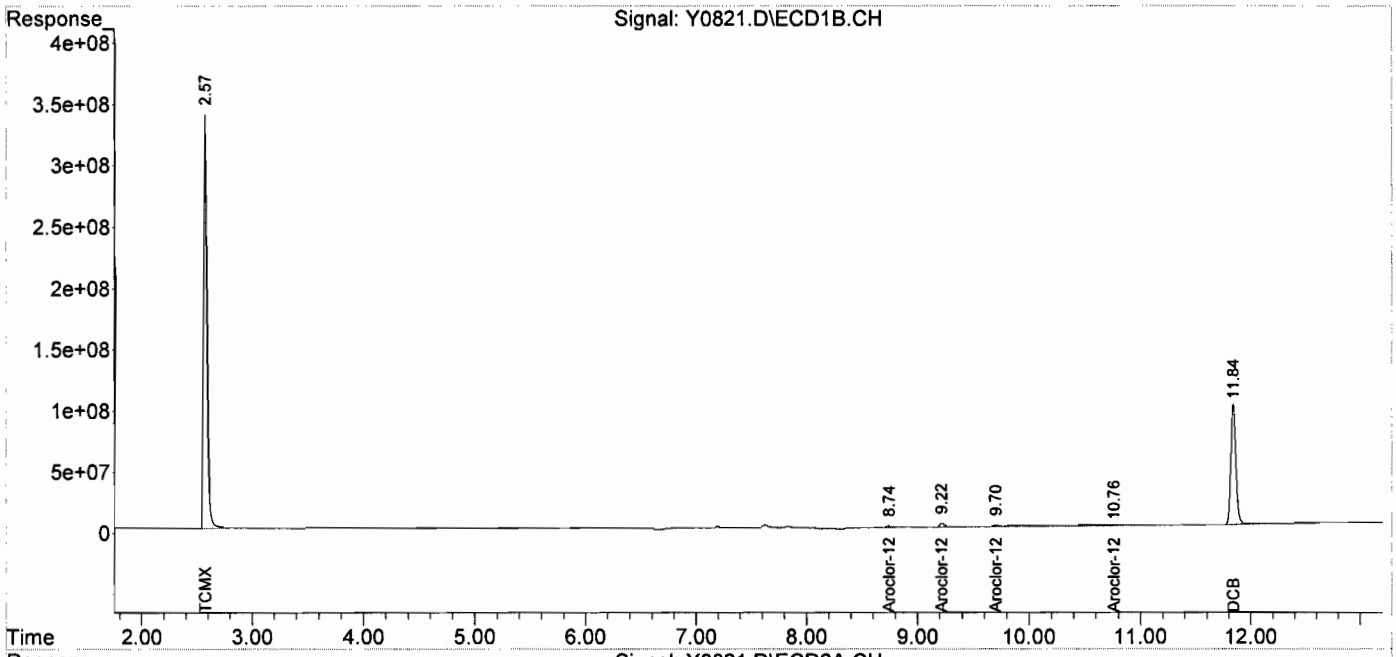
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

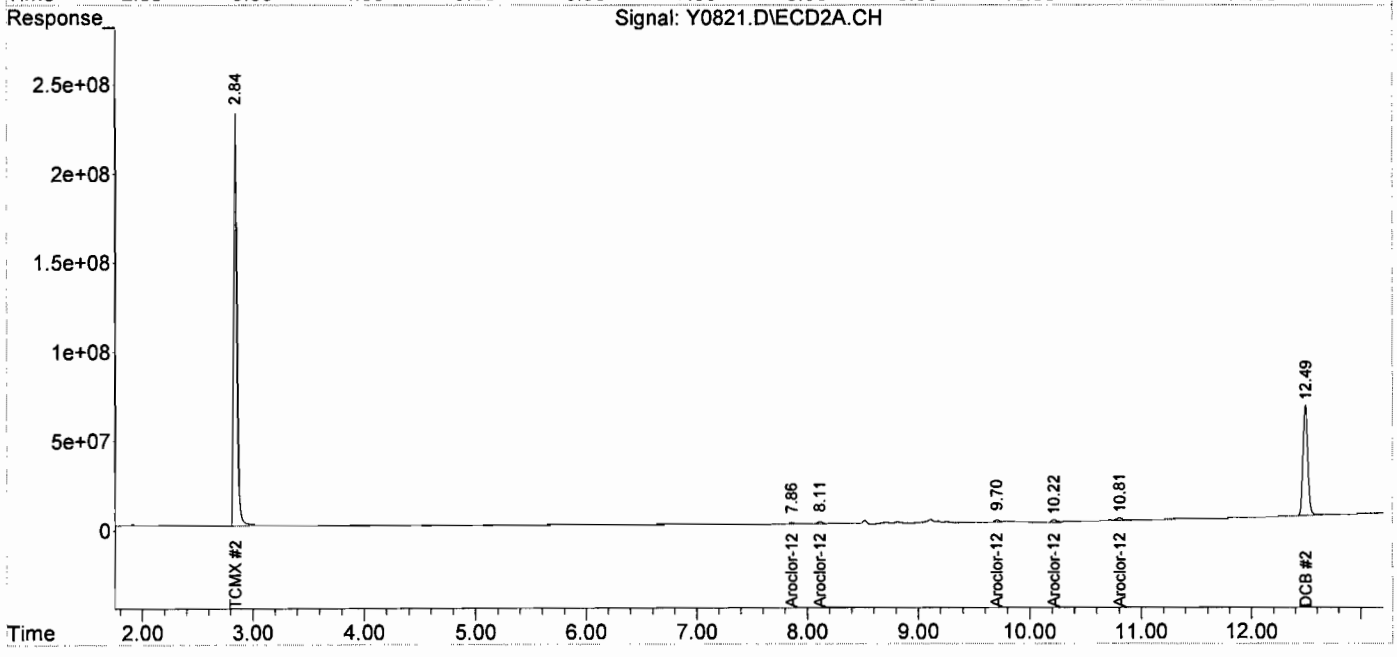
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0821.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:29
Operator : JS
Sample : E-56_(4.,E16-09537-031,S,5.43g,6.20,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:03:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0822.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:47
Operator : JS
Sample : E-56_(6-,E16-09537-032,S,5.53g,9.30,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:04:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6942.7E6	4588.4E6	170.874	171.401
Spiked Amount 200.000			Recovery	=	85.44%	85.70%
2) S DCB	11.84	12.49	3219.9E6	1945.2E6	201.800	183.446
Spiked Amount 200.000			Recovery	=	100.90%	91.72%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

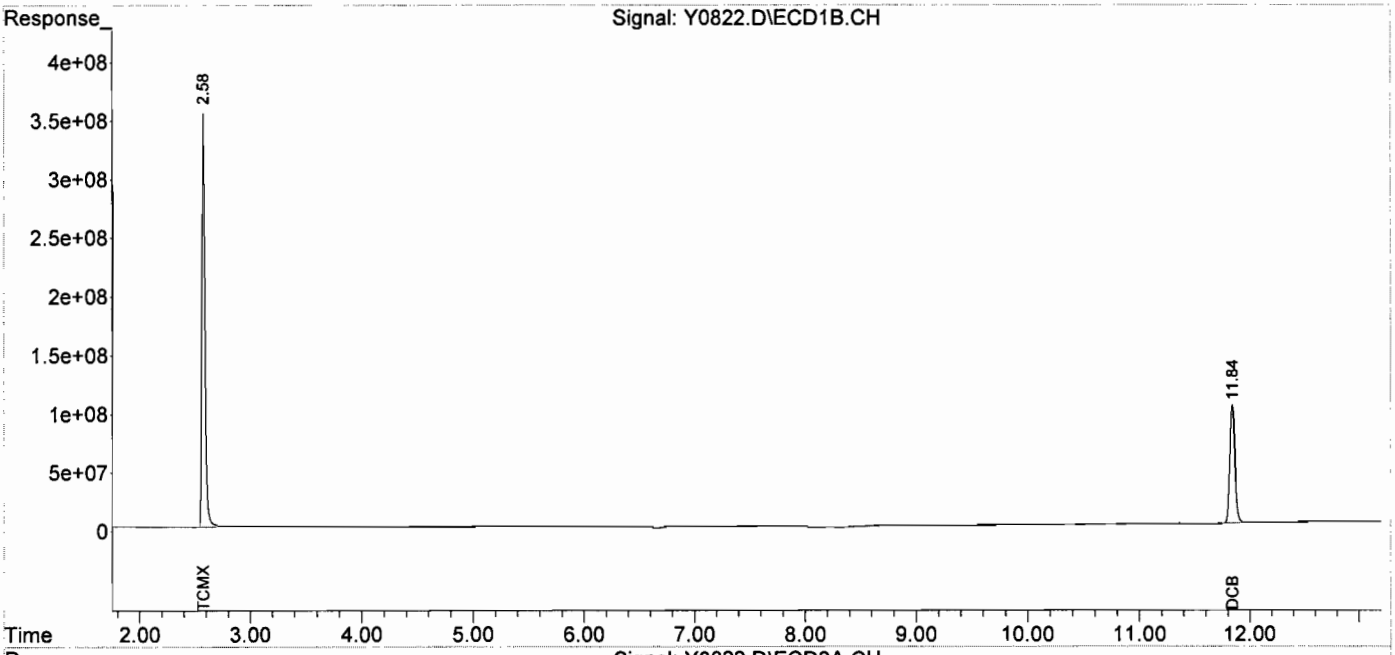
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

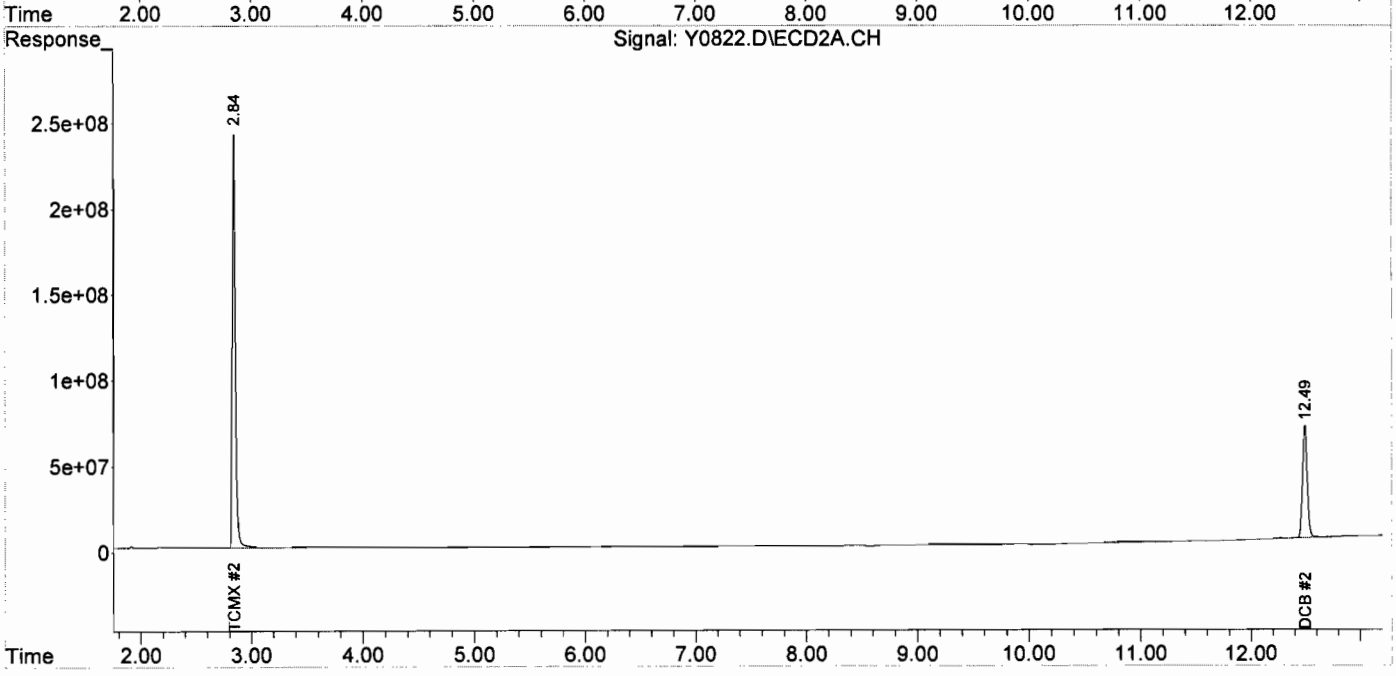
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0822.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 20:47
Operator : JS
Sample : E-56_(6-,E16-09537-032,S,5.53g,9.30,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:04:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0824.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:13
Operator : JS
Sample : E-33_(0.,E16-09537-037,S,5.19g,12.2,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:06:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6072.8E6	4314.0E6	149.465	161.151
Spiked Amount 200.000			Recovery =		74.73%	80.58%
2) S DCB	11.84	12.49	2933.7E6	2109.0E6	183.864	198.893
Spiked Amount 200.000			Recovery =		91.93%	99.45%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	2692.0E6	1194.5E6	1037.481	1628.928 #
34) L8 Aroclor-1260 {2}	8.74	8.11	2689.3E6	1844.4E6	2167.767	1669.655
35) L8 Aroclor-1260 {3}	9.21	9.70	8951.6E6	2673.5E6	2628.850	2620.385
36) L8 Aroclor-1260 {4}	9.70	10.21	4305.7E6	5374.8E6	2639.735	2451.894
37) L8 Aroclor-1260 {5}	10.76	10.80	2652.4E6	4938.4E6	3342.956	3176.743
Sum Aroclor-1260			21291.0E6	16025.5E6	11816.788	11547.604
Average Aroclor-1260					2363.358	2309.521
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

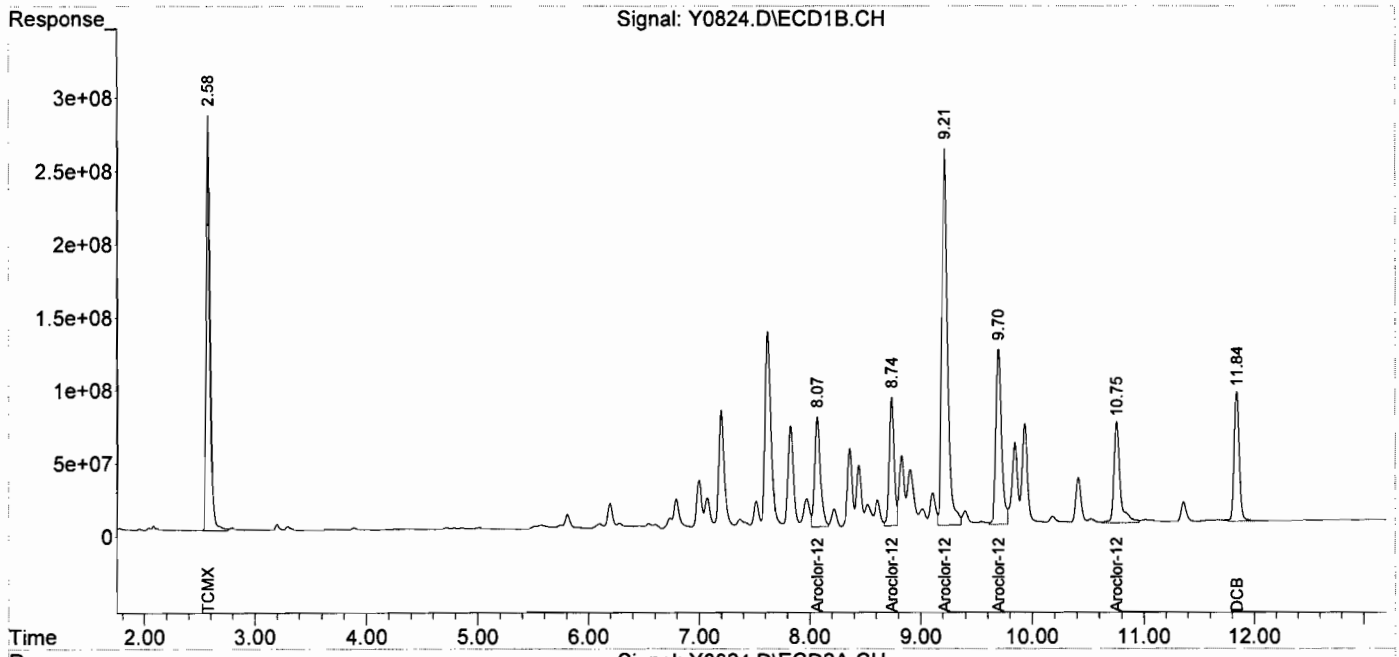
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0824.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:13
Operator : JS
Sample : E-33_(0.,E16-09537-037,S,5.19g,12.2,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:06:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0840.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:44
Operator : JS
Sample : E-33_(0.,E16-09537-037DL,S,5.19g,12.2,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:26:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.59	2.85	1432.6E6	914.4E6	35.260	34.159
Spiked Amount 200.000			Recovery	=	17.63%	17.08%
2) S DCB	11.84	12.49	683.7E6	517.2E6	42.848	48.776
Spiked Amount 200.000			Recovery	=	21.42%	24.39%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	760.4E6	279.5E6	293.042	381.122 #
34) L8 Aroclor-1260 {2}	8.74	8.11	687.2E6	435.0E6	553.974	393.815 #
35) L8 Aroclor-1260 {3}	9.22	9.70	2220.5E6	610.7E6	652.114	598.587
36) L8 Aroclor-1260 {4}	9.70	10.21	1097.8E6	1136.2E6	673.014	518.337
37) L8 Aroclor-1260 {5}	10.76	10.80	598.1E6	1067.8E6	753.847	686.858
Sum Aroclor-1260			5364.0E6	3529.2E6	2925.991	2578.719
Average Aroclor-1260					585.198	515.744
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

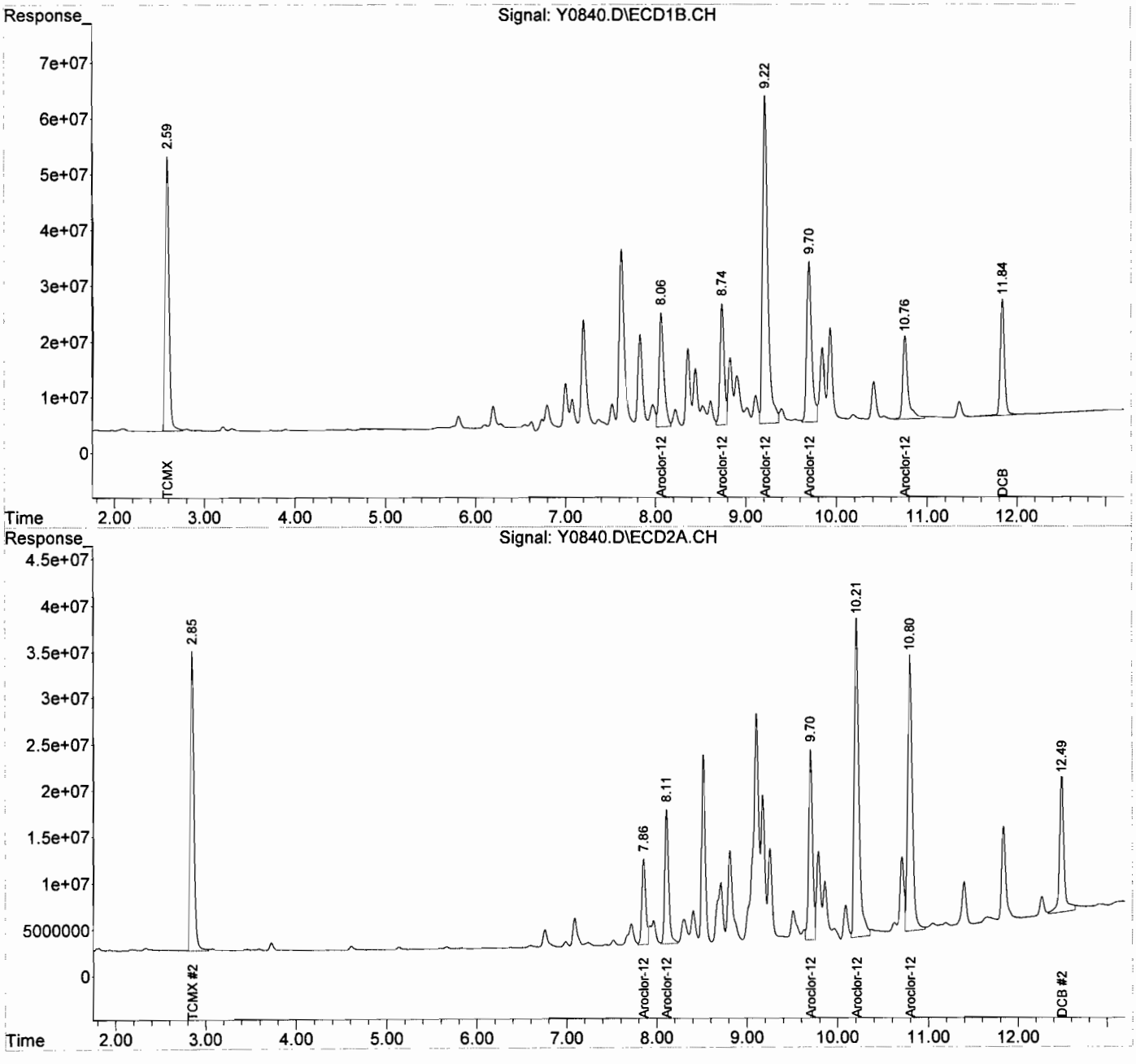
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0840.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 9:44
Operator : JS
Sample : E-33_(0.,E16-09537-037DL,S,5.19g,12.2,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:26:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0825.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:30
Operator : JS
Sample : E-33_(2-,E16-09537-038,S,5.68g,12.6,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:06:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6238.8E6	4369.1E6	153.549	163.207
Spiked Amount 200.000			Recovery	=	76.77%	81.60%
2) S DCB	11.84	12.49	2924.3E6	2045.9E6	183.272	192.948m
Spiked Amount 200.000			Recovery	=	91.64%	96.47%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	2928.0E6	1249.5E6	1128.427	1704.044 #
34) L8 Aroclor-1260 {2}	8.74	8.11	3011.4E6	2010.0E6	2427.432	1819.572 #
35) L8 Aroclor-1260 {3}	9.22	9.70	10273.9E6	2991.5E6	3017.187	2932.096
36) L8 Aroclor-1260 {4}	9.70	10.21	4951.4E6	6237.6E6	3035.630	2845.490
37) L8 Aroclor-1260 {5}	10.75	10.80	3041.3E6	5675.2E6	3833.153	3650.681
Sum Aroclor-1260			24206.1E6	18163.8E6	13441.829	12951.883
Average Aroclor-1260					2688.366	2590.377
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

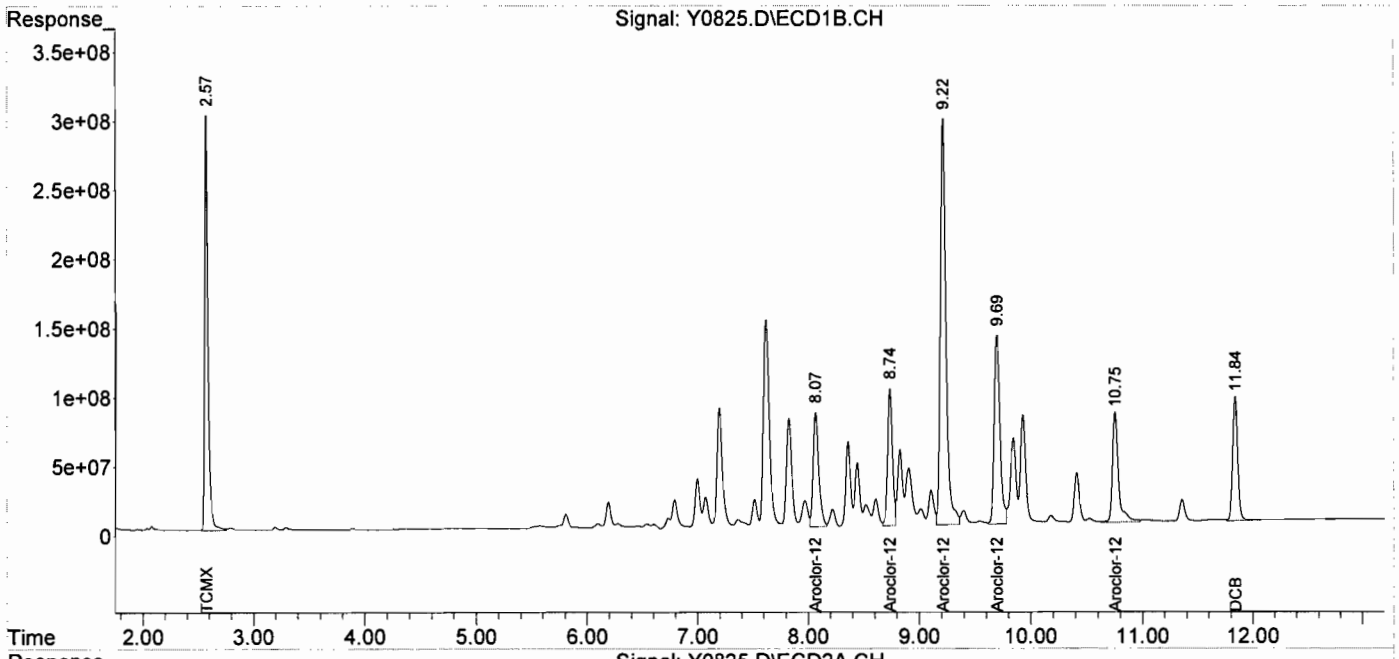
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

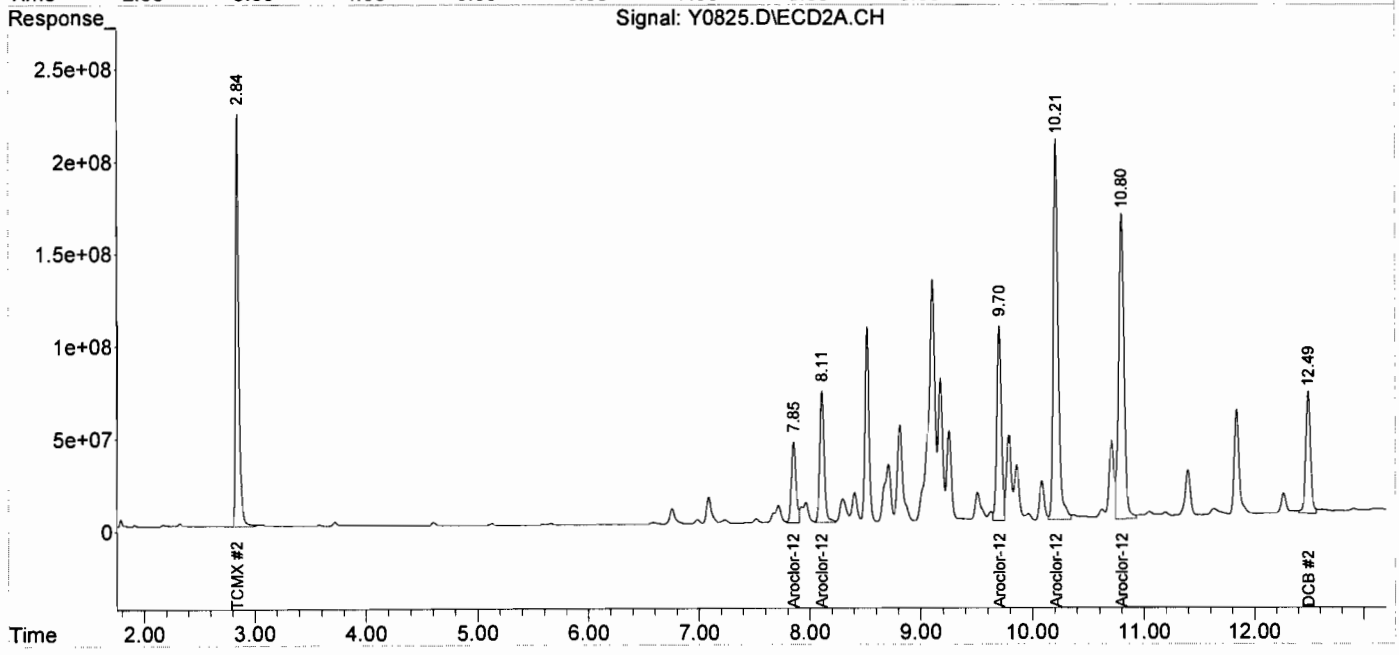
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0825.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:30
Operator : JS
Sample : E-33_(2-,E16-09537-038,S,5.68g,12.6,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:06:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0841.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 10:01
Operator : JS
Sample : E-33_(2-,E16-09537-038DL,S,5.68g,12.6,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:25:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.85	1479.9E6	935.2E6	36.424	34.933
Spiked Amount 200.000			Recovery	=	18.21%	17.47%
2) S DCB	11.84	12.49	701.1E6	438.6E6	43.937	41.361
Spiked Amount 200.000			Recovery	=	21.97%	20.68%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	814.2E6	293.4E6	313.792	400.096 #
34) L8 Aroclor-1260 {2}	8.74	8.11	782.6E6	477.8E6	630.857	432.502 #
35) L8 Aroclor-1260 {3}	9.22	9.70	2581.6E6	687.3E6	758.141	673.622
36) L8 Aroclor-1260 {4}	9.70	10.21	1276.4E6	1341.5E6	782.548	611.976
37) L8 Aroclor-1260 {5}	10.76	10.80	705.0E6	1235.3E6	888.579	794.668
Sum Aroclor-1260			6159.9E6	4035.3E6	3373.918	2912.865
Average Aroclor-1260					674.784	582.573
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

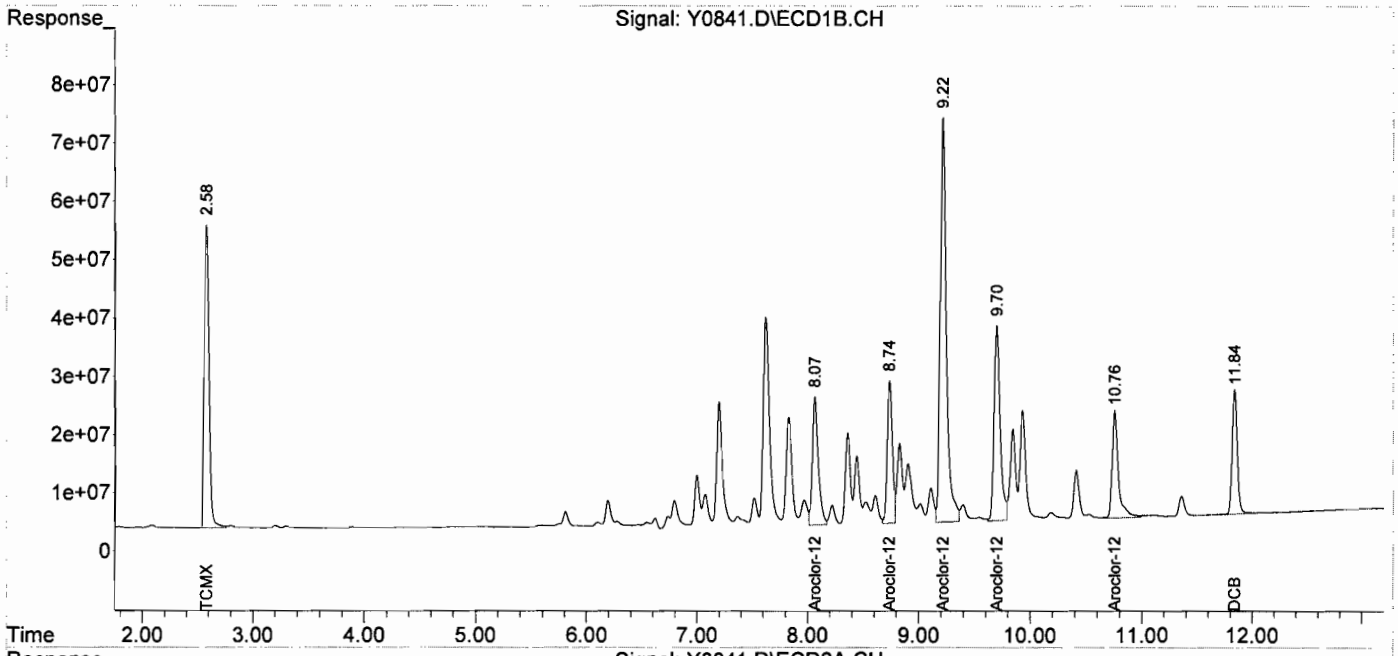
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

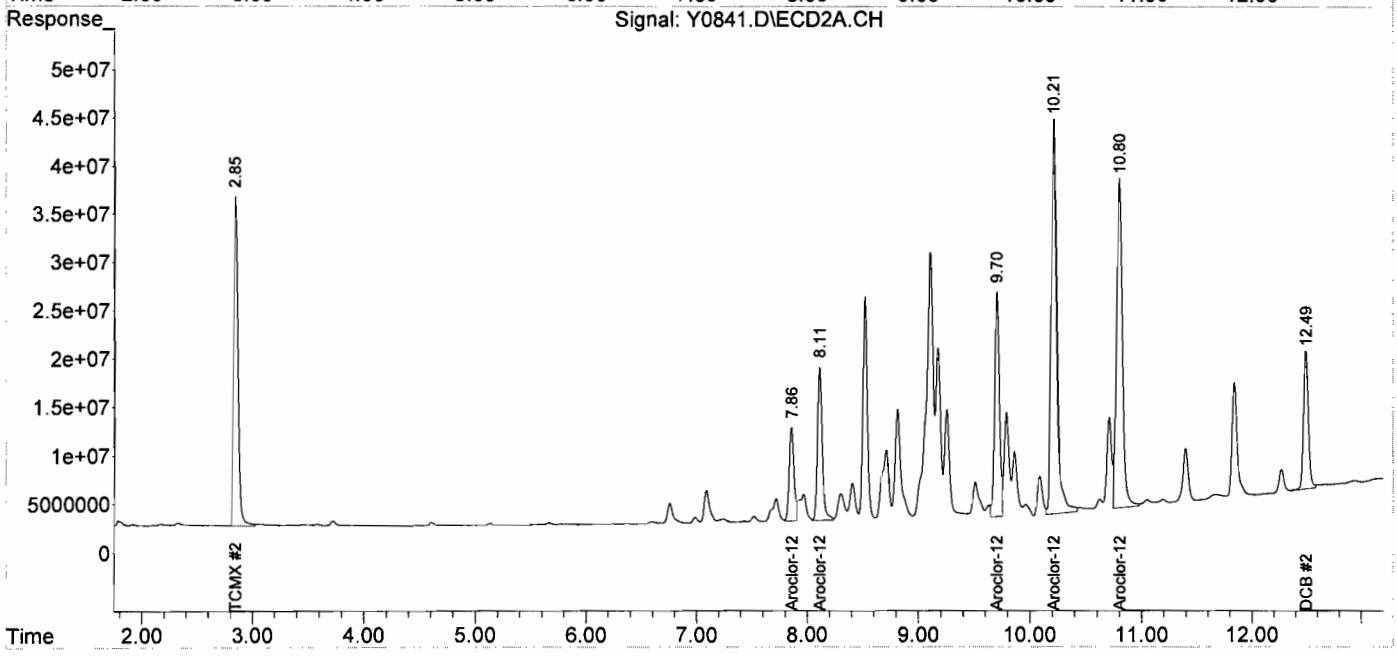
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0841.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 10:01
Operator : JS
Sample : E-33_(2-,E16-09537-038DL,S,5.68g,12.6,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:25:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0826.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:48
Operator : JS
Sample : E-33_(3-,E16-09537-039,S,5.32g,7.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6453.8E6	4367.6E6	158.842	163.152
Spiked Amount 200.000			Recovery	=	79.42%	81.58%
2) S DCB	11.84	12.49	2955.3E6	2021.3E6	185.215	190.620m
Spiked Amount 200.000			Recovery	=	92.61%	95.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	654.8E6	329.1E6	252.344	448.806 #
34) L8 Aroclor-1260 {2}	8.74	8.11	796.3E6	528.8E6	641.916	478.662 #
35) L8 Aroclor-1260 {3}	9.22	9.70	2577.4E6	728.6E6	756.924	714.108
36) L8 Aroclor-1260 {4}	9.70	10.21	1243.2E6	1310.2E6	762.211	597.700
37) L8 Aroclor-1260 {5}	10.76	10.80	770.9E6	1368.1E6	971.648	880.070
Sum Aroclor-1260			6042.7E6	4264.8E6	3385.043	3119.346
Average Aroclor-1260					677.009	623.869
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

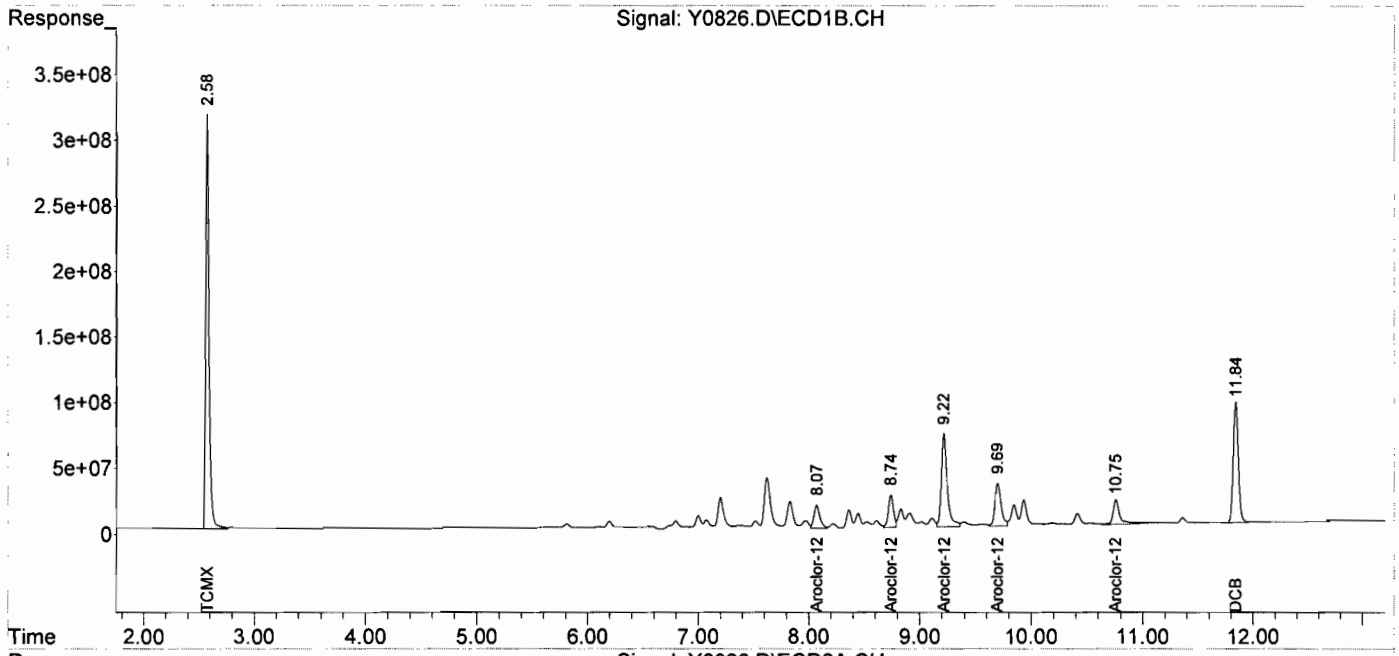
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

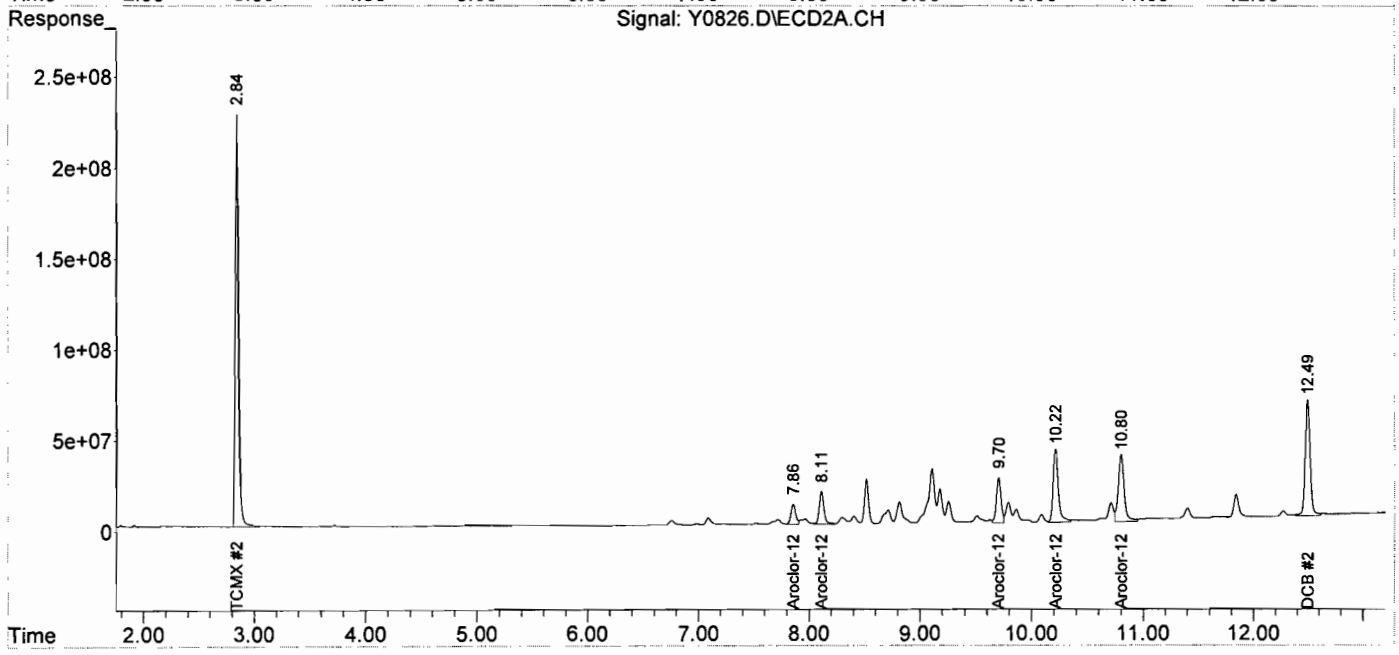
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0826.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 22:48
Operator : JS
Sample : E-33_(3-,E16-09537-039,S,5.32g,7.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0827.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:05
Operator : JS
Sample : E-33_(4.,E16-09537-040,S,5.65g,7.30,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:08:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

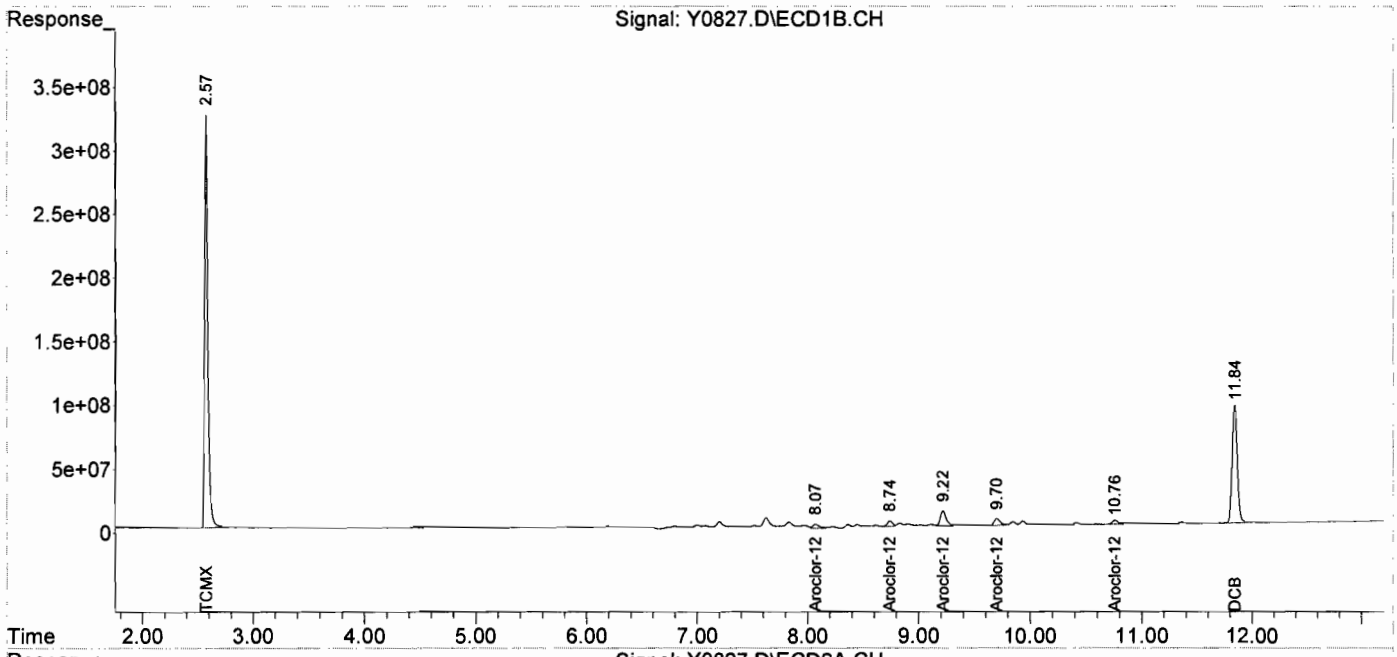
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6557.4E6	4377.2E6	161.391	163.511
Spiked Amount 200.000			Recovery	=	80.70%	81.76%
2) S DCB	11.84	12.49	2988.7E6	1883.2E6	187.311	177.601
Spiked Amount 200.000			Recovery	=	93.66%	88.80%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	127.2E6	77076216	49.003	105.112 #
34) L8 Aroclor-1260 {2}	8.74	8.11	144.0E6	129.9E6	116.091m	117.571
35) L8 Aroclor-1260 {3}	9.22	9.70	443.9E6	123.3E6	130.356m	120.884m
36) L8 Aroclor-1260 {4}	9.70	10.22	207.5E6	218.6E6	127.219m	99.704
37) L8 Aroclor-1260 {5}	10.76	10.80	116.4E6	239.5E6	146.740	154.047
Sum Aroclor-1260			1039.0E6	788.3E6	569.409	597.318
Average Aroclor-1260					113.882	119.464
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

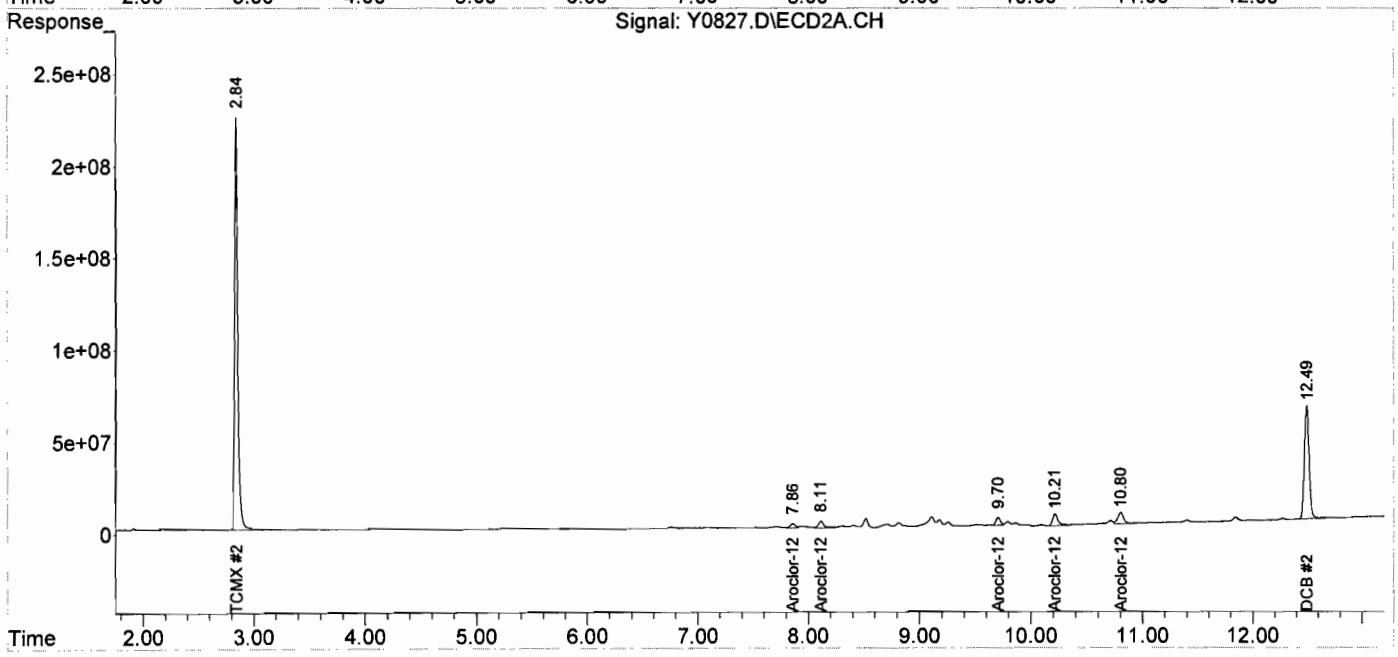
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0827.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:05
Operator : JS
Sample : E-33_(4.,E16-09537-040,S,5.65g,7.30,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:08:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0828.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:22
Operator : JS
Sample : E-33_(5.,E16-09537-041,S,5.88g,3.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:11:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

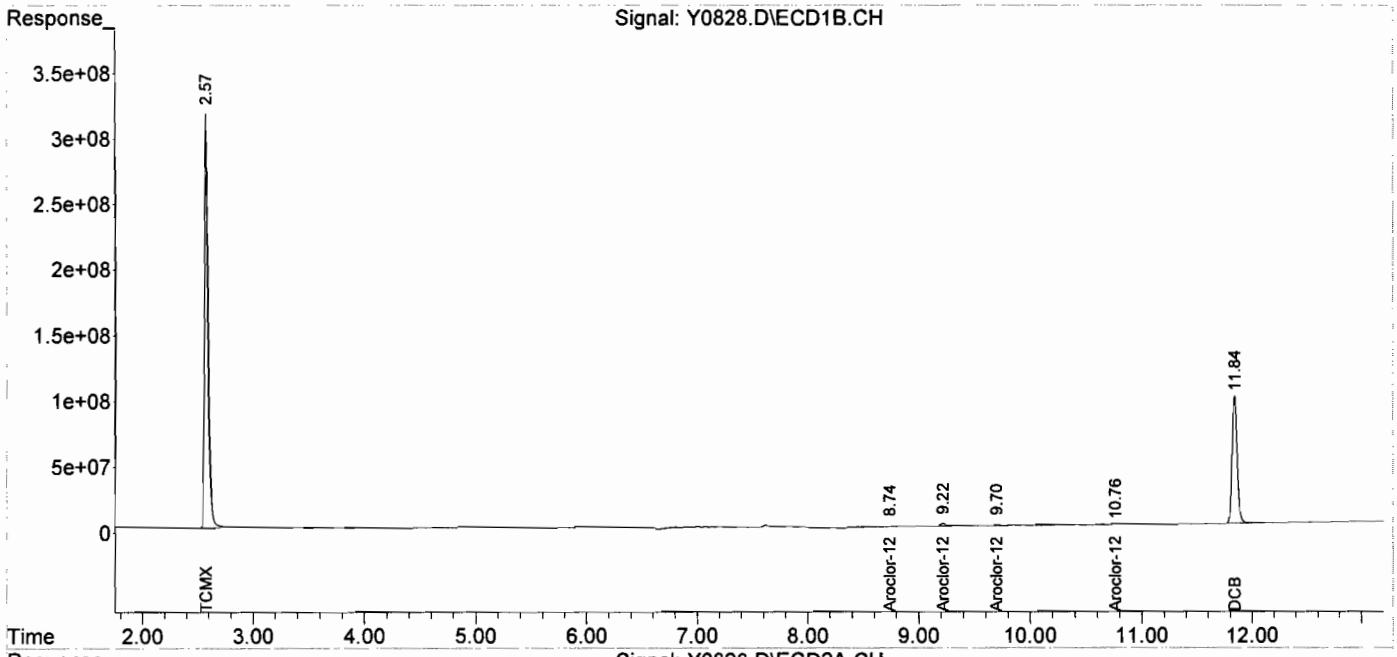
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6692.1E6	4437.2E6	164.708	165.751
Spiked Amount 200.000			Recovery	=	82.35%	82.88%
2) S DCB	11.84	12.49	3087.5E6	1904.8E6	193.503	179.639
Spiked Amount 200.000			Recovery	=	96.75%	89.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.86	0	12226257	N.D. d	16.673m#
34) L8 Aroclor-1260 {2}	8.74	8.11	24219897	20740579	19.523m	18.776m
35) L8 Aroclor-1260 {3}	9.22	9.71	71075180	24169716	20.873m	23.690m
36) L8 Aroclor-1260 {4}	9.70	10.22	33987449	37742592	20.837m	17.218
37) L8 Aroclor-1260 {5}	10.76	10.80	18413363	36463386	23.207m	23.456m
Sum Aroclor-1260			147.7E6	131.3E6	84.441	99.812
Average Aroclor-1260					21.110	19.962
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

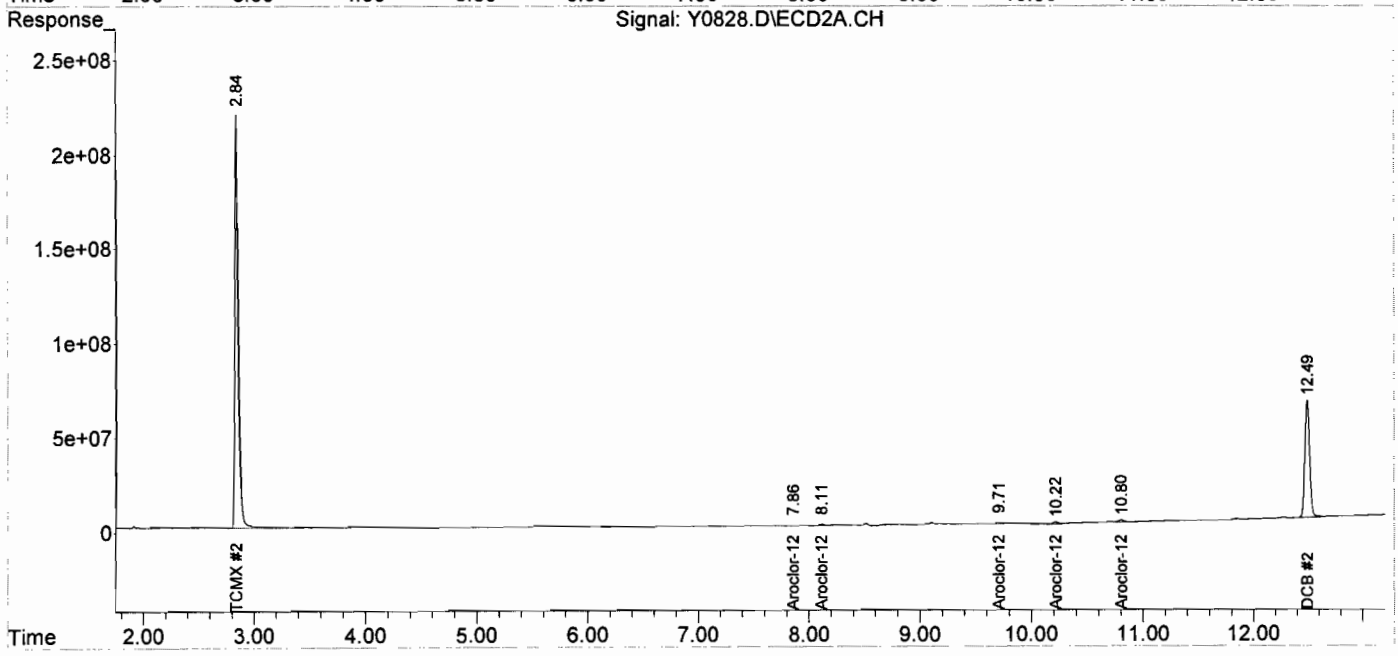
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0828.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:22
Operator : JS
Sample : E-33_(5.,E16-09537-041,S,5.88g,3.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:11:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0829.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:40
Operator : JS
Sample : E-40_(4.,E16-09537-042,S,5.58g,6.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:13:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.84	6733.6E6	4466.7E6	165.728	166.852
Spiked Amount 200.000			Recovery =		82.86%	83.43%
2) S DCB	11.84	12.49	3132.4E6	1911.8E6	196.312	180.293
Spiked Amount 200.000			Recovery =		98.16%	90.15%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	47434702	36695071	18.281	50.042m#
34) L8 Aroclor-1260 {2}	8.74	8.11	30311290	44534979	24.433m	40.316m#
35) L8 Aroclor-1260 {3}	9.22	9.70	51148500	28243411	15.021m	27.683m#
36) L8 Aroclor-1260 {4}	9.70	10.22	17232947	28562903	10.565m	13.030
37) L8 Aroclor-1260 {5}	10.76	10.81	9100039	31036573	11.469m	19.965m#
Sum Aroclor-1260			155.2E6	169.1E6	79.770	151.036
Average Aroclor-1260					15.954	30.207
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

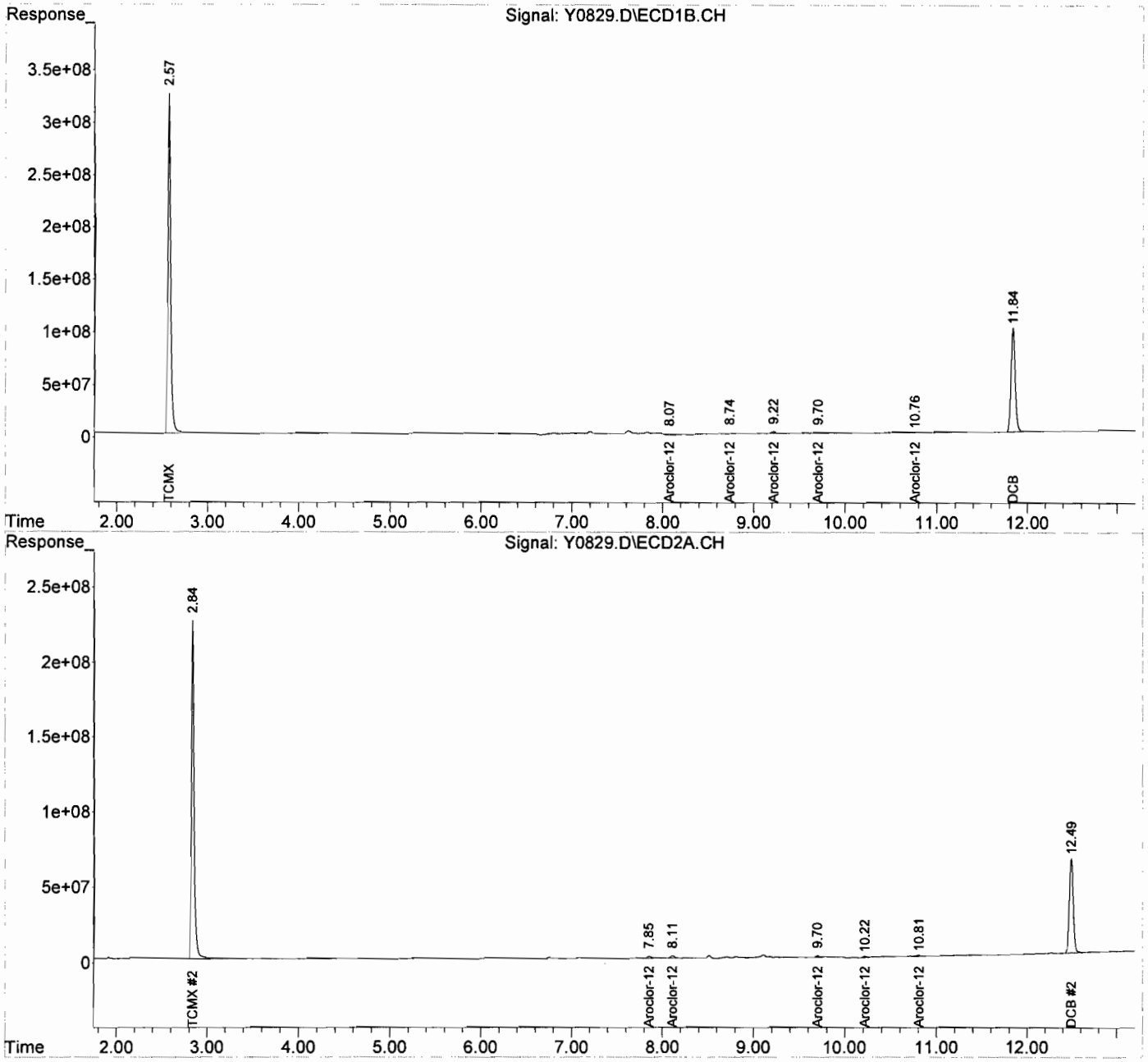
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0829.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:40
Operator : JS
Sample : E-40_(4.,E16-09537-042,S,5.58g,6.60,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:13:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0830.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:57
Operator : JS
Sample : E-39_(4.,E16-09537-043,S,5.93g,13.0,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:14:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6867.3E6	4577.0E6	169.020	170.973
Spiked Amount 200.000			Recovery	=	84.51%	85.49%
2) S DCB	11.84	12.49	3247.3E6	1952.1E6	203.518	184.095
Spiked Amount 200.000			Recovery	=	101.76%	92.05%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	30350470	21057239	11.697m	28.717m#
34) L8 Aroclor-1260 {2}	8.74	8.11	38101015	32500696	30.712m	29.422m
35) L8 Aroclor-1260 {3}	9.22	9.71	110.6E6	32901525	32.489m	32.248m
36) L8 Aroclor-1260 {4}	9.70	10.22	45854190	57745050	28.113m	26.342
37) L8 Aroclor-1260 {5}	10.76	10.80	30941638	55778968	38.998	35.881m
Sum Aroclor-1260			255.9E6	200.0E6	142.008	152.610
Average Aroclor-1260					28.402	30.522
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

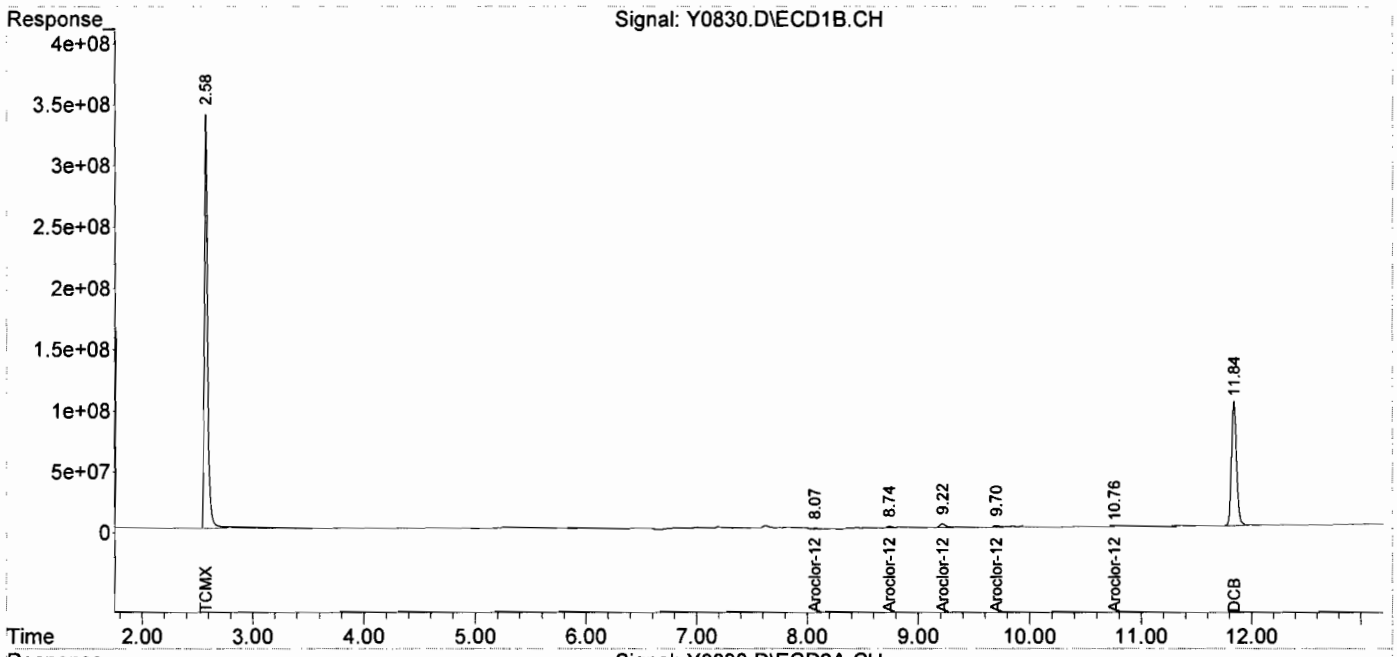
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

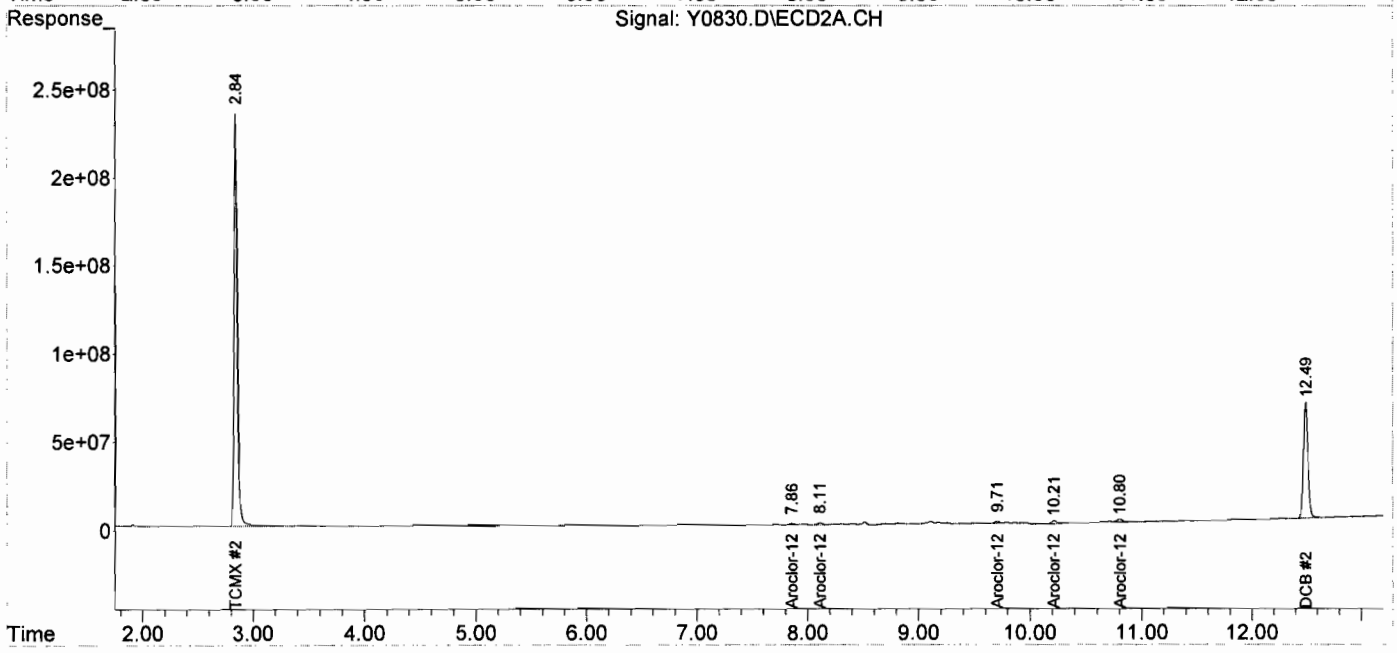
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0830.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 23:57
Operator : JS
Sample : E-39_(4.,E16-09537-043,S,5.93g,13.0,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:14:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3814.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:29
Operator : JS
Sample : EB-10111,E16-09537-044,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:52:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	2.74	2308.8E6	1665.9E6	143.874	138.438
Spiked Amount 200.000			Recovery	=	71.94%	69.22%
2) S DCB	11.98	12.25	812.0E6	715.4E6	155.031	148.245m
Spiked Amount 200.000			Recovery	=	77.52%	74.12%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

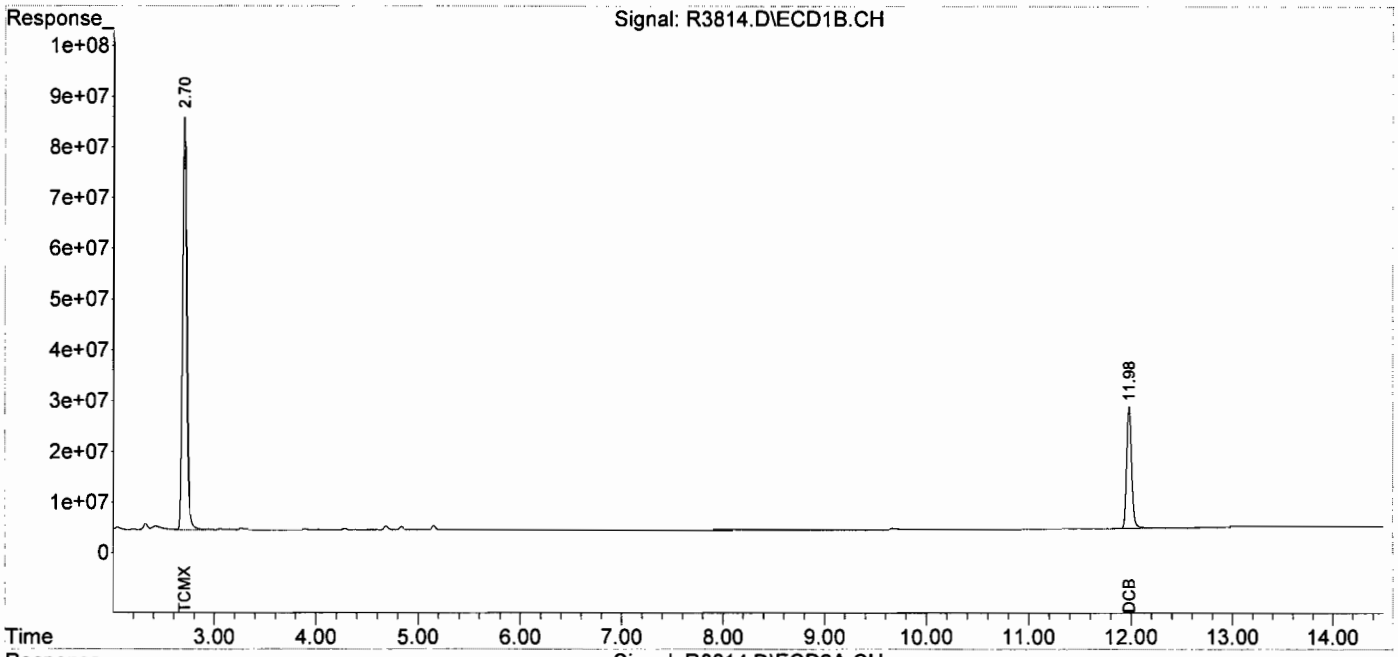
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

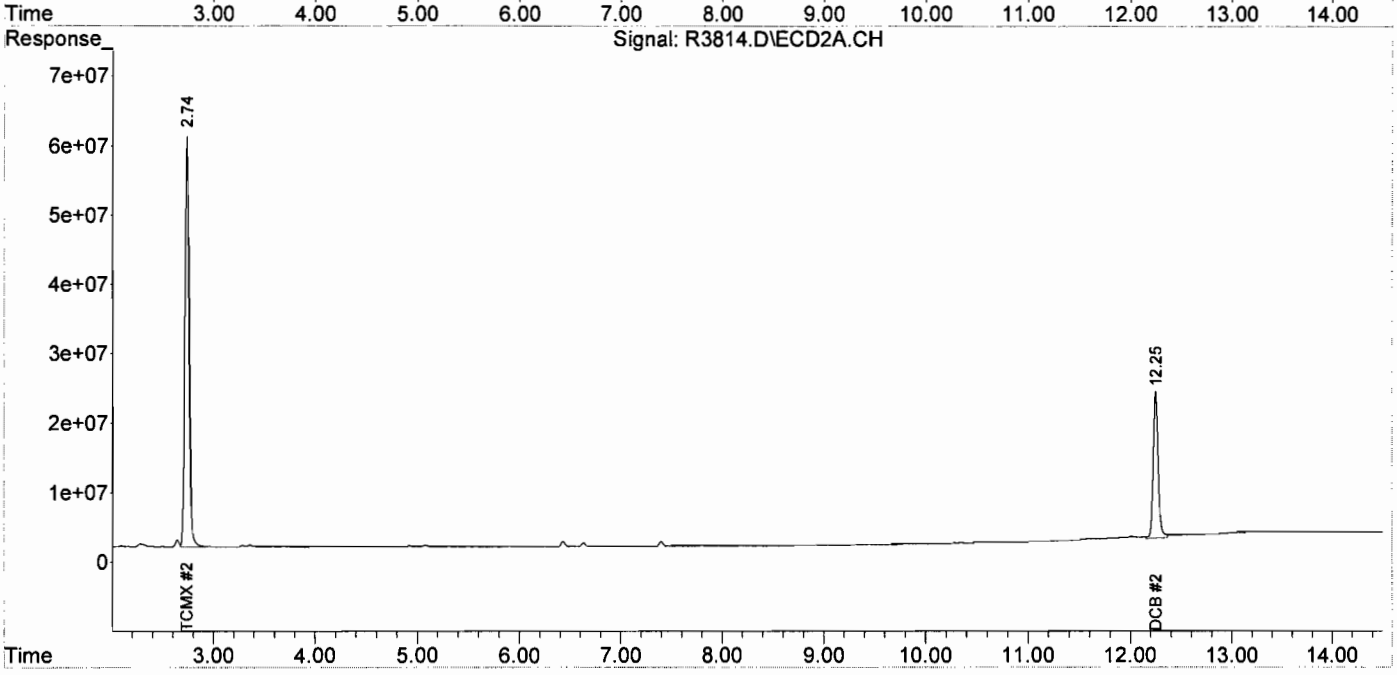
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3814.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:29
Operator : JS
Sample : EB-10111,E16-09537-044,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:52:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0831.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:14
Operator : JS
Sample : E-32_(0.,E16-09537-045,S,5.58g,10.5,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:15:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6249.1E6	4343.5E6	153.803	162.253
Spiked Amount 200.000			Recovery	=	76.90%	81.13%
2) S DCB	11.84	12.49	2988.5E6	2092.2E6	187.294	197.310
Spiked Amount 200.000			Recovery	=	93.65%	98.66%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	2892.0E6	1280.2E6	1114.531	1745.869 #
34) L8 Aroclor-1260 {2}	8.74	8.11	3149.0E6	2380.3E6	2538.295	2154.819
35) L8 Aroclor-1260 {3}	9.22	9.70	10697.7E6	3152.3E6	3141.621	3089.670
36) L8 Aroclor-1260 {4}	9.70	10.21	5108.7E6	6265.0E6	3132.098	2857.987
37) L8 Aroclor-1260 {5}	10.76	10.80	3090.4E6	5758.8E6	3894.981	3704.465
Sum Aroclor-1260			24937.7E6	18836.5E6	13821.526	13552.810
Average Aroclor-1260					2764.305	2710.562
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

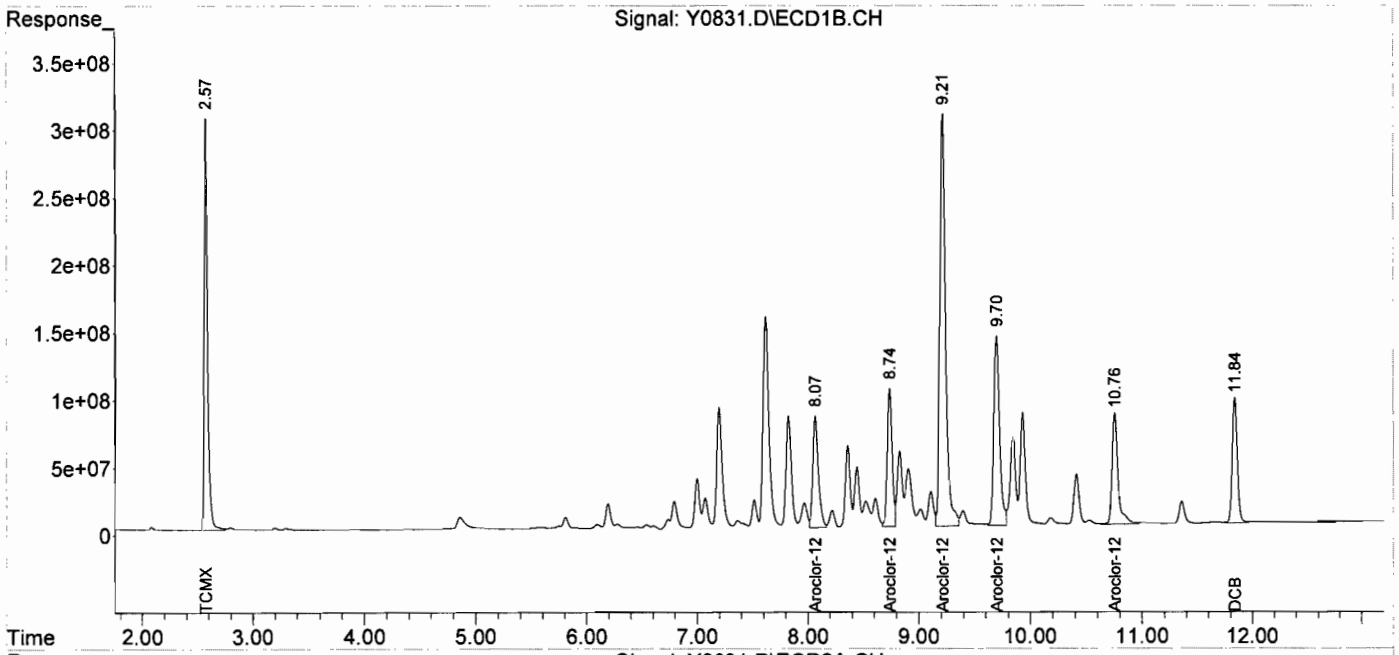
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

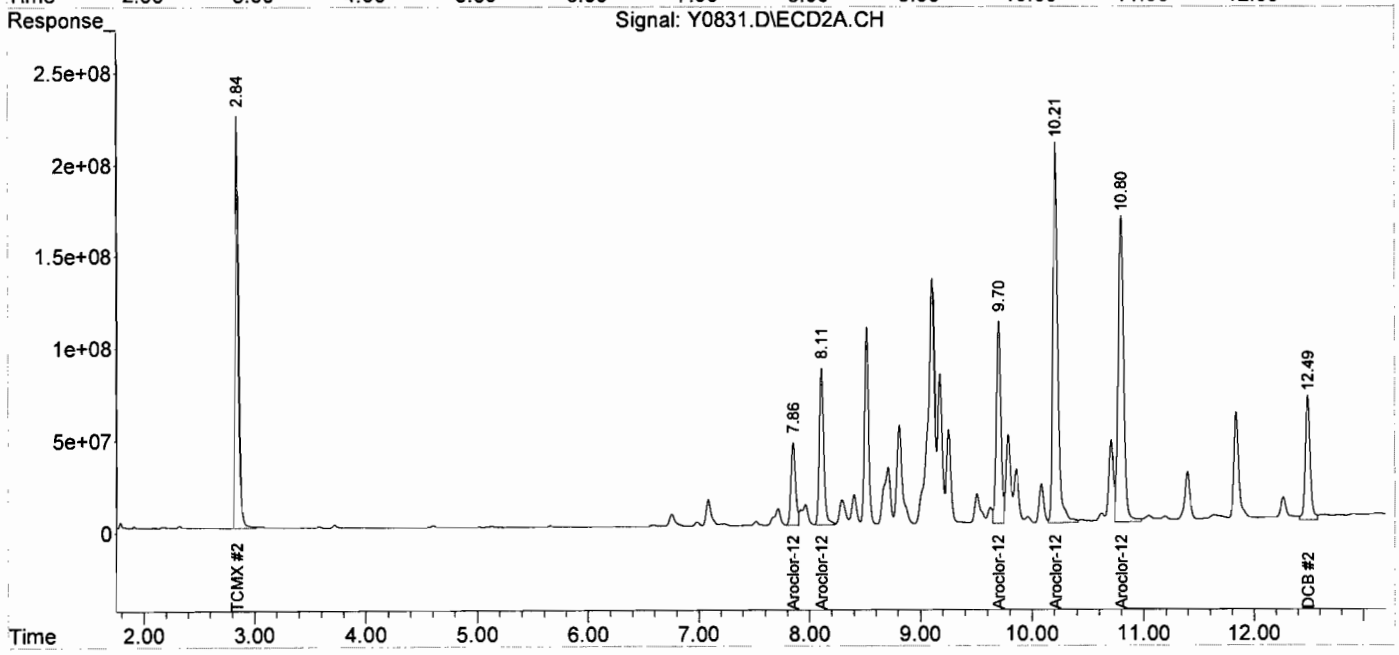
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0831.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:14
Operator : JS
Sample : E-32_(0.,E16-09537-045,S,5.58g,10.5,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:15:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0842.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 10:19
Operator : JS
Sample : E-32_(0.,E16-09537-045DL,S,5.58g,10.5,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:25:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.85	1408.5E6	905.1E6	34.666	33.811
Spiked Amount 200.000			Recovery	=	17.33%	16.91%
2) S DCB	11.84	12.49	667.0E6	428.3E6	41.805	40.392
Spiked Amount 200.000			Recovery	=	20.90%	20.20%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	788.6E6	291.9E6	303.922	398.097 #
34) L8 Aroclor-1260 {2}	8.74	8.11	788.7E6	536.9E6	635.714	485.991
35) L8 Aroclor-1260 {3}	9.22	9.71	2560.0E6	702.0E6	751.797	688.063
36) L8 Aroclor-1260 {4}	9.70	10.21	1255.7E6	1308.5E6	769.859	596.914
37) L8 Aroclor-1260 {5}	10.76	10.80	695.9E6	1212.6E6	877.032	780.042
Sum Aroclor-1260			6088.8E6	4051.9E6	3338.323	2949.106
Average Aroclor-1260					667.665	589.821
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

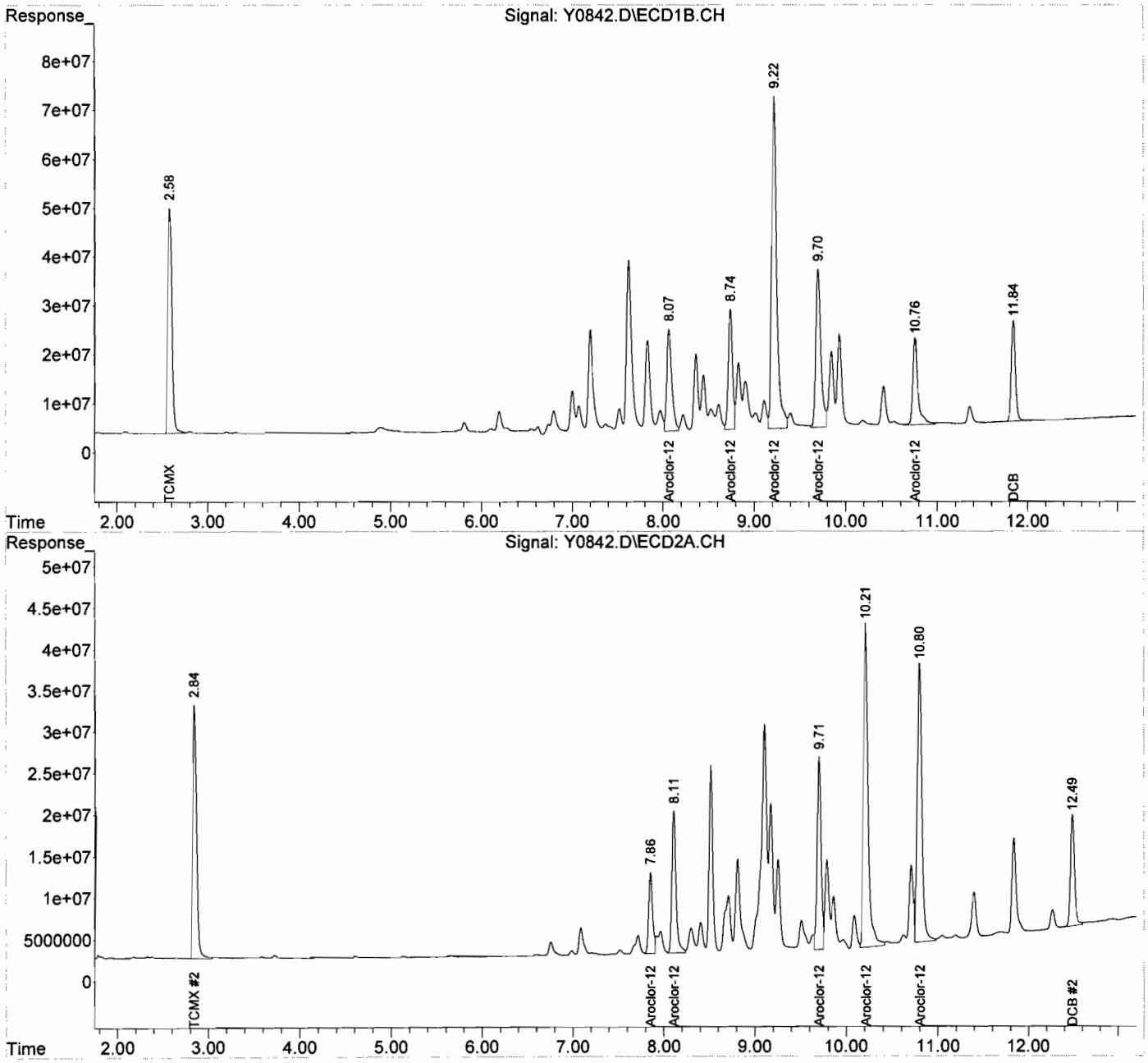
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0842.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 10:19
Operator : JS
Sample : E-32_(0.,E16-09537-045DL,S,5.58g,10.5,20
Misc : 161017-14,10/17/16,10/12/16,5
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:25:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0832.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:32
Operator : JS
Sample : E-32_(2-,E16-09537-046,S,5.74g,15.8,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:16:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6447.6E6	4500.4E6	158.689	168.110
Spiked Amount 200.000			Recovery	=	79.34%	84.06%
2) S DCB	11.84	12.49	3090.9E6	2096.6E6	193.716	197.726m
Spiked Amount 200.000			Recovery	=	96.86%	98.86%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	1436.0E6	616.8E6	553.404	841.167 #
34) L8 Aroclor-1260 {2}	8.74	8.11	1674.9E6	1057.6E6	1350.080	957.423 #
35) L8 Aroclor-1260 {3}	9.22	9.70	5584.0E6	1591.4E6	1639.867	1559.764
36) L8 Aroclor-1260 {4}	9.70	10.21	2711.2E6	3072.1E6	1662.224	1401.459
37) L8 Aroclor-1260 {5}	10.75	10.80	1579.7E6	2994.2E6	1990.976m	1926.111
Sum Aroclor-1260			12985.8E6	9332.2E6	7196.552	6685.923
Average Aroclor-1260					1439.310	1337.185
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

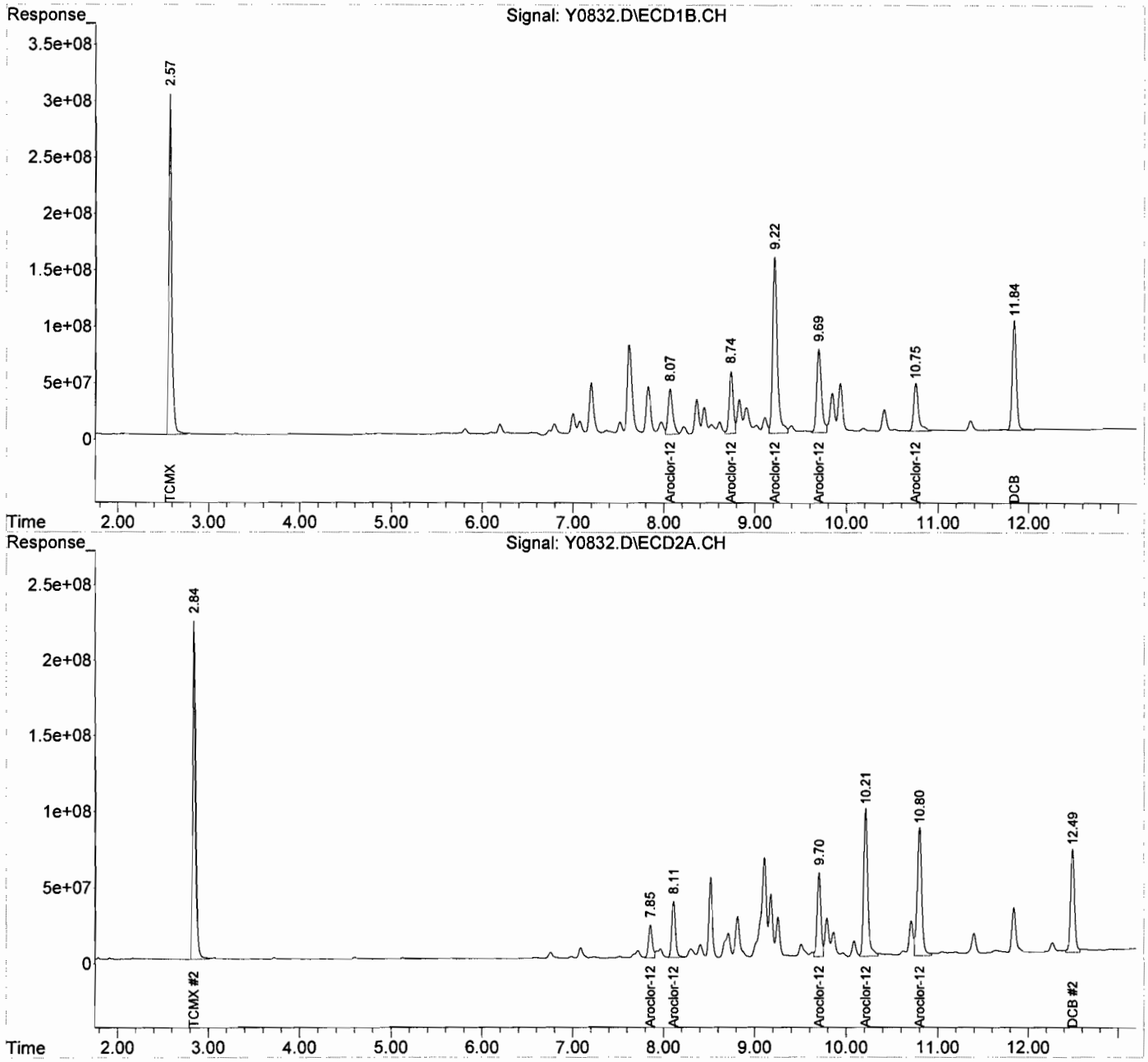
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0832.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:32
Operator : JS
Sample : E-32_(2-,E16-09537-046,S,5.74g,15.8,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:16:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0833.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:49
Operator : JS
Sample : E-32_(3-,E16-09537-047,S,5.69g,5.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:17:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.57	2.84	6530.0E6	4432.9E6	160.718	165.589	
Spiked Amount 200.000			Recovery	=	80.36%	82.79%	
2) S DCB	11.84	12.49	3078.0E6	1949.1E6	192.906	183.812	
Spiked Amount 200.000			Recovery	=	96.45%	91.91%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.07	7.86	331.6E6	174.4E6	127.801	237.855	#
34) L8 Aroclor-1260 {2}	8.74	8.11	416.5E6	272.1E6	335.710	246.350	#
35) L8 Aroclor-1260 {3}	9.22	9.70	1313.9E6	373.9E6	385.846	366.460	
36) L8 Aroclor-1260 {4}	9.70	10.21	622.4E6	601.1E6	381.574	274.217	#
37) L8 Aroclor-1260 {5}	10.76	10.80	370.5E6	622.4E6	467.006	400.398	
Sum Aroclor-1260			3054.9E6	2044.0E6	1697.937	1525.280	
Average Aroclor-1260					339.587	305.056	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

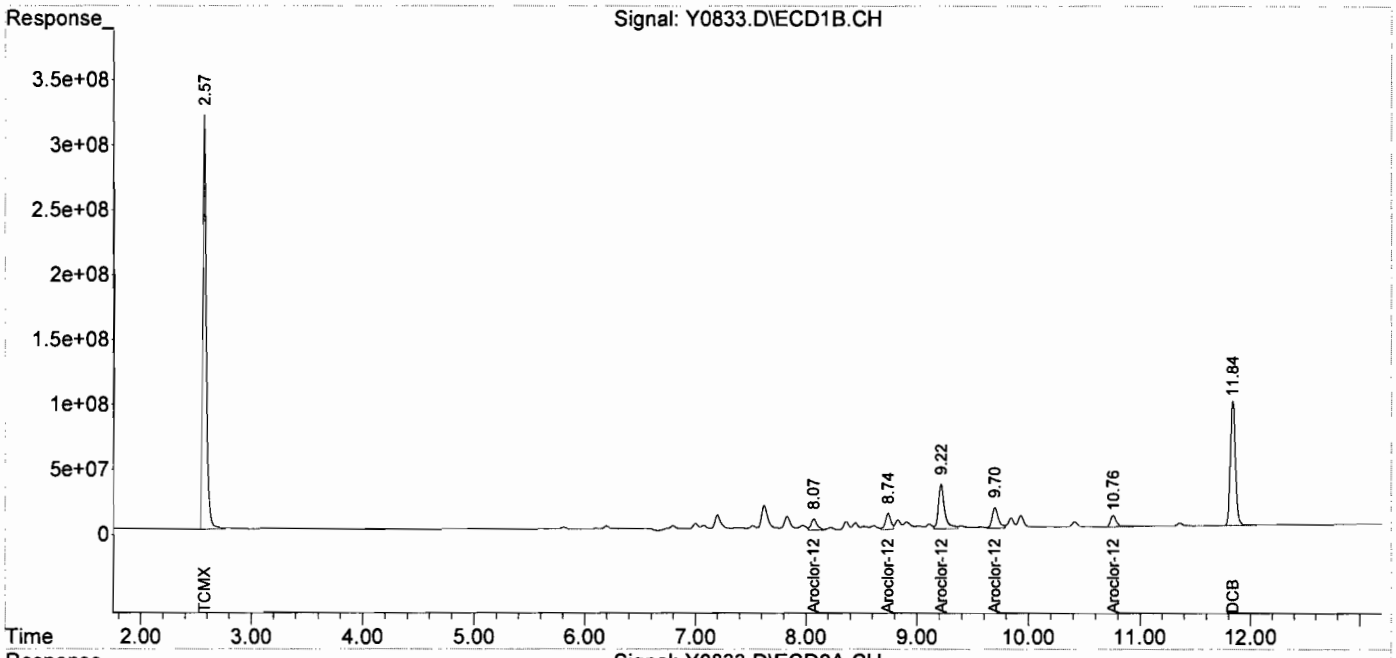
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

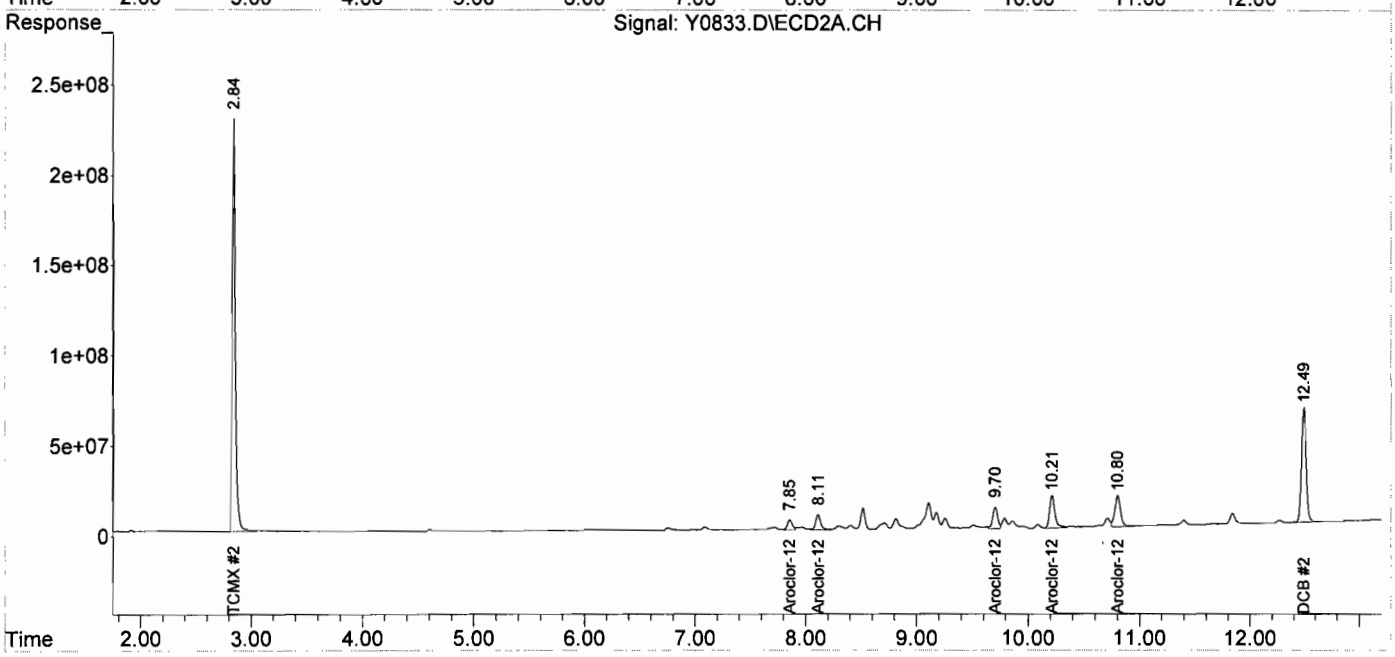
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : Y0833.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 00:49
Operator : JS
Sample : E-32_(3-,E16-09537-047,S,5.69g,5.10,20
Misc : 161017-14,10/17/16,10/12/16,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 13:17:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0848.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 12:25
Operator : JS
Sample : E-32_(4.,E16-09537-048,S,5.67g,7.40,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:22:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.84	6660.6E6	4404.4E6	163.932	164.527
Spiked Amount 200.000			Recovery	=	81.97%	82.26%
2) S DCB	11.84	12.49	3211.5E6	1911.0E6	201.273	180.220
Spiked Amount 200.000			Recovery	=	100.64%	90.11%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	39596066	18654768	15.260	25.440m#
34) L8 Aroclor-1260 {2}	8.74	8.11	34932005	29654328	28.158m	26.845m
35) L8 Aroclor-1260 {3}	9.21	9.70	103.7E6	36617671	30.464m	35.891m
36) L8 Aroclor-1260 {4}	9.70	10.21	43748299	61997006	26.821	28.282
37) L8 Aroclor-1260 {5}	10.76	10.80	27636142	51637429	34.832	33.217m
Sum Aroclor-1260			249.6E6	198.6E6	135.535	149.675
Average Aroclor-1260					27.107	29.935
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

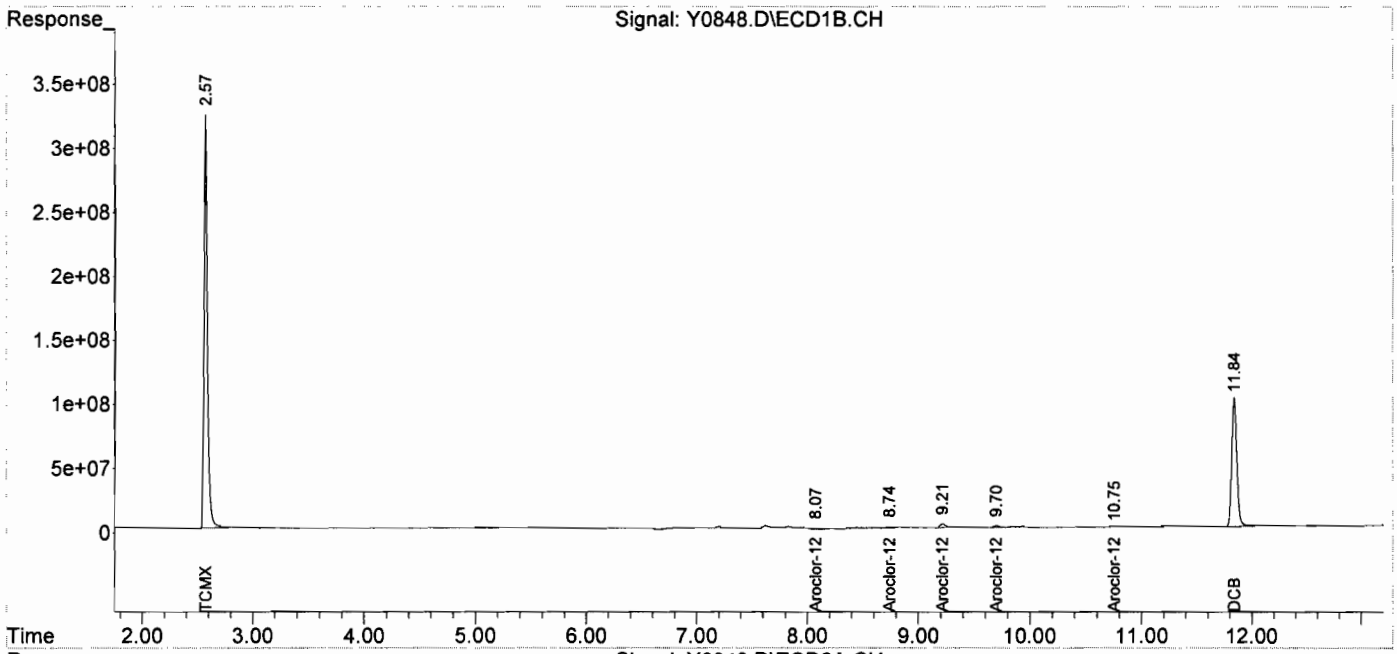
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

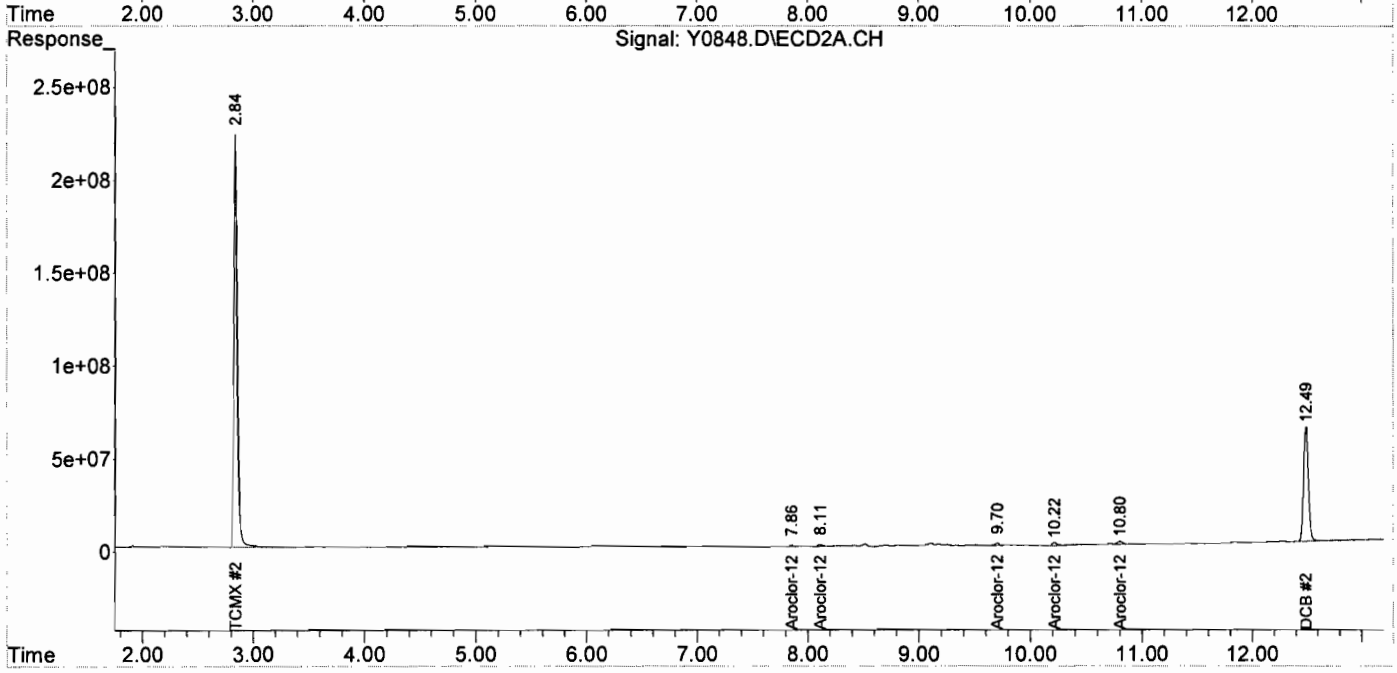
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0848.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 12:25
Operator : JS
Sample : E-32_(4.,E16-09537-048,S,5.67g,7.40,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:22:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0849.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 12:42
Operator : JS
Sample : E-32_(5.,E16-09537-049,S,5.67g,8.10,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:25:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6650.3E6	4404.6E6	163.678	164.533
Spiked Amount 200.000			Recovery	=	81.84%	82.27%
2) S DCB	11.84	12.49	3188.1E6	1904.4E6	199.803	179.602
Spiked Amount 200.000			Recovery	=	99.90%	89.80%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	0.00	7.86	0	6351555	N.D. d	8.662m#
34) L8 Aroclor-1260 {2}	8.75	8.11	12608607	9867440	10.163m	8.933m
35) L8 Aroclor-1260 {3}	9.22	9.70	40765137	12646879	11.972	12.396m
36) L8 Aroclor-1260 {4}	9.70	10.22	14643322	24271286	8.978	11.072
37) L8 Aroclor-1260 {5}	10.75	10.80	10726715	20121062	13.520m	12.943m
Sum Aroclor-1260			78743780	73258221	44.632	54.006
Average Aroclor-1260					11.158	10.801
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

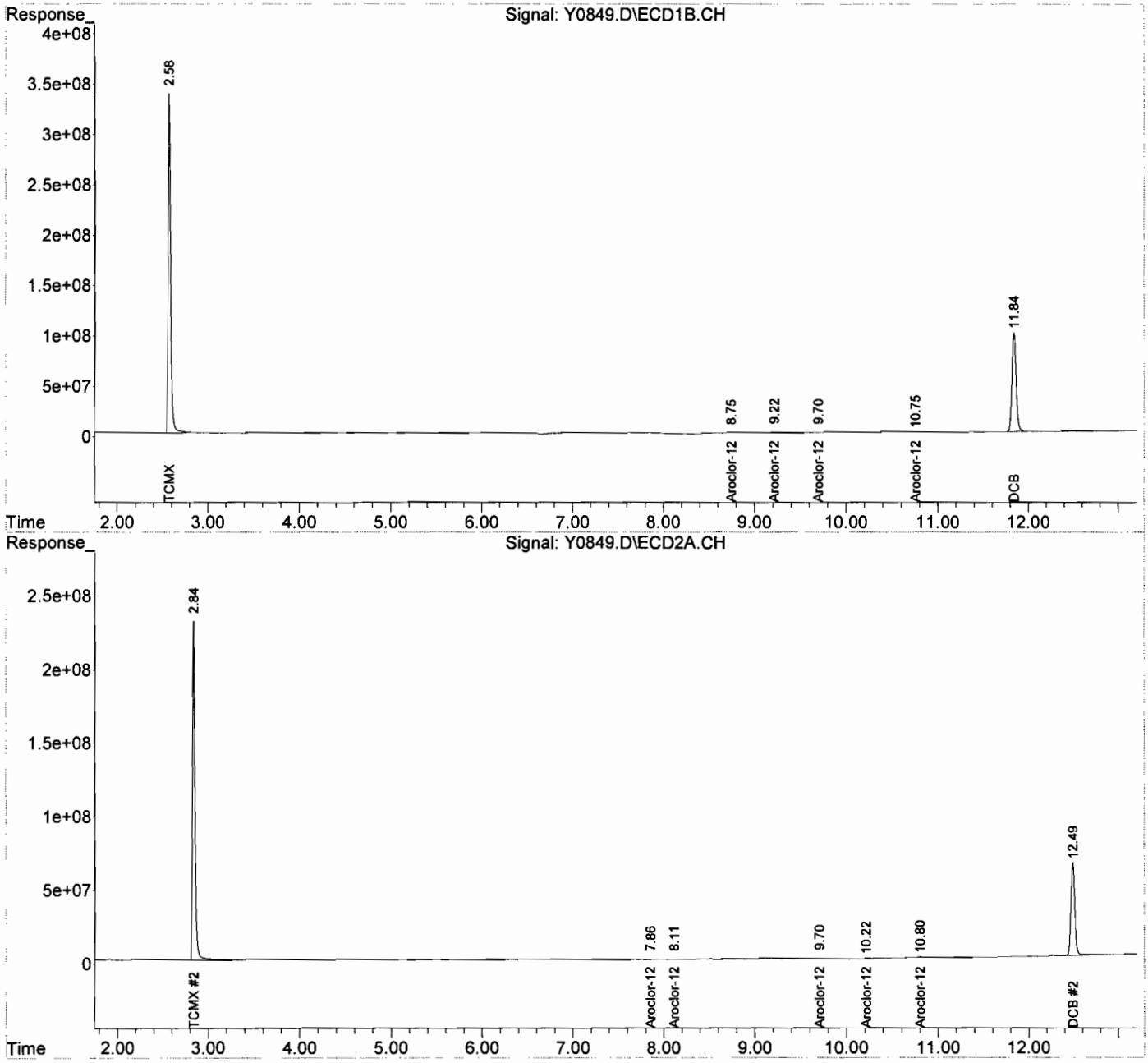
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0849.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 12:42
Operator : JS
Sample : E-32_(5.,E16-09537-049,S,5.67g,8.10,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:25:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0850.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:00
Operator : JS
Sample : E-41_(0.,E16-09537-050,S,5.31g,10.6,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:33:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6388.3E6	4383.1E6	157.230	163.730
Spiked Amount 200.000			Recovery	=	78.61%	81.86%
2) S DCB	11.84	12.49	3111.7E6	2076.7E6	195.015	195.852
Spiked Amount 200.000			Recovery	=	97.51%	97.93%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	3090.4E6	1500.0E6	1191.001	2045.669 #
34) L8 Aroclor-1260 {2}	8.74	8.11	3215.4E6	2227.8E6	2591.886	2016.717
35) L8 Aroclor-1260 {3}	9.22	9.70	11321.9E6	3264.4E6	3324.947	3199.547
36) L8 Aroclor-1260 {4}	9.70	10.21	5513.8E6	6511.8E6	3380.400	2970.571
37) L8 Aroclor-1260 {5}	10.76	10.80	3443.6E6	6135.0E6	4340.233	3946.507
Sum Aroclor-1260			26585.1E6	19639.0E6	14828.467	14179.011
Average Aroclor-1260					2965.693	2835.802
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

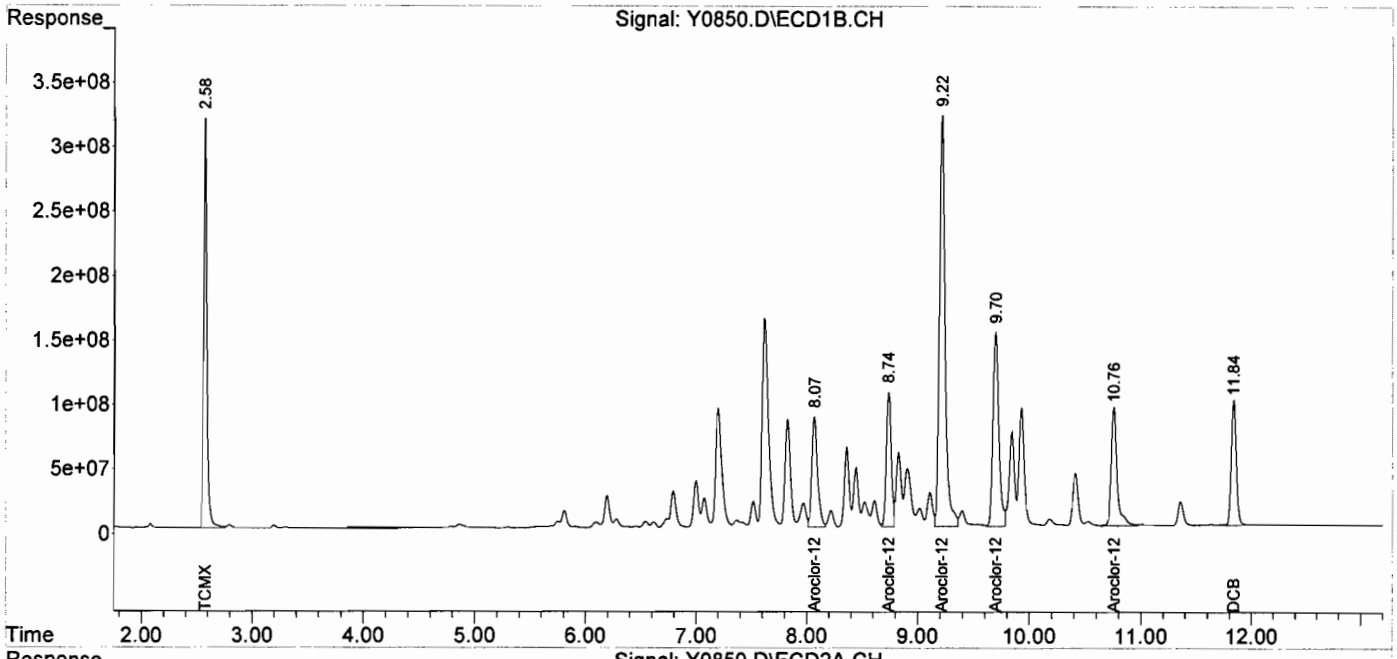
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

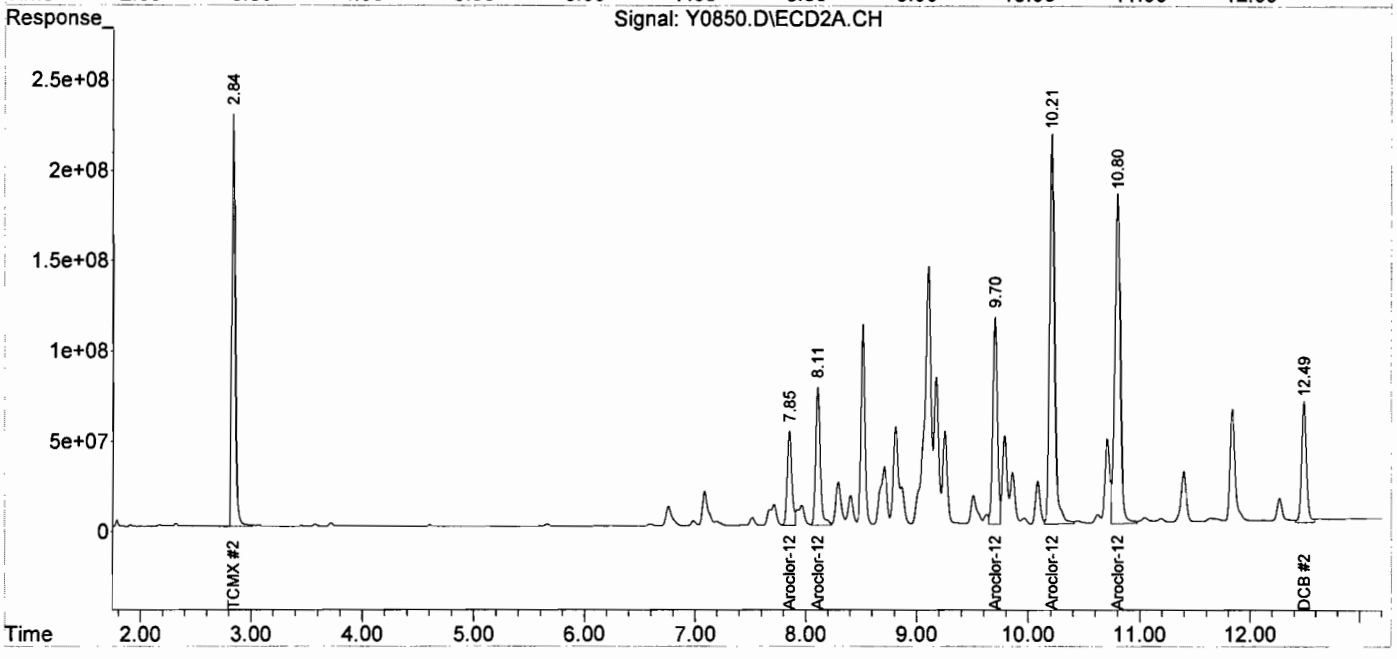
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0850.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:00
Operator : JS
Sample : E-41_(0.,E16-09537-050,S,5.31g,10.6,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:33:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0859.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 16:03
Operator : JS
Sample : E-41_(0.,E16-09537-050DL,S,5.31g,10.6,20
Misc : 161017-23,10/17/16,10/12/16,5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:40:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.57	2.85	1482.2E6	997.7E6	36.481	37.267	
Spiked Amount 200.000			Recovery	=	18.24%	18.63%	
2) S DCB	11.84	12.50	691.7E6	441.6E6	43.350	41.650	
Spiked Amount 200.000			Recovery	=	21.68%	20.82%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.07	7.87	860.0E6	344.1E6	331.420	469.223	#
34) L8 Aroclor-1260 {2}	8.74	8.12	811.5E6	512.2E6	654.151	463.720	#
35) L8 Aroclor-1260 {3}	9.22	9.71	2735.6E6	744.1E6	803.379	729.290	
36) L8 Aroclor-1260 {4}	9.70	10.22	1360.2E6	1421.6E6	833.914	648.522	
37) L8 Aroclor-1260 {5}	10.76	10.81	762.4E6	1311.4E6	960.846	843.613	
Sum Aroclor-1260			6529.7E6	4333.4E6	3583.710	3154.368	
Average Aroclor-1260					716.742	630.874	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

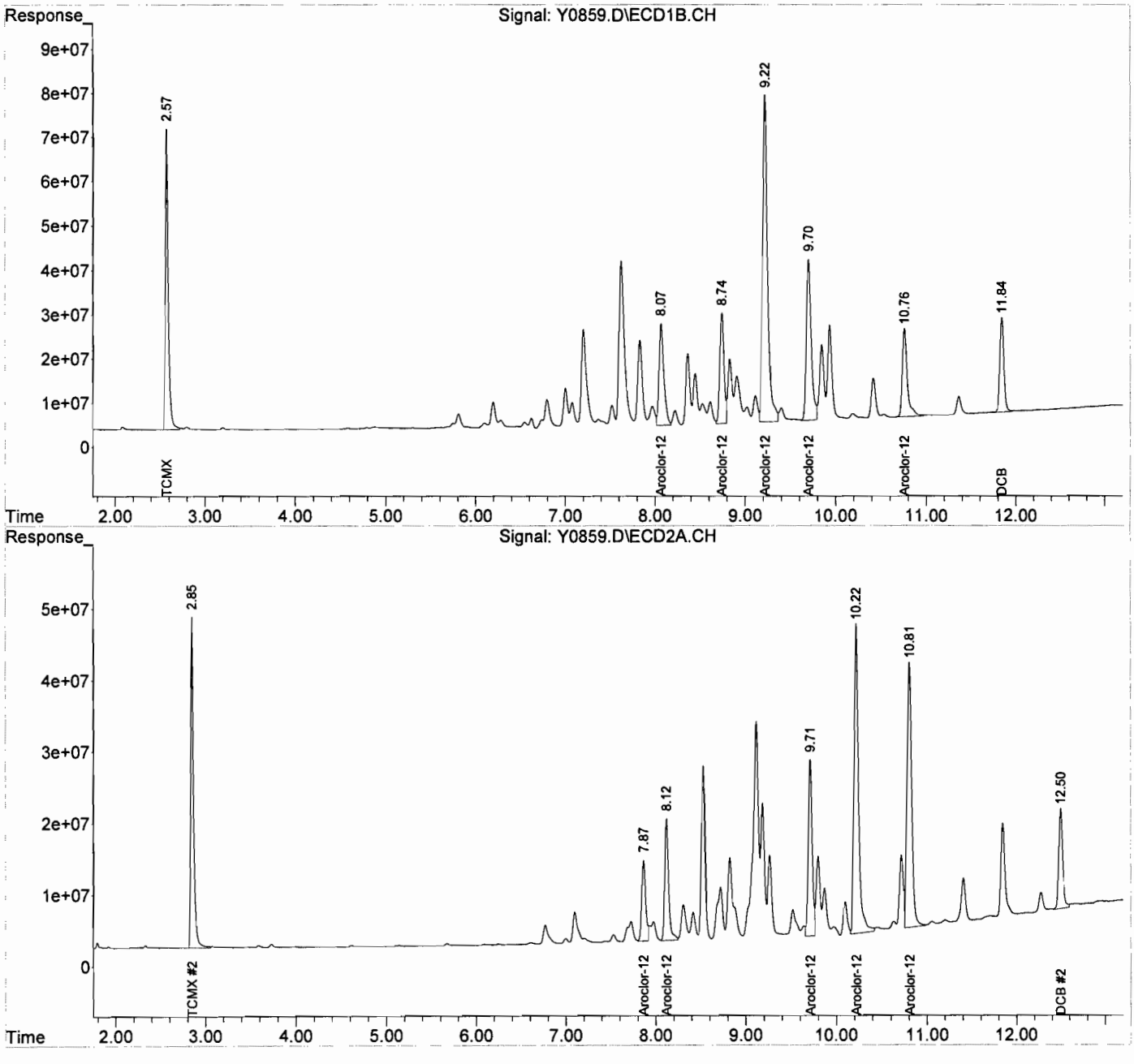
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0859.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 16:03
Operator : JS
Sample : E-41_(0.,E16-09537-050DL,S,5.31g,10.6,20
Misc : 161017-23,10/17/16,10/12/16,5
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:40:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0851.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:17
Operator : JS
Sample : E-41_(2-,E16-09537-051,S,5.64g,6.60,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:33:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.57	2.84	6580.7E6	4395.5E6	161.965	164.195	
Spiked Amount 200.000			Recovery	=	80.98%	82.10%	
2) S DCB	11.84	12.49	3175.1E6	1997.8E6	198.992	188.407	
Spiked Amount 200.000			Recovery	=	99.50%	94.20%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.07	7.86	364.9E6	199.6E6	140.623	272.168	#
34) L8 Aroclor-1260 {2}	8.74	8.11	453.0E6	304.3E6	365.140	275.441	
35) L8 Aroclor-1260 {3}	9.22	9.70	1453.9E6	411.2E6	426.962	403.076	
36) L8 Aroclor-1260 {4}	9.70	10.21	704.5E6	670.8E6	431.919	305.986	#
37) L8 Aroclor-1260 {5}	10.76	10.80	429.5E6	697.5E6	541.317	448.661	
Sum Aroclor-1260			3405.7E6	2283.3E6	1905.961	1705.332	
Average Aroclor-1260					381.192	341.066	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

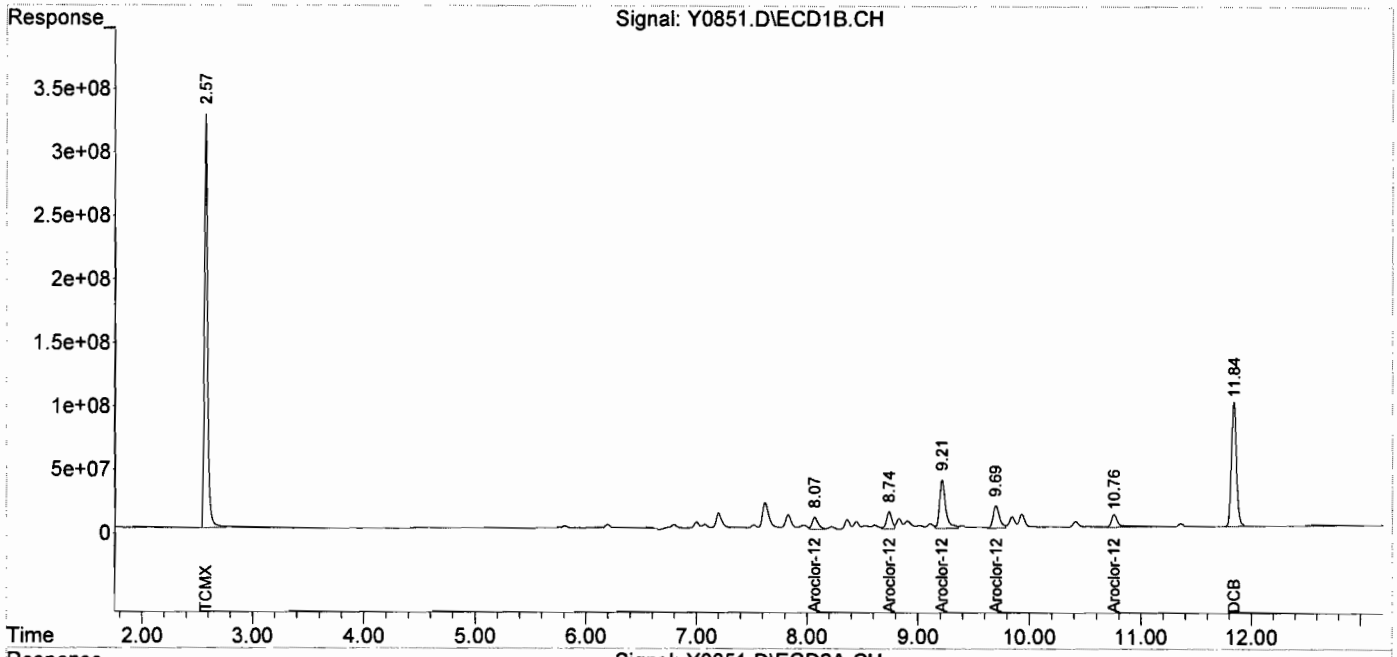
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

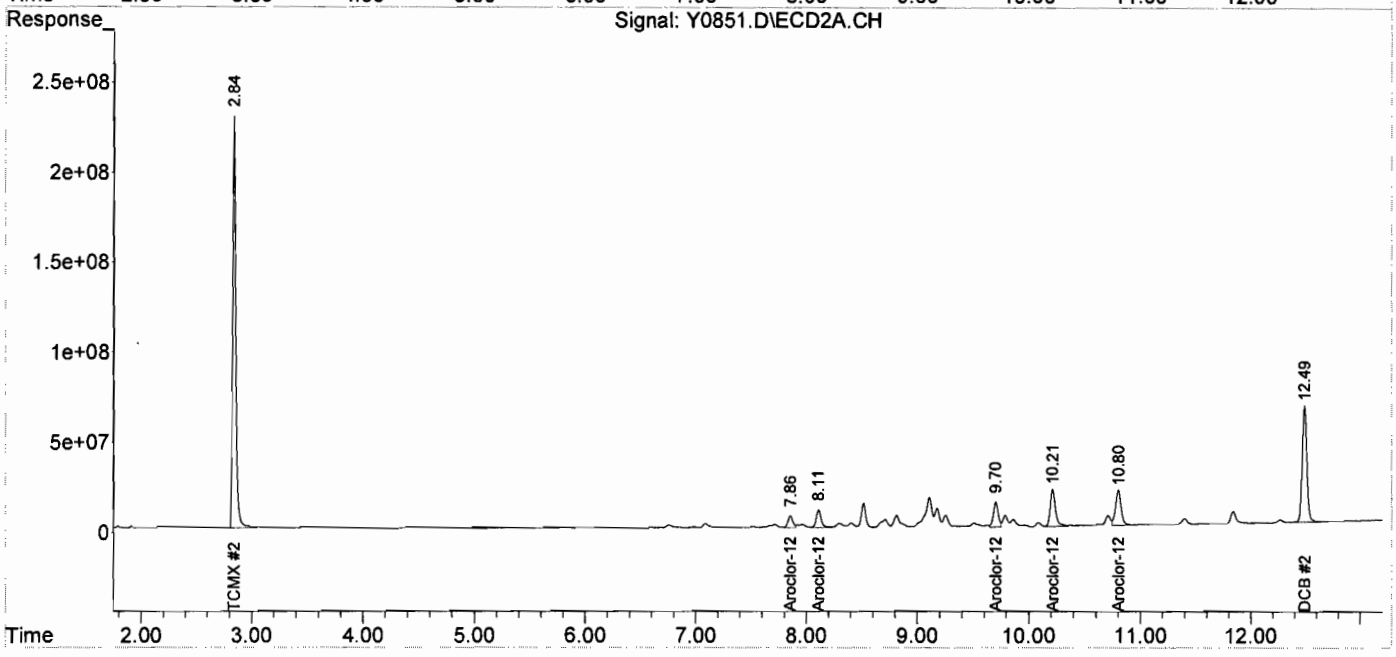
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0851.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:17
Operator : JS
Sample : E-41_(2-,E16-09537-051,S,5.64g,6.60,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:33:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4076.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:29
Operator : JS
Sample : E-41_(5-,E16-09537-053,S,5.55g,20.2,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:55:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2833.2E6	2190.2E6	176.554	182.006
Spiked Amount 200.000			Recovery	=	88.28%	91.00%
2) S DCB	11.97	12.23	1170.8E6	968.1E6	223.532	200.610m
Spiked Amount 200.000			Recovery	=	111.77%	100.31%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.17	7.78	146.1E6	78962407	141.377	154.380
34) L8 Aroclor-1260 {2}	8.85	8.17	115.8E6	90709965	240.511	158.671 #
35) L8 Aroclor-1260 {3}	9.33	9.39	287.2E6	110.7E6	235.821	270.592
36) L8 Aroclor-1260 {4}	9.81	9.88	165.3E6	244.9E6	260.655m	253.540
37) L8 Aroclor-1260 {5}	10.88	10.46	61312575	189.8E6	232.678m	219.437m
Sum Aroclor-1260			775.8E6	715.0E6	1111.042	1056.620
Average Aroclor-1260					222.208	211.324
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

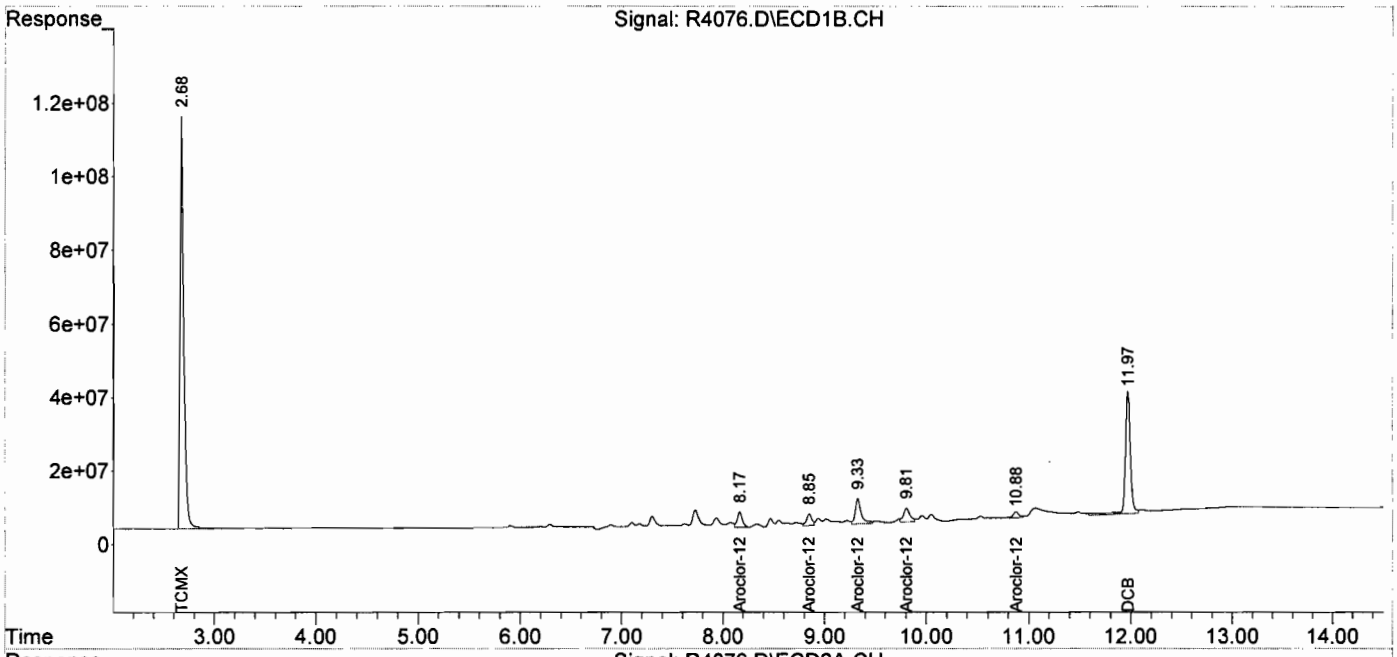
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

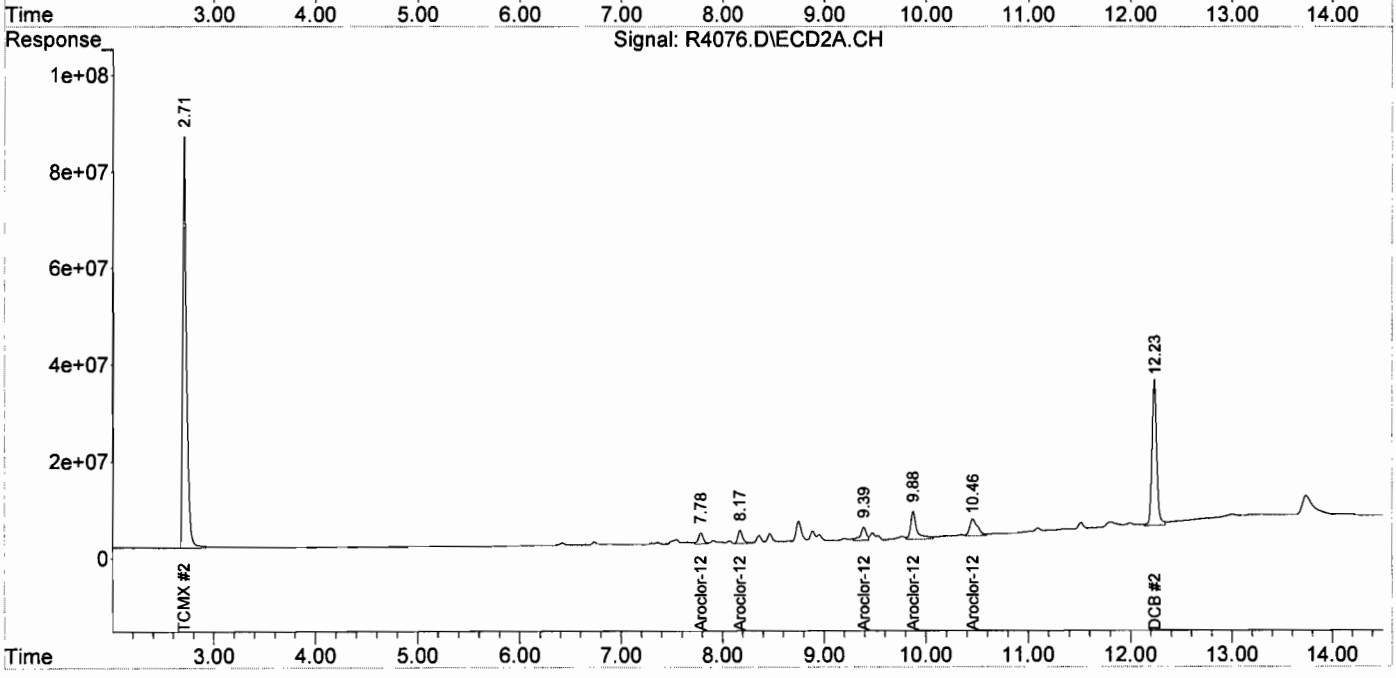
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4076.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:29
Operator : JS
Sample : E-41_(5-,E16-09537-053,S,5.55g,20.2,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:55:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0852.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:34
Operator : JS
Sample : X-2_(2-2,E16-09537-054,S,5.70g,6.70,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:34:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

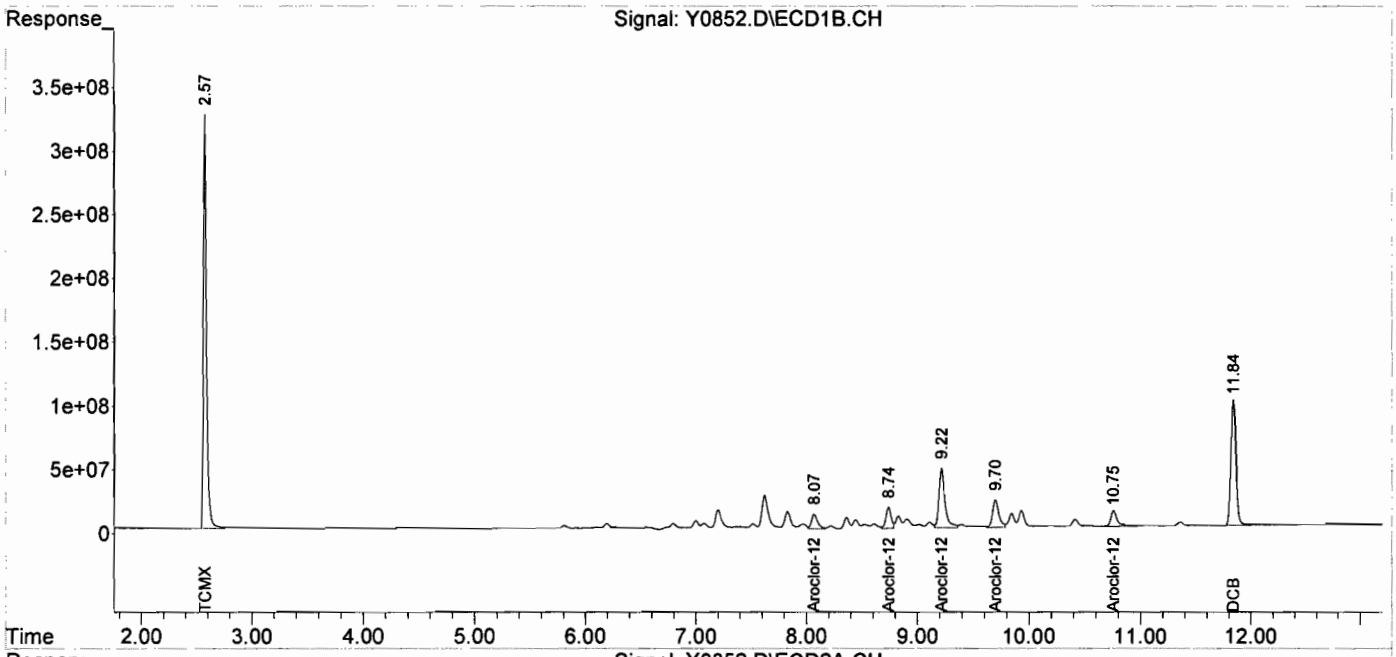
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.84	6517.9E6	4355.9E6	160.419	162.713
Spiked Amount 200.000			Recovery	=	80.21%	81.36%
2) S DCB	11.84	12.49	3150.9E6	1905.7E6	197.477	179.719
Spiked Amount 200.000			Recovery	=	98.74%	89.86%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	437.6E6	234.2E6	168.650	319.400 #
34) L8 Aroclor-1260 {2}	8.74	8.11	533.9E6	358.6E6	430.340	324.653
35) L8 Aroclor-1260 {3}	9.22	9.70	1742.6E6	494.1E6	511.770	484.275
36) L8 Aroclor-1260 {4}	9.70	10.21	833.2E6	824.7E6	510.802	376.217 #
37) L8 Aroclor-1260 {5}	10.76	10.80	508.1E6	852.6E6	640.351	548.441
Sum Aroclor-1260			4055.4E6	2764.2E6	2261.912	2052.986
Average Aroclor-1260					452.382	410.597
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

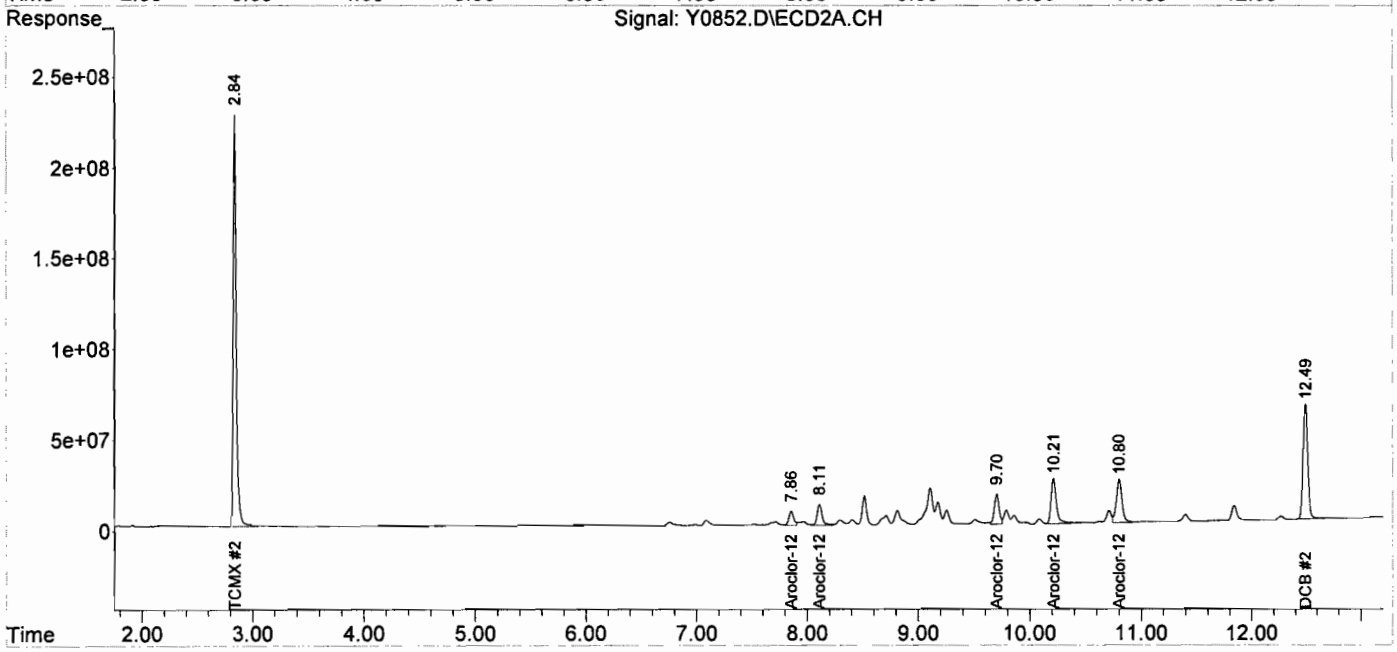
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0852.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:34
Operator : JS
Sample : X-2_(2-2,E16-09537-054,S,5.70g,6.70,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:34:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0853.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:52
Operator : JS
Sample : E-50_(4.,E16-09537-055,S,5.79g,6.60,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:36:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.84	5859.2E6	4253.0E6	144.208	158.869
Spiked Amount 200.000			Recovery	=	72.10%	79.43%
2) S DCB	11.84	12.49	3419.9E6	2132.3E6	214.334	201.091
Spiked Amount 200.000			Recovery	=	107.17%	100.55%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.06	7.85	259.3E6	116.0E6	99.933	158.141 #
34) L8 Aroclor-1260 {2}	8.74	8.11	250.8E6	182.5E6	202.140m	165.209
35) L8 Aroclor-1260 {3}	9.21	9.70	756.4E6	226.9E6	222.148m	222.439m
36) L8 Aroclor-1260 {4}	9.70	10.21	343.9E6	472.8E6	210.838m	215.661
37) L8 Aroclor-1260 {5}	10.76	10.80	206.4E6	435.5E6	260.118m	280.160m
Sum Aroclor-1260			1816.8E6	1433.7E6	995.178	1041.610
Average Aroclor-1260					199.036	208.322
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

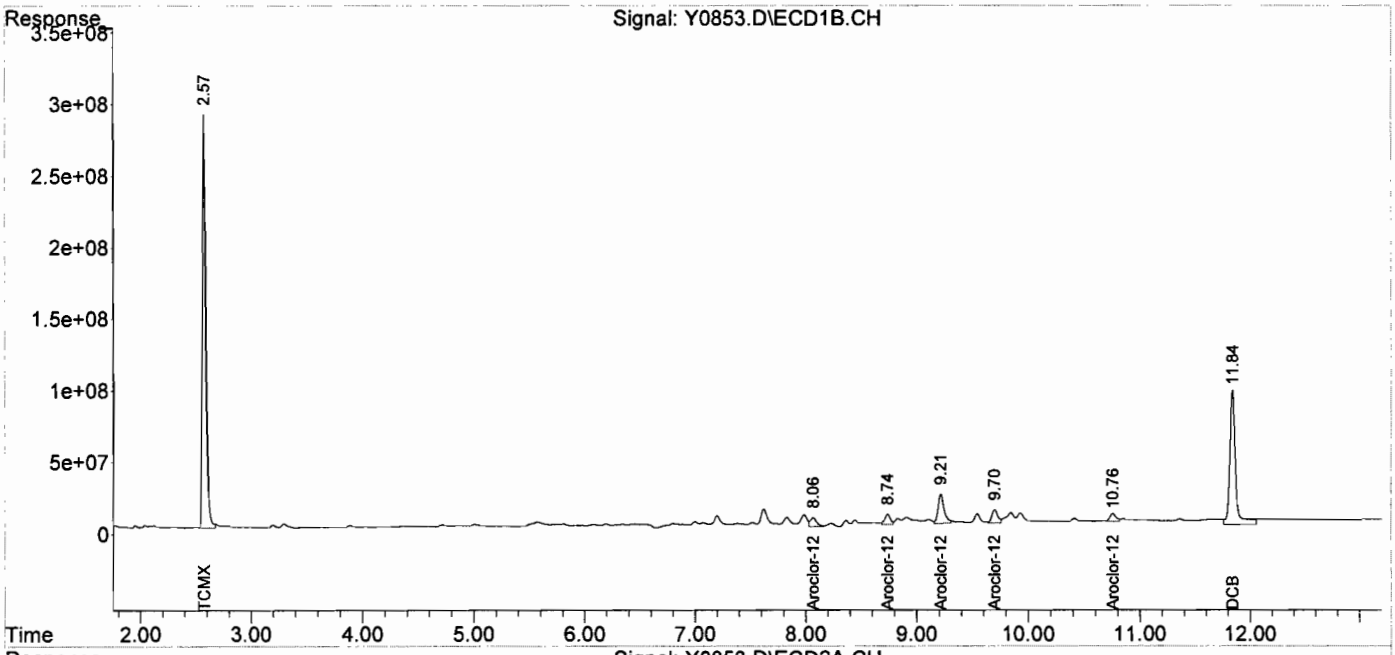
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

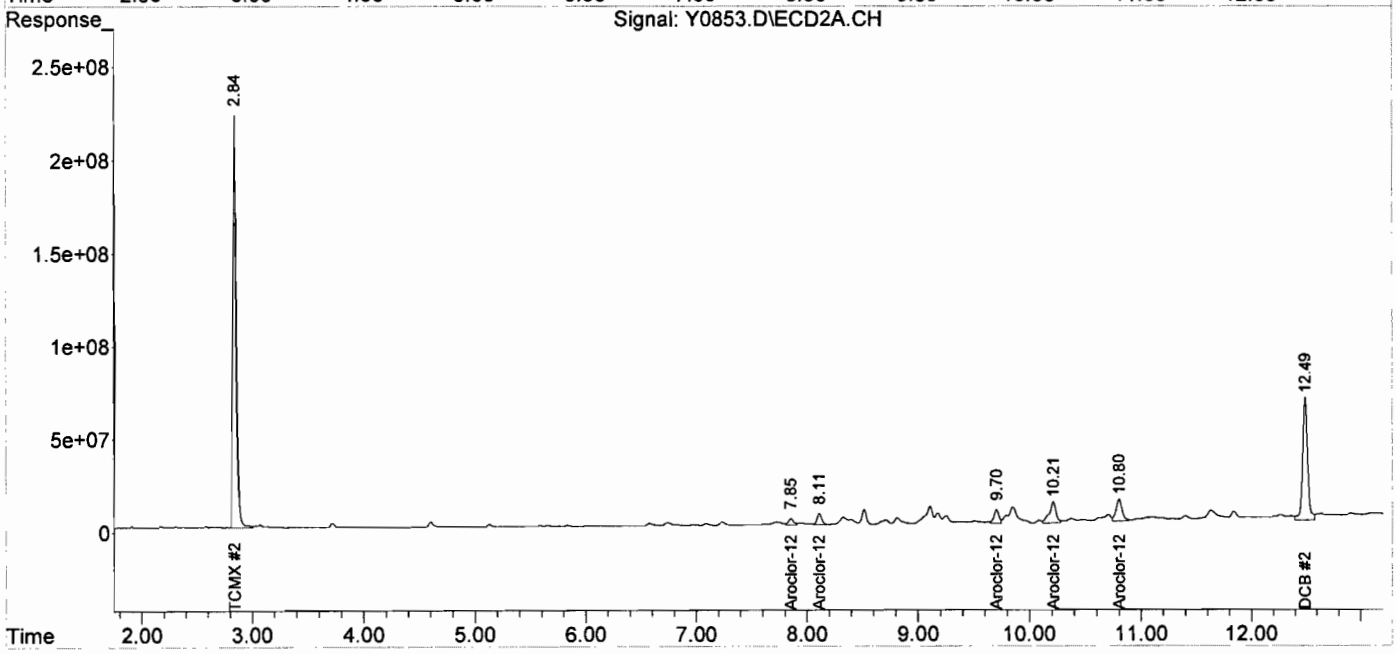
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0853.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 13:52
Operator : JS
Sample : E-50_(4.,E16-09537-055,S,5.79g,6.60,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:36:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0854.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 14:09
Operator : JS
Sample : E-51_(4.,E16-09537-056,S,5.63g,16.1,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:37:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6783.9E6	4505.4E6	166.966	168.298
Spiked Amount 200.000			Recovery	=	83.48%	84.15%
2) S DCB	11.84	12.49	3184.4E6	2068.1E6	199.572	195.037
Spiked Amount 200.000			Recovery	=	99.79%	97.52%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

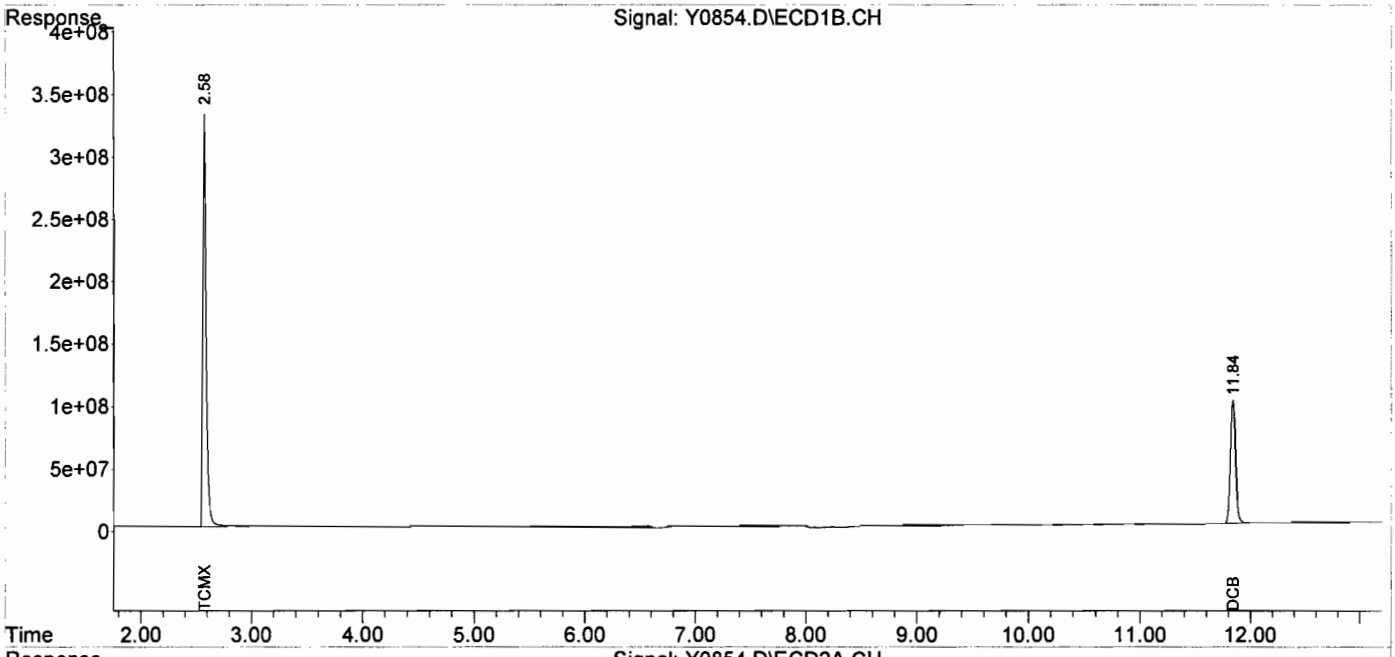
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

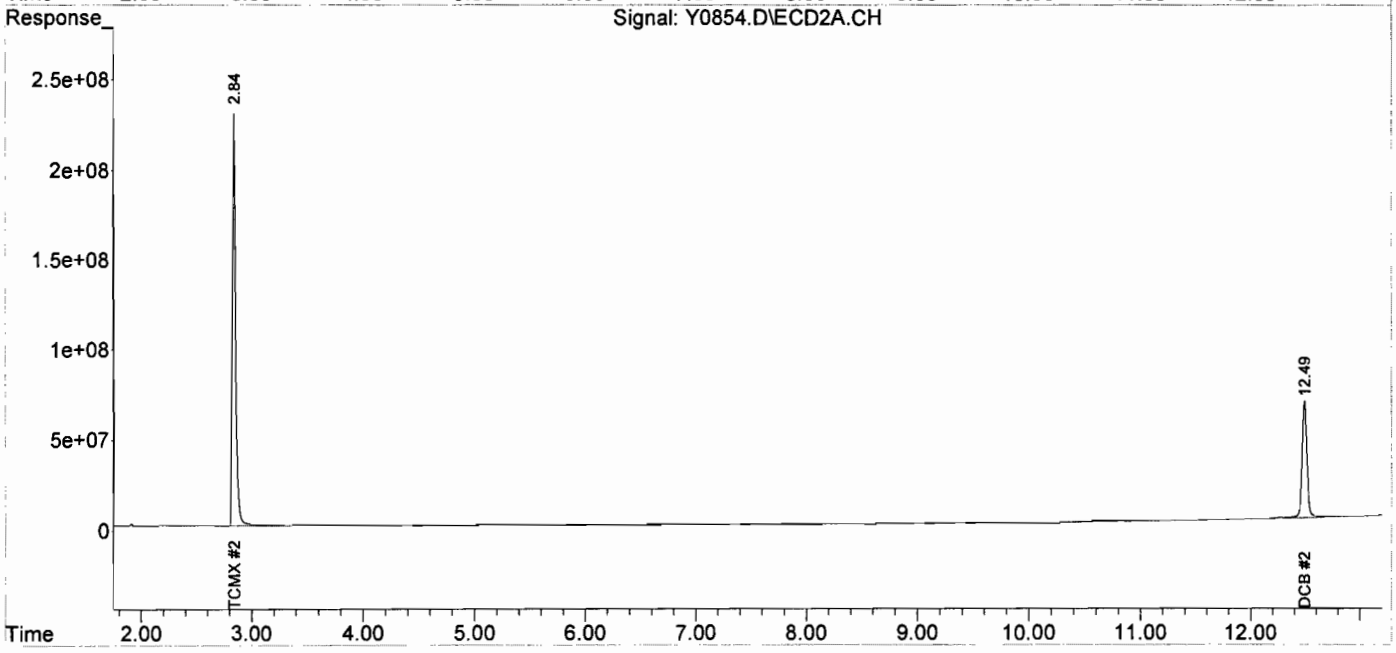
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0854.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 14:09
Operator : JS
Sample : E-51_(4.,E16-09537-056,S,5.63g,16.1,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:37:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4077.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:46
Operator : JS
Sample : E-44_(4.,E16-09537-057,S,5.22g,23.3,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:56:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2700.2E6	2083.8E6	168.264	173.162
Spiked Amount 200.000			Recovery	=	84.13%	86.58%
2) S DCB	11.97	12.23	1064.2E6	975.7E6	203.186m	202.188m
Spiked Amount 200.000			Recovery	=	101.59%	101.09%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

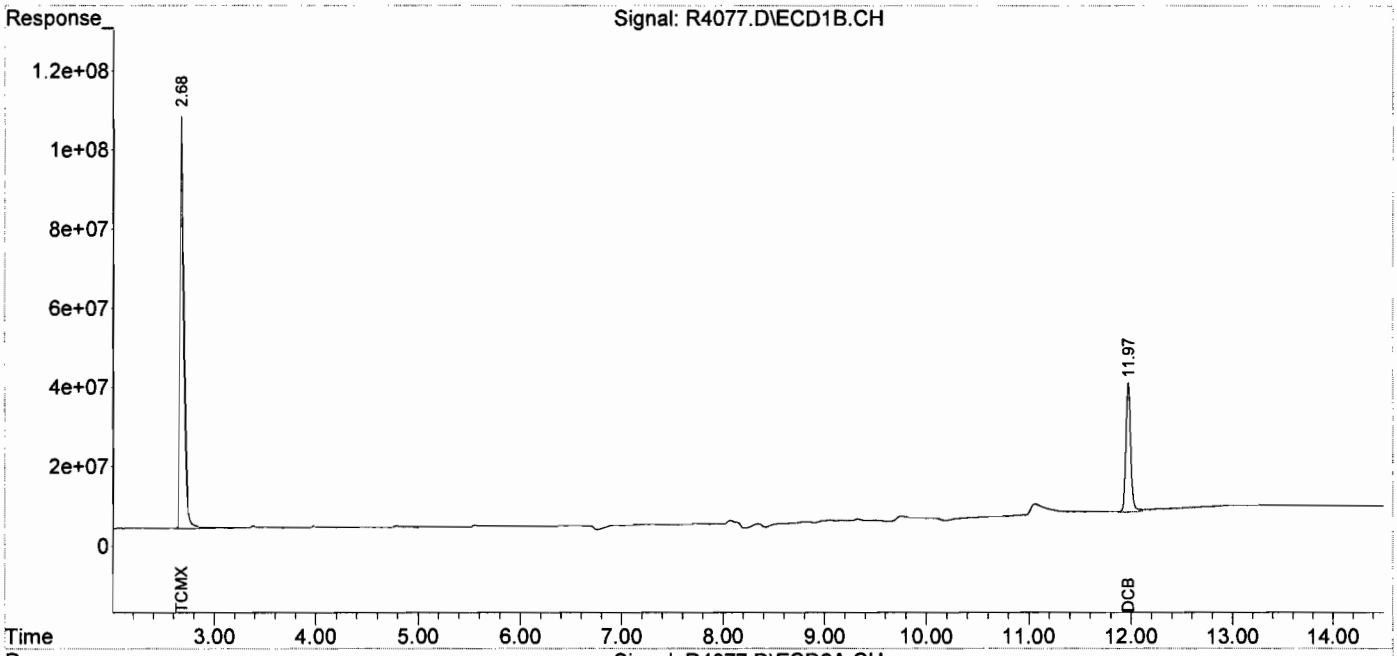
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

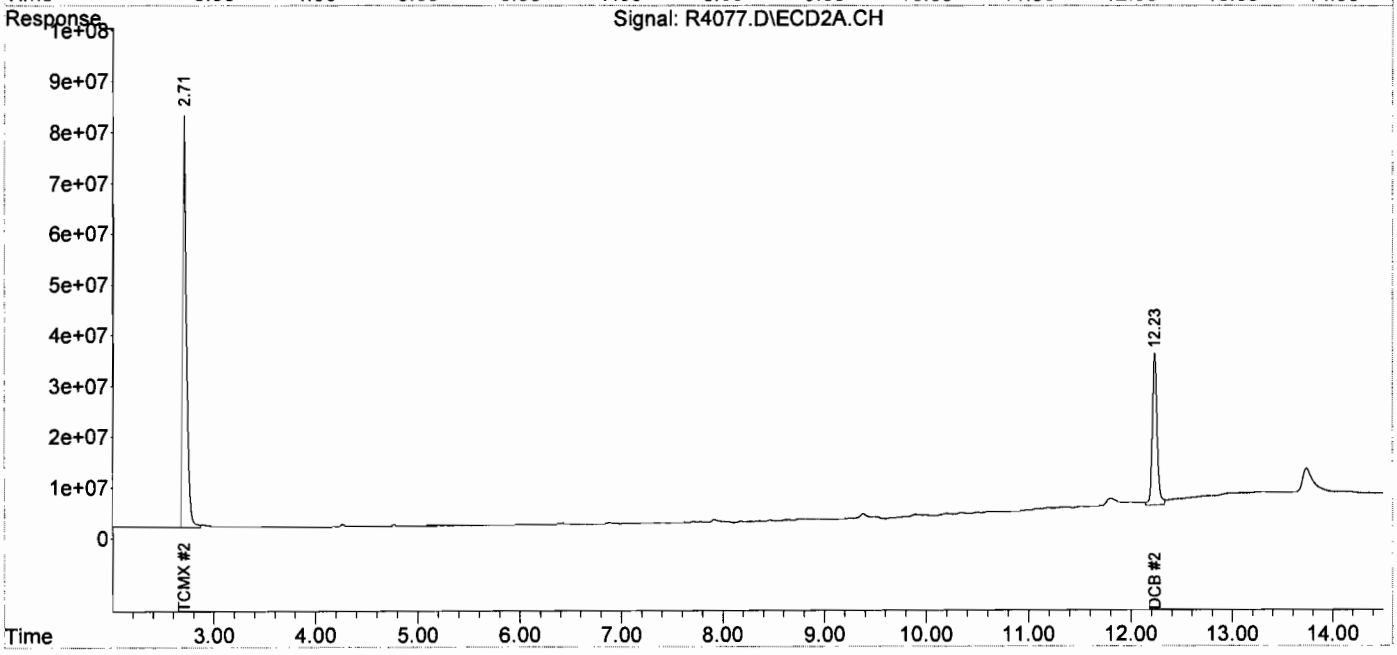
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4077.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 4:46
Operator : JS
Sample : E-44_(4.,E16-09537-057,S,5.22g,23.3,20
Misc : 161025-09,10/25/16,10/12/16,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:56:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0858.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 15:23
Operator : JS
Sample : E-50_(0.,E16-09537-058,S,5.30g,21.2,20
Misc : 161017-23,10/17/16,10/12/16,200
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 15:36:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.08	7.86	1466.2E6	414.5E6	565.055	565.252
34) L8 Aroclor-1260 {2}	8.74	8.12	602.4E6	465.4E6	485.587	421.346
35) L8 Aroclor-1260 {3}	9.22	9.71	1930.7E6	551.9E6	566.998	540.950
36) L8 Aroclor-1260 {4}	9.70	10.22	946.9E6	1179.1E6	580.537	537.885
37) L8 Aroclor-1260 {5}	10.76	10.81	480.6E6	894.8E6	605.777	575.599
Sum Aroclor-1260			5426.9E6	3505.7E6	2803.954	2641.032
Average Aroclor-1260					560.791	528.206
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

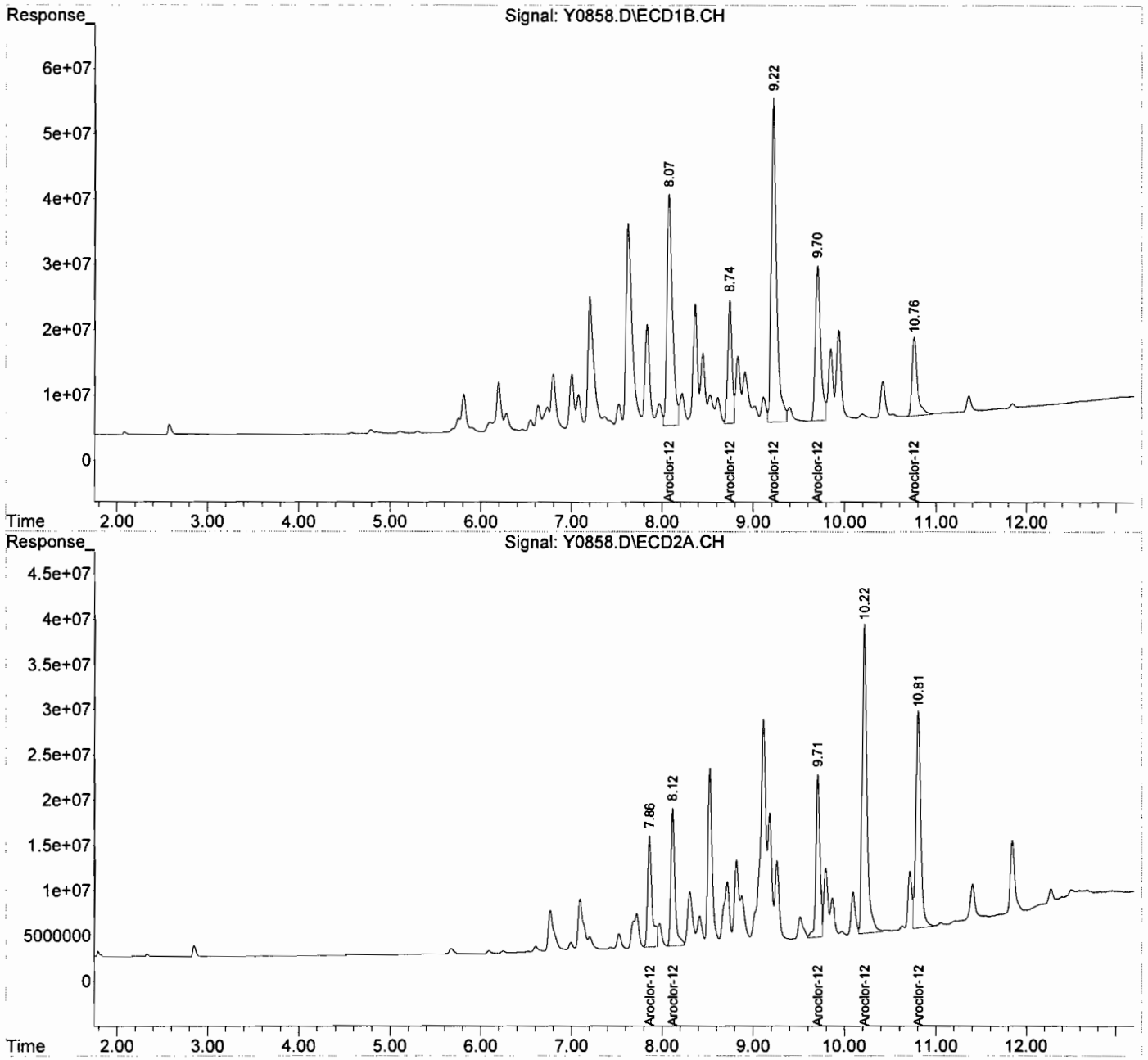
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0858.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 15:23
Operator : JS
Sample : E-50_(0.,E16-09537-058,S,5.30g,21.2,20
Misc : 161017-23,10/17/16,10/12/16,200
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 15:36:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0860.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 16:37
Operator : JS
Sample : E-50_(2-,E16-09537-059,S,5.34g,12.4,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:42:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6573.3E6	4426.7E6	161.783	165.357
Spiked Amount 200.000			Recovery	=	80.89%	82.68%
2) S DCB	11.84	12.49	2996.0E6	2168.6E6	187.765	204.513
Spiked Amount 200.000			Recovery	=	93.88%	102.26%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	312.4E6	131.2E6	120.384	178.893 #
34) L8 Aroclor-1260 {2}	8.74	8.11	197.5E6	114.6E6	159.174m	103.708 #
35) L8 Aroclor-1260 {3}	9.22	0.00	657.2E6	0	192.991m	N.D. d#
36) L8 Aroclor-1260 {4}	9.70	10.21	321.3E6	368.8E6	196.956	168.221
37) L8 Aroclor-1260 {5}	10.75	10.80	177.7E6	367.9E6	223.966m	236.647m
Sum Aroclor-1260			1666.0E6	982.4E6	893.473	687.469
Average Aroclor-1260					178.695	171.867
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

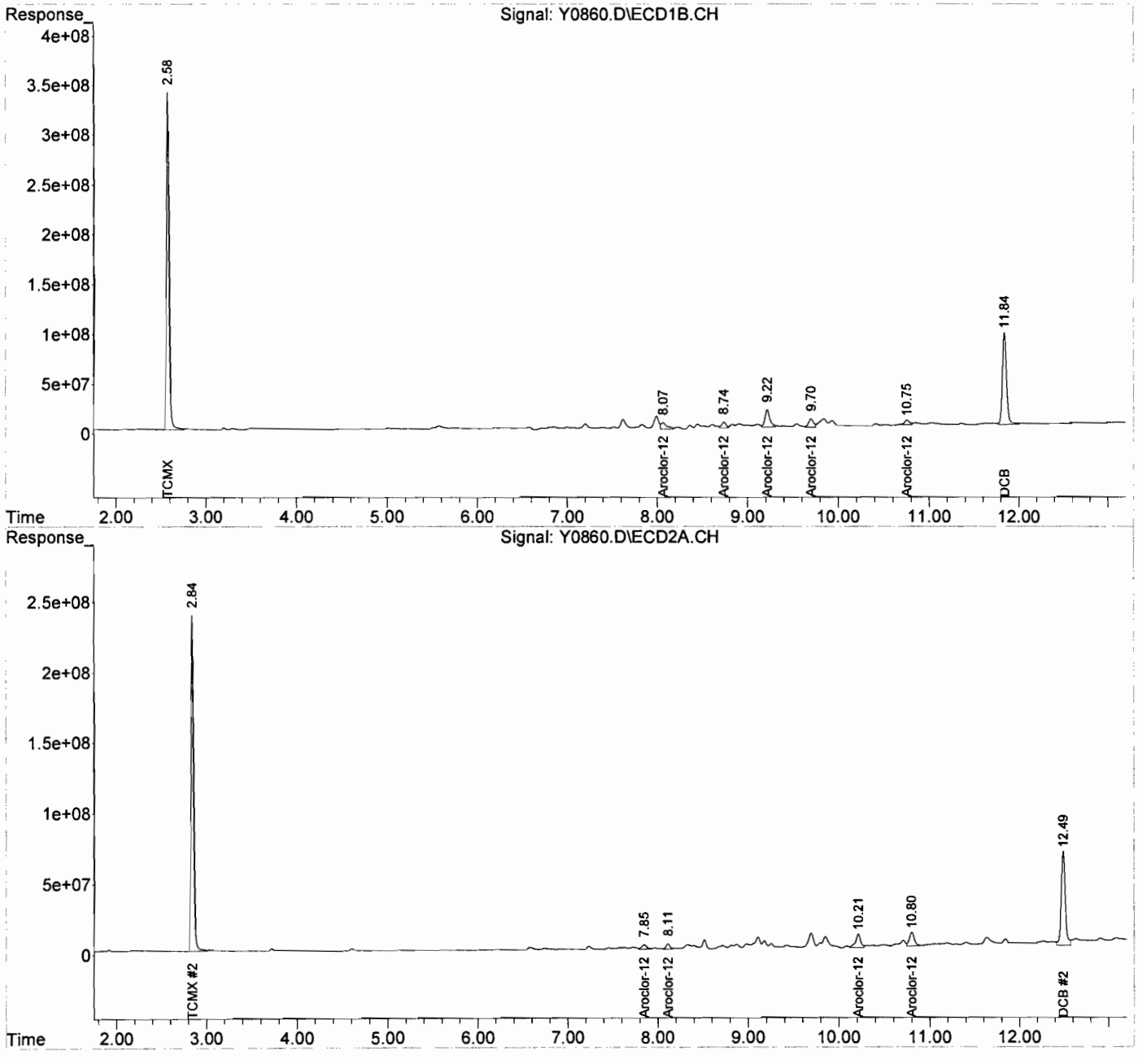
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0860.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 16:37
Operator : JS
Sample : E-50_(2-,E16-09537-059,S,5.34g,12.4,20
Misc : 161017-23,10/17/16,10/12/16,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:42:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA161010-14
Client ID: PCB
Date Received: NA
Date Extracted: 10/10/2016
Date Analyzed: 10/12/2016
Data file: Y0760.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA161017-25
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3809.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 15:58
Operator : JS
Sample : PCB,BLKA161017-25,A,1000ml,100,5
Misc : 161017-25,10/17/16,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

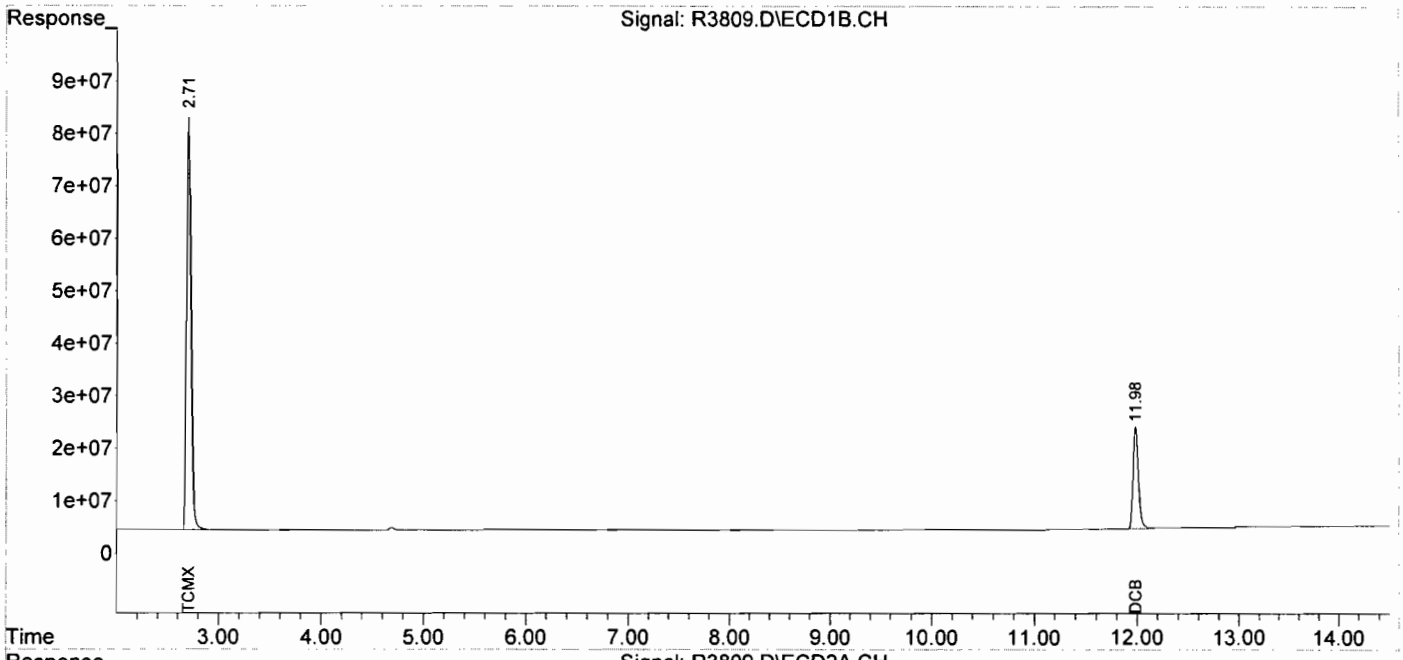
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2321.4E6	1664.0E6	144.660	138.273
Spiked Amount 200.000			Recovery	=	72.33%	69.14%
2) S DCB	11.98	12.26	692.6E6	636.7E6	132.228	131.949m
Spiked Amount 200.000			Recovery	=	66.11%	65.97%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

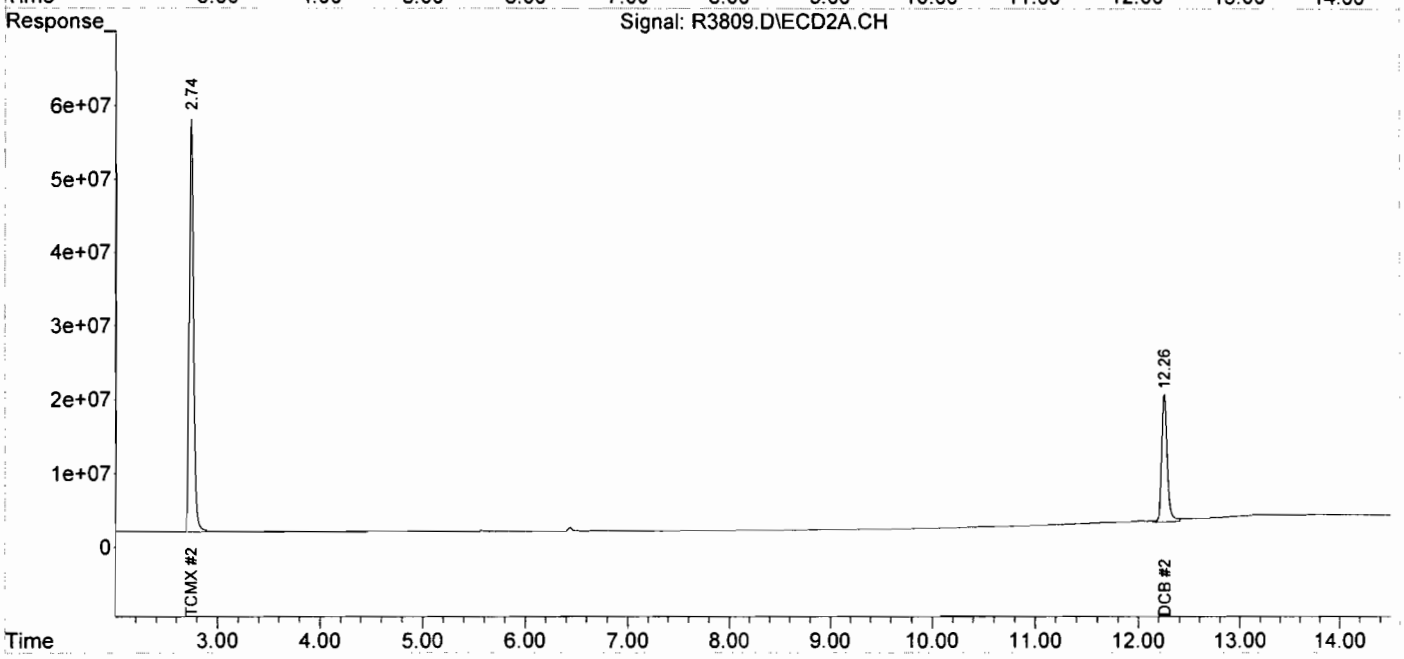
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 15:58
Operator : JS
Sample : PCB,BLKA161017-25,A,1000ml,100,5
Misc : 161017-25,10/17/16,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161017-13
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3816.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-18\
Data File : R3816.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:22
Operator : JS
Sample : PCB,BLKS161017-13,S,5g,0,20
Misc : 161017-13,10/17/16,NA,1 (Sig #1); 161017-13,10/17/16,10/12/16,10 (Sig #2)
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:55:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2953.0E6	2140.5E6	184.017	177.874
Spiked Amount 200.000			Recovery	=	92.01%	88.94%
2) S DCB	11.98	12.25	957.4E6	927.3E6	182.780	192.153
Spiked Amount 200.000			Recovery	=	91.39%	96.08%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

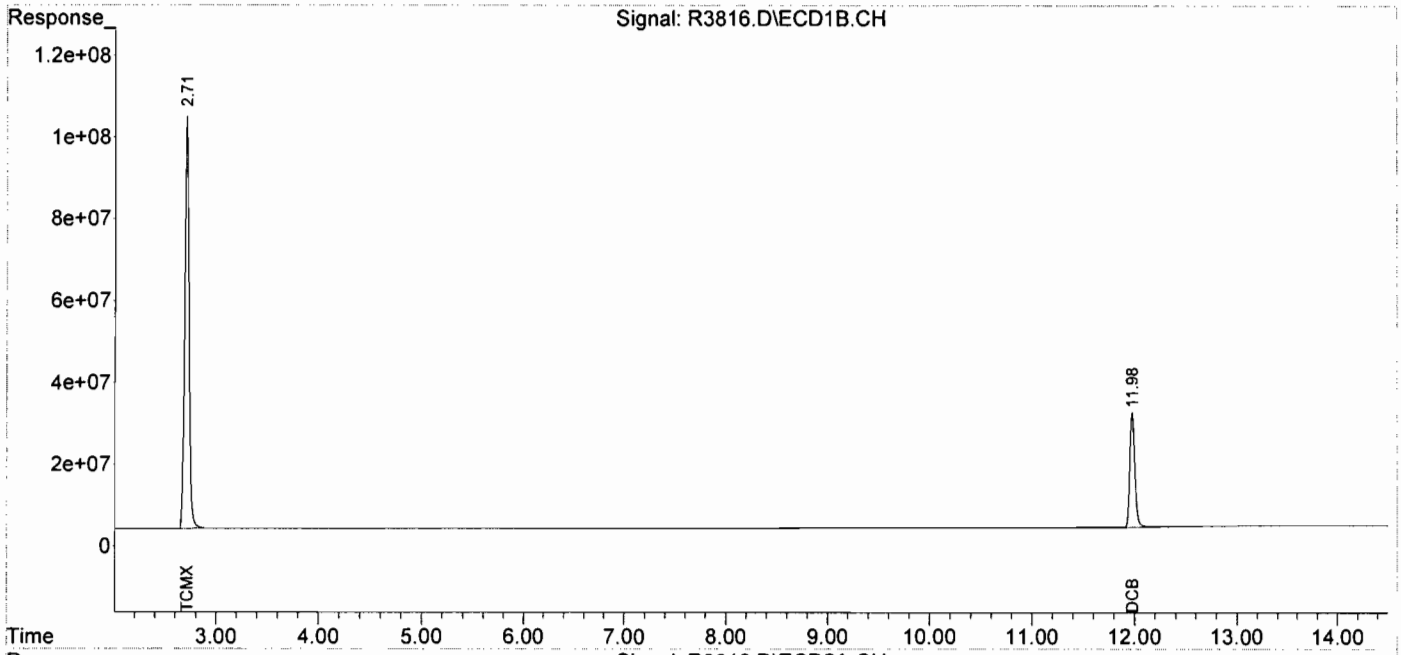
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

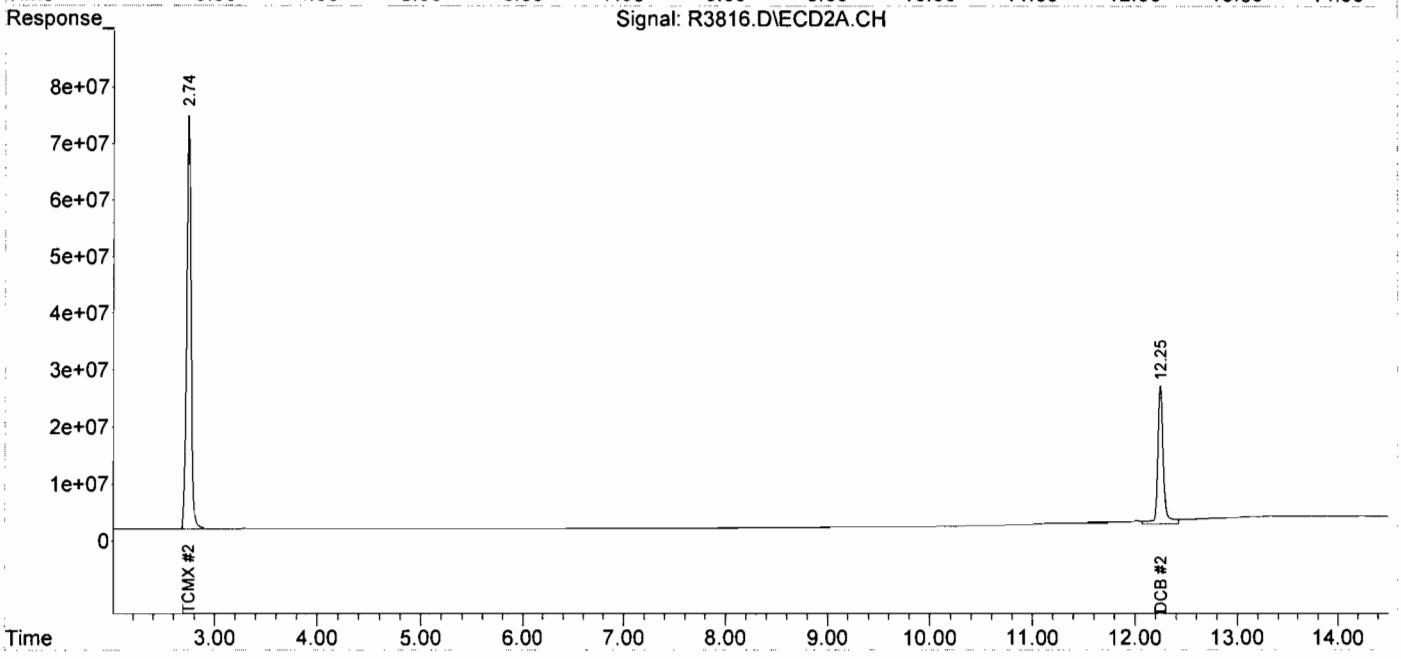
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-18\
Data File : R3816.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 18:22
Operator : JS
Sample : PCB,BLKS161017-13,S,5g,0,20
Misc : 161017-13,10/17/16,NA,1 (Sig #1); 161017-13,10/17/16,10/12/16,10 (Sig #2)
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:55:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161017-14
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: Y0809.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-18\
Data File : Y0809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 16:10
Operator : JS
Sample : PCB,BLKS161017-14,S,5g,0,20
Misc : 161017-14,10/17/16,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:51:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

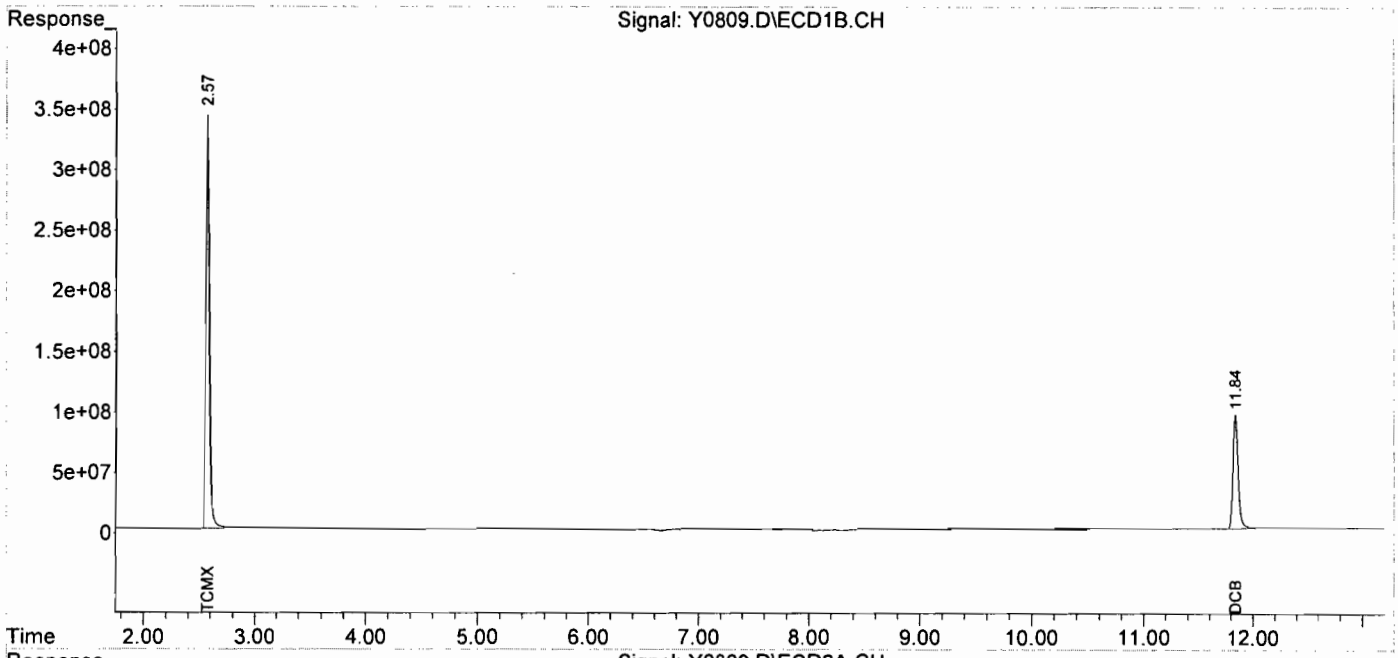
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.85	7036.3E6	4809.2E6	173.179	179.648
Spiked Amount 200.000			Recovery	=	86.59%	89.82%
2) S DCB	11.84	12.50	3136.3E6	1914.4E6	196.556	180.538
Spiked Amount 200.000			Recovery	=	98.28%	90.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

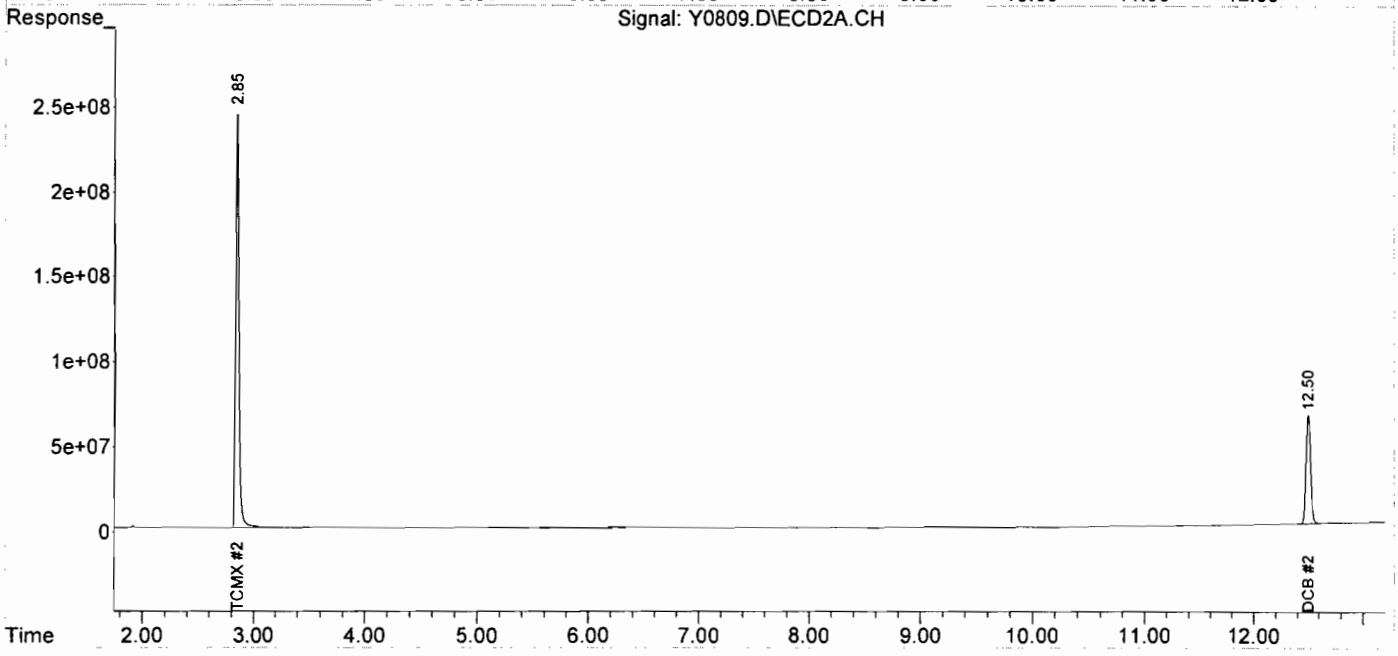
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\16-10-18\
Data File : Y0809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 16:10
Operator : JS
Sample : PCB,BLKS161017-14,S,5g,0,20
Misc : 161017-14,10/17/16,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 12:51:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161017-23
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0844.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0844.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 11:16
Operator : JS
Sample : PCB,BLKS161017-23,S,5g,0,20
Misc : 161017-23,10/17/16,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:18:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.85	6866.7E6	4757.2E6	169.003	177.703
Spiked Amount 200.000			Recovery	=	84.50%	88.85%
2) S DCB	11.84	12.50	3172.1E6	1883.6E6	198.801	177.636
Spiked Amount 200.000			Recovery	=	99.40%	88.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

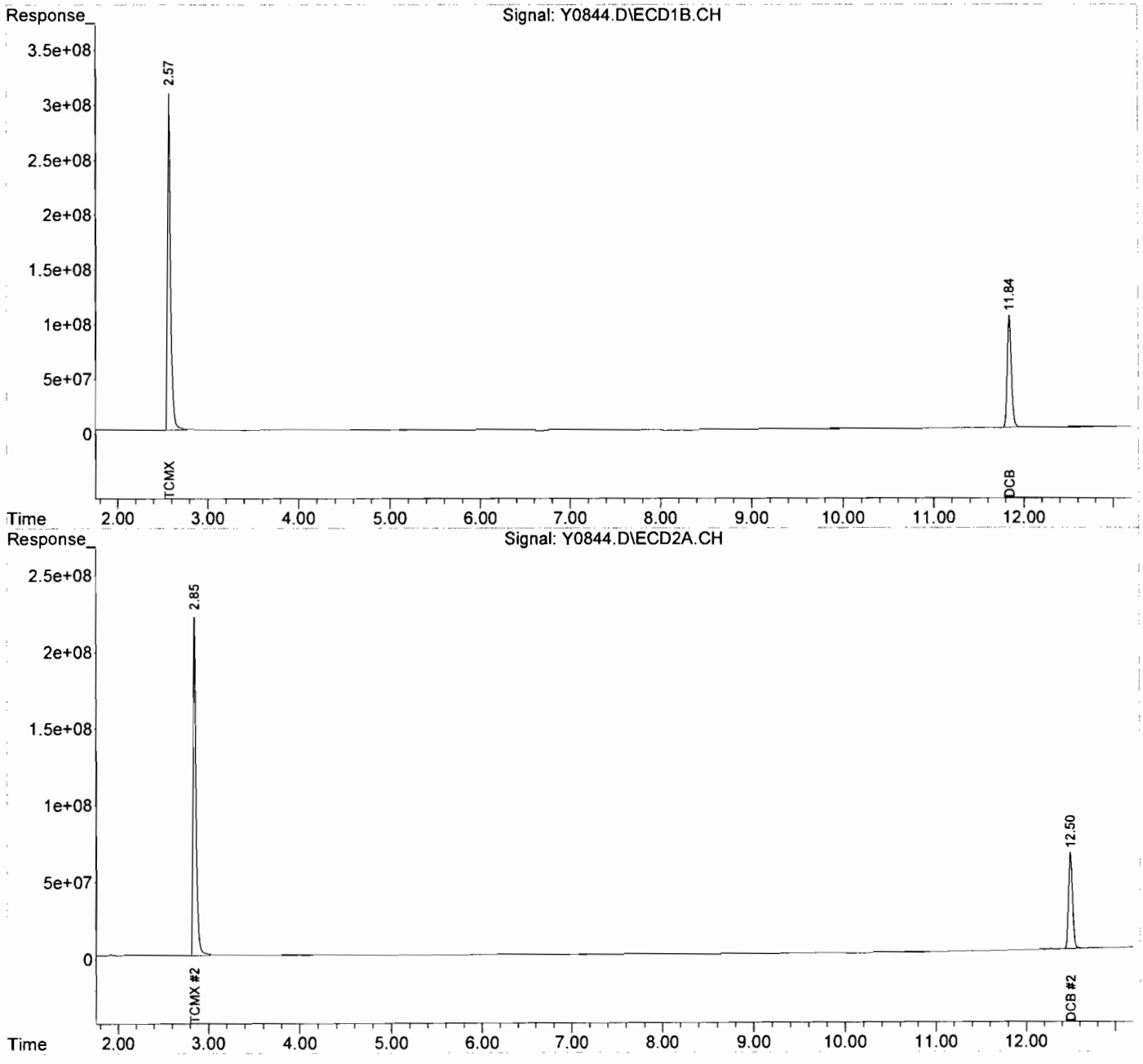
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0844.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 11:16
Operator : JS
Sample : PCB,BLKS161017-23,S,5g,0,20
Misc : 161017-23,10/17/16,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:18:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161025-09
Client ID: PCB
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4085.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-27\
Data File : R4085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 8:38
Operator : JS
Sample : PCB,BLKS161025-09,S,5g,0,20
Misc : 161025-09,10/25/16,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:02:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.75	2747.6E6	2178.6E6	171.220	181.040
Spiked Amount 200.000			Recovery	=	85.61%	90.52%
2) S DCB	11.98	12.24	956.4E6	951.6E6	182.601	197.190m
Spiked Amount 200.000			Recovery	=	91.30%	98.59%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

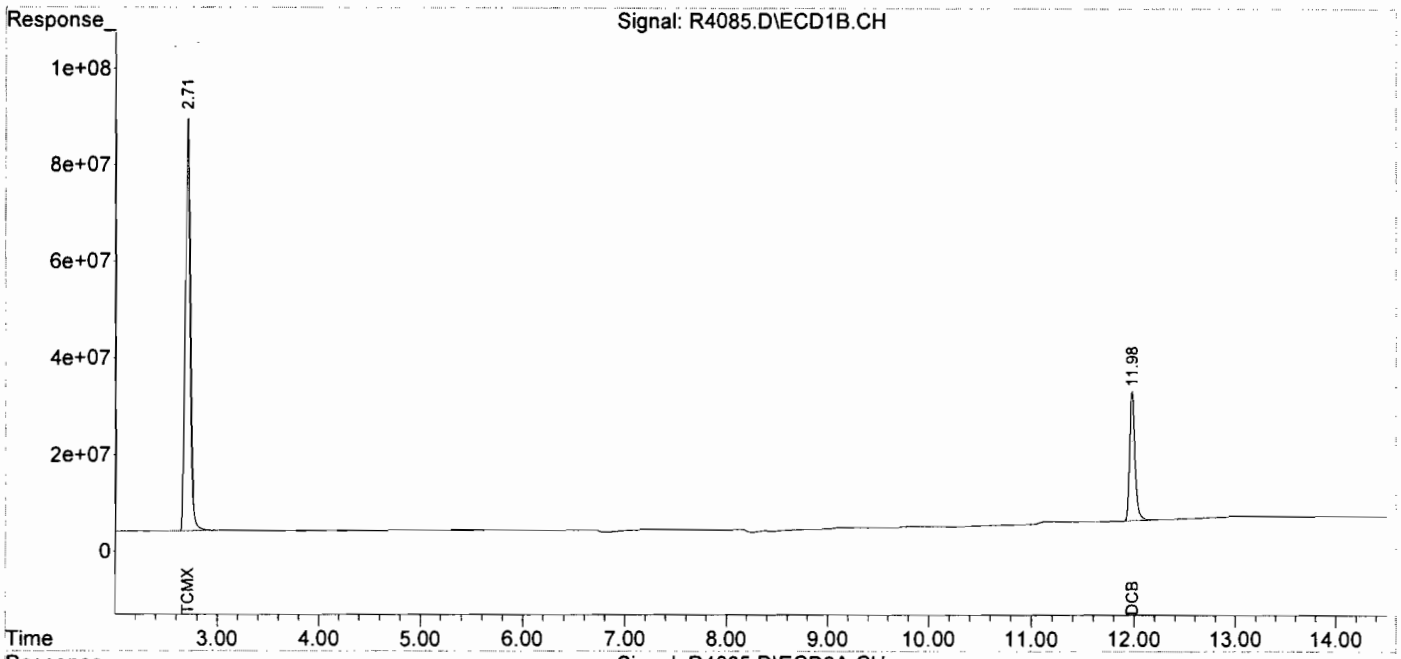
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

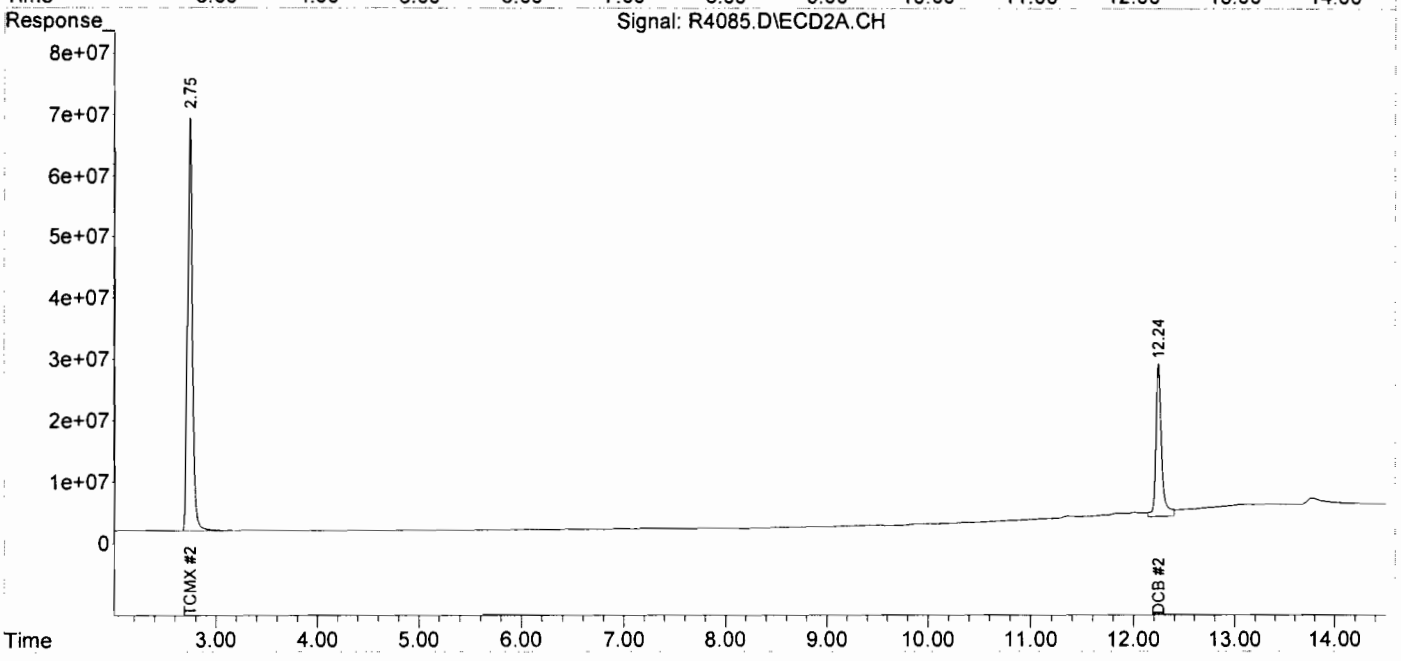
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-27\
Data File : R4085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 8:38
Operator : JS
Sample : PCB,BLKS161025-09,S,5g,0,20
Misc : 161025-09,10/25/16,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:02:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





SAMPLE TRACKING

IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE
SUITE 405
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM
Project Name: AMTRAK - EAST BARRACKS
Project Location (State): NJ
Bottle Order #:
☑ "Report to"/"Invoice To" same as above
Sampled by: NDF, SR, ZA

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☑ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL
☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed: _____
(only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☑ IGW	☐ GWEL (TOGS Table 5)
☑ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-54-0.5-1.0		10-10-16	0750	S	1	1	X	
E-54-2.0-2.5			0805	S	1	2	H	HOLD
E-42-0.5-1.0			0830	S	1	3	X	
E-42-2.0-2.5			0855	S	1	4	X	
E-42-3.0-3.5			0915	S	1	5	X	
E-42-4.0-4.5			0948	S	1	6	H	HOLD
E-51-0.5-1.0			1020	S	1	7	X	
E-51-2.0-2.5			1030	S	1	8	X	

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code):
Container Type (use code):

Special Instructions/QC Requirements & Comments:
H = HOLD; CONTINGENT. PLEASE MEET NJ DKQ PROTOCOL

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONSTITUTIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AMEC FW	10/12/16	3:50		10/12/16	3:50

FOR LAB USE ONLY
SDG #: 8537
Cooler Temp: 5 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 1 of 8

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: See pg 1
Telephone #:
Fax #:
Project Manager:
EMAIL Address:
Project Name:
Project Location (State):
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-51-3.0-3.5		10-10-16	1055	S	1	9	X	
E-49-0.5-1.0			1005	S	1	10	X	
E-52-0.5-1.0			1355	S	1	11	X	
E-37-0.5-1.0			0955	S	1	12	X	
E-44-0.5-1.0			1300	S	1	13	X	
E-44-2.0-2.5			1314	S	1	14	X	
E-44-3.0-3.5			1330	S	1	15	H	HOLD
E-60-0.5-1.0			1408	S	1	16	X	

ANALYTICAL PARAMETERS (please note if contingent)

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 4 °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AMEC FW	10-12-16	3:50		10/12/16	3:50
	10/13/16	6:30a		10/13/16	6:06

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 2 of 8

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address:
Telephone #: See Pg 1
Fax #:
Project Manager:
EMAIL Address:
Project Name:
Project Location (State):
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*
NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-36-0.5-1.0		10-10-16	1415	S	1	17	x	
E-36-2.0-2.5			1512	S	1	18	x	
E-47-0.5-1.0			1500	S	1	16	x	
X-1-0.5-1.0			—	S	1	20	x	
EB-101016		↓	1530	WATER	2	1	x	
E-43-0.5-1.0		10-11-16	0850	S	1	22	x	
E-43-2.0-2.5			0855	S	1	23	x	
E-43-3.0-3.5		↓	0902	S	1	24	x	

ANALYTICAL PARAMETERS (please note if contingent)

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code)
Container Type (use code)

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AMEC FW	10-12-16	8:50		10/12/16	3:56
	10/12/16	6:30		10/12/16	6:00

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 5 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information	**Rush TAT Charge	Deliverables	EDDs	Concentrations Expected:
Company: AMEC FOSTER WHEELER	REPORT TO:	24 hr - 100%...	NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*	☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D	Low Med High
Address:	Address:	48 hr - 75%....	NY: ☐ ASP Category A ☐ ASP Category B*		These samples have been previously analyzed by IAL
Telephone #: See Pg 1	Attn:	72 hr - 50%....			☐ YES ☐ NO
Fax #:	FAX #	96 hr - 35%....			
Project Manager:	INVOICE TO:	5 day - 25%....			
EMAIL Address:	Address:	6-9 day - 10%			
Project Name:					
Project Location (State):	Attn:				
Bottle Order #:	PO #				
☐ "Report to"/"Invoice To" same as above	Quote #				
Sampled by:					

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (If other than 2 weeks):

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-43-4.5-5.0		10-11-16	0950	S	1	25	H	HOLD
E-55-4.5-5.0			1008	S	1	26	x	
E-34-3.0-3.5			1204	S	1	27	x	
E-34-4.5-5.0			1205	S	1	28	H	HOLD
E-57-4.5-5.0			1300	S	1	29	x	
E-57-6.0-6.5			1305	S	1	30	x	
E-56-4.5-5.0			1235	S	1	31	x	
E-56-6.0-6.5			1238	S	1	32	x	

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code):
Container Type (use code):

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 4 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	10-12-16	3:50		10/12/16	3:5
	10/12/16	6:00		10/13/16	8:60

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 4 of 8

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IAL Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address:
Telephone #:
Fax #:
Project Manager: Sapp 1
EMAIL Address:
Project Name:
Project Location (State):
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☐ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL
☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC	PCB	% MOISTURE						Sample Specific Notes:
E-30-3.0-3.5		10-11-16	0953	S	4	33	X		X						
E-30-4.5-5.0			1015	S	4	34	X H		X H						HOLD
E-31-3.0-3.5			1016	S	4	35	X								
E-31-4.5-5.0			1040	S	4	36	H		H						HOLD
E-33-0.5-1.0			1320	S	1	37	X	X							
E-33-2.0-2.5			1345	S	1	38		X							
E-33-3.0-3.5			1356	S	1	39		X							
E-33-4.5-5.0			1358	S	4 5	40	X	X	X						

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AMEC FW	10/12/16	3:50		10/12/16	3:50
	10/12/16	6:00		10/12/16	6:00

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 4 °C

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information	**Rush TAT Charge	Deliverables		EDDs	Concentrations Expected:
Company: AMEC FOSTER WHEELER	REPORT TO:	24 hr - 100%...	NJ, CT, PA	NY	☐ NJ SRP	Low Med High
Address:	Address:	48 hr - 75%....	☐ Results Only	☐ ASP Category A	☐ NYSDEC EQuIS	These samples have been previously analyzed by IAL
		72 hr - 50%....	☐ Reduced		☐ lab approved custom EDD	
Telephone #:	Attn:	96 hr - 35%....	☐ Regulatory/ Full*	☐ ASP Category B*	☐ NO EDD REQ'D	☐ YES ☐ NO
Fax #:	FAX #	5 day - 25%....				
Project Manager: Sepg 1	INVOICE TO:	6-9 day - 10%				
EMAIL Address:	Address:					
Project Name:						
Project Location (State):	Attn:					
Bottle Order #:	PO #					
☐ "Report to"/"Invoice To" same as above	Quote #					
Sampled by:						

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

COMPLETED BY IAL:
_____ Field Sampling _____ Equipment Rental

Sample Matrix
DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

ANALYTICAL PARAMETERS (please note if contingent)

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC	PCB	% moisture							Sample Specific Notes:
E-33-5.5-6.0		10-11-16	1358	S	#5	41	x	✓	x							
E-40-4.5-5.0			1115	S	1	42		x								
E-39-4.5-5.0			1325	S	1	43		x								
EB-101116			1415	WATER	5	44	x	x								
E-32-0.5-1.0		10-12-16	0835	S	1	45		x								
E-32-2.0-2.5			0841	S	1	46		x								
E-32-3.0-3.5			0853	S	1	47		x								
E-32-4.5-5.0			0855	S	#5	48	x	x	x							

Known Hazard: YES / NO
Describe:

Preservative (use code)
Container Type (use code)

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 5 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	10-12-16	3:50		10/12/16	3:50
	10/12/16	6:00		10/12/16	6:00

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONSTITUTIONS (found on rear of pink copy).

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LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information	Reporting Information
Company: AMEC FOSTER WHEELER	REPORT TO:
Address:	Address:
Telephone #:	Attn:
Fax #:	FAX #
Project Manager: See Pg 1	INVOICE TO:
EMAIL Address:	Address:
Project Name:	
Project Location (State):	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by:	

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA: ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*

NY: ☐ ASP Category A ☐ ASP Category B*

EDDs

☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low Med High

These samples have been previously analyzed by IAL: ☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (*only* if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	VOC	PCB	% Moisture	Sample Specific Notes:
E-32-5.5-6.0		10-12-16	0858	S	5	49	x	x	x	
E-41-0.5-1.0			0857	S	1	50		x		
E-41-2.0-2.5			0913	S	1	51		x		
E-41-4.0-4.5			0922	S	1	52		H		HOLD
E-41-5.0-5.5			0925	S	1	53		H		HOLD
X-2-2.0-2.5			-	S	1	54		x		
E-50-4.5-5.0			1028	S	1	55		x		
E-51-4.5-5.0			1035	S	1	56		x		

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 9537
Cooler Temp: 5 °C

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Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	10-12-16	3:40		10/12/16	3:50
	10/13/16	6:00		10/14/16	6:00

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LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

E16-09537 Page 8 of 89

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Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
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Web: www.ialonline.com

Customer Information	Reporting Information
Company: AMEC FOSTER WHEELER	REPORT TO:
Address:	Address:
Telephone #:	Attn:
Fax #:	FAX #
Project Manager:	INVOICE TO:
EMAIL Address:	Address:
Project Name:	
Project Location (State):	Attn:
Bottle Order #:	PO #
☐ "Report to"/"Invoice To" same as above	Quote #
Sampled by:	

COMPLETED BY IAL: ____ Field Sampling ____ Equipment Rental

Rush TAT Charge: 24 hr - 100%... 48 hr - 75%.... 72 hr - 50%.... 96 hr - 35%.... 5 day - 25%.... 6-9 day - 10%

Deliverables: NJ, CT, PA — ☐ Results Only ☐ Reduced ☐ Regulatory/ Full*; NY — ☐ ASP Category A ☐ ASP Category B*

EDDs: ☐ NJ SRP ☐ NYSDEC EQuIS ☐ lab approved custom EDD ☐ NO EDD REQ'D

Concentrations Expected: Low Med High

These samples have been previously analyzed by IAL: ☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal

Rush/date needed (only if pre-approved)**: _____

Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1 ☐ NJ EPH-C40 - Category 2 ☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (If other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Sample Matrix

DW - Drinking Water; WW - Waste Water; GW - Groundwater; SW - Surface Water; LIQ - Liquid (Specify); OI - Oil; S - Soil; SOL - Solid; SL - Sludge; W - Wipe; B - Biphasic

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	VOC	Sample Specific Notes:
E-44-4.5-5.0		10-12-16	1008	S	1	57	X		HOLD
E-50-0.5-1.0		10-10-16	1200	S	1	58	X		
E-50-2.0-2.5		10-10-16	1235	S	1	59	X		
TRIP BLANK		-	-	WATER	2	60		X	

Known Hazard: YES / NO

Describe:

Preservative Code: 1 = None; 2 = HCl; 3 = HNO3; 4 = MeOH; 5 = NaOH; 6 = H2SO4; 7 = Other

Container Code: A = Amber Glass; B = Plastic; C = Vial; D = Glass; E = EnCore; T = Terracore

Preservative (use code):

Container Type (use code):

Carrier (check one): ☐ IAL Courier ☐ Client Courier ☐ FedEx/UPS***

***Tracking #:

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IAL Rev 2/2014

Special Instructions/QC Requirements & Comments:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	10-12-16	3:40		10/12/16	3:50
	10/12/16	6:00			

FOR LAB USE ONLY

SDG #: 9537

Cooler Temp: _____°C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

16-09537 Page 290

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Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09537: AMTRAK EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: marlene.lindhardt@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Oct 12, 2016 @ 18:00	NA	Nov 07, 2016	Nov 11, 2016 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT, EQ EDD

**** QC Requirement (must meet):** NJ IGW

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
09537-001	E-54 (0.5-1)	0.5/1	10/10/16@07:50	Soil	mg/Kg (ppm)	
09537-002	E-54 (2-2.5)	2/2.5	10/10/16@08:05	Soil	mg/Kg (ppm)	
09537-003	E-42 (0.5-1)	0.5/1	10/10/16@08:30	Soil	mg/Kg (ppm)	
09537-004	E-42 (2-2.5)	2/2.5	10/10/16@08:55	Soil	mg/Kg (ppm)	
09537-005	E-42 (3-3.5)	3/3.5	10/10/16@09:15	Soil	mg/Kg (ppm)	
09537-006	E-42 (4-4.5)	4/4.5	10/10/16@09:48	Soil	mg/Kg (ppm)	
09537-007	E-51 (0.5-1)	0.5/1	10/10/16@10:20	Soil	mg/Kg (ppm)	
09537-008	E-51 (2-2.5)	2/2.5	10/10/16@10:30	Soil	mg/Kg (ppm)	
09537-009	E-51 (3-3.5)	3/3.5	10/10/16@10:55	Soil	mg/Kg (ppm)	
09537-010	E-49 (0.5-1)	0.5/1	10/10/16@10:05	Soil	mg/Kg (ppm)	
09537-011	E-52 (0.5-1)	0.5/1	10/10/16@13:55	Soil	mg/Kg (ppm)	
09537-012	E-37 (0.5-1)	0.5/1	10/10/16@09:55	Soil	mg/Kg (ppm)	
09537-013	E-44 (0.5-1)	0.5/1	10/10/16@13:00	Soil	mg/Kg (ppm)	
09537-014	E-44 (2-2.5)	2/2.5	10/10/16@13:14	Soil	mg/Kg (ppm)	
09537-015	E-44 (3-3.5)	3/3.5	10/10/16@13:30	Soil	mg/Kg (ppm)	
09537-016	E-60 (0.5-1)	0.5/1	10/10/16@14:08	Soil	mg/Kg (ppm)	
09537-017	E-36 (0.5-1)	0.5/1	10/10/16@14:15	Soil	mg/Kg (ppm)	
09537-018	E-36 (2-2.5)	2/2.5	10/10/16@15:12	Soil	mg/Kg (ppm)	
09537-019	E-47 (0.5-1)	0.5/1	10/10/16@15:00	Soil	mg/Kg (ppm)	
09537-020	X-1 (0.5-1)	0.5/1	10/10/16	Soil	mg/Kg (ppm)	
09537-021	EB-101016	NA	10/10/16@15:30	Aqueous	mg/L (ppm)	
09537-022	E-43 (0.5-1)	0.5/1	10/11/16@08:50	Soil	mg/Kg (ppm)	
09537-023	E-43 (2-2.5)	2/2.5	10/11/16@08:55	Soil	mg/Kg (ppm)	
09537-024	E-43 (3-3.5)	3/3.5	10/11/16@09:02	Soil	mg/Kg (ppm)	
09537-025	E-43 (4.5-5)	4.5/5	10/11/16@09:50	Soil	mg/Kg (ppm)	
09537-026	E-55 (4.5-5)	4.5/5	10/11/16@10:08	Soil	mg/Kg (ppm)	
09537-027	E-34 (3-3.5)	3/3.5	10/11/16@12:04	Soil	mg/Kg (ppm)	
09537-028	E-34 (4.5-5)	4.5/5	10/11/16@12:05	Soil	mg/Kg (ppm)	

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

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Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09537: AMTRAK EAST BARRACKS

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
09537-029	E-57 (4.5-5)	4.5/5	10/11/16@13:00	Soil	mg/Kg (ppm)	
09537-030	E-57 (6-6.5)	6/6.5	10/11/16@13:05	Soil	mg/Kg (ppm)	
09537-031	E-56 (4.5-5)	4.5/5	10/11/16@12:35	Soil	mg/Kg (ppm)	
09537-032	E-56 (6-6.5)	6/6.5	10/11/16@12:38	Soil	mg/Kg (ppm)	
09537-033	E-30 (3-3.5)	3/3.5	10/11/16@09:53	Soil	mg/Kg (ppm)	
09537-034	E-30 (4.5-5)	4.5/5	10/11/16@10:15	Soil	mg/Kg (ppm)	
09537-035	E-31 (3-3.5)	3/3.5	10/11/16@10:16	Soil	mg/Kg (ppm)	
09537-036	E-31 (4.5-5)	4.5/5	10/11/16@10:40	Soil	mg/Kg (ppm)	
09537-037	E-33 (0.5-1)	0.5/1	10/11/16@13:20	Soil	mg/Kg (ppm)	
09537-038	E-33 (2-2.5)	2/2.5	10/11/16@13:45	Soil	mg/Kg (ppm)	
09537-039	E-33 (3-3.5)	3/3.5	10/11/16@13:56	Soil	mg/Kg (ppm)	
09537-040	E-33 (4.5-5)	4.5/5	10/11/16@13:58	Soil	mg/Kg (ppm)	
09537-041	E-33 (5.5-6)	5.5/6	10/11/16@13:58	Soil	mg/Kg (ppm)	
09537-042	E-40 (4.5-5)	4.5/5	10/11/16@11:15	Soil	mg/Kg (ppm)	
09537-043	E-39 (4.5-5)	4.5/5	10/11/16@13:25	Soil	mg/Kg (ppm)	
09537-044	EB-101116	NA	10/11/16@14:15	Aqueous	mg/L (ppm)	
09537-045	E-32 (0.5-1)	0.5/1	10/12/16@08:35	Soil	mg/Kg (ppm)	
09537-046	E-32 (2-2.5)	2/2.5	10/12/16@08:41	Soil	mg/Kg (ppm)	
09537-047	E-32 (3-3.5)	3/3.5	10/12/16@08:53	Soil	mg/Kg (ppm)	
09537-048	E-32 (4.5-5)	4.5/5	10/12/16@08:55	Soil	mg/Kg (ppm)	
09537-049	E-32 (5.5-6)	5.5/6	10/12/16@08:58	Soil	mg/Kg (ppm)	
09537-050	E-41 (0.5-1)	0.5/1	10/12/16@08:57	Soil	mg/Kg (ppm)	
09537-051	E-41 (2-2.5)	2/2.5	10/12/16@09:13	Soil	mg/Kg (ppm)	
09537-052	E-41 (4-4.5)	4/4.5	10/12/16@09:22	Soil	mg/Kg (ppm)	
09537-053	E-41 (5-5.5)	5/5.5	10/12/16@09:25	Soil	mg/Kg (ppm)	
09537-054	X-2 (2-2.5)	2/2.5	10/12/16	Soil	mg/Kg (ppm)	
09537-055	E-50 (4.5-5)	4.5/5	10/12/16@10:28	Soil	mg/Kg (ppm)	
09537-056	E-51 (4.5-5)	4.5/5	10/12/16@10:35	Soil	mg/Kg (ppm)	
09537-057	E-44 (4.5-5)	4.5/5	10/12/16@10:08	Soil	mg/Kg (ppm)	
09537-058	E-50 (0.5-1)	0.5/1	10/10/16@12:00	Soil	mg/Kg (ppm)	
09537-059	E-50 (2-2.5)	2/2.5	10/10/16@12:35	Soil	mg/Kg (ppm)	
09537-060	TRIP BLANK	NA	10/10/16	Aqueous	mg/L (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
002	TCL PCB	Analyze	8082A	STD/2 WKS	10/10/2017
003	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
004	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
005	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
006	TCL PCB	Analyze	8082A	STD/2 WKS	10/10/2017
007	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
008	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
009	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
010	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
011	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
012	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
013	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
014	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017

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IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09537: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
015	TCL PCB	Cancel	8082A	RUSH 1 WK	10/10/2017
016	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
017	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
018	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
019	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
020	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
021	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
022	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
023	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
024	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
025	TCL PCB	Analyze	8082A	STD/2 WKS	10/11/2017
026	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
027	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
028	TCL PCB	Cancel	8082A	RUSH 1 WK	10/11/2017
029	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
030	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
031	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
032	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
033	Special VO	Analyze	8260C	RUSH 1 WK	10/25/2016
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/11/2016
034	Special VO	Analyze	8260C	STD/2 WKS	10/25/2016
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/11/2016
035	Special VO	Analyze	8260C	RUSH 1 WK	10/25/2016
036	Special VO	Analyze	8260C	STD/2 WKS	10/25/2016
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/11/2016
037	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
038	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
039	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
040	Special VO	Analyze	8260C	RUSH 1 WK	10/25/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/11/2016
041	Special VO	Analyze	8260C	RUSH 1 WK	10/25/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/11/2016
042	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
043	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
044	Special VO	Analyze	8260C	RUSH 1 WK	10/25/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/11/2017
045	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
046	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
047	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
048	Special VO	Analyze	8260C	RUSH 1 WK	10/26/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/12/2016

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Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09537: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
049	Special VO	Analyze	8260C	RUSH 1 WK	10/26/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
	% Moisture	Analyze	D2216-71	RUSH 1 WK	10/12/2016
050	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
051	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
052	TCL PCB	Cancel	8082A	RUSH 1 WK	10/12/2017
053	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017
054	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
055	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
056	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
057	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017
058	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
059	TCL PCB	Analyze	8082A	RUSH 1 WK	10/10/2017
060	Special VO	Analyze	8260C	RUSH 1 WK	10/24/2016

Project Notes:

NOTE 1 taken by Frank on 10/13/2016 12:25
3 ENCORS RECEIVED - 1 INTO MEOH/2 INTO H2O

FOR SPECIAL VO REPORT PCE ONLY.

REV 1 taken by epacella on 10/14/2016 03:20
AS PER MARLENE LINDHARDT, PLEASE EXPEDITE SAMPLES TO 1 WEEK TAT, DUE 10/20

REV 2 taken by Mark on 10/21/2016 04:31
REV 02 DUE 11/4/16

PER MARLENE L., ANALYZE SAMPLES #002, 006, 025, 053 & 057 FOR PCB.
OTHERS REMAIN ON HOLD

ORIGINAL RESULTS SENT 10/21/16

REV 3 taken by Mark on 10/24/2016 03:52
REV 03 DUE 11/7/16

PER MARLENE LINDHARDT, ANALYZE SAMPLES #034 & 036 FOR PCE ONLY

CANCEL OTHERS ON HOLD

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INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 16** **09537** CLIENT: AMEC

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA

✗ = NO

VOA received: ☑ Encore ☐ IGW - Methanol

(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact
✓	no-Missing Bottles
✓	no-Extra Bottles
✓	Sufficient Sample Volume
✓	no-headspace/bubbles in VOs
✓	Labels intact/correct
✓	pH Check (exclude VOs)[1]
✓	Correct bottles/preservative
✓	Sufficient Holding/Prep Time[1]
☐	Multiphasic Sample
☐	Sample to be Subcontracted
✓	**Chain of Custody is Clear**

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 10/12/16

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☑

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL KD DATE 10/13/16

Laboratory Custody Chronicle

IAL Case No.

E16-09537

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/12/2016@18:00

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	09537-033	Soil	n/a	n/a	10/17/16	Xing
"	-034	"	n/a	n/a	10/24/16	Xing
"	-035	"	n/a	n/a	10/17/16	Xing
"	-036	"	n/a	n/a	10/24/16	Xing
"	-040	"	n/a	n/a	10/17/16	Xing
"	-041	"	n/a	n/a	10/17/16	Xing
"	-044	Aqueous	n/a	n/a	10/20/16	Barbara
"	-048	Soil	n/a	n/a	10/17/16	Xing
"	-049	"	n/a	n/a	10/17/16	Xing
"	-060	Aqueous	n/a	n/a	10/20/16	Barbara

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	-001	Soil	10/17/16	Archimede	10/18/16	Justyna
"	-002	"	10/25/16	Archimede	10/27/16	Justyna
"	-003	"	10/17/16	Archimede	10/18/16	Justyna
"	-004	"	10/17/16	Archimede	10/18/16	Justyna
"	-005	"	10/17/16	Archimede	10/18/16	Justyna
"	-006	"	10/25/16	Archimede	10/27/16	Justyna
"	-007	"	10/17/16	Archimede	10/18/16	Justyna
"	-008	"	10/17/16	Archimede	10/18/16	Justyna
"	-009	"	10/17/16	Archimede	10/18/16	Justyna
"	-010	"	10/17/16	Archimede	10/18/16	Justyna
"	-011	"	10/17/16	Archimede	10/18/16	Justyna
"	-012	"	10/17/16	Archimede	10/18/16	Justyna
"	-013	"	10/17/16	Archimede	10/18/16	Justyna
"	-014	"	10/17/16	Archimede	10/18/16	Justyna
"	-016	"	10/17/16	Archimede	10/18/16	Justyna
"	-017	"	10/17/16	Archimede	10/18/16	Justyna
"	-018	"	10/17/16	Archimede	10/18/16	Justyna
"	-019	"	10/17/16	Archimede	10/18/16	Justyna
"	-020	"	10/17/16	Archimede	10/18/16	Justyna
"	-021	Aqueous	10/17/16	Archimede	10/18/16	Justyna
"	-022	Soil	10/17/16	Archimede	10/18/16	Justyna
"	-023	"	10/17/16	Archimede	10/18/16	Justyna
"	-024	"	10/17/16	Archimede	10/18/16	Justyna
"	-025	"	10/25/16	Archimede	10/27/16	Justyna
"	-026	"	10/17/16	Archimede	10/18/16	Justyna
"	-027	"	10/17/16	Archimede	10/18/16	Justyna
"	-029	"	10/17/16	Archimede	10/18/16	Justyna
"	-030	"	10/17/16	Archimede	10/18/16	Justyna
"	-031	"	10/17/16	Archimede	10/18/16	Justyna
"	-032	"	10/17/16	Archimede	10/18/16	Justyna
"	-037	"	10/17/16	Archimede	10/18/16	Justyna
"	-038	"	10/17/16	Archimede	10/18/16	Justyna
"	-039	"	10/17/16	Archimede	10/18/16	Justyna

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Laboratory Custody Chronicle

IAL Case No.
E16-09537

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/12/2016@18:00

"	-040	"	10/17/16	Archimede	10/18/16	Justyna
"	-041	"	10/17/16	Archimede	10/18/16	Justyna
"	-042	"	10/17/16	Archimede	10/18/16	Justyna
"	-043	"	10/17/16	Archimede	10/18/16	Justyna
"	-044	Aqueous	10/17/16	Archimede	10/18/16	Justyna
"	-045	Soil	10/17/16	Archimede	10/20/16	Justyna
"	-046	"	10/17/16	Archimede	10/20/16	Justyna
"	-047	"	10/17/16	Archimede	10/20/16	Justyna
"	-048	"	10/17/16	Archimede	10/20/16	Justyna
"	-049	"	10/17/16	Archimede	10/20/16	Justyna
"	-050	"	10/17/16	Archimede	10/20/16	Justyna
"	-051	"	10/17/16	Archimede	10/20/16	Justyna
"	-053	"	10/25/16	Archimede	10/27/16	Justyna
"	-054	"	10/17/16	Archimede	10/20/16	Justyna
"	-055	"	10/17/16	Archimede	10/20/16	Justyna
"	-056	"	10/17/16	Archimede	10/20/16	Justyna
"	-057	"	10/25/16	Archimede	10/27/16	Justyna
"	-058	"	10/17/16	Archimede	10/20/16	Justyna
"	-059	"	10/17/16	Archimede	10/20/16	Justyna

Department: Wet Chemistry			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
% Moisture	-033	Soil	n/a	n/a	10/14/16@10:23	Lucy
"	-034	"	n/a	n/a	10/14/16@10:23	Lucy
"	-036	"	n/a	n/a	10/14/16@10:23	Lucy
"	-040	"	n/a	n/a	10/14/16@10:23	Lucy
"	-041	"	n/a	n/a	10/14/16@10:23	Lucy
"	-048	"	n/a	n/a	10/14/16@10:23	Lucy
"	-049	"	n/a	n/a	10/14/16@10:23	Lucy

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LAST PAGE OF DOCUMENT

IAL
Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK EAST BARRACKS**
IAL Case Number: **E16-09581**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Integrated Analytical Laboratories - Table of Contents

Sample Summary

IAL Case No.

E16-09581

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/13/2016@17:30

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
09581-001	E-35 (0.5-1)	0.5/1	10/12/2016@13:05	Soil	1
09581-002	E-35 (2-2.5)	2/2.5	10/12/2016@12:55	Soil	1
09581-003	E-45 (0.5-1)	0.5/1	10/12/2016@11:10	Soil	1
09581-004	E-45 (2-2.5)	2/2.5	10/12/2016@11:30	Soil	1
09581-005	E-45 (3-3.5)	3/3.5	10/12/2016@11:40	Soil	1
09581-006	E-45 (4.5-5)	4.5/5	10/12/2016@11:45	Soil	1
09581-007	E-53 (0.5-1)	0.5/1	10/12/2016@12:18	Soil	1
09581-008	E-58 (0.5-1)	0.5/1	10/12/2016@13:00	Soil	1
09581-009	E-59 (0.5-1)	0.5/1	10/12/2016@14:28	Soil	1
09581-010	E-48 (0.5-1)	0.5/1	10/12/2016@12:14	Soil	1
09581-011	E-46 (0.5-1)	0.5/1	10/12/2016@11:50	Soil	1
09581-012	E-46 (2-2.5)	2/2.5	10/12/2016@12:00	Soil	1
09581-013	E-46 (3-3.5)	3/3.5	10/12/2016@12:12	Soil	1
09581-014	E-46 (4.5-5)	4.5/5	10/12/2016@12:15	Soil	1
09581-015	E-38 (0.5-1)	0.5/1	10/12/2016@09:37	Soil	1
09581-016	E-38 (2-2.5)	2/2.5	10/12/2016@09:43	Soil	1
09581-017	E-38 (4.5-5)	4.5/5	10/12/2016@09:58	Soil	1
09581-018	X-3 (0.5-1)	0.5/1	10/12/2016	Soil	1
09581-019	X-4 (0.5-1)	0.5/1	10/12/2016	Soil	1
09581-020	EB-101216	n/a	10/12/2016@14:50	Aqueous	5
09581-021	TRIP BLANK	n/a	10/12/2016	Aqueous	2

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DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09581

Integrated Analytical Laboratories, LLC. received twenty-one (21) samples** from AMEC-SMRST (IAL SDG# **E16-09581**, Project: AMTRAK EAST BARRACKS) on October 13, 2016 for the analysis of :

(2) Special VO
(2) Special Pesticides
(18) TCL PCB

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

Volatiles By 8260C	**Batch: 161019**	**Matrix: Aqueous**

QC
- Calibration curve met QC criteria.
- Internal standards recovery met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS percent recovery met QC criteria.
- MS/MSD RPD met QC criteria.
- MS/MSD percent recovery met QC criteria.

E16-09581
- All samples were analyzed within holding time.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-020	1	NA
E16-09581-021	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09581

PCB By 8082A | **Batch: 161017-23** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 007, 008, 009, 010, 011.

E16-09581

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-001	1	NA
E16-09581-002	1	NA
E16-09581-003	2	Target compound(s).
E16-09581-007	1	NA
E16-09581-008	1	NA
E16-09581-009	1	NA
E16-09581-010	1;10	Target compound(s).
E16-09581-011	1	NA

PCB By 8082A | **Batch: 161017-25** | **Matrix: Aqueous**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3665A: 020.
- The following samples were cleaned up using method 3660B to remove sulfur: 020.

E16-09581

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-020	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09581

PCB By 8082A | **Batch: 161018-01** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 015, 016, 017, 018, 019.

E16-09581

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-015	1	NA
E16-09581-016	1	NA
E16-09581-017	1	NA
E16-09581-018	1	NA
E16-09581-019	1	NA

PCB By 8082A | **Batch: 161025-09** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 004, 006, 012, 014.

E16-09581

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-004	1	NA
E16-09581-006	1	NA
E16-09581-012	1	NA
E16-09581-014	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E16-09581

Pesticides By 8081B	Batch: 161025-08	Matrix: Soil

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference for #010. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- MS/MSD RPD did not meet QC criteria due to matrix interference.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3660B to remove sulfur: 007, 010.

E16-09581

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E16-09581-007	1	NA
E16-09581-010	2	Matrix Interference.

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

11/8/2016
Date

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK EAST BARRACKS
IAL Project #: E16-09581
IAL Sample ID(s): E16-09581-001 ~ -021
Sampling Date(s): 10/12/2016

List of DKQP Method Used:
Special VO by 8260C
GC-ECD Project Revision by
Special Pesticides by 8081B
TCL PCB by 8082A

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		X	
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?	X		
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?		X	

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09581

Lab ID:	09581-001			09581-002			09581-003			09581-004		
Client ID:	E-35 (0.5-1)			E-35 (2-2.5)			E-45 (0.5-1)			E-45 (2-2.5)		
Depth:	0.5/1			2/2.5			0.5/1			2/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/12/16			10/12/16			10/12/16			10/12/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1221	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1232	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1242	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1248	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1254	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1260	ND		0.016	ND		0.017	7.64	D	0.030	4.15		0.015
Aroclor-1262	ND		0.016	ND		0.017	ND		0.030	ND		0.015
Aroclor-1268	ND		0.016	ND		0.017	ND		0.030	ND		0.015
PCBs	ND		0.016	ND		0.017	7.64	D	0.030	4.15		0.015

Lab ID:	09581-005			09581-006			09581-007			09581-008		
Client ID:	E-45 (3-3.5)			E-45 (4.5-5)			E-53 (0.5-1)			E-58 (0.5-1)		
Depth:	3/3.5			4.5/5			0.5/1			0.5/1		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	10/12/16			10/12/16			10/12/16			10/12/16		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1221	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1232	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1242	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1248	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1254	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1260	~		~	ND		0.016	3.13		0.019	ND		0.017
Aroclor-1262	~		~	ND		0.016	ND		0.019	ND		0.017
Aroclor-1268	~		~	ND		0.016	ND		0.019	ND		0.017
PCBs	~		~	ND		0.016	3.13		0.019	ND		0.017
Pesticides (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Dieldrin	~		~	~		~	ND		0.000202	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09581

	Lab ID:	09581-009			09581-010			09581-011			09581-012		
	Client ID:	E-59 (0.5-1)			E-48 (0.5-1)			E-46 (0.5-1)			E-46 (2-2.5)		
	Depth:	0.5/1			0.5/1			0.5/1			2/2.5		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/12/16			10/12/16			10/12/16			10/12/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1221		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1232		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1242		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1248		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1254		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1260		ND		0.015	19.1	D	0.173	3.36		0.023	ND		0.016
Aroclor-1262		ND		0.015	ND		0.017	ND		0.023	ND		0.016
Aroclor-1268		ND		0.015	ND		0.017	ND		0.023	ND		0.016
PCBs		ND		0.015	19.1	D	0.173	3.36		0.023	ND		0.016
Pesticides (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Dieldrin		~		~	ND		0.000412	~		~	~		~

	Lab ID:	09581-013			09581-014			09581-015			09581-016		
	Client ID:	E-46 (3-3.5)			E-46 (4.5-5)			E-38 (0.5-1)			E-38 (2-2.5)		
	Depth:	3/3.5			4.5/5			0.5/1			2/2.5		
	Matrix:	Soil			Soil			Soil			Soil		
	Sampled Date	10/12/16			10/12/16			10/12/16			10/12/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1221		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1232		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1242		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1248		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1254		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1260		~		~	ND		0.016	3.10		0.016	1.10		0.019
Aroclor-1262		~		~	ND		0.016	ND		0.016	ND		0.019
Aroclor-1268		~		~	ND		0.016	ND		0.016	ND		0.019
PCBs		~		~	ND		0.016	3.10		0.016	1.10		0.019

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09581

	Lab ID:	09581-017			09581-018			09581-019		
	Client ID:	E-38 (4.5-5)			X-3 (0.5-1)			X-4 (0.5-1)		
	Depth:	4.5/5			0.5/1			0.5/1		
	Matrix:	Soil			Soil			Soil		
	Sampled Date	10/12/16			10/12/16			10/12/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)		*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016		ND		0.017	ND		0.017	ND		0.016
Aroclor-1221		ND		0.017	ND		0.017	ND		0.016
Aroclor-1232		ND		0.017	ND		0.017	ND		0.016
Aroclor-1242		ND		0.017	ND		0.017	ND		0.016
Aroclor-1248		ND		0.017	ND		0.017	ND		0.016
Aroclor-1254		ND		0.017	ND		0.017	ND		0.016
Aroclor-1260		0.310		0.017	ND		0.017	ND		0.016
Aroclor-1262		ND		0.017	ND		0.017	ND		0.016
Aroclor-1268		ND		0.017	ND		0.017	ND		0.016
PCBs		0.310		0.017	ND		0.017	ND		0.016

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK EAST BARRACKS
Lab Case No.: E16-09581

	Lab ID:	09581-020			09581-021		
	Client ID:	EB-101216			TRIP BLANK		
	Matrix:	Aqueous			Aqueous		
	Sampled Date	10/12/16			10/12/16		
PARAMETER(Units)		Conc	Q	MDL	Conc	Q	MDL
Volatiles (Units)		*(mg/L)*			*(mg/L)*		
Tetrachloroethene		ND		0.000381	ND		0.000381
PCB's (Units)		*(mg/L)*			*(mg/L)*		
Aroclor-1016		ND		0.00002	~		~
Aroclor-1221		ND		0.00002	~		~
Aroclor-1232		ND		0.00002	~		~
Aroclor-1242		ND		0.00002	~		~
Aroclor-1248		ND		0.00002	~		~
Aroclor-1254		ND		0.00002	~		~
Aroclor-1260		ND		0.00002	~		~
Aroclor-1262		ND		0.00002	~		~
Aroclor-1268		ND		0.00002	~		~
PCBs		ND		0.00002	~		~

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09581-020
Client ID: EB-101216
Date Received: 10/13/2016
Date Analyzed: 10/19/2016
Data file: E5905.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0005	0.000381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: E16-09581-021
Client ID: TRIP_BLANK
Date Received: 10/13/2016
Date Analyzed: 10/19/2016
Data file: E5906.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.0005	0.000381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-001
Client ID: E-35_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/20/2016
Data file: Y0910.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.32g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-002
Client ID: E-35_(2-
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0865.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.017
Aroclor-1221	ND		0.041	0.017
Aroclor-1232	ND		0.041	0.017
Aroclor-1242	ND		0.041	0.017
Aroclor-1248	ND		0.041	0.017
Aroclor-1254	ND		0.041	0.017
Aroclor-1260	ND		0.041	0.017
Aroclor-1262	ND		0.041	0.017
Aroclor-1268	ND		0.041	0.017
PCBs	ND		0.041	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-003
Client ID: E-45_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/20/2016
Data file: Y0912.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.70g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 5.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.074	0.030
Aroclor-1221	ND		0.074	0.030
Aroclor-1232	ND		0.074	0.030
Aroclor-1242	ND		0.074	0.030
Aroclor-1248	ND		0.074	0.030
Aroclor-1254	ND		0.074	0.030
Aroclor-1260	7.64	D	0.074	0.030
Aroclor-1262	ND		0.074	0.030
Aroclor-1268	ND		0.074	0.030
PCBs	7.64	D	0.074	0.030

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-004
Client ID: E-45_(2-
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4079.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.80g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 8.50

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.038	0.015
Aroclor-1221	ND		0.038	0.015
Aroclor-1232	ND		0.038	0.015
Aroclor-1242	ND		0.038	0.015
Aroclor-1248	ND		0.038	0.015
Aroclor-1254	ND		0.038	0.015
Aroclor-1260	4.15		0.038	0.015
Aroclor-1262	ND		0.038	0.015
Aroclor-1268	ND		0.038	0.015
PCBs	4.15		0.038	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-006
Client ID: E-45_(4.
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4080.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.34g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-007
Client ID: E-53_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0867.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.23g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.047	0.019
Aroclor-1221	ND		0.047	0.019
Aroclor-1232	ND		0.047	0.019
Aroclor-1242	ND		0.047	0.019
Aroclor-1248	ND		0.047	0.019
Aroclor-1254	ND		0.047	0.019
Aroclor-1260	3.13		0.047	0.019
Aroclor-1262	ND		0.047	0.019
Aroclor-1268	ND		0.047	0.019
PCBs	3.13		0.047	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-008
Client ID: E-58_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0868.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.33g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	ND		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	ND		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-009
Client ID: E-59_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0869.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.59g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 7.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.015
Aroclor-1221	ND		0.039	0.015
Aroclor-1232	ND		0.039	0.015
Aroclor-1242	ND		0.039	0.015
Aroclor-1248	ND		0.039	0.015
Aroclor-1254	ND		0.039	0.015
Aroclor-1260	ND		0.039	0.015
Aroclor-1262	ND		0.039	0.015
Aroclor-1268	ND		0.039	0.015
PCBs	ND		0.039	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-010
Client ID: E-48_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0870.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 19.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	14.1	E	0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	14.1	E	0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-010DL
Client ID: E-48_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/20/2016
Data file: Y0913.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 10
% Moisture: 19.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.434	0.173
Aroclor-1221	ND		0.434	0.173
Aroclor-1232	ND		0.434	0.173
Aroclor-1242	ND		0.434	0.173
Aroclor-1248	ND		0.434	0.173
Aroclor-1254	ND		0.434	0.173
Aroclor-1260	19.1	D	0.434	0.173
Aroclor-1262	ND		0.434	0.173
Aroclor-1268	ND		0.434	0.173
PCBs	19.1	D	0.434	0.173

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-011
Client ID: E-46_(0.
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/20/2016
Data file: Y0911.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.81g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 41.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.059	0.023
Aroclor-1221	ND		0.059	0.023
Aroclor-1232	ND		0.059	0.023
Aroclor-1242	ND		0.059	0.023
Aroclor-1248	ND		0.059	0.023
Aroclor-1254	ND		0.059	0.023
Aroclor-1260	3.36		0.059	0.023
Aroclor-1262	ND		0.059	0.023
Aroclor-1268	ND		0.059	0.023
PCBs	3.36		0.059	0.023

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-012
Client ID: E-46_(2-
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4081.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.57g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-014
Client ID: E-46_(4.
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4082.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.85g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-015
Client ID: E-38_(0.
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0877.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.86g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 15.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	3.10		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	3.10		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-016
Client ID: E-38_(2-
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0878.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.20g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.047	0.019
Aroclor-1221	ND		0.047	0.019
Aroclor-1232	ND		0.047	0.019
Aroclor-1242	ND		0.047	0.019
Aroclor-1248	ND		0.047	0.019
Aroclor-1254	ND		0.047	0.019
Aroclor-1260	1.10		0.047	0.019
Aroclor-1262	ND		0.047	0.019
Aroclor-1268	ND		0.047	0.019
PCBs	1.10		0.047	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-017
Client ID: E-38_(4.
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0879.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.29g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.90

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	0.310		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	0.310		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-018
Client ID: X-3_(0.5
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0880.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.34g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.10

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.017
Aroclor-1221	ND		0.041	0.017
Aroclor-1232	ND		0.041	0.017
Aroclor-1242	ND		0.041	0.017
Aroclor-1248	ND		0.041	0.017
Aroclor-1254	ND		0.041	0.017
Aroclor-1260	ND		0.041	0.017
Aroclor-1262	ND		0.041	0.017
Aroclor-1268	ND		0.041	0.017
PCBs	ND		0.041	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-019
Client ID: X-4_(0.5
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0881.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.68g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 9.00

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E16-09581-020
Client ID: EB-10121
Date Received: 10/13/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3815.D

GC Column: DB-5/DB1701P
Sample wt/vol: 500ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E16-09581-007
Client ID: E-53_(0.
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/26/2016
Data file: V7306.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.6

Compound	Concentration	Q	RL	MDL
Dieldrin	ND		0.000404	0.000202

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: E16-09581-010
Client ID: E-48_(0.
Date Received: 10/13/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/26/2016
Data file: V7307.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 2
% Moisture: 19.8

Compound	Concentration	Q	RL	MDL
Dieldrin	ND		0.000824	0.000412

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

VOLATILE ORGANICS

VOLATILE ORGANICS QC SUMMARY

VOLATILE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Lab Sample ID	Matrix	File ID	SMC1 #	SMC2 #	SMC3 #
BLKA161019	AQUEOUS	E5899.D	111	95	96
E16-09283-003	AQUEOUS	E5900.D	109	94	97
LCSA161019	AQUEOUS	E5901.D	99	100	100
E16-09408-001MS	AQUEOUS	E5902.D	95	96	101
E16-09408-001MSD	AQUEOUS	E5903.D	96	98	101
E16-09581-020	AQUEOUS	E5905.D	118	94	100
E16-09581-021	AQUEOUS	E5906.D	117	96	97
E16-09408-001	AQUEOUS	E5907.D	111	95	97
E16-09408-002	AQUEOUS	E5908.D	98	97	97
E16-09408-003	AQUEOUS	E5909.D	101	96	98
E16-09635-001	AQUEOUS	E5910.D	115	93	97
E16-09635-002	AQUEOUS	E5911.D	115	95	97
E16-09635-003	AQUEOUS	E5912.D	107	96	96
E16-09635-004	AQUEOUS	E5913.D	116	94	98
E16-09635-005	AQUEOUS	E5914.D	107	96	96
E16-09635-006	AQUEOUS	E5915.D	116	94	97
E16-09635-007	AQUEOUS	E5916.D	120	95	96
E16-09635-008	AQUEOUS	E5917.D	106	96	98
E16-09635-009	AQUEOUS	E5918.D	112	100	107

	Concentration	DKQPs	Leachate Aqueous/Meoh	Soil
SMC1 = 1,2-Dichloroethane-d4	50 ppb	70-130	59-138	43-133
SMC2 = Toluene-d8	50 ppb	70-130	40-133	39-137
SMC3 = Bromofluorobenzene	50 ppb	70-130	42-152	45-145

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

8260

LCS ACCURACY REPORT

Lab ID: LCSA161019
Date Received: NA
Date Analyzed: 10/19/2016
LCS Data file: E5901.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
Dichlorodifluoromethane	50.0	43.9	88		47-152
Chloromethane	50.0	55.0	110		64-124
Vinyl chloride	50.0	49.7	99		67-131
Bromomethane	50.0	46.0	92		60-156
Chloroethane	50.0	48.3	97		69-161
Trichlorofluoromethane	50.0	48.4	97		70-160
1,1-Dichloroethene	50.0	47.7	95		67-156
Acetone	100	84.8	85		63-168
Carbon disulfide	50.0	50.2	100		67-144
Methylene chloride	50.0	48.6	97		61-170
Acrylonitrile	150.0	129.3	86		34-180
tert-Butyl alcohol (TBA)	100.0	90.1	90		77-155
trans-1,2-Dichloroethene	50.0	57.0	114		61-166
Methyl tert-butyl ether (MTBE)	50.0	50.2	100		47-163
1,1-Dichloroethane	50.0	61.0	122		70-127
cis-1,2-Dichloroethene	50.0	61.7	123		71-124
2,2-Dichloropropane	50.0	59.9	120		63-151
2-Butanone (MEK)	100	110.4	110		71-134
Bromochloromethane	50.0	58.1	116		69-131
Chloroform	50.0	58.6	117		68-136
1,1,1-Trichloroethane	50.0	58.8	118		66-151
Carbon tetrachloride	50.0	53.5	107		66-158
1,1-Dichloropropene	50.0	55.2	110		70-142
1,2-Dichloroethane (EDC)	50.0	57.1	114		68-128
Benzene	50.0	56.6	113		70-128
Trichloroethene	50.0	55.7	111		70-137
1,2-Dichloropropane	50.0	57.6	115		70-133
Dibromomethane	50.0	56.1	112		71-129
1,4-Dioxane	1500	1459	97		41-150
Bromodichloromethane	50.0	53.7	107		69-140
2-Chloroethyl vinyl ether	100	129.8	130		70-132
cis-1,3-Dichloropropene	50.0	40.6	81		72-138
4-Methyl-2-pentanone (MIBK)	100	91.1	91		73-127
Toluene	50.0	54.8	110		71-130
trans-1,3-Dichloropropene	50.0	40.3	81		72-137
1,1,2-Trichloroethane	50.0	52.0	104		70-133
Tetrachloroethene	50.0	50.8	102		71-133
1,3-Dichloropropane	50.0	54.7	109		72-125

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA161019
Date Received: NA
Date Analyzed: 10/19/2016
LCS Data file: E5901.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Conc. LCS	%Rec. LCS	#	Limits
2-Hexanone	100	98.1	98		71-144
Dibromochloromethane	50.0	43.8	88		70-148
1,2-Dibromoethane (EDB)	50.0	50.7	101		73-125
Chlorobenzene	50.0	54.7	109		69-131
1,1,1,2-Tetrachloroethane	50.0	54.4	109		72-136
Ethylbenzene	50.0	55.6	111		70-129
m,p-Xylene	100.0	113.7	114		69-130
o-Xylene	50.0	58.6	117		70-129
Styrene	50.0	56.3	113		74-139
Bromoform	50.0	42.7	85		70-132
Isopropylbenzene	50.0	54.2	108		72-135
1,1,2,2-Tetrachloroethane	50.0	46.6	93		72-115
Bromobenzene	50.0	53.2	106		69-125
1,2,3-Trichloropropane	50.0	44.5	89		71-142
n-Propylbenzene	50.0	54.3	109		72-128
2-Chlorotoluene	50.0	54.2	108		70-121
1,3,5-Trimethylbenzene	50.0	52.9	106		72-126
4-Chlorotoluene	50.0	51.0	102		70-120
tert-Butylbenzene	50.0	54.1	108		72-132
1,2,4-Trimethylbenzene	50.0	53.4	107		71-125
sec-Butylbenzene	50.0	51.5	103		72-133
1,3-Dichlorobenzene	50.0	50.1	100		70-123
4-Isopropyltoluene	50.0	53.2	106		72-129
1,4-Dichlorobenzene	50.0	50.3	101		69-117
n-Butylbenzene	50.0	51.6	103		72-130
1,2-Dichlorobenzene	50.0	51.6	103		71-122
1,2-Dibromo-3-chloropropane	50.0	42.6	85		73-126
1,2,4-Trichlorobenzene	50.0	54.2	108		71-120
Hexachlorobutadiene	50.0	48.7	97		67-148
Naphthalene	50.0	51.1	102		65-139
1,2,3-Trichlorobenzene	50.0	51.5	103		63-132
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.9	94		72-163
Methyl acetate	50.0	50.6	101		68-159
Cyclohexane	50.0	56.2	112		69-138
Methylcyclohexane	50.0	50.8	102		67-150

	Leachate Aqueous/Meoh	Soil/Sediment
LCS Recovery Limits	70-130	70-130

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

LCS ACCURACY REPORT

Lab ID: LCSA161019
Date Received: NA
Date Analyzed: 10/19/2016
LCS Data file: E5901.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	LCS	MS Conc.	%Rec	#

As per SW-846 8260C, up to 10% of the compounds may be out , but must be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
LCS ACCURACY (%REC)	70-130	70-130

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

8260

MS/MSD SPIKE REPORT

Lab ID: E16-09408-001
Client ID: MW-P74-10101
Date Received: NA
Date Analyzed: 10/19/2016
MS Data file: E5902.D
MSD Data file: E5903.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% # RPD #	Limits
Dichlorodifluoromethane	50.0	0.0	44.5	89		42.9	86	4	34-178/24
Chloromethane	50.0	0.0	51.0	102		48.4	97	5	36-162/21
Vinyl chloride	50.0	0.0	48.6	97		46.5	93	4	40-175/22
Bromomethane	50.0	0.0	43.0	86		43.3	87	1	37-181/24
Chloroethane	50.0	0.0	46.6	93		46.5	93	0	38-178/23
Trichlorofluoromethane	50.0	0.0	47.2	94		43.5	87	8	32-176/24
1,1-Dichloroethene	50.0	0.0	45.3	91		44.4	89	2	45-175/22
Acetone	100	0.0	99.9	100		95.0	95	5	25-164/23
Carbon disulfide	50.0	0.0	49.4	99		48.4	97	2	42-182/23
Methylene chloride	50.0	0.0	45.9	92		47.4	95	3	36-170/22
Acrylonitrile	150	0.0	121	81		117	78	3	40-170/22
tert-Butyl alcohol (TBA)	100	0.0	85.3	85		91.8	92	7	35-159/21
trans-1,2-Dichloroethene	50.0	0.0	55.8	112		54.8	110	2	39-169/22
Methyl tert-butyl ether (MTBE)	50.0	0.0	50.8	102		50.3	101	1	39-162/21
1,1-Dichloroethane	50.0	0.0	58.4	117		58.1	116	1	43-158/19
cis-1,2-Dichloroethene	50.0	0.0	58.9	118		58.6	117	1	44-168/21
2,2-Dichloropropane	50.0	0.0	62.2	124		56.1	112	10	38-157/20
2-Butanone (MEK)	100	0.0	95.7	96		95.2	95	1	28-146/20
Bromochloromethane	50.0	0.0	55.9	112		55.1	110	1	45-165/20
Chloroform	50.0	0.0	55.6	111		56.3	113	1	41-168/21
1,1,1-Trichloroethane	50.0	0.0	57.6	115		56.0	112	3	35-171/23
Carbon tetrachloride	50.0	0.0	51.6	103		50.0	100	3	33-176/24
1,1-Dichloropropene	50.0	0.0	54.7	109		52.3	105	4	42-159/20
1,2-Dichloroethane (EDC)	50.0	0.0	53.3	107		54.1	108	1	36-161/21
Benzene	50.0	0.0	54.9	110		54.9	110	0	44-156/19
Trichloroethene	50.0	0.0	54.3	109		54.1	108	0	11-198/31
1,2-Dichloropropane	50.0	0.0	55.9	112		58.6	117	5	44-150/18
Dibromomethane	50.0	0.0	54.1	108		54.1	108	0	43-156/19
1,4-Dioxane	1,500	0.0	1214	81		1302	87	7	44-179/23
Bromodichloromethane	50.0	0.0	47.2	94		48.2	96	2	43-167/21
cis-1,3-Dichloropropene	50.0	0.0	41.0	82		45.2	90	10	44-165/20
4-Methyl-2-pentanone (MIBK)	100	0.0	87.5	88		81.6	82	7	29-145/19
Toluene	50.0	0.0	52.6	105		53.1	106	1	43-158/19
trans-1,3-Dichloropropene	50.0	0.0	36.2	72		39.1	78	8	43-164/20
1,1,2-Trichloroethane	50.0	0.0	49.6	99		49.6	99	0	45-159/19
Tetrachloroethene	50.0	0.0	49.0	98		49.9	100	2	41-152/19
1,3-Dichloropropane	50.0	0.0	52.5	105		52.4	105	0	45-159/19

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09408-001
Client ID: MW-P74-10101
Date Received: NA
Date Analyzed: 10/19/2016
MS Data file: E5902.D
MSD Data file: E5903.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	% RPD	#	Limits
2-Hexanone	100	0.0	97.0	97		80.2	80	19		29-148/20
Dibromochloromethane	50.0	0.0	37.0	74		36.2	72	2		42-173/22
1,2-Dibromoethane (EDB)	50.0	0.0	48.9	98		49.2	98	1		46-162/19
Chlorobenzene	50.0	0.0	53.1	106		52.1	104	2		42-147/18
1,1,1,2-Tetrachloroethane	50.0	0.0	53.6	107		50.8	102	5		39-162/21
Ethylbenzene	50.0	0.0	54.6	109		53.6	107	2		42-148/18
m,p-Xylene	100	0.0	110.0	110		108.6	109	1		18-173/26
o-Xylene	50.0	0.0	58.9	118		56.9	114	3		40-155/19
Styrene	50.0	0.0	55.9	112		55.6	111	1		40-156/19
Bromoform	50.0	0.0	42.7	85		41.5	83	3		35-159/21
Isopropylbenzene	50.0	0.0	53.6	107		51.7	103	4		41-150/18
1,1,2,2-Tetrachloroethane	50.0	0.0	45.0	90		40.6	81	10		37-157/20
Bromobenzene	50.0	0.0	52.5	105		51.8	104	1		41-151/18
1,2,3-Trichloropropane	50.0	0.0	44.1	88		40.4	81	9		39-146/18
n-Propylbenzene	50.0	0.0	53.7	107		52.4	105	2		40-146/18
2-Chlorotoluene	50.0	0.0	53.5	107		52.4	105	2		41-147/18
1,3,5-Trimethylbenzene	50.0	0.0	52.2	104		50.7	101	3		42-150/18
4-Chlorotoluene	50.0	0.0	50.9	102		49.7	99	2		40-145/18
tert-Butylbenzene	50.0	0.0	53.3	107		51.0	102	4		40-152/19
1,2,4-Trimethylbenzene	50.0	0.0	52.8	106		50.6	101	4		42-148/18
sec-Butylbenzene	50.0	0.0	51.2	102		48.3	97	6		39-151/19
1,3-Dichlorobenzene	50.0	0.0	49.4	99		48.3	97	2		38-150/19
4-Isopropyltoluene	50.0	0.0	51.8	104		49.1	98	5		39-150/18
1,4-Dichlorobenzene	50.0	0.0	49.2	98		48.1	96	2		37-148/19
n-Butylbenzene	50.0	0.0	50.9	102		47.5	95	7		36-150/19
1,2-Dichlorobenzene	50.0	0.0	51.8	104		48.7	97	6		40-151/19
1,2-Dibromo-3-chloropropane	50.0	0.0	40.0	80		41.5	83	4		35-151/19
1,2,4-Trichlorobenzene	50.0	0.0	53.9	108		46.8	94	14		23-153/22
Hexachlorobutadiene	50.0	0.0	48.3	97		41.7	83	15		22-162/23
Naphthalene	50.0	0.0	50.7	101		51.2	102	1		28-157/21
1,2,3-Trichlorobenzene	50.0	0.0	51.5	103		43.9	88	16		23-157/22
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	0.0	47.4	95		43.8	88	8		36-157/20
Methyl acetate	50.0	0.0	48.6	97		41.8	84	15		26-152/21
Cyclohexane	50.0	0.0	57.6	115		54.1	108	6		34-138/17
Methylcyclohexane	50.0	0.0	51.8	104		49.3	99	5		34-137/17

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	70-130	70-130
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

MS/MSD SPIKE REPORT

Lab ID: E16-09408-001	GC/MS Column: DB-624
Client ID: MW-P74-10101	Sample wt/vol: 5mL
Date Received: NA	Matrix-Units: Aqueous-µg/L
Date Analyzed: 10/19/2016	% Moisture: 100
MS Data file: E5902.D	Dilution Factor: 1
MSD Data file: E5903.D	Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	# %RP #

2-Chloroethyl vinyl ether has zero spike recovery in the MS/MSD. This is due to the HCL acid preservation used on the samples. It is a known phenomenon, that this compound decomposes in the presence of acid.

As per SW-846 8260C, up to 10% of the compounds may be out , but may be within 40-160%
As per NJDEP DKQPs, only the following compounds may be in the 40-160% range:
Acetone; Bromomethane; 2-Butanone (MEK); Carbon disulfide; Chloroethane; Chloromethane
1,2-Dibromo-3-chloropropane; Dichlorodifluoromethane; 1,4-Dioxane; 2-Hexanone
Naphthalene; 4-Methyl-2-pentanone (MIBK); Trichlorofluoromethane

	Leachate Aqueous/Meoh	Soil/Sediment
MS/MSD Recovery Limits	70-130	70-130
MS/MSD RPD Limits (IAL/DKQP)	30/20	30/30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

VOLATILE METHOD BLANK SUMMARY

Lab File ID: E5899.D Instrument ID: MSD_E

Date Analyzed: 10/19/2016 Time Analyzed: 17:49

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS & MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
S3	E16-09283-003	10/19/2016	18:19
LCSA161019	LCSA161019	10/19/2016	18:49
E16-09408-001MS	E16-09408-001MS	10/19/2016	19:18
E16-09408-001MSD	E16-09408-001MSD	10/19/2016	19:48
EB-101216	E16-09581-020	10/19/2016	20:48
TRIP_BLANK	E16-09581-021	10/19/2016	21:18
MW-P74-10101	E16-09408-001	10/19/2016	21:48
FB-101016	E16-09408-002	10/19/2016	22:18
TB-101016	E16-09408-003	10/19/2016	22:48
TB_101416	E16-09635-001	10/19/2016	23:18
FB_10142016	E16-09635-002	10/19/2016	23:48
MW_4-101416	E16-09635-003	10/20/2016	0:18
MW_1-101416	E16-09635-004	10/20/2016	0:47
MW_2-101416	E16-09635-005	10/20/2016	1:17
MW_7-101416	E16-09635-006	10/20/2016	1:47
MW_3-101416	E16-09635-007	10/20/2016	2:16
MW_8-101416	E16-09635-008	10/20/2016	2:46
FDUP	E16-09635-009	10/20/2016	3:15

FORM 4

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E5681.D BFB Injection Date: 10/07/2016

Inst ID: MSD_E BFB Injection Time: 10:02

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	24.2			
75	30.0 - 60.0% of mass 95	52.6			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	6.8			
173	Less than 2.0% of mass 174	0.8	(	1.0	)1
174	Great than 50.0% of mass 95	81.7			
175	5.0 - 9.0% of mass 174	5.7	(	7.0	)1
176	95.0 - 101.0% of mass 174	79.4	(	97.2	)1
177	5.0 - 9.0% of mass 176	5.0	(	6.3	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
ICC161007	ICC100	E5688.D	10/07/2016	13:38
ICC161007	ICC00.5	E5683.D	10/07/2016	11:01
ICC161007	ICC001	E5684.D	10/07/2016	11:31
ICC161007	ICC005	E5685.D	10/07/2016	12:01
ICC161007	ICC020	E5687.D	10/07/2016	13:09
ICC161007	ICC150	E5689.D	10/07/2016	14:08
ICC161007	ICC200	E5690.D	10/07/2016	14:38
ICV161007	ICV100	E5694.D	10/07/2016	17:03

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

Lab File ID: E5895.D BFB Injection Date: 10/19/2016

Inst ID: MSD_E BFB Injection Time: 15:50

m/z	Ion Abudance Criteria	%Relative Abundance			
50	15 - 40.0% of mass 95	23.5			
75	30.0 - 60.0% of mass 95	47.7			
95	Base peak, 100% relative abundance	100.0			
96	5.0 - 9.0% of mass 95	7.0			
173	Less than 2.0% of mass 174	0.7	(	1.1	)1
174	Great than 50.0% of mass 95	67.9			
175	5.0 - 9.0% of mass 174	5.0	(	7.3	)1
176	95.0 - 101.0% of mass 174	64.5	(	95.0	)1
177	5.0 - 9.0% of mass 176	4.3	(	6.7	)2
	1-Value is % mass 174	2-Value is % mass 176			

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

Client ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
CCV100	CCV161019	E5896.D	10/19/2016	16:20
BLKA161019	BLKA161019	E5899.D	10/19/2016	17:49
S3	E16-09283-003	E5900.D	10/19/2016	18:19
LCSA161019	LCSA161019	E5901.D	10/19/2016	18:49
E16-09408-001MS	E16-09408-001MS	E5902.D	10/19/2016	19:18
E16-09408-001MSI	E16-09408-001MS	E5903.D	10/19/2016	19:48
EB-101216	E16-09581-020	E5905.D	10/19/2016	20:48
TRIP_BLANK	E16-09581-021	E5906.D	10/19/2016	21:18
MW-P74-10101	E16-09408-001	E5907.D	10/19/2016	21:48
FB-101016	E16-09408-002	E5908.D	10/19/2016	22:18
TB-101016	E16-09408-003	E5909.D	10/19/2016	22:48
TB_101416	E16-09635-001	E5910.D	10/19/2016	23:18
FB_10142016	E16-09635-002	E5911.D	10/19/2016	23:48
MW_4-101416	E16-09635-003	E5912.D	10/20/2016	0:18
MW_1-101416	E16-09635-004	E5913.D	10/20/2016	0:47
MW_2-101416	E16-09635-005	E5914.D	10/20/2016	1:17
MW_7-101416	E16-09635-006	E5915.D	10/20/2016	1:47
MW_3-101416	E16-09635-007	E5916.D	10/20/2016	2:16
MW_8-101416	E16-09635-008	E5917.D	10/20/2016	2:46
FDUP	E16-09635-009	E5918.D	10/20/2016	3:15

Response Factor Report MSD_E

Method Path : C:\MSDCHEM\1\METHODS\
Method File : E8161007.M
Title : VOLATILE ORGANICS BY EPA METHOD 8260C
Last Update : Fri Oct 07 16:26:24 2016
Response Via : Initial Calibration

Calibration Files
0.5 =E5683.D 1.0 =E5684.D 5.0 =E5685.D
20. =E5687.D 100 =E5688.D 150 =E5689.D 200 =E5690.D

		Compound	0.5	1.0	5.0	20.	100	150	200	Avg	%RSD
1)	I	Pentafluorobenzene	----------	ISTD	----------						
2)	T	Dichlorodifluorom		0.569	0.528	0.417	0.413	0.450	0.406	0.464	14.79
3)	P	Chloromethane		0.775	0.851	0.674	0.631	0.681	0.632	0.707	12.37
4)	C	Vinyl chloride		0.755	0.832	0.677	0.660	0.683	0.619	0.704	10.88
5)	T	Bromomethane		0.314	0.365	0.304	0.295	0.290	0.277	0.308	10.03
6)	T	Chloroethane	0.338	0.388	0.436	0.362	0.344	0.341	0.317	0.361	11.00
7)	T	Trichlorofluorome	0.689	0.795	0.778	0.643	0.668	0.672	0.625	0.696	9.42
9)	MC	1,1-Dichloroethen	0.470	0.633	0.589	0.468	0.454	0.473	0.436	0.503	15.04
10)	T	Acetone		0.157	0.135	0.117	0.117	0.097	0.102	0.121	18.27
11)	T	Carbon disulfide	1.082	1.911	1.603	1.387	1.402	1.501	1.409	1.471	17.08
13)	T	Methylene chlorid	0.440	0.724	0.608	0.489	0.481	0.498	0.484	0.532	18.64
14)	T	Acrylonitrile		0.208	0.139	0.150	0.210	0.168	0.162	0.173	17.29
15)	T	tert-Butyl alcoho	0.017	0.017	0.020	0.017	0.021	0.016	0.015	0.018	12.59
16)	T	trans-1,2-Dichlor	0.345	0.484	0.433	0.400	0.436	0.449	0.431	0.425	10.23
17)	T	Methyl tert-butyl	1.049	1.110	0.961	1.066	1.214	1.170	1.141	1.101	7.67
18)	P	1,1-Dichloroethan	0.727	0.933	0.795	0.789	0.872	0.884	0.810	0.830	8.39
19)	T	Diisopropyl ether	1.241	1.401	1.409	1.408	1.643	1.584	1.525	1.459	9.26
20)	T	cis-1,2-Dichloroe	0.352	0.476	0.386	0.413	0.460	0.457	0.428	0.425	10.50
21)	T	2,2-Dichloropropa	0.365	0.418	0.362	0.330	0.340	0.314	0.282	0.344	12.49
22)	T	2-Butanone (MEK)	0.264	0.243	0.188	0.199	0.236	0.233	0.232	0.228	11.53
23)	T	Bromochloromethan		0.220	0.159	0.194	0.208	0.189	0.188	0.193	10.85
25)	C	Chloroform	0.778	0.869	0.729	0.738	0.803	0.799	0.738	0.779	6.43
26)	T	1,1,1-Trichloroet	0.509	0.674	0.699	0.600	0.642	0.656	0.648	0.633	9.89
27)	T	Carbon tetrachlor	0.448	0.683	0.678	0.587	0.632	0.672	0.651	0.621	13.41
28)	T	1,1-Dichloroprope	0.457	0.763	0.665	0.552	0.608	0.641	0.613	0.614	15.47
29)	T	1,2-Dichloroethan	0.754	0.823	0.621	0.683	0.751	0.721	0.672	0.718	9.19
30)	S	1,2-Dichloroethan	0.707	0.701	0.499	0.611	0.572	0.486	0.486	0.580	16.67
31)	I	1,4-Difluorobenzene	----------	ISTD	----------						
32)	M	Benzene	0.965	1.154	1.152	1.055	1.147	1.186	1.157	1.116	7.00
33)	M	Trichloroethene	0.238	0.341	0.336	0.286	0.308	0.320	0.319	0.307	11.54
34)	C	1,2-Dichloropropa	0.236	0.307	0.322	0.288	0.316	0.326	0.319	0.302	10.51
35)	T	Dibromomethane	0.133	0.191	0.152	0.169	0.187	0.174	0.177	0.169	11.97
36)	T	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	19.75
37)	T	Bromodichlorometh	0.293	0.346	0.343	0.343	0.387	0.401	0.394	0.358	10.65
39)	T	cis-1,3-Dichlorop	0.281	0.348	0.361	0.401	0.454	0.460	0.458	0.395	17.33
40)	T	4-Methyl-2-pentan	0.273	0.215	0.227	0.323	0.337	0.307	0.317	0.285	16.90
41)	S	Toluene-d8	1.138	1.149	1.245	1.209	1.189	1.160	1.219	1.187	3.34
42)	MC	Toluene	0.581	0.700	0.760	0.678	0.717	0.750	0.748	0.705	8.82
43)	T	trans-1,3-Dichlor	0.455	0.287	0.340	0.385	0.434	0.437	0.466	0.401	16.58
44)	T	1,1,2-Trichloroet		0.209	0.232	0.214	0.225	0.224	0.225	0.221	3.79
45)	T	Tetrachloroethene	0.219	0.385	0.354	0.278	0.288	0.303	0.305	0.305	17.59
46)	T	1,3-Dichloropropa	0.378	0.380	0.448	0.438	0.454	0.466	0.462	0.432	8.68
47)	T	2-Hexanone	0.186	0.187	0.194	0.204	0.259	0.235	0.227	0.213	13.07
48)	T	Dibromochlorometh		0.205	0.233	0.239	0.275	0.272	0.283	0.251	12.07
49)	T	1,2-Dibromoethane	0.228	0.238	0.276	0.260	0.275	0.276	0.278	0.261	7.90
50)	I	Chlorobenzene-d5	----------	ISTD	----------						
51)	MP	Chlorobenzene	0.774	0.978	0.969	0.877	0.912	0.954	0.933	0.914	7.75
52)	T	1,1,1,2-Tetrachlo	0.270	0.306	0.314	0.288	0.320	0.335	0.338	0.310	7.95
53)	C	Ethylbenzene	1.162	1.602	1.656	1.490	1.631	1.740	1.714	1.571	12.59
54)	T	m,p-Xylene	0.351	0.566	0.628	0.569	0.630	0.666	0.633	0.578	19.31

55)	T	o-Xylene	0.338	0.482	0.554	0.536	0.578	0.613	0.598	0.529	17.88
56)	T	Styrene		0.650	0.898	0.928	1.027	1.087	1.044	0.939	16.90
57)	P	Bromoform	0.219	0.141	0.143	0.164	0.212	0.211	0.206	0.185	18.66
58)	T	Isopropylbenzene		1.262	1.571	1.431	1.600	1.686	1.652	1.534	10.40
59)	S	Bromofluorobenzen	0.575	0.582	0.603	0.619	0.629	0.631	0.634	0.610	3.97
60)	P	1,1,2,2-Tetrachlo	0.406	0.446	0.467	0.423	0.484	0.476	0.483	0.455	6.75
61)	T	Bromobenzene	0.328	0.395	0.380	0.367	0.395	0.412	0.403	0.383	7.40
62)	T	1,2,3-Trichloropr	0.437	0.426	0.429	0.376	0.432	0.426	0.432	0.423	4.97
63)	T	n-Propylbenzene	1.222	1.917	2.099	1.828	1.955	2.075	2.014	1.873	16.12
64)	T	2-Chlorotoluene	0.817	1.177	1.266	1.097	1.189	1.258	1.233	1.148	13.68
65)	T	1,3,5-Trimethylbe		1.147	1.407	1.298	1.386	1.460	1.420	1.353	8.45
66)	T	4-Chlorotoluene		1.375	1.524	1.308	1.367	1.472	1.438	1.414	5.57
67)	T	tert-Butylbenzene		0.892	1.068	0.985	1.085	1.151	1.139	1.053	9.39
68)	T	1,2,4-Trimethylbe		1.105	1.428	1.320	1.389	1.498	1.459	1.366	10.38
69)	T	sec-Butylbenzene		1.473	1.803	1.600	1.674	1.793	1.743	1.681	7.59
70)	T	1,3-Dichlorobenze		0.816	0.829	0.720	0.761	0.805	0.765	0.783	5.25
71)	T	4-Isopropyltoluen		1.116	1.498	1.296	1.392	1.500	1.458	1.377	10.83
72)	T	1,4-Dichlorobenze		0.833	0.848	0.732	0.762	0.816	0.786	0.796	5.59
73)	T	n-Butylbenzene		1.219	1.405	1.255	1.295	1.392	1.343	1.318	5.69
74)	T	1,2-Dichlorobenze		0.682	0.788	0.706	0.747	0.777	0.748	0.742	5.48
75)	T	1,2-Dibromo-3-chl		0.063	0.065	0.066	0.094	0.092	0.092	0.079	19.61
76)	T	1,2,4-Trichlorobe		0.453	0.474	0.444	0.486	0.529	0.481	0.478	6.29
77)	T	Hexachlorobutadie		0.215	0.212	0.170	0.160	0.185	0.173	0.186	12.20
78)	T	Naphthalene		0.836	1.116	1.267	1.400	1.404	1.525	1.258	19.81
79)	T	1,2,3-Trichlorobe		0.383	0.500	0.453	0.484	0.533	0.490	0.474	10.85
80)	T	1,1,2-Trichloro-1	0.381	0.419	0.490	0.367	0.347	0.364	0.318	0.384	14.65
81)	T	Methyl acetate	0.406	0.294	0.272	0.264	0.366	0.270	0.278	0.307	18.24
82)	T	Cyclohexane		0.743	0.836	0.743	0.753	0.820	0.742	0.773	5.56
83)	T	Methylcyclohexane		0.694	0.656	0.549	0.594	0.644	0.597	0.622	8.39

(#) = Out of Range ### Number of calibration levels exceeded format ###

E8161007.M Tue Oct 18 16:04:55 2016 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-07-16\
Data File : E5694.D
Acq On : 7 Oct 2016 17:03
Operator : BARBARA
Sample : ICV100,ICV161007,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 07 17:31:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Fri Oct 07 16:26:24 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	112	0.00
2	T	Dichlorodifluoromethane	0.464	0.395	14.9	108	0.00
3	P	Chloromethane	0.707	0.583	17.5	104	0.00
4	C	Vinyl chloride	0.704	0.623	11.5	106	0.02
5	T	Bromomethane	0.308	0.280	9.1	107	0.00
6	T	Chloroethane	0.361	0.328	9.1	107	0.00
7	T	Trichlorofluoromethane	0.696	0.617	11.4	104	0.02
8	T	Acrolein	0.056	0.057	-1.8	116	0.00
9	MC	1,1-Dichloroethene	0.503	0.441	12.3	109	0.00
10	T	Acetone	0.121	0.120	0.8	116	-0.03
11	T	Carbon disulfide	1.471	1.398	5.0	112	0.00
13	T	Methylene chloride	0.532	0.485	8.8	113	0.00
14	T	Acrylonitrile	0.173	0.201	-16.2	108	-0.01
15	T	tert-Butyl alcohol (TBA)	0.018	0.020	-11.1	107	0.00
16	T	trans-1,2-Dichloroethene	0.425	0.463	-8.9	119	0.00
17	T	Methyl tert-butyl ether (MT	1.101	1.290	-17.2	119	0.00
18	P	1,1-Dichloroethane	0.830	0.926	-11.6	119	0.00
20	T	cis-1,2-Dichloroethene	0.425	0.507	-19.3	124	-0.01
21	T	2,2-Dichloropropane	0.344	0.332	3.5	110	0.00
22	T	2-Butanone (MEK)	0.228	0.267	-17.1	127	-0.01
23	T	Bromochloromethane	0.193	0.216	-11.9	117	0.00
25	C	Chloroform	0.779	0.873	-12.1	122	0.00
26	T	1,1,1-Trichloroethane	0.633	0.650	-2.7	114	-0.01
27	T	Carbon tetrachloride	0.621	0.660	-6.3	117	-0.01
28	T	1,1-Dichloropropene	0.614	0.633	-3.1	117	0.00
29	T	1,2-Dichloroethane (EDC)	0.718	0.851	-18.5	127	0.00
30	S	1,2-Dichloroethane-d4	0.580	0.661	-14.0	130	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	115	0.00
32	M	Benzene	1.116	1.195	-7.1	120	0.00
33	M	Trichloroethene	0.307	0.311	-1.3	116	0.00
34	C	1,2-Dichloropropane	0.302	0.335	-10.9	122	0.00
35	T	Dibromomethane	0.169	0.195	-15.4	120	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	102	-0.02
37	T	Bromodichloromethane	0.358	0.423	-18.2	126	0.00
39	T	cis-1,3-Dichloropropene	0.395	0.427	-8.1	108	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.285	0.326	-14.4	111	0.00
41	S	Toluene-d8	1.187	1.184	0.3	114	0.00
42	MC	Toluene	0.705	0.743	-5.4	119	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.472	-17.7	125	0.00
44	T	1,1,2-Trichloroethane	0.221	0.239	-8.1	122	0.00
45	T	Tetrachloroethene	0.305	0.291	4.6	116	0.00
46	T	1,3-Dichloropropane	0.432	0.488	-13.0	124	0.00
47	T	2-Hexanone	0.213	0.227	-6.6	101	0.00
48	T	Dibromochloromethane	0.251	0.253	-0.8	106	0.00

49	T	1,2-Dibromoethane (EDB)	0.261	0.289	-10.7	121	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	114	0.00
51	MP	Chlorobenzene	0.914	0.940	-2.8	118	0.00
52	T	1,1,1,2-Tetrachloroethane	0.310	0.339	-9.4	121	0.00
53	C	Ethylbenzene	1.571	1.664	-5.9	117	0.00
54	T	m,p-Xylene	0.578	0.631	-9.2	114	0.00
55	T	o-Xylene	0.529	0.594	-12.3	117	0.00
56	T	Styrene	0.939	1.048	-11.6	116	0.00
57	P	Bromoform	0.185	0.196	-5.9	105	0.00
58	T	Isopropylbenzene	1.534	1.567	-2.2	112	0.00
59	S	Bromofluorobenzene	0.610	0.618	-1.3	112	0.00
60	P	1,1,2,2-Tetrachloroethane	0.455	0.464	-2.0	110	0.00
61	T	Bromobenzene	0.383	0.396	-3.4	114	0.00
62	T	1,2,3-Trichloropropane	0.423	0.412	2.6	109	0.00
63	T	n-Propylbenzene	1.873	1.937	-3.4	113	0.00
64	T	2-Chlorotoluene	1.148	1.173	-2.2	113	0.00
65	T	1,3,5-Trimethylbenzene	1.353	1.342	0.8	111	0.00
66	T	4-Chlorotoluene	1.414	1.383	2.2	116	0.00
67	T	tert-Butylbenzene	1.053	1.035	1.7	109	0.00
68	T	1,2,4-Trimethylbenzene	1.366	1.353	1.0	111	0.00
69	T	sec-Butylbenzene	1.681	1.609	4.3	110	0.00
70	T	1,3-Dichlorobenzene	0.783	0.750	4.2	113	0.00
71	T	4-Isopropyltoluene	1.377	1.382	-0.4	113	0.00
72	T	1,4-Dichlorobenzene	0.796	0.754	5.3	113	0.00
73	T	n-Butylbenzene	1.318	1.284	2.6	113	0.00
74	T	1,2-Dichlorobenzene	0.742	0.713	3.9	109	0.00
75	T	1,2-Dibromo-3-chloropropane	0.079	0.090	-13.9	109	0.00
76	T	1,2,4-Trichlorobenzene	0.478	0.472	1.3	111	0.00
77	T	Hexachlorobutadiene	0.186	0.165	11.3	118	0.00
78	T	Naphthalene	1.258	1.386	-10.2	113	0.00
79	T	1,2,3-Trichlorobenzene	0.474	0.452	4.6	107	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.384	0.330	14.1	109	0.00
81	T	Methyl acetate	0.307	0.343	-11.7	107	-0.01
82	T	Cyclohexane	0.773	0.737	4.7	112	0.00
83	T	Methylcyclohexane	0.622	0.593	4.7	114	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E8161007.M Tue Oct 18 16:06:50 2016 RT1

Evaluate Continuing Calibration Report

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5896.D
Acq On : 19 Oct 2016 16:20
Operator : BARBARA
Sample : CCV100,CCV161019,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 19 16:48:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 35% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	89	0.00
2	T	Dichlorodifluoromethane	0.464	0.417	10.1	90	0.00
3	P	Chloromethane	0.707	0.750	-6.1	106	0.00
4	C	Vinyl chloride	0.704	0.675	4.1	91	0.00
5	T	Bromomethane	0.308	0.272	11.7	82	0.00
6	T	Chloroethane	0.361	0.340	5.8	88	0.00
7	T	Trichlorofluoromethane	0.696	0.666	4.3	89	0.00
9	MC	1,1-Dichloroethene	0.503	0.464	7.8	91	0.00
10	T	Acetone	0.121	0.134	-10.7	102	0.38
11	T	Carbon disulfide	1.471	1.475	-0.3	94	-0.01
12	T	Vinyl acetate	0.361	0.327	9.4	60	0.00
13	T	Methylene chloride	0.532	0.491	7.7	91	0.00
14	T	Acrylonitrile	0.173	0.156	9.8	66	0.00
15	T	tert-Butyl alcohol (TBA)	0.018	0.015	16.7	64	0.00
16	T	trans-1,2-Dichloroethene	0.425	0.471	-10.8	96	0.00
17	T	Methyl tert-butyl ether (MT	1.101	1.005	8.7	74	0.00
18	P	1,1-Dichloroethane	0.830	0.954	-14.9	97	0.00
19	T	Diisopropyl ether (DIPE)	1.459	1.734	-18.8	94	0.00
20	T	cis-1,2-Dichloroethene	0.425	0.498	-17.2	96	0.00
21	T	2,2-Dichloropropane	0.344	0.392	-14.0	103	0.00
22	T	2-Butanone (MEK)	0.228	0.214	6.1	81	0.00
23	T	Bromochloromethane	0.193	0.200	-3.6	85	0.00
24	T	Tetrahydrofuran	0.121	0.118	2.5	75	0.00
25	C	Chloroform	0.779	0.851	-9.2	94	0.00
26	T	1,1,1-Trichloroethane	0.633	0.712	-12.5	99	0.00
27	T	Carbon tetrachloride	0.621	0.671	-8.1	94	0.00
28	T	1,1-Dichloropropene	0.614	0.680	-10.7	100	0.00
29	T	1,2-Dichloroethane (EDC)	0.718	0.722	-0.6	86	0.00
30	S	1,2-Dichloroethane-d4	0.580	0.508	12.4	79	0.00
31	I	1,4-Difluorobenzene	1.000	1.000	0.0	87	0.00
32	M	Benzene	1.116	1.243	-11.4	94	0.00
33	M	Trichloroethene	0.307	0.342	-11.4	96	0.00
34	C	1,2-Dichloropropane	0.302	0.346	-14.6	95	0.00
35	T	Dibromomethane	0.169	0.175	-3.6	81	0.00
36	T	1,4-Dioxane	0.001	0.001	0.0	68	0.00
37	T	Bromodichloromethane	0.358	0.388	-8.4	87	0.00
39	T	cis-1,3-Dichloropropene	0.395	0.417	-5.6	80	0.00
40	T	4-Methyl-2-pentanone (MIBK)	0.285	0.246	13.7	63	0.00
41	S	Toluene-d8	1.187	1.193	-0.5	87	0.00
42	MC	Toluene	0.705	0.769	-9.1	93	0.00
43	T	trans-1,3-Dichloropropene	0.401	0.371	7.5	74	0.00
44	T	1,1,2-Trichloroethane	0.221	0.214	3.2	82	0.00
45	T	Tetrachloroethene	0.305	0.316	-3.6	95	0.00
46	T	1,3-Dichloropropane	0.432	0.435	-0.7	83	0.00

47	T	2-Hexanone	0.213	0.188	11.7	63	0.00
48	T	Dibromochloromethane	0.251	0.234	6.8	74	0.00
49	T	1,2-Dibromoethane (EDB)	0.261	0.261	0.0	82	0.00
50	I	Chlorobenzene-d5	1.000	1.000	0.0	85	0.00
51	MP	Chlorobenzene	0.914	0.999	-9.3	93	0.00
52	T	1,1,1,2-Tetrachloroethane	0.310	0.334	-7.7	88	0.00
53	C	Ethylbenzene	1.571	1.783	-13.5	93	0.00
54	T	m,p-Xylene	0.578	0.672	-16.3	90	0.00
55	T	o-Xylene	0.529	0.634	-19.8	93	0.00
56	T	Styrene	0.939	1.078	-14.8	89	0.00
57	P	Bromoform	0.185	0.150	12.7	52	0.00
58	T	Isopropylbenzene	1.534	1.732	-12.9	92	0.00
59	S	Bromofluorobenzene	0.610	0.623	-2.1	84	0.00
60	P	1,1,2,2-Tetrachloroethane	0.455	0.405	11.0	71	0.00
61	T	Bromobenzene	0.383	0.407	-6.3	87	0.00
62	T	1,2,3-Trichloropropane	0.423	0.362	14.4	71	0.00
63	T	n-Propylbenzene	1.873	2.118	-13.1	92	0.00
64	T	2-Chlorotoluene	1.148	1.282	-11.7	91	0.00
65	T	1,3,5-Trimethylbenzene	1.353	1.502	-11.0	92	0.00
66	T	4-Chlorotoluene	1.414	1.496	-5.8	93	0.00
67	T	tert-Butylbenzene	1.053	1.210	-14.9	94	0.00
68	T	1,2,4-Trimethylbenzene	1.366	1.538	-12.6	94	0.00
69	T	sec-Butylbenzene	1.681	1.834	-9.1	93	0.00
70	T	1,3-Dichlorobenzene	0.783	0.800	-2.2	89	0.00
71	T	4-Isopropyltoluene	1.377	1.572	-14.2	96	0.00
72	T	1,4-Dichlorobenzene	0.796	0.823	-3.4	91	0.00
73	T	n-Butylbenzene	1.318	1.473	-11.8	96	0.00
74	T	1,2-Dichlorobenzene	0.742	0.774	-4.3	88	0.00
75	T	1,2-Dibromo-3-chloropropane	0.079	0.066	16.5	59	0.00
76	T	1,2,4-Trichlorobenzene	0.478	0.544	-13.8	95	0.00
77	T	Hexachlorobutadiene	0.186	0.192	-3.2	101	0.00
78	T	Naphthalene	1.258	1.308	-4.0	79	0.00
79	T	1,2,3-Trichlorobenzene	0.474	0.523	-10.3	91	0.00
80	T	1,1,2-Trichloro-1,2,2-trifl	0.384	0.381	0.8	93	0.00
81	T	Methyl acetate	0.307	0.259	15.6	60	0.00
82	T	Cyclohexane	0.773	0.916	-18.5	103	0.00
83	T	Methylcyclohexane	0.622	0.691	-11.1	98	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

E8161007.M Thu Oct 20 13:50:17 2016 RT1

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E5688.D Date Analyzed: 10/07/2016

Instrument ID: MSD_E Time Analyzed: 13:38

	50UG/L	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
	12 HOUR STD	318451	6.41	490965	7.23	422021	10.58
	UPPER LIMIT	636902	6.91	981930	7.73	844042	11.08
	LOWER LIMIT	159225.5	5.91	245482.5	6.73	211010.5	10.08
	LAB SAMPLE ID						
01	ICC00.5	275102	6.40	443791	7.23	379042	10.58
02	ICC001	261470	6.41	423679	7.23	359332	10.58
03	ICC005	255357	6.41	372495	7.23	334992	10.58
04	ICC020	288409	6.41	429458	7.23	381955	10.58
05	ICC150	328452	6.41	504457	7.23	427143	10.58
06	ICC200	350582	6.40	522406	7.23	466420	10.58
07	ICV100	357574	6.40	564032	7.23	481879	10.58
08							
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IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): E5896.D

Date Analyzed: 10/19/2016

Instrument ID: MSD_E

Time Analyzed: 16:20

	50UG/L	IS1 AREA	#	RT	#	IS2 AREA	#	RT	#	IS3 AREA	#	RT	#
	12 HOUR STD	283268		6.40		425528		7.23		357165		10.58	
	UPPER LIMIT	566536		6.90		851056		7.73		714330		11.08	
	LOWER LIMIT	141634		5.90		212764		6.73		178582.5		10.08	
	LAB SAMPLE ID												
01	BLKA161019	259848		6.40		412858		7.23		347350		10.58	
02	E16-09283-003	268570		6.41		415448		7.23		346726		10.58	
03	LCSA161019	276603		6.41		435443		7.23		371902		10.58	
04	E16-09408-001MS	285963		6.41		443969		7.23		371758		10.58	
05	E16-09408-001MSD	290146		6.40		449285		7.23		390100		10.58	
06	E16-09581-020	274298		6.40		442779		7.23		366095		10.58	
07	E16-09581-021	249519		6.41		410626		7.23		355251		10.58	
08	E16-09408-001	257174		6.40		412089		7.23		345388		10.58	
09	E16-09408-002	257606		6.40		396951		7.23		341526		10.58	
10	E16-09408-003	243134		6.41		377624		7.23		321443		10.58	
11	E16-09635-001	239670		6.40		397656		7.23		335144		10.58	
12	E16-09635-002	246685		6.41		407857		7.23		350824		10.58	
13	E16-09635-003	233472		6.41		372115		7.23		324513		10.58	
14	E16-09635-004	243775		6.41		398100		7.23		330962		10.58	
15	E16-09635-005	250041		6.41		392683		7.23		333763		10.58	
16	E16-09635-006	255947		6.41		415333		7.23		348350		10.58	
17	E16-09635-007	261365		6.40		435772		7.23		370699		10.58	
18	E16-09635-008	256283		6.40		398456		7.23		343721		10.58	
19	E16-09635-009	270928		6.40		434363		7.23		378612		10.58	
20													
21													
22													

IS1 = PENTAFLUOROBENZENE
IS2 = 1,4-DIFLUOROBENZENE
IS3 = CHLOROBENZENE-D5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM 8

VOLATILE ORGANICS SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-19-16\
Data File : E5905.D
Acq On : 19 Oct 2016 20:48
Operator : BARBARA
Sample : EB-101216,E16-09581-020,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/13/16,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 15:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

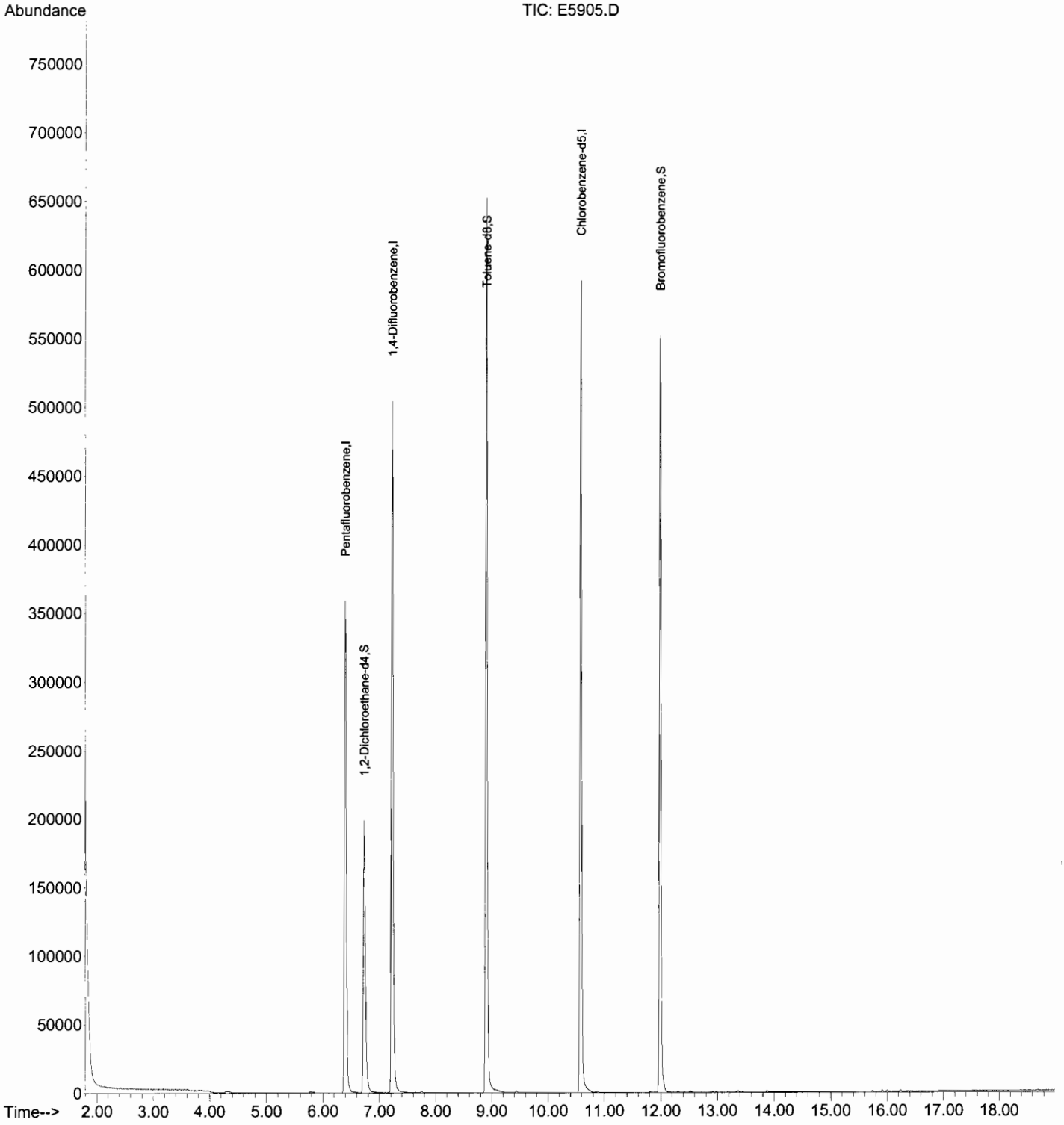
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.40	168	274298	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	442779	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	366095	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	188616	59.24	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 118.48%			
41) Toluene-d8	8.91	98	495912	47.18	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.36%			
59) Bromofluorobenzene	11.99	95	222624	49.80	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 99.60%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\10-19-16\
Data File : E5905.D
Acq On : 19 Oct 2016 20:48
Operator : BARBARA
Sample : EB-101216,E16-09581-020,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/13/16,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 20 15:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5906.D
Acq On : 19 Oct 2016 21:18
Operator : BARBARA
Sample : TRIP_BLANK,E16-09581-021,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/13/16,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 15:58:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

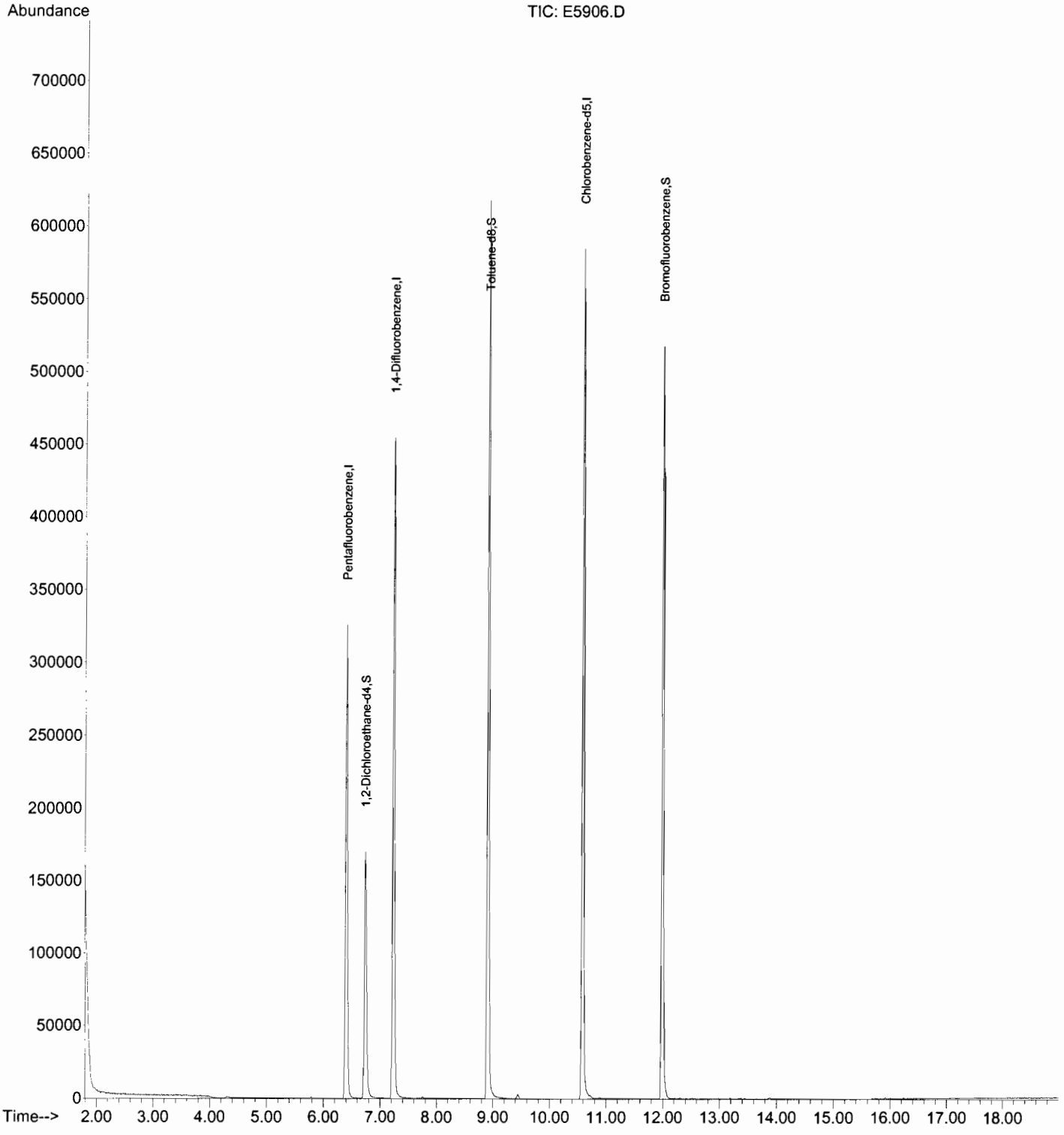
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.41	168	249519	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	410626	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	355251	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	168932	58.33	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 116.66%			
41) Toluene-d8	8.91	98	469861	48.20	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.40%			
59) Bromofluorobenzene	11.98	95	210750	48.59	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 97.18%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5906.D
Acq On : 19 Oct 2016 21:18
Operator : BARBARA
Sample : TRIP_BLANK,E16-09581-021,A,5mL,100
Misc : AMEC-SMRST/AMTRAK_,10/12/16,10/13/16,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Oct 20 15:58:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



INTEGRATED ANALYTICAL LABORATORIES

VOLATILE ORGANICS

Lab ID: BLKA161019
Client ID: BLKA161019
Date Received: NA
Date Analyzed: 10/19/2016
Data file: E5899.D

GC/MS Column: DB-624
Sample wt/vol: 5mL
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Tetrachloroethene	ND		0.500	0.381

Total Target Compounds (1): 0

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5899.D
Acq On : 19 Oct 2016 17:49
Operator : BARBARA
Sample : BLKA161019,BLKA161019,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 20 13:51:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration

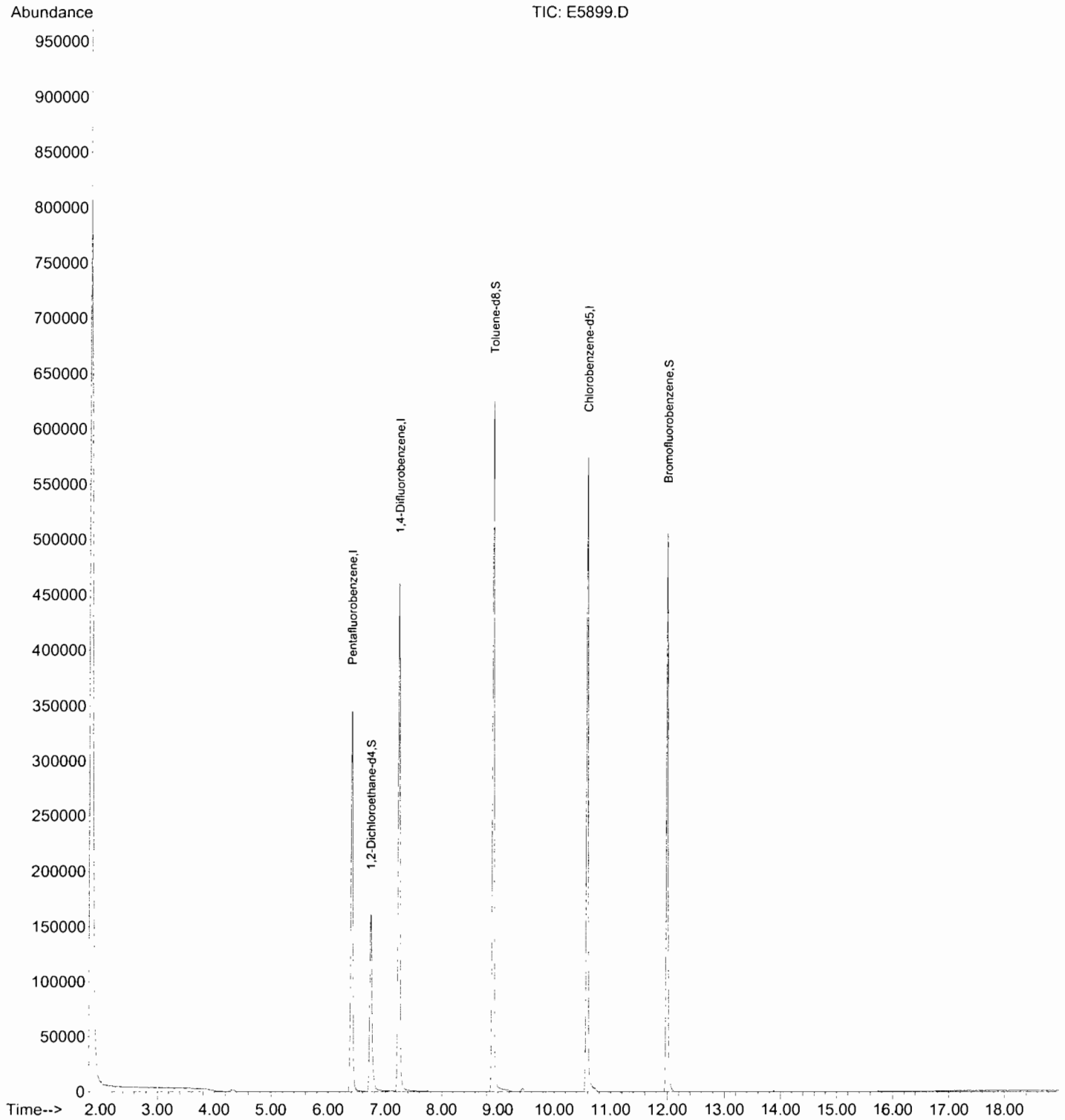
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.40	168	259848	50.00	UG	0.00
31) 1,4-Difluorobenzene	7.23	114	412858	50.00	UG	0.00
50) Chlorobenzene-d5	10.58	117	347350	50.00	UG	0.00
System Monitoring Compounds						
30) 1,2-Dichloroethane-d4	6.74	65	167138	55.42	UG	0.00
Spiked Amount 50.000	Range 69 - 166		Recovery = 110.84%			
41) Toluene-d8	8.91	98	464121	47.35	UG	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.70%			
59) Bromofluorobenzene	11.99	95	203525	47.99	UG	0.00
Spiked Amount 50.000	Range 66 - 120		Recovery = 95.98%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\10-19-16\
Data File : E5899.D
Acq On : 19 Oct 2016 17:49
Operator : BARBARA
Sample : BLKA161019,BLKA161019,A,5mL,100
Misc : NA,NA,NA,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 20 13:51:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\E8161007.M
Quant Title : VOLATILE ORGANICS BY EPA METHOD 8260C
QLast Update : Tue Oct 18 17:51:31 2016
Response via : Initial Calibration



PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/12/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA161010-14	AQUEOUS	80		86		77		102	
PCB	LCSA161010-14	AQUEOUS	74		84		72		91	
COMPOSITE_	E16-09038-022MS	AQUEOUS	72		92		69		103	
COMPOSITE_	E16-09038-023MS	AQUEOUS	73		94		70		111	
DISCRETE	E16-09038-016	AQUEOUS	64		72		62		78	
DISCRETE	E16-09038-017	AQUEOUS	60		79		59		77	
COMPOSIT	E16-09038-018	AQUEOUS	68		78		66		79	
COMPOSIT	E16-09038-019	AQUEOUS	63		82		62		78	
COMPOSIT	E16-09038-020	AQUEOUS	62		74		59		78	
COMPOSIT	E16-09038-021	AQUEOUS	63		87		62		83	
COMPOSIT	E16-09038-024	AQUEOUS	71		82		68		97	
COMPOSIT	E16-09038-025	AQUEOUS	61		82		59		77	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/18/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA161017-25	AQUEOUS	72		66		69		66	
PCB	LCSA161017-25	AQUEOUS	74		70		69		69	
MW-P74-1	E16-09408-001	AQUEOUS	60		66		60		67	
FB-10101	E16-09408-002	AQUEOUS	78		74		74		72	
EB-10101	E16-09537-021	AQUEOUS	63		70		60		73	
EB-10111	E16-09537-044	AQUEOUS	72		78		69		74	
EB-10121	E16-09581-020	AQUEOUS	67		73		66		70	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-23	SOIL	85		99		89		89	
PCB	LCSS161017-23	SOIL	84		102		82		90	
PCB	E16-09537-048MS	SOIL	83		102		82		90	
PCB	E16-09537-048MS	SOIL	84		103		83		90	
E-32_(4.	E16-09537-048	SOIL	82		101		82		90	
E-32_(5.	E16-09537-049	SOIL	82		100		82		90	
E-41_(0.	E16-09537-050	SOIL	79		98		82		98	
E-41_(2-	E16-09537-051	SOIL	81		100		82		94	
X-2_(2-2	E16-09537-054	SOIL	80		99		81		90	
E-50_(4.	E16-09537-055	SOIL	72		107		79		101	
E-51_(4.	E16-09537-056	SOIL	84		100		84		98	
E-50_(0.	E16-09537-058	SOIL	D		0	D	0	D	0	D
E-41_(0.	E16-09537-050DL	SOIL	91		109		93		104	
E-50_(2-	E16-09537-059	SOIL	81		94		83		102	
WC-1	E16-09555-001	SOIL	81		94		82		105	
WC-2	E16-09555-002	SOIL	81		96		82		90	
E-35_(2-	E16-09581-002	SOIL	78		79		82		109	
E-53_(0.	E16-09581-007	SOIL	84		89		88		109	
E-58_(0.	E16-09581-008	SOIL	79		82		83		93	
E-59_(0.	E16-09581-009	SOIL	76		81		81		112	
E-48_(0.	E16-09581-010	SOIL	76		96		85		113	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161017-23	SOIL	85		99		89		89	
PCB	LCSS161017-23	SOIL	84		102		82		90	
E-35_(0.	E16-09581-001	SOIL	77		75		81		93	
E-46_(0.	E16-09581-011	SOIL	86		106		96		123	
E-45_(0.	E16-09581-003	SOIL	76		83		79		128	
E-48_(0.	E16-09581-010DL	SOIL	90		104		91		112	
WC-SM	E16-09573-001	SOIL	85		105		85		100	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/19/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS161018-01	SOIL	82		94		82		89	
PCB	LCSS161018-01	SOIL	82		96		81		89	
PCB	E16-09581-015MS	SOIL	71		94		81		103	
PCB	E16-09581-015MS	SOIL	72		91		81		115	
E-38_(0.	E16-09581-015	SOIL	70		85		81		111	
E-38_(2-	E16-09581-016	SOIL	74		81		82		130	
E-38_(4.	E16-09581-017	SOIL	75		80		81		100	
X-3_(0.5	E16-09581-018	SOIL	76		80		82		164	
X-4_(0.5	E16-09581-019	SOIL	76		78		81		103	
PX-101	E16-09505-001	SOIL	76		82		81		109	
PX-102	E16-09505-002	SOIL	77		85		82		96	
PX-103	E16-09505-003	SOIL	80		87		84		117	
PX-104	E16-09505-004	SOIL	78		87		82		93	
PX-105	E16-09505-005	SOIL	79		87		83		138	
PX-1	E16-09629-001	SOIL	79		90		83		97	
PX-2	E16-09629-002	SOIL	80		91		84		93	
PX-3	E16-09629-003	SOIL	79		92		82		87	
PX-4	E16-09629-004	SOIL	79		90		82		85	
PX-5	E16-09629-005	SOIL	80		91		84		96	
PX-6	E16-09629-006	SOIL	78		86		82		103	
WC-1	E16-09644-001	SOIL	72		73		86		103	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/26/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
BB-ST2-S	E16-09848-073		89		118		89		108	
PX-1	E16-09793-001	SOIL	81		98		84		95	
PX-2	E16-09793-002	SOIL	84		110		86		93	
PX-3	E16-09793-003	SOIL	83		106		86		97	
PX-4	E16-09793-004	SOIL	85		98		88		94	
PX-5	E16-09793-005	SOIL	83		108		85		97	
E-54_(2-	E16-09537-002	SOIL	77		106		80		98	
E-42_(4-	E16-09537-006	SOIL	81		97		83		94	
E-43_(4.	E16-09537-025	SOIL	81		96		83		94	
E-41_(5-	E16-09537-053	SOIL	88		112		91		100	
E-44_(4.	E16-09537-057	SOIL	84		102		87		101	
20161024	E16-09856-001	SOIL	84		109		87		108	
E-45_(2-	E16-09581-004	SOIL	79		104		81		104	
E-45_(4.	E16-09581-006	SOIL	81		95		84		92	
E-46_(2-	E16-09581-012	SOIL	81		94		84		99	
E-46_(4.	E16-09581-014	SOIL	82		102		85		103	
PCB	BLKS161025-09	SOIL	86		91		91		99	
PCB	LCSS161025-09	SOIL	80		95		80		88	
PCB	E16-09793-001MS	SOIL	87		101		89		93	
PCB	E16-09793-001MS	SOIL	84		102		86		100	
SOIL	E16-09799-001	SOIL	88		99		88		94	
BB-ST1-S	E16-09848-072		103		104		108		109	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSA161017-25
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3810.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	357.5	72		32-132
Aroclor-1260	500	0.0	387.8	78		46-137

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161017-23
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0845.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	467.9	94		40-137
Aroclor-1260	500	0.0	491.0	98		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161018-01
Date Received: NA
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0874.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	462.7	93		40-137
Aroclor-1260	500	0.0	480.1	96		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS161025-09
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4086.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	587.5	118		40-137
Aroclor-1260	500	0.0	647.0	129		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09038-020
Date Received: 09/28/2016
Date Extracted: 10/10/2016
Date Analyzed: 10/12/2016
MS Data file: Y0762.D
MSD Data file: Y0763.D

GC Column: DB-5/DB1701P
Sample wt/vol: 500ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	382.6	77		374.2	75		2		15-144/21
Aroclor-1260	500	11.7	437.5	85		430.7	84		2		35-160/21

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09537-048
Date Received: 10/12/2016
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
MS Data file: Y0846.D
MSD Data file: Y0847.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.67g
Matrix-Units: Soil-µg/Kg
% Moisture: 7.40
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	459.9	92		474.0	95		3		12-163/25
Aroclor-1260	500	27.1	517.1	98		528.9	100		2		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09581-015
Date Received: 10/13/2016
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
MS Data file: Y0875.D
MSD Data file: Y0876.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.86g
Matrix-Units: Soil-µg/Kg
% Moisture: 15.9
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	467.6	94		441.3	88		6		12-163/25
Aroclor-1260	500	764.0	1204.1	88		1193.5	86		1		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E16-09793-001
Date Received: 10/20/2016
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
MS Data file: R4087.D
MSD Data file: R4088.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.65g
Matrix-Units: Soil-µg/Kg
% Moisture: 10.1
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	637.8	128		617.4	123		3		12-163/25
Aroclor-1260	500	0.0	673.6	135		722.5	145		7		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

PCB METHOD BLANK SUMMARY

Lab File ID: Y0760.D

Instrument ID: GC-Y

Date Extracted: 10/10/2016

Matrix: AQUEOUS

Date Analyzed: 10/12/2016

Time Analyzed: 09:05

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA161010-14	10/12/2016	09:22
COMPOSITE_	E16-09038-022MS	10/12/2016	09:44
COMPOSITE_	E16-09038-023MSD	10/12/2016	10:01
DISCRETE	E16-09038-016	10/12/2016	10:18
DISCRETE	E16-09038-017	10/12/2016	10:36
COMPOSIT	E16-09038-018	10/12/2016	10:53
COMPOSIT	E16-09038-019	10/12/2016	11:11
COMPOSIT	E16-09038-020	10/12/2016	11:28
COMPOSIT	E16-09038-021	10/12/2016	11:45
COMPOSIT	E16-09038-024	10/12/2016	12:03
COMPOSIT	E16-09038-025	10/12/2016	12:20

PCB METHOD BLANK SUMMARY

Lab File ID:	R3809.D	Instrument ID:	GC-R
Date Extracted:	10/17/2016	Matrix:	AQUEOUS
Date Analyzed:	10/18/2016	Time Analyzed:	15:58

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA161017-25	10/18/2016	16:16
MW-P74-1	E16-09408-001	10/18/2016	16:37
FB-10101	E16-09408-002	10/18/2016	16:54
EB-10101	E16-09537-021	10/18/2016	17:12
EB-10111	E16-09537-044	10/18/2016	17:29
EB-10121	E16-09581-020	10/18/2016	17:47

PCB METHOD BLANK SUMMARY

Lab File ID: Y0844.D

Instrument ID: GC-Y

Date Extracted: 10/17/2016

Matrix: SOIL

Date Analyzed: 10/19/2016

Time Analyzed: 11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-23	10/19/2016	11:33
PCB	E16-09537-048MS	10/19/2016	11:50
PCB	E16-09537-048MSD	10/19/2016	12:08
E-32_(4.	E16-09537-048	10/19/2016	12:25
E-32_(5.	E16-09537-049	10/19/2016	12:42
E-41_(0.	E16-09537-050	10/19/2016	13:00
E-41_(2-	E16-09537-051	10/19/2016	13:17
X-2_(2-2	E16-09537-054	10/19/2016	13:34
E-50_(4.	E16-09537-055	10/19/2016	13:52
E-51_(4.	E16-09537-056	10/19/2016	14:09
E-50_(0.	E16-09537-058	10/19/2016	15:23
E-41_(0.	E16-09537-050DL	10/19/2016	16:03
E-50_(2-	E16-09537-059	10/19/2016	16:37
WC-1	E16-09555-001	10/19/2016	16:55
WC-2	E16-09555-002	10/19/2016	17:12
E-35_(2-	E16-09581-002	10/19/2016	18:04
E-53_(0.	E16-09581-007	10/19/2016	18:38
E-58_(0.	E16-09581-008	10/19/2016	18:56
E-59_(0.	E16-09581-009	10/19/2016	19:13
E-48_(0.	E16-09581-010	10/19/2016	19:30

PCB METHOD BLANK SUMMARY

Lab File ID:	Y0844.D	Instrument ID:	GC-Y
Date Extracted:	10/17/2016	Matrix:	SOIL
Date Analyzed:	10/19/2016	Time Analyzed:	11:16

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161017-23	10/19/2016	11:33
E-35_(0.	E16-09581-001	10/20/2016	10:28
E-46_(0.	E16-09581-011	10/20/2016	10:45
E-45_(0.	E16-09581-003	10/20/2016	11:02
E-48_(0.	E16-09581-010DL	10/20/2016	11:20
WC-SM	E16-09573-001	10/20/2016	11:37

PCB METHOD BLANK SUMMARY

Lab File ID:	Y0873.D	Instrument ID:	GC-Y
Date Extracted:	10/18/2016	Matrix:	SOIL
Date Analyzed:	10/19/2016	Time Analyzed:	21:31

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS161018-01	10/19/2016	21:49
PCB	E16-09581-015MS	10/19/2016	22:06
PCB	E16-09581-015MSD	10/19/2016	22:23
E-38_(0.	E16-09581-015	10/19/2016	22:41
E-38_(2-	E16-09581-016	10/19/2016	22:58
E-38_(4.	E16-09581-017	10/19/2016	23:15
X-3_(0.5	E16-09581-018	10/19/2016	23:32
X-4_(0.5	E16-09581-019	10/19/2016	23:50
PX-101	E16-09505-001	10/20/2016	00:07
PX-102	E16-09505-002	10/20/2016	00:24
PX-103	E16-09505-003	10/20/2016	00:42
PX-104	E16-09505-004	10/20/2016	00:59
PX-105	E16-09505-005	10/20/2016	01:16
PX-1	E16-09629-001	10/20/2016	03:00
PX-2	E16-09629-002	10/20/2016	03:17
PX-3	E16-09629-003	10/20/2016	03:35
PX-4	E16-09629-004	10/20/2016	03:52
PX-5	E16-09629-005	10/20/2016	04:09
PX-6	E16-09629-006	10/20/2016	04:27
WC-1	E16-09644-001	10/20/2016	04:44

PCB METHOD BLANK SUMMARY

Lab File ID: R4085.D Instrument ID: GC-R

Date Extracted: 10/25/2016 Matrix: -

Date Analyzed: 10/27/2016 Time Analyzed: 08:38

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
BB-ST2-S	E16-09848-073	10/27/2016	00:07
PX-1	E16-09793-001	10/27/2016	00:42
PX-2	E16-09793-002	10/27/2016	01:17
PX-3	E16-09793-003	10/27/2016	01:52
PX-4	E16-09793-004	10/27/2016	02:27
PX-5	E16-09793-005	10/27/2016	03:01
E-54_(2-	E16-09537-002	10/27/2016	03:36
E-42_(4-	E16-09537-006	10/27/2016	03:54
E-43_(4.	E16-09537-025	10/27/2016	04:11
E-41_(5-	E16-09537-053	10/27/2016	04:29
E-44_(4.	E16-09537-057	10/27/2016	04:46
20161024	E16-09856-001	10/27/2016	05:03
E-45_(2-	E16-09581-004	10/27/2016	05:21
E-45_(4.	E16-09581-006	10/27/2016	05:38
E-46_(2-	E16-09581-012	10/27/2016	05:56
E-46_(4.	E16-09581-014	10/27/2016	06:13
PCB	LCSS161025-09	10/27/2016	08:55
PCB	E16-09793-001MS	10/27/2016	09:13
PCB	E16-09793-001MSD	10/27/2016	09:30
SOIL	E16-09799-001	10/27/2016	10:05
BB-ST1-S	E16-09848-072	10/27/2016	10:22

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.03	3.03	3.03	3.03	3.04	3.03	2.96	3.10
Aroclor-1016 {2}	3.85	3.85	3.85	3.85	3.85	3.85	3.78	3.92
Aroclor-1016 {3}	4.39	4.40	4.40	4.40	4.40	4.40	4.33	4.47
Aroclor-1016 {4}	4.90	4.90	4.90	4.90	4.90	4.90	4.83	4.97
Aroclor-1016 {5}	5.29	5.29	5.29	5.29	5.29	5.29	5.22	5.36
Aroclor-1221			1.95				1.88	2.02
Aroclor-1221 {2}			2.83				2.76	2.90
Aroclor-1221 {3}			2.95				2.88	3.02
Aroclor-1221 {4}			3.03				2.96	3.10
Aroclor-1221 {5}			3.62				3.55	3.69
Aroclor-1232			3.03				2.96	3.10
Aroclor-1232 {2}			3.85				3.78	3.92
Aroclor-1232 {3}			4.51				4.44	4.58
Aroclor-1232 {4}			5.10				5.03	5.17
Aroclor-1232 {5}			5.29				5.22	5.36
Aroclor-1242			3.85				3.78	3.92
Aroclor-1242 {2}			4.78				4.71	4.85
Aroclor-1242 {3}			5.10				5.03	5.17
Aroclor-1242 {4}			5.79				5.72	5.86
Aroclor-1242 {5}			6.07				6.00	6.14
Aroclor-1248			4.25				4.17	4.33
Aroclor-1248 {2}			4.78				4.70	4.86
Aroclor-1248 {3}			5.10				5.02	5.18
Aroclor-1248 {4}			5.79				5.71	5.87
Aroclor-1248 {5}			6.07				5.99	6.15
Aroclor-1254			6.19				6.11	6.27
Aroclor-1254 {2}			6.62				6.54	6.70
Aroclor-1254 {3}			6.79				6.70	6.88
Aroclor-1254 {4}			7.23				7.14	7.32
Aroclor-1254 {5}			8.07				7.98	8.16
Aroclor-1260	8.07	8.06	8.06	8.06	8.06	8.07	7.17	8.97
Aroclor-1260 {2}	8.74	8.74	8.74	8.73	8.74	8.74	7.84	9.64
Aroclor-1260 {3}	9.21	9.21	9.21	9.21	9.21	9.21	8.31	10.11
Aroclor-1260 {4}	9.70	9.70	9.69	9.69	9.69	9.69	8.79	10.59
Aroclor-1260 {5}	10.75	10.75	10.75	10.75	10.75	10.75	9.85	11.65

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	491014	579943	625620	612734	596105	581083	9.16
Aroclor-1016 {2}	752234	865462	845296	831053	792257	817260	5.52
Aroclor-1016 {3}	978759	1192176	1134924	1111425	1078138	1099084	7.20
Aroclor-1016 {4}	503644	558117	552031	528304	503814	529182	4.87
Aroclor-1016 {5}	772440	885842	905386	896982	879382	868007	6.26
Aroclor-1221			330955				
Aroclor-1221 {2}			524118				
Aroclor-1221 {3}			331582				
Aroclor-1221 {4}			1183134				
Aroclor-1221 {5}			242831				
Aroclor-1232			774050				
Aroclor-1232 {2}			427464				
Aroclor-1232 {3}			398104				
Aroclor-1232 {4}			408494				
Aroclor-1232 {5}			565165				
Aroclor-1242			772812				
Aroclor-1242 {2}			558750				
Aroclor-1242 {3}			658547				
Aroclor-1242 {4}			1252589				
Aroclor-1242 {5}			1154570				
Aroclor-1248			1683740				
Aroclor-1248 {2}			969193				
Aroclor-1248 {3}			1212917				
Aroclor-1248 {4}			2172911				
Aroclor-1248 {5}			1525846				
Aroclor-1254			2481449				
Aroclor-1254 {2}			1566129				
Aroclor-1254 {3}			3056941				
Aroclor-1254 {4}			3186703				
Aroclor-1254 {5}			3108056				
Aroclor-1260	2335344	2625739	2678500	2649292	2685068	2594789	5.66
Aroclor-1260 {2}	1178434	1257909	1275058	1256075	1235419	1240579	3.02
Aroclor-1260 {3}	2968230	3409371	3549851	3520945	3577307	3405141	7.41
Aroclor-1260 {4}	1457030	1625114	1672954	1679539	1720836	1631095	6.32
Aroclor-1260 {5}	685104	784132	829026	826856	841999	793423	8.11
					Average %RSD		6.35

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.73	3.72	3.73	3.72	3.73	3.73	3.66	3.80
Aroclor-1016 {2}	4.34	4.33	4.33	4.33	4.34	4.33	4.26	4.40
Aroclor-1016 {3}	5.10	5.09	5.09	5.09	5.10	5.10	5.03	5.17
Aroclor-1016 {4}	5.31	5.30	5.30	5.30	5.31	5.30	5.23	5.37
Aroclor-1016 {5}	5.48	5.48	5.48	5.48	5.48	5.48	5.41	5.55
Aroclor-1221			2.37				2.30	2.44
Aroclor-1221 {2}			3.40				3.33	3.47
Aroclor-1221 {3}			3.64				3.57	3.71
Aroclor-1221 {4}			3.73				3.66	3.80
Aroclor-1221 {5}			5.10				5.03	5.17
Aroclor-1232			3.63				3.56	3.70
Aroclor-1232 {2}			4.65				4.58	4.72
Aroclor-1232 {3}			5.09				5.02	5.16
Aroclor-1232 {4}			5.30				5.23	5.37
Aroclor-1232 {5}			6.08				6.01	6.15
Aroclor-1242			4.72				4.65	4.79
Aroclor-1242 {2}			5.48				5.41	5.55
Aroclor-1242 {3}			6.08				6.01	6.15
Aroclor-1242 {4}			6.24				6.17	6.31
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.09				5.01	5.17
Aroclor-1248 {2}			5.68				5.60	5.76
Aroclor-1248 {3}			6.08				6.00	6.16
Aroclor-1248 {4}			6.24				6.16	6.32
Aroclor-1248 {5}			6.59				6.51	6.67
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.11				8.02	8.20
Aroclor-1254 {4}			8.29				8.20	8.38
Aroclor-1254 {5}			9.11				9.02	9.20
Aroclor-1260	7.86	7.86	7.86	7.85	7.85	7.86	6.96	8.76
Aroclor-1260 {2}	8.11	8.11	8.11	8.11	8.11	8.11	7.21	9.01
Aroclor-1260 {3}	9.71	9.70	9.70	9.70	9.70	9.70	8.80	10.60
Aroclor-1260 {4}	10.22	10.21	10.21	10.21	10.21	10.21	9.31	11.11
Aroclor-1260 {5}	10.81	10.80	10.80	10.80	10.80	10.80	9.90	11.70

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	426403	426642	396228	371630	359410	396062	7.78
Aroclor-1016 {2}	864011	887401	781794	737306	703504	794803	9.98
Aroclor-1016 {3}	1972319	1932857	1823089	1797534	1768300	1858820	4.78
Aroclor-1016 {4}	911060	914387	803776	776981	738814	829003	9.63
Aroclor-1016 {5}	643701	671039	612066	601557	589151	623503	5.36
Aroclor-1221			215372				
Aroclor-1221 {2}			329916				
Aroclor-1221 {3}			210241				
Aroclor-1221 {4}			776851				
Aroclor-1221 {5}			142408				
Aroclor-1232			126868				
Aroclor-1232 {2}			141929				
Aroclor-1232 {3}			929490				
Aroclor-1232 {4}			430081				
Aroclor-1232 {5}			452267				
Aroclor-1242			366894				
Aroclor-1242 {2}			640028				
Aroclor-1242 {3}			838724				
Aroclor-1242 {4}			714656				
Aroclor-1242 {5}			1375081				
Aroclor-1248			1136613				
Aroclor-1248 {2}			1742197				
Aroclor-1248 {3}			1260506				
Aroclor-1248 {4}			1153184				
Aroclor-1248 {5}			629450				
Aroclor-1254			1697548				
Aroclor-1254 {2}			1354206				
Aroclor-1254 {3}			947246				
Aroclor-1254 {4}			1300799				
Aroclor-1254 {5}			2205060				
Aroclor-1260	765096	821046	706809	686497	686944	733278	8.00
Aroclor-1260 {2}	1215391	1225936	1052349	1018750	1010835	1104652	9.70
Aroclor-1260 {3}	1113832	1089294	977222	952962	967974	1020257	7.37
Aroclor-1260 {4}	2246474	2259912	2163090	2112331	2178672	2192096	2.79
Aroclor-1260 {5}	1444735	1632071	1581478	1539906	1574551	1554548	4.48
					Average %RSD		6.99

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.35				8.23	8.47
Aroclor-1262 {2}			9.21				9.09	9.33
Aroclor-1262 {3}			9.84				9.72	9.96
Aroclor-1262 {4}			9.92				9.80	10.04
Aroclor-1262 {5}			10.75				10.63	10.87
Aroclor-1268			9.84				9.72	9.96
Aroclor-1268 {2}			9.92				9.80	10.04
Aroclor-1268 {3}			10.39				10.27	10.51
Aroclor-1268 {4}			10.52				10.40	10.64
Aroclor-1268 {5}			11.35				11.23	11.47

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.70				9.58	9.82
Aroclor-1262 {2}			10.21				10.09	10.33
Aroclor-1262 {3}			10.71				10.59	10.83
Aroclor-1262 {4}			10.80				10.68	10.92
Aroclor-1262 {5}			11.40				11.28	11.52
Aroclor-1268			10.71				10.59	10.83
Aroclor-1268 {2}			10.79				10.67	10.91
Aroclor-1268 {3}			11.04				10.92	11.16
Aroclor-1268 {4}			11.84				11.72	11.96
Aroclor-1268 {5}			12.26				12.14	12.38

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 09/28/2016 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y0391.D Y0390.D Y0389.D Y0388.D Y0387.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3214023				
Aroclor-1262 {2}			6477252				
Aroclor-1262 {3}			2175071				
Aroclor-1262 {4}			3008681				
Aroclor-1262 {5}			2257799				
Aroclor-1268			6368540				
Aroclor-1268 {2}			7166504				
Aroclor-1268 {3}			5747507				
Aroclor-1268 {4}			1409634				
Aroclor-1268 {5}			17232745				

GC Column (2nd): DB-1701P

Data File: Y0391.C Y0390.C Y0389.C Y0388.C Y0387.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1790083				
Aroclor-1262 {2}			3965767				
Aroclor-1262 {3}			1363732				
Aroclor-1262 {4}			2783342				
Aroclor-1262 {5}			503618				
Aroclor-1268			3713532				
Aroclor-1268 {2}			3714475				
Aroclor-1268 {3}			3010293				
Aroclor-1268 {4}			1313352				
Aroclor-1268 {5}			9784435				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/12/2016 **Instrument ID:** GC-Y

Data File: Y0759.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	617080	6.19
Aroclor-1016 {2}	3.85	3.78	3.92	817260	806398	1.33
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1139593	3.69
Aroclor-1016 {4}	4.90	4.83	4.97	529182	549189	3.78
Aroclor-1016 {5}	5.29	5.22	5.36	868007	887458	2.24
Aroclor-1260	8.07	7.17	8.97	2594789	2566721	1.08
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1095460	11.70
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3294914	3.24
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1544358	5.32
Aroclor-1260 {5}	10.75	9.85	11.65	793423	729272	8.09

Data File: Y0759.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.74	3.66	3.80	396062	406290	2.58
Aroclor-1016 {2}	4.34	4.26	4.40	794803	802286	0.94
Aroclor-1016 {3}	5.11	5.03	5.17	1858820	1828461	1.63
Aroclor-1016 {4}	5.31	5.23	5.37	829003	776012	6.39
Aroclor-1016 {5}	5.49	5.41	5.55	623503	600958	3.62
Aroclor-1260	7.86	6.96	8.76	733278	699405	4.62
Aroclor-1260 {2}	8.12	7.21	9.01	1104652	1025676	7.15
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	979507	3.99
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2132394	2.72
Aroclor-1260 {5}	10.81	9.90	11.70	1554548	1597158	2.74

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/12/2016 **Instrument ID:** GC-Y

Data File: Y0772.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	620325	6.75
Aroclor-1016 {2}	3.85	3.78	3.92	817260	791811	3.11
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1150897	4.71
Aroclor-1016 {4}	4.90	4.83	4.97	529182	574583	8.58
Aroclor-1016 {5}	5.30	5.22	5.36	868007	917463	5.70
Aroclor-1260	8.07	7.17	8.97	2594789	2744680	5.78
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1187200	4.30
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3698762	8.62
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1759760	7.89
Aroclor-1260 {5}	10.76	9.85	11.65	793423	846130	6.64

Data File: Y0772.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	399592	0.89
Aroclor-1016 {2}	4.34	4.26	4.40	794803	798511	0.47
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1830994	1.50
Aroclor-1016 {4}	5.31	5.23	5.37	829003	788455	4.89
Aroclor-1016 {5}	5.48	5.41	5.55	623503	611301	1.96
Aroclor-1260	7.85	6.96	8.76	733278	716448	2.30
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1072551	2.91
Aroclor-1260 {3}	9.70	8.80	10.60	1020257	1025323	0.50
Aroclor-1260 {4}	10.21	9.31	11.11	2192096	2271665	3.63
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1654285	6.42

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.13	3.13	3.13	3.13	3.13	3.13	3.06	3.20
Aroclor-1016 {2}	3.95	3.95	3.94	3.94	3.94	3.94	3.87	4.01
Aroclor-1016 {3}	4.49	4.49	4.49	4.49	4.49	4.49	4.42	4.56
Aroclor-1016 {4}	4.88	4.99	4.99	4.99	4.99	4.97	4.90	5.04
Aroclor-1016 {5}	5.39	5.39	5.38	5.38	5.38	5.39	5.32	5.46
Aroclor-1221			2.06				1.99	2.13
Aroclor-1221 {2}			2.93				2.86	3.00
Aroclor-1221 {3}			3.06				2.99	3.13
Aroclor-1221 {4}			3.13				3.06	3.20
Aroclor-1221 {5}			3.71				3.64	3.78
Aroclor-1232			3.13				3.06	3.20
Aroclor-1232 {2}			3.94				3.87	4.01
Aroclor-1232 {3}			4.60				4.53	4.67
Aroclor-1232 {4}			5.19				5.12	5.26
Aroclor-1232 {5}			5.38				5.31	5.45
Aroclor-1242			3.95				3.88	4.02
Aroclor-1242 {2}			4.88				4.81	4.95
Aroclor-1242 {3}			5.20				5.13	5.27
Aroclor-1242 {4}			5.89				5.82	5.96
Aroclor-1242 {5}			6.16				6.09	6.23
Aroclor-1248			4.34				4.26	4.42
Aroclor-1248 {2}			4.88				4.80	4.96
Aroclor-1248 {3}			5.19				5.11	5.27
Aroclor-1248 {4}			5.89				5.81	5.97
Aroclor-1248 {5}			6.16				6.08	6.24
Aroclor-1254			6.28				6.20	6.36
Aroclor-1254 {2}			6.72				6.64	6.80
Aroclor-1254 {3}			6.88				6.79	6.97
Aroclor-1254 {4}			7.32				7.23	7.41
Aroclor-1254 {5}			8.17				8.08	8.26
Aroclor-1260	8.17	8.17	8.16	8.16	8.16	8.17	7.27	9.07
Aroclor-1260 {2}	8.84	8.84	8.84	8.84	8.84	8.84	7.94	9.74
Aroclor-1260 {3}	9.32	9.32	9.32	9.32	9.32	9.32	8.42	10.22
Aroclor-1260 {4}	9.80	9.80	9.80	9.80	9.80	9.80	8.90	10.70
Aroclor-1260 {5}	10.88	10.87	10.87	10.86	10.86	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	267841	268688	258898	244596	229070	253819	6.65
Aroclor-1016 {2}	378625	380994	344057	328707	308851	348247	9.02
Aroclor-1016 {3}	480102	468941	459297	434731	407079	450030	6.50
Aroclor-1016 {4}	182766	253952	211546	201622	158281	201634	17.66
Aroclor-1016 {5}	454025	361999	355852	346934	323306	368423	13.59
Aroclor-1221			124482				
Aroclor-1221 {2}			218373				
Aroclor-1221 {3}			140243				
Aroclor-1221 {4}			469731				
Aroclor-1221 {5}			123351				
Aroclor-1232			323958				
Aroclor-1232 {2}			203199				
Aroclor-1232 {3}			186780				
Aroclor-1232 {4}			209522				
Aroclor-1232 {5}			259245				
Aroclor-1242			374674				
Aroclor-1242 {2}			255908				
Aroclor-1242 {3}			345557				
Aroclor-1242 {4}			527463				
Aroclor-1242 {5}			444736				
Aroclor-1248			737823				
Aroclor-1248 {2}			430267				
Aroclor-1248 {3}			549289				
Aroclor-1248 {4}			889638				
Aroclor-1248 {5}			649797				
Aroclor-1254			842729				
Aroclor-1254 {2}			644103				
Aroclor-1254 {3}			1222977				
Aroclor-1254 {4}			1321508				
Aroclor-1254 {5}			1211120				
Aroclor-1260	1107171	1085104	1031083	989327	955273	1033592	6.15
Aroclor-1260 {2}	512952	493631	488404	464802	447212	481400	5.34
Aroclor-1260 {3}	1436466	1210861	1197527	1143817	1100948	1217924	10.66
Aroclor-1260 {4}	720328	632484	629899	600666	588319	634339	8.14
Aroclor-1260 {5}	269425	279232	275165	249132	244586	263508	5.95
					Average %RSD		8.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.47	3.47	3.47	3.47	3.47	3.47	3.40	3.54
Aroclor-1016 {2}	4.06	4.06	4.06	4.05	4.06	4.06	3.99	4.13
Aroclor-1016 {3}	4.75	4.76	4.75	4.75	4.75	4.75	4.68	4.82
Aroclor-1016 {4}	4.97	4.98	4.97	4.97	4.97	4.97	4.90	5.04
Aroclor-1016 {5}	5.13	5.14	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1221			2.26				2.19	2.33
Aroclor-1221 {2}			3.18				3.11	3.25
Aroclor-1221 {3}			3.40				3.33	3.47
Aroclor-1221 {4}			3.47				3.40	3.54
Aroclor-1221 {5}			4.76				4.69	4.83
Aroclor-1232			3.47				3.40	3.54
Aroclor-1232 {2}			4.43				4.36	4.50
Aroclor-1232 {3}			4.97				4.90	5.04
Aroclor-1232 {4}			5.13				5.06	5.20
Aroclor-1232 {5}			5.74				5.67	5.81
Aroclor-1242			4.43				4.36	4.50
Aroclor-1242 {2}			5.13				5.06	5.20
Aroclor-1242 {3}			5.74				5.67	5.81
Aroclor-1242 {4}			5.90				5.83	5.97
Aroclor-1242 {5}			6.42				6.35	6.49
Aroclor-1248			4.75				4.67	4.83
Aroclor-1248 {2}			5.33				5.25	5.41
Aroclor-1248 {3}			5.74				5.66	5.82
Aroclor-1248 {4}			5.90				5.82	5.98
Aroclor-1248 {5}			6.22				6.14	6.30
Aroclor-1254			6.74				6.66	6.82
Aroclor-1254 {2}			7.30				7.22	7.38
Aroclor-1254 {3}			7.79				7.70	7.88
Aroclor-1254 {4}			7.91				7.82	8.00
Aroclor-1254 {5}			8.76				8.67	8.85
Aroclor-1260	7.79	7.79	7.79	7.79	7.79	7.79	6.89	8.69
Aroclor-1260 {2}	8.18	8.18	8.18	8.17	8.17	8.18	7.28	9.08
Aroclor-1260 {3}	9.40	9.40	9.39	9.39	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.89	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.46	10.47	10.46	10.46	10.46	10.46	9.56	11.36

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	226419	212128	188990	177876	167596	194602	12.48
Aroclor-1016 {2}	483016	436451	366487	347326	332421	393140	16.31
Aroclor-1016 {3}	974937	903424	809396	793329	784620	853141	9.73
Aroclor-1016 {4}	413865	418283	348368	330133	315838	365297	13.08
Aroclor-1016 {5}	319873	288026	278044	263429	252307	280336	9.27
Aroclor-1221			106257				
Aroclor-1221 {2}			147304				
Aroclor-1221 {3}			102972				
Aroclor-1221 {4}			360830				
Aroclor-1221 {5}			69170				
Aroclor-1232			238433				
Aroclor-1232 {2}			95028				
Aroclor-1232 {3}			193436				
Aroclor-1232 {4}			153846				
Aroclor-1232 {5}			215153				
Aroclor-1242			171387				
Aroclor-1242 {2}			288102				
Aroclor-1242 {3}			377897				
Aroclor-1242 {4}			383422				
Aroclor-1242 {5}			633147				
Aroclor-1248			520961				
Aroclor-1248 {2}			796079				
Aroclor-1248 {3}			569539				
Aroclor-1248 {4}			520331				
Aroclor-1248 {5}			296634				
Aroclor-1254			807866				
Aroclor-1254 {2}			614978				
Aroclor-1254 {3}			503616				
Aroclor-1254 {4}			575892				
Aroclor-1254 {5}			901476				
Aroclor-1260	645199	561054	473970	446668	430505	511479	17.62
Aroclor-1260 {2}	616918	639557	558157	528523	515275	571686	9.53
Aroclor-1260 {3}	371151	388900	441666	426190	416915	408964	6.98
Aroclor-1260 {4}	1026926	1056095	914477	916652	915464	965923	7.22
Aroclor-1260 {5}	917138	875386	833588	853875	844038	864805	3.82
					Average %RSD		10.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.46				8.34	8.58
Aroclor-1262 {2}			9.32				9.20	9.44
Aroclor-1262 {3}			9.96				9.84	10.08
Aroclor-1262 {4}			10.04				9.92	10.16
Aroclor-1262 {5}			10.87				10.75	10.99
Aroclor-1268			9.95				9.83	10.07
Aroclor-1268 {2}			10.04				9.92	10.16
Aroclor-1268 {3}			10.51				10.39	10.63
Aroclor-1268 {4}			10.64				10.52	10.76
Aroclor-1268 {5}			11.48				11.36	11.60

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.40				9.28	9.52
Aroclor-1262 {2}			9.88				9.76	10.00
Aroclor-1262 {3}			10.45				10.33	10.57
Aroclor-1262 {4}			10.51				10.39	10.63
Aroclor-1262 {5}			11.10				10.98	11.22
Aroclor-1268			10.44				10.32	10.56
Aroclor-1268 {2}			10.51				10.39	10.63
Aroclor-1268 {3}			10.79				10.67	10.91
Aroclor-1268 {4}			11.52				11.40	11.64
Aroclor-1268 {5}			12.00				11.88	12.12

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1172015				
Aroclor-1262 {2}			2219989				
Aroclor-1262 {3}			832860				
Aroclor-1262 {4}			888066				
Aroclor-1262 {5}			803623				
Aroclor-1268			2137084				
Aroclor-1268 {2}			2073940				
Aroclor-1268 {3}			1756518				
Aroclor-1268 {4}			475451				
Aroclor-1268 {5}			5454688				

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			786732				
Aroclor-1262 {2}			1736325				
Aroclor-1262 {3}			1075997				
Aroclor-1262 {4}			738818				
Aroclor-1262 {5}			227213				
Aroclor-1268			1635466				
Aroclor-1268 {2}			1661627				
Aroclor-1268 {3}			1364310				
Aroclor-1268 {4}			859435				
Aroclor-1268 {5}			4654711				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3808.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	274795	8.26
Aroclor-1016 {2}	3.96	3.87	4.01	348247	362998	4.24
Aroclor-1016 {3}	4.51	4.42	4.56	450030	494420	9.86
Aroclor-1016 {4}	5.01	4.90	5.04	201634	228844	13.50
Aroclor-1016 {5}	5.41	5.32	5.46	368423	392675	6.58
Aroclor-1260	8.18	7.27	9.07	1033592	1067855	3.31
Aroclor-1260 {2}	8.86	7.94	9.74	481400	501051	4.08
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1207150	0.88
Aroclor-1260 {4}	9.82	8.90	10.70	634339	619444	2.35
Aroclor-1260 {5}	10.89	9.97	11.77	263508	260498	1.14

Data File: R3808.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.49	3.40	3.54	194602	198490	2.00
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372380	5.28
Aroclor-1016 {3}	4.77	4.68	4.82	853141	816808	4.26
Aroclor-1016 {4}	4.99	4.90	5.04	365297	357253	2.20
Aroclor-1016 {5}	5.15	5.06	5.20	280336	286965	2.36
Aroclor-1260	7.80	6.89	8.69	511479	484396	5.30
Aroclor-1260 {2}	8.19	7.28	9.08	571686	571313	0.07
Aroclor-1260 {3}	9.41	8.50	10.30	408964	449882	10.01
Aroclor-1260 {4}	9.89	8.98	10.78	965923	949197	1.73
Aroclor-1260 {5}	10.48	9.56	11.36	864805	875961	1.29

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/18/2016 **Instrument ID:** GC-R

Data File: R3827.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	275475	8.53
Aroclor-1016 {2}	3.96	3.87	4.01	348247	356383	2.34
Aroclor-1016 {3}	4.51	4.42	4.56	450030	478985	6.43
Aroclor-1016 {4}	5.01	4.90	5.04	201634	229727	13.93
Aroclor-1016 {5}	5.40	5.32	5.46	368423	375891	2.03
Aroclor-1260	8.18	7.27	9.07	1033592	1043657	0.97
Aroclor-1260 {2}	8.85	7.94	9.74	481400	484180	0.58
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1226904	0.74
Aroclor-1260 {4}	9.81	8.90	10.70	634339	644267	1.57
Aroclor-1260 {5}	10.88	9.97	11.77	263508	270673	2.72

Data File: R3827.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	195194	0.30
Aroclor-1016 {2}	4.07	3.99	4.13	393140	372382	5.28
Aroclor-1016 {3}	4.76	4.68	4.82	853141	818414	4.07
Aroclor-1016 {4}	4.98	4.90	5.04	365297	351467	3.79
Aroclor-1016 {5}	5.14	5.06	5.20	280336	280411	0.03
Aroclor-1260	7.79	6.89	8.69	511479	476781	6.78
Aroclor-1260 {2}	8.18	7.28	9.08	571686	562185	1.66
Aroclor-1260 {3}	9.40	8.50	10.30	408964	439428	7.45
Aroclor-1260 {4}	9.88	8.98	10.78	965923	945554	2.11
Aroclor-1260 {5}	10.47	9.56	11.36	864805	864949	0.02

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0843.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	672649	15.76
Aroclor-1016 {2}	3.86	3.78	3.92	817260	805812	1.40
Aroclor-1016 {3}	4.41	4.33	4.47	1099084	1216094	10.65
Aroclor-1016 {4}	4.91	4.83	4.97	529182	622648	17.66
Aroclor-1016 {5}	5.30	5.22	5.36	868007	969507	11.69
Aroclor-1260	8.08	7.17	8.97	2594789	2873680	10.75
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1186996	4.32
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3922801	15.20
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1826294	11.97
Aroclor-1260 {5}	10.76	9.85	11.65	793423	924942	16.58

Data File: Y0843.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	429580	8.46
Aroclor-1016 {2}	4.34	4.26	4.40	794803	859103	8.09
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1944447	4.61
Aroclor-1016 {4}	5.31	5.23	5.37	829003	851746	2.74
Aroclor-1016 {5}	5.48	5.41	5.55	623503	660070	5.86
Aroclor-1260	7.86	6.96	8.76	733278	805896	9.90
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1159961	5.01
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	1105188	8.32
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2486634	13.44
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1802869	15.97

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0857.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.04	2.96	3.10	581083	604842	4.09
Aroclor-1016 {2}	3.86	3.78	3.92	817260	796484	2.54
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1087467	1.06
Aroclor-1016 {4}	4.91	4.83	4.97	529182	534315	0.97
Aroclor-1016 {5}	5.30	5.22	5.36	868007	840835	3.13
Aroclor-1260	8.07	7.17	8.97	2594789	2461774	5.13
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1143329	7.84
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3334392	2.08
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1587286	2.69
Aroclor-1260 {5}	10.76	9.85	11.65	793423	828807	4.46

Data File: Y0857.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	390736	1.34
Aroclor-1016 {2}	4.34	4.26	4.40	794803	796423	0.20
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1804753	2.91
Aroclor-1016 {4}	5.31	5.23	5.37	829003	788446	4.89
Aroclor-1016 {5}	5.48	5.41	5.55	623503	609209	2.29
Aroclor-1260	7.86	6.96	8.76	733278	679853	7.29
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1020510	7.62
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	971090	4.82
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2196062	0.18
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1597134	2.74

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0872.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	583320	0.38
Aroclor-1016 {2}	3.85	3.78	3.92	817260	796931	2.49
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1099051	0.00
Aroclor-1016 {4}	4.91	4.83	4.97	529182	535165	1.13
Aroclor-1016 {5}	5.30	5.22	5.36	868007	858009	1.15
Aroclor-1260	8.07	7.17	8.97	2594789	2474229	4.65
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1145314	7.68
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3367276	1.11
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1598117	2.02
Aroclor-1260 {5}	10.76	9.85	11.65	793423	790242	0.40

Data File: Y0872.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	387522	2.16
Aroclor-1016 {2}	4.34	4.26	4.40	794803	794030	0.10
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1796684	3.34
Aroclor-1016 {4}	5.31	5.23	5.37	829003	778705	6.07
Aroclor-1016 {5}	5.48	5.41	5.55	623503	595734	4.45
Aroclor-1260	7.86	6.96	8.76	733278	686954	6.32
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1027452	6.99
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	963502	5.56
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2137622	2.49
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1557445	0.19

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/19/2016 **Instrument ID:** GC-Y

Data File: Y0872.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	583320	0.38
Aroclor-1016 {2}	3.85	3.78	3.92	817260	796931	2.49
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1099051	0.00
Aroclor-1016 {4}	4.91	4.83	4.97	529182	535165	1.13
Aroclor-1016 {5}	5.30	5.22	5.36	868007	858009	1.15
Aroclor-1260	8.07	7.17	8.97	2594789	2474229	4.65
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1145314	7.68
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3367276	1.11
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1598117	2.02
Aroclor-1260 {5}	10.76	9.85	11.65	793423	790242	0.40

Data File: Y0872.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	387522	2.16
Aroclor-1016 {2}	4.34	4.26	4.40	794803	794030	0.10
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1796684	3.34
Aroclor-1016 {4}	5.31	5.23	5.37	829003	778705	6.07
Aroclor-1016 {5}	5.48	5.41	5.55	623503	595734	4.45
Aroclor-1260	7.86	6.96	8.76	733278	686954	6.32
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1027452	6.99
Aroclor-1260 {3}	9.71	8.80	10.60	1020257	963502	5.56
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2137622	2.49
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1557445	0.19

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/20/2016 **Instrument ID:** GC-Y

Data File: Y0887.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	593848	2.20
Aroclor-1016 {2}	3.85	3.78	3.92	817260	774666	5.21
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1083457	1.42
Aroclor-1016 {4}	4.90	4.83	4.97	529182	552633	4.43
Aroclor-1016 {5}	5.30	5.22	5.36	868007	843732	2.80
Aroclor-1260	8.07	7.17	8.97	2594789	2442966	5.85
Aroclor-1260 {2}	8.74	7.84	9.64	1240579	1100396	11.30
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3331815	2.15
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1568455	3.84
Aroclor-1260 {5}	10.76	9.85	11.65	793423	775128	2.31

Data File: Y0887.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	390165	1.49
Aroclor-1016 {2}	4.33	4.26	4.40	794803	799345	0.57
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1792861	3.55
Aroclor-1016 {4}	5.30	5.23	5.37	829003	784878	5.32
Aroclor-1016 {5}	5.48	5.41	5.55	623503	601934	3.46
Aroclor-1260	7.86	6.96	8.76	733278	679616	7.32
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1028499	6.89
Aroclor-1260 {3}	9.70	8.80	10.60	1020257	956340	6.26
Aroclor-1260 {4}	10.22	9.31	11.11	2192096	2165247	1.22
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1549602	0.32

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/20/2016 **Instrument ID:** GC-Y

Data File: Y0908.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.03	2.96	3.10	581083	619349	6.59
Aroclor-1016 {2}	3.85	3.78	3.92	817260	761271	6.85
Aroclor-1016 {3}	4.40	4.33	4.47	1099084	1121883	2.07
Aroclor-1016 {4}	4.90	4.83	4.97	529182	571429	7.98
Aroclor-1016 {5}	5.30	5.22	5.36	868007	881347	1.54
Aroclor-1260	8.07	7.17	8.97	2594789	2572683	0.85
Aroclor-1260 {2}	8.75	7.84	9.64	1240579	1067141	13.98
Aroclor-1260 {3}	9.22	8.31	10.11	3405141	3489076	2.46
Aroclor-1260 {4}	9.70	8.79	10.59	1631095	1624943	0.38
Aroclor-1260 {5}	10.76	9.85	11.65	793423	807630	1.79

Data File: Y0908.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	396062	408310	3.09
Aroclor-1016 {2}	4.33	4.26	4.40	794803	838747	5.53
Aroclor-1016 {3}	5.10	5.03	5.17	1858820	1892076	1.79
Aroclor-1016 {4}	5.30	5.23	5.37	829003	830646	0.20
Aroclor-1016 {5}	5.48	5.41	5.55	623503	636461	2.08
Aroclor-1260	7.86	6.96	8.76	733278	722267	1.50
Aroclor-1260 {2}	8.11	7.21	9.01	1104652	1087614	1.54
Aroclor-1260 {3}	9.70	8.80	10.60	1020257	1029651	0.92
Aroclor-1260 {4}	10.21	9.31	11.11	2192096	2303351	5.08
Aroclor-1260 {5}	10.80	9.90	11.70	1554548	1648071	6.02

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.13	3.13	3.13	3.13	3.13	3.13	3.06	3.20
Aroclor-1016 {2}	3.95	3.95	3.94	3.94	3.94	3.94	3.87	4.01
Aroclor-1016 {3}	4.49	4.49	4.49	4.49	4.49	4.49	4.42	4.56
Aroclor-1016 {4}	4.88	4.99	4.99	4.99	4.99	4.97	4.90	5.04
Aroclor-1016 {5}	5.39	5.39	5.38	5.38	5.38	5.39	5.32	5.46
Aroclor-1221			2.06				1.99	2.13
Aroclor-1221 {2}			2.93				2.86	3.00
Aroclor-1221 {3}			3.06				2.99	3.13
Aroclor-1221 {4}			3.13				3.06	3.20
Aroclor-1221 {5}			3.71				3.64	3.78
Aroclor-1232			3.13				3.06	3.20
Aroclor-1232 {2}			3.94				3.87	4.01
Aroclor-1232 {3}			4.60				4.53	4.67
Aroclor-1232 {4}			5.19				5.12	5.26
Aroclor-1232 {5}			5.38				5.31	5.45
Aroclor-1242			3.95				3.88	4.02
Aroclor-1242 {2}			4.88				4.81	4.95
Aroclor-1242 {3}			5.20				5.13	5.27
Aroclor-1242 {4}			5.89				5.82	5.96
Aroclor-1242 {5}			6.16				6.09	6.23
Aroclor-1248			4.34				4.26	4.42
Aroclor-1248 {2}			4.88				4.80	4.96
Aroclor-1248 {3}			5.19				5.11	5.27
Aroclor-1248 {4}			5.89				5.81	5.97
Aroclor-1248 {5}			6.16				6.08	6.24
Aroclor-1254			6.28				6.20	6.36
Aroclor-1254 {2}			6.72				6.64	6.80
Aroclor-1254 {3}			6.88				6.79	6.97
Aroclor-1254 {4}			7.32				7.23	7.41
Aroclor-1254 {5}			8.17				8.08	8.26
Aroclor-1260	8.17	8.17	8.16	8.16	8.16	8.17	7.27	9.07
Aroclor-1260 {2}	8.84	8.84	8.84	8.84	8.84	8.84	7.94	9.74
Aroclor-1260 {3}	9.32	9.32	9.32	9.32	9.32	9.32	8.42	10.22
Aroclor-1260 {4}	9.80	9.80	9.80	9.80	9.80	9.80	8.90	10.70
Aroclor-1260 {5}	10.88	10.87	10.87	10.86	10.86	10.87	9.97	11.77

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	267841	268688	258898	244596	229070	253819	6.65
Aroclor-1016 {2}	378625	380994	344057	328707	308851	348247	9.02
Aroclor-1016 {3}	480102	468941	459297	434731	407079	450030	6.50
Aroclor-1016 {4}	182766	253952	211546	201622	158281	201634	17.66
Aroclor-1016 {5}	454025	361999	355852	346934	323306	368423	13.59
Aroclor-1221			124482				
Aroclor-1221 {2}			218373				
Aroclor-1221 {3}			140243				
Aroclor-1221 {4}			469731				
Aroclor-1221 {5}			123351				
Aroclor-1232			323958				
Aroclor-1232 {2}			203199				
Aroclor-1232 {3}			186780				
Aroclor-1232 {4}			209522				
Aroclor-1232 {5}			259245				
Aroclor-1242			374674				
Aroclor-1242 {2}			255908				
Aroclor-1242 {3}			345557				
Aroclor-1242 {4}			527463				
Aroclor-1242 {5}			444736				
Aroclor-1248			737823				
Aroclor-1248 {2}			430267				
Aroclor-1248 {3}			549289				
Aroclor-1248 {4}			889638				
Aroclor-1248 {5}			649797				
Aroclor-1254			842729				
Aroclor-1254 {2}			644103				
Aroclor-1254 {3}			1222977				
Aroclor-1254 {4}			1321508				
Aroclor-1254 {5}			1211120				
Aroclor-1260	1107171	1085104	1031083	989327	955273	1033592	6.15
Aroclor-1260 {2}	512952	493631	488404	464802	447212	481400	5.34
Aroclor-1260 {3}	1436466	1210861	1197527	1143817	1100948	1217924	10.66
Aroclor-1260 {4}	720328	632484	629899	600666	588319	634339	8.14
Aroclor-1260 {5}	269425	279232	275165	249132	244586	263508	5.95
					Average %RSD		8.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.47	3.47	3.47	3.47	3.47	3.47	3.40	3.54
Aroclor-1016 {2}	4.06	4.06	4.06	4.05	4.06	4.06	3.99	4.13
Aroclor-1016 {3}	4.75	4.76	4.75	4.75	4.75	4.75	4.68	4.82
Aroclor-1016 {4}	4.97	4.98	4.97	4.97	4.97	4.97	4.90	5.04
Aroclor-1016 {5}	5.13	5.14	5.13	5.13	5.13	5.13	5.06	5.20
Aroclor-1221			2.26				2.19	2.33
Aroclor-1221 {2}			3.18				3.11	3.25
Aroclor-1221 {3}			3.40				3.33	3.47
Aroclor-1221 {4}			3.47				3.40	3.54
Aroclor-1221 {5}			4.76				4.69	4.83
Aroclor-1232			3.47				3.40	3.54
Aroclor-1232 {2}			4.43				4.36	4.50
Aroclor-1232 {3}			4.97				4.90	5.04
Aroclor-1232 {4}			5.13				5.06	5.20
Aroclor-1232 {5}			5.74				5.67	5.81
Aroclor-1242			4.43				4.36	4.50
Aroclor-1242 {2}			5.13				5.06	5.20
Aroclor-1242 {3}			5.74				5.67	5.81
Aroclor-1242 {4}			5.90				5.83	5.97
Aroclor-1242 {5}			6.42				6.35	6.49
Aroclor-1248			4.75				4.67	4.83
Aroclor-1248 {2}			5.33				5.25	5.41
Aroclor-1248 {3}			5.74				5.66	5.82
Aroclor-1248 {4}			5.90				5.82	5.98
Aroclor-1248 {5}			6.22				6.14	6.30
Aroclor-1254			6.74				6.66	6.82
Aroclor-1254 {2}			7.30				7.22	7.38
Aroclor-1254 {3}			7.79				7.70	7.88
Aroclor-1254 {4}			7.91				7.82	8.00
Aroclor-1254 {5}			8.76				8.67	8.85
Aroclor-1260	7.79	7.79	7.79	7.79	7.79	7.79	6.89	8.69
Aroclor-1260 {2}	8.18	8.18	8.18	8.17	8.17	8.18	7.28	9.08
Aroclor-1260 {3}	9.40	9.40	9.39	9.39	9.39	9.40	8.50	10.30
Aroclor-1260 {4}	9.88	9.89	9.88	9.88	9.88	9.88	8.98	10.78
Aroclor-1260 {5}	10.46	10.47	10.46	10.46	10.46	10.46	9.56	11.36

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	226419	212128	188990	177876	167596	194602	12.48
Aroclor-1016 {2}	483016	436451	366487	347326	332421	393140	16.31
Aroclor-1016 {3}	974937	903424	809396	793329	784620	853141	9.73
Aroclor-1016 {4}	413865	418283	348368	330133	315838	365297	13.08
Aroclor-1016 {5}	319873	288026	278044	263429	252307	280336	9.27
Aroclor-1221			106257				
Aroclor-1221 {2}			147304				
Aroclor-1221 {3}			102972				
Aroclor-1221 {4}			360830				
Aroclor-1221 {5}			69170				
Aroclor-1232			238433				
Aroclor-1232 {2}			95028				
Aroclor-1232 {3}			193436				
Aroclor-1232 {4}			153846				
Aroclor-1232 {5}			215153				
Aroclor-1242			171387				
Aroclor-1242 {2}			288102				
Aroclor-1242 {3}			377897				
Aroclor-1242 {4}			383422				
Aroclor-1242 {5}			633147				
Aroclor-1248			520961				
Aroclor-1248 {2}			796079				
Aroclor-1248 {3}			569539				
Aroclor-1248 {4}			520331				
Aroclor-1248 {5}			296634				
Aroclor-1254			807866				
Aroclor-1254 {2}			614978				
Aroclor-1254 {3}			503616				
Aroclor-1254 {4}			575892				
Aroclor-1254 {5}			901476				
Aroclor-1260	645199	561054	473970	446668	430505	511479	17.62
Aroclor-1260 {2}	616918	639557	558157	528523	515275	571686	9.53
Aroclor-1260 {3}	371151	388900	441666	426190	416915	408964	6.98
Aroclor-1260 {4}	1026926	1056095	914477	916652	915464	965923	7.22
Aroclor-1260 {5}	917138	875386	833588	853875	844038	864805	3.82
					Average %RSD		10.61

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.46				8.34	8.58
Aroclor-1262 {2}			9.32				9.20	9.44
Aroclor-1262 {3}			9.96				9.84	10.08
Aroclor-1262 {4}			10.04				9.92	10.16
Aroclor-1262 {5}			10.87				10.75	10.99
Aroclor-1268			9.95				9.83	10.07
Aroclor-1268 {2}			10.04				9.92	10.16
Aroclor-1268 {3}			10.51				10.39	10.63
Aroclor-1268 {4}			10.64				10.52	10.76
Aroclor-1268 {5}			11.48				11.36	11.60

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.40				9.28	9.52
Aroclor-1262 {2}			9.88				9.76	10.00
Aroclor-1262 {3}			10.45				10.33	10.57
Aroclor-1262 {4}			10.51				10.39	10.63
Aroclor-1262 {5}			11.10				10.98	11.22
Aroclor-1268			10.44				10.32	10.56
Aroclor-1268 {2}			10.51				10.39	10.63
Aroclor-1268 {3}			10.79				10.67	10.91
Aroclor-1268 {4}			11.52				11.40	11.64
Aroclor-1268 {5}			12.00				11.88	12.12

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/06/2016 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R3554.D R3553.D R3552.D R3551.D R3550.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1172015				
Aroclor-1262 {2}			2219989				
Aroclor-1262 {3}			832860				
Aroclor-1262 {4}			888066				
Aroclor-1262 {5}			803623				
Aroclor-1268			2137084				
Aroclor-1268 {2}			2073940				
Aroclor-1268 {3}			1756518				
Aroclor-1268 {4}			475451				
Aroclor-1268 {5}			5454688				

GC Column (2nd): DB-1701P

Data File: R3554.C R3553.C R3552.C R3551.C R3550.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			786732				
Aroclor-1262 {2}			1736325				
Aroclor-1262 {3}			1075997				
Aroclor-1262 {4}			738818				
Aroclor-1262 {5}			227213				
Aroclor-1268			1635466				
Aroclor-1268 {2}			1661627				
Aroclor-1268 {3}			1364310				
Aroclor-1268 {4}			859435				
Aroclor-1268 {5}			4654711				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4083.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	273468	7.74
Aroclor-1016 {2}	3.96	3.87	4.01	348247	344111	1.19
Aroclor-1016 {3}	4.51	4.42	4.56	450030	471190	4.70
Aroclor-1016 {4}	5.01	4.90	5.04	201634	236256	17.17
Aroclor-1016 {5}	5.40	5.32	5.46	368423	374873	1.75
Aroclor-1260	8.18	7.27	9.07	1033592	1049615	1.55
Aroclor-1260 {2}	8.86	7.94	9.74	481400	477780	0.75
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1230565	1.04
Aroclor-1260 {4}	9.81	8.90	10.70	634339	641558	1.14
Aroclor-1260 {5}	10.88	9.97	11.77	263508	277287	5.23

Data File: R4083.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	207206	6.48
Aroclor-1016 {2}	4.07	3.99	4.13	393140	392677	0.12
Aroclor-1016 {3}	4.76	4.68	4.82	853141	861619	0.99
Aroclor-1016 {4}	4.98	4.90	5.04	365297	374021	2.39
Aroclor-1016 {5}	5.14	5.06	5.20	280336	297830	6.24
Aroclor-1260	7.79	6.89	8.69	511479	512116	0.12
Aroclor-1260 {2}	8.18	7.28	9.08	571686	603439	5.55
Aroclor-1260 {3}	9.39	8.50	10.30	408964	471201	15.22
Aroclor-1260 {4}	9.88	8.98	10.78	965923	1018474	5.44
Aroclor-1260 {5}	10.46	9.56	11.36	864805	911960	5.45

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4084.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	277555	9.35
Aroclor-1016 {2}	3.96	3.87	4.01	348247	347528	0.21
Aroclor-1016 {3}	4.51	4.42	4.56	450030	478990	6.44
Aroclor-1016 {4}	5.01	4.90	5.04	201634	241311	19.68
Aroclor-1016 {5}	5.40	5.32	5.46	368423	383740	4.16
Aroclor-1260	8.18	7.27	9.07	1033592	1062065	2.75
Aroclor-1260 {2}	8.85	7.94	9.74	481400	480622	0.16
Aroclor-1260 {3}	9.33	8.42	10.22	1217924	1243247	2.08
Aroclor-1260 {4}	9.81	8.90	10.70	634339	648570	2.24
Aroclor-1260 {5}	10.88	9.97	11.77	263508	288330	9.42

Data File: R4084.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.48	3.40	3.54	194602	207146	6.45
Aroclor-1016 {2}	4.06	3.99	4.13	393140	392541	0.15
Aroclor-1016 {3}	4.76	4.68	4.82	853141	857226	0.48
Aroclor-1016 {4}	4.98	4.90	5.04	365297	371787	1.78
Aroclor-1016 {5}	5.14	5.06	5.20	280336	297181	6.01
Aroclor-1260	7.79	6.89	8.69	511479	520179	1.70
Aroclor-1260 {2}	8.18	7.28	9.08	571686	606130	6.02
Aroclor-1260 {3}	9.39	8.50	10.30	408964	476280	16.46
Aroclor-1260 {4}	9.88	8.98	10.78	965923	1029469	6.58
Aroclor-1260 {5}	10.46	9.56	11.36	864805	918879	6.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 10/27/2016 **Instrument ID:** GC-R

Data File: R4091.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.15	3.06	3.20	253819	246644	2.83
Aroclor-1016 {2}	3.97	3.87	4.01	348247	315099	9.52
Aroclor-1016 {3}	4.51	4.42	4.56	450030	423953	5.79
Aroclor-1016 {4}	5.01	4.90	5.04	201634	212094	5.19
Aroclor-1016 {5}	5.40	5.32	5.46	368423	332397	9.78
Aroclor-1260	8.18	7.27	9.07	1033592	900656	12.86
Aroclor-1260 {2}	8.86	7.94	9.74	481400	407779	15.29
Aroclor-1260 {3}	9.34	8.42	10.22	1217924	1030711	15.37
Aroclor-1260 {4}	9.82	8.90	10.70	634339	542534	14.47
Aroclor-1260 {5}	10.88	9.97	11.77	263508	237264	9.96

Data File: R4091.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.49	3.40	3.54	194602	187515	3.64
Aroclor-1016 {2}	4.07	3.99	4.13	393140	355838	9.49
Aroclor-1016 {3}	4.77	4.68	4.82	853141	779098	8.68
Aroclor-1016 {4}	4.99	4.90	5.04	365297	336523	7.88
Aroclor-1016 {5}	5.15	5.06	5.20	280336	267632	4.53
Aroclor-1260	7.80	6.89	8.69	511479	453231	11.39
Aroclor-1260 {2}	8.18	7.28	9.08	571686	532821	6.80
Aroclor-1260 {3}	9.40	8.50	10.30	408964	408192	0.19
Aroclor-1260 {4}	9.89	8.98	10.78	965923	924765	4.26
Aroclor-1260 {5}	10.47	9.56	11.36	864805	879546	1.70

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA161010-14	10/12/2016	09:05	2.57		11.84		2.85		12.50	
PCB	LCSA161010-14	10/12/2016	09:22	2.57		11.84		2.84		12.49	
COMPOSITE_	E16-09038-022MS	10/12/2016	09:44	2.57		11.84		2.85		12.49	
COMPOSITE_	E16-09038-023MSD	10/12/2016	10:01	2.57		11.84		2.84		12.49	
DISCRETE	E16-09038-016	10/12/2016	10:18	2.57		11.84		2.84		12.49	
DISCRETE	E16-09038-017	10/12/2016	10:36	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-018	10/12/2016	10:53	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-019	10/12/2016	11:11	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-020	10/12/2016	11:28	2.58		11.84		2.84		12.49	
COMPOSIT	E16-09038-021	10/12/2016	11:45	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-024	10/12/2016	12:03	2.57		11.84		2.84		12.49	
COMPOSIT	E16-09038-025	10/12/2016	12:20	2.57		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.71 **DCB 1** 11.98 **TCMX 2** 2.74 **DCB 2** 12.26

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA161017-25	10/18/2016	15:58	2.71		11.98		2.74		12.26	
PCB	LCSA161017-25	10/18/2016	16:16	2.71		11.98		2.74		12.25	
MW-P74-1	E16-09408-001	10/18/2016	16:37	2.71		11.98		2.75		12.25	
FB-10101	E16-09408-002	10/18/2016	16:54	2.70		11.98		2.74		12.25	
EB-10101	E16-09537-021	10/18/2016	17:12	2.70		11.98		2.74		12.25	
EB-10111	E16-09537-044	10/18/2016	17:29	2.70		11.98		2.74		12.25	
EB-10121	E16-09581-020	10/18/2016	17:47	2.70		11.98		2.74		12.25	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-23	10/19/2016	11:16	2.57		11.84		2.85		12.50	
PCB	LCSS161017-23	10/19/2016	11:33	2.57		11.84		2.84		12.49	
PCB	E16-09537-048MS	10/19/2016	11:50	2.58		11.84		2.84		12.49	
PCB	E16-09537-048MSD	10/19/2016	12:08	2.57		11.84		2.84		12.49	
E-32_(4.	E16-09537-048	10/19/2016	12:25	2.57		11.84		2.84		12.49	
E-32_(5.	E16-09537-049	10/19/2016	12:42	2.58		11.84		2.84		12.49	
E-41_(0.	E16-09537-050	10/19/2016	13:00	2.58		11.84		2.84		12.49	
E-41_(2-	E16-09537-051	10/19/2016	13:17	2.57		11.84		2.84		12.49	
X-2_(2-2	E16-09537-054	10/19/2016	13:34	2.57		11.84		2.84		12.49	
E-50_(4.	E16-09537-055	10/19/2016	13:52	2.57		11.84		2.84		12.49	
E-51_(4.	E16-09537-056	10/19/2016	14:09	2.58		11.84		2.84		12.49	
E-50_(0.	E16-09537-058	10/19/2016	15:23	0.00	D	0.00	D	0.00	D	0.00	D
E-41_(0.	E16-09537-050DL	10/19/2016	16:03	2.57		11.84		2.85		12.50	
E-50_(2-	E16-09537-059	10/19/2016	16:37	2.58		11.84		2.84		12.49	
WC-1	E16-09555-001	10/19/2016	16:55	2.58		11.84		2.84		12.49	
WC-2	E16-09555-002	10/19/2016	17:12	2.58		11.84		2.84		12.49	
E-35_(2-	E16-09581-002	10/19/2016	18:04	2.58		11.84		2.84		12.49	
E-53_(0.	E16-09581-007	10/19/2016	18:38	2.58		11.84		2.84		12.49	
E-58_(0.	E16-09581-008	10/19/2016	18:56	2.58		11.84		2.84		12.49	
E-59_(0.	E16-09581-009	10/19/2016	19:13	2.58		11.84		2.84		12.49	
E-48_(0.	E16-09581-010	10/19/2016	19:30	2.58		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.57 **DCB 1** 11.84 **TCMX 2** 2.85 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161017-23	10/19/2016	11:16	2.57		11.84		2.85		12.50	
PCB	LCSS161017-23	10/19/2016	11:33	2.57		11.84		2.84		12.49	
E-35_(0.	E16-09581-001	10/20/2016	10:28	2.58		11.84		2.84		12.49	
E-46_(0.	E16-09581-011	10/20/2016	10:45	2.58		11.84		2.84		12.49	
E-45_(0.	E16-09581-003	10/20/2016	11:02	2.57		11.84		2.84		12.49	
E-48_(0.	E16-09581-010DL	10/20/2016	11:20	2.58		11.84		2.84		12.49	
WC-SM	E16-09573-001	10/20/2016	11:37	2.58		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 **2.58** **DCB 1** **11.84** **TCMX 2** **2.84** **DCB 2** **12.49**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS161018-01	10/19/2016	21:31	2.58		11.84		2.84		12.49	
PCB	LCSS161018-01	10/19/2016	21:49	2.58		11.84		2.84		12.49	
PCB	E16-09581-015MS	10/19/2016	22:06	2.58		11.84		2.84		12.49	
PCB	E16-09581-015MSD	10/19/2016	22:23	2.58		11.84		2.84		12.49	
E-38_(0.	E16-09581-015	10/19/2016	22:41	2.58		11.84		2.84		12.49	
E-38_(2-	E16-09581-016	10/19/2016	22:58	2.58		11.84		2.84		12.49	
E-38_(4.	E16-09581-017	10/19/2016	23:15	2.58		11.84		2.84		12.49	
X-3_(0.5	E16-09581-018	10/19/2016	23:32	2.58		11.84		2.84		12.49	
X-4_(0.5	E16-09581-019	10/19/2016	23:50	2.58		11.84		2.84		12.49	
PX-101	E16-09505-001	10/20/2016	00:07	2.58		11.84		2.84		12.49	
PX-102	E16-09505-002	10/20/2016	00:24	2.58		11.84		2.84		12.49	
PX-103	E16-09505-003	10/20/2016	00:42	2.58		11.84		2.84		12.49	
PX-104	E16-09505-004	10/20/2016	00:59	2.58		11.84		2.84		12.49	
PX-105	E16-09505-005	10/20/2016	01:16	2.58		11.84		2.84		12.49	
PX-1	E16-09629-001	10/20/2016	03:00	2.58		11.84		2.84		12.49	
PX-2	E16-09629-002	10/20/2016	03:17	2.58		11.84		2.84		12.49	
PX-3	E16-09629-003	10/20/2016	03:35	2.58		11.84		2.84		12.49	
PX-4	E16-09629-004	10/20/2016	03:52	2.58		11.84		2.84		12.49	
PX-5	E16-09629-005	10/20/2016	04:09	2.58		11.84		2.84		12.49	
PX-6	E16-09629-006	10/20/2016	04:27	2.58		11.84		2.84		12.49	
WC-1	E16-09644-001	10/20/2016	04:44	2.58		11.84		2.84		12.49	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.68 **DCB 1** 11.97 **TCMX 2** 2.71 **DCB 2** 12.23

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
BB-ST2-S	E16-09848-073	10/27/2016	00:07	2.68		11.97		2.71		12.23	
PX-1	E16-09793-001	10/27/2016	00:42	2.68		11.97		2.71		12.24	
PX-2	E16-09793-002	10/27/2016	01:17	2.68		11.97		2.71		12.23	
PX-3	E16-09793-003	10/27/2016	01:52	2.68		11.97		2.71		12.23	
PX-4	E16-09793-004	10/27/2016	02:27	2.70		11.97		2.73		12.24	
PX-5	E16-09793-005	10/27/2016	03:01	2.68		11.97		2.71		12.23	
E-54_(2-	E16-09537-002	10/27/2016	03:36	2.68		11.97		2.71		12.23	
E-42_(4-	E16-09537-006	10/27/2016	03:54	2.68		11.97		2.71		12.23	
E-43_(4.	E16-09537-025	10/27/2016	04:11	2.68		11.97		2.71		12.24	
E-41_(5-	E16-09537-053	10/27/2016	04:29	2.68		11.97		2.71		12.23	
E-44_(4.	E16-09537-057	10/27/2016	04:46	2.68		11.97		2.71		12.23	
20161024	E16-09856-001	10/27/2016	05:03	2.68		11.97		2.71		12.23	
E-45_(2-	E16-09581-004	10/27/2016	05:21	2.68		11.97		2.71		12.23	
E-45_(4.	E16-09581-006	10/27/2016	05:38	2.68		11.97		2.71		12.24	
E-46_(2-	E16-09581-012	10/27/2016	05:56	2.68		11.97		2.71		12.23	
E-46_(4.	E16-09581-014	10/27/2016	06:13	2.68		11.97		2.71		12.23	
PCB	BLKS161025-09	10/27/2016	08:38	2.71		11.98		2.75		12.24	
PCB	LCSS161025-09	10/27/2016	08:55	2.71		11.97		2.74		12.24	
PCB	E16-09793-001MS	10/27/2016	09:13	2.71		11.97		2.74		12.24	
PCB	E16-09793-001MSD	10/27/2016	09:30	2.70		11.97		2.74		12.23	
SOIL	E16-09799-001	10/27/2016	10:05	2.71		11.97		2.74		12.24	
BB-ST1-S	E16-09848-072	10/27/2016	10:22	2.71		11.97		2.74		12.24	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0910.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 10:28
Operator : JS
Sample : E-35_(0.,E16-09581-001,S,5.32g,7.90,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:28:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6221.2E6	4343.3E6	153.116	162.243
Spiked Amount 200.000			Recovery	=	76.56%	81.12%
2) S DCB	11.84	12.49	2381.7E6	1970.9E6	149.269	185.871
Spiked Amount 200.000			Recovery	=	74.63%	92.94%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

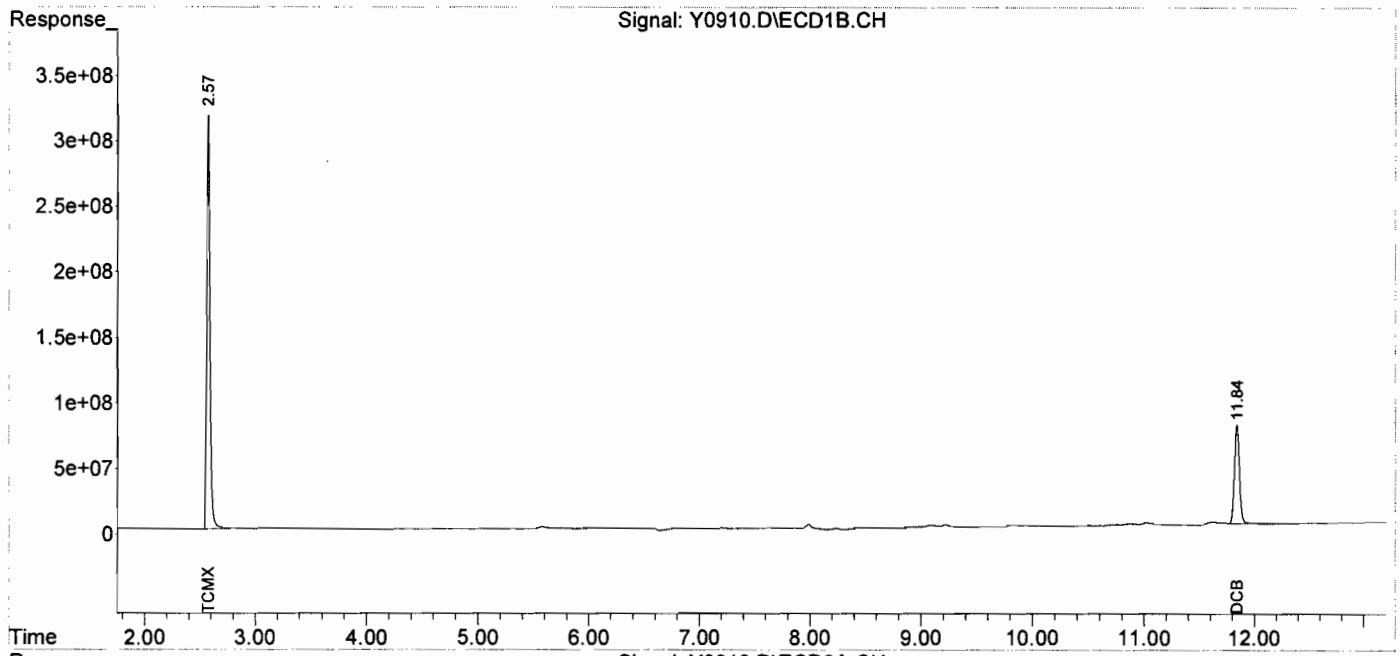
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

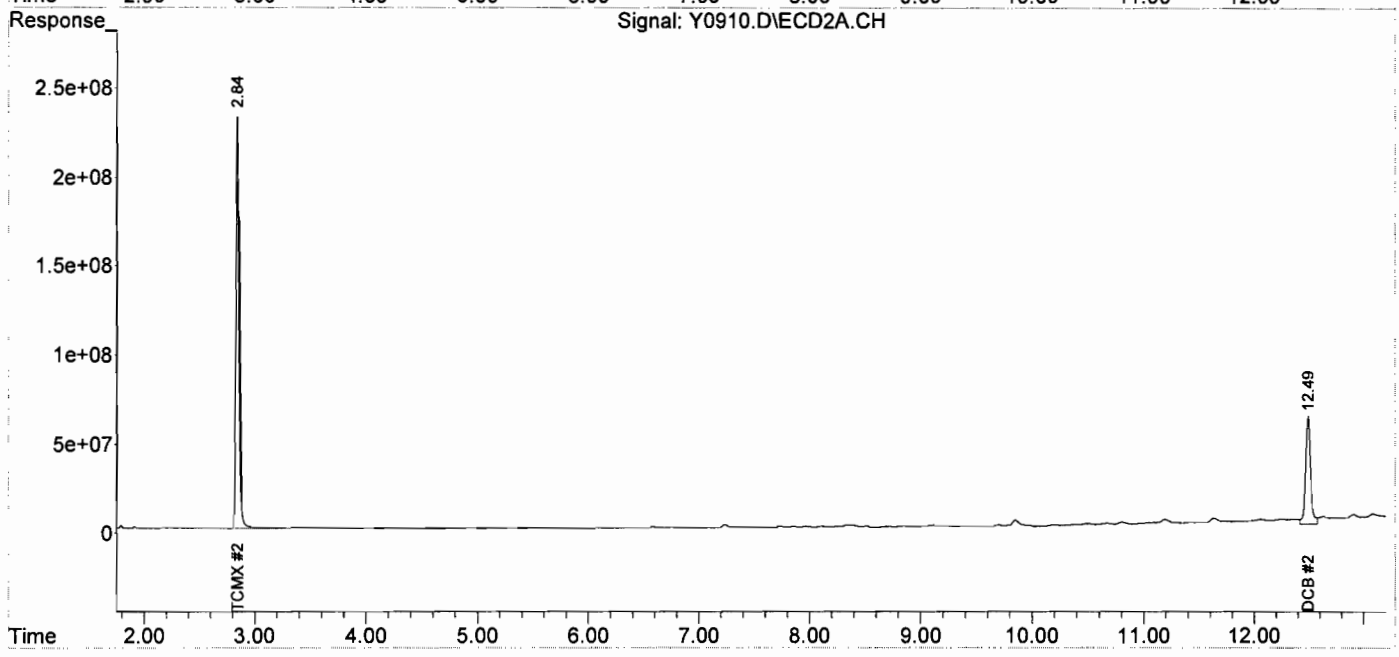
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0910.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 10:28
Operator : JS
Sample : E-35_(0.,E16-09581-001,S,5.32g,7.90,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:28:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0865.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:04
Operator : JS
Sample : E-35_(2-,E16-09581-002,S,5.30g,8.80,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:42:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6320.0E6	4383.9E6	155.550	163.760
Spiked Amount 200.000			Recovery	=	77.78%	81.88%
2) S DCB	11.84	12.49	2515.7E6	2316.7E6	157.664	218.482 #
Spiked Amount 200.000			Recovery	=	78.83%	109.24%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

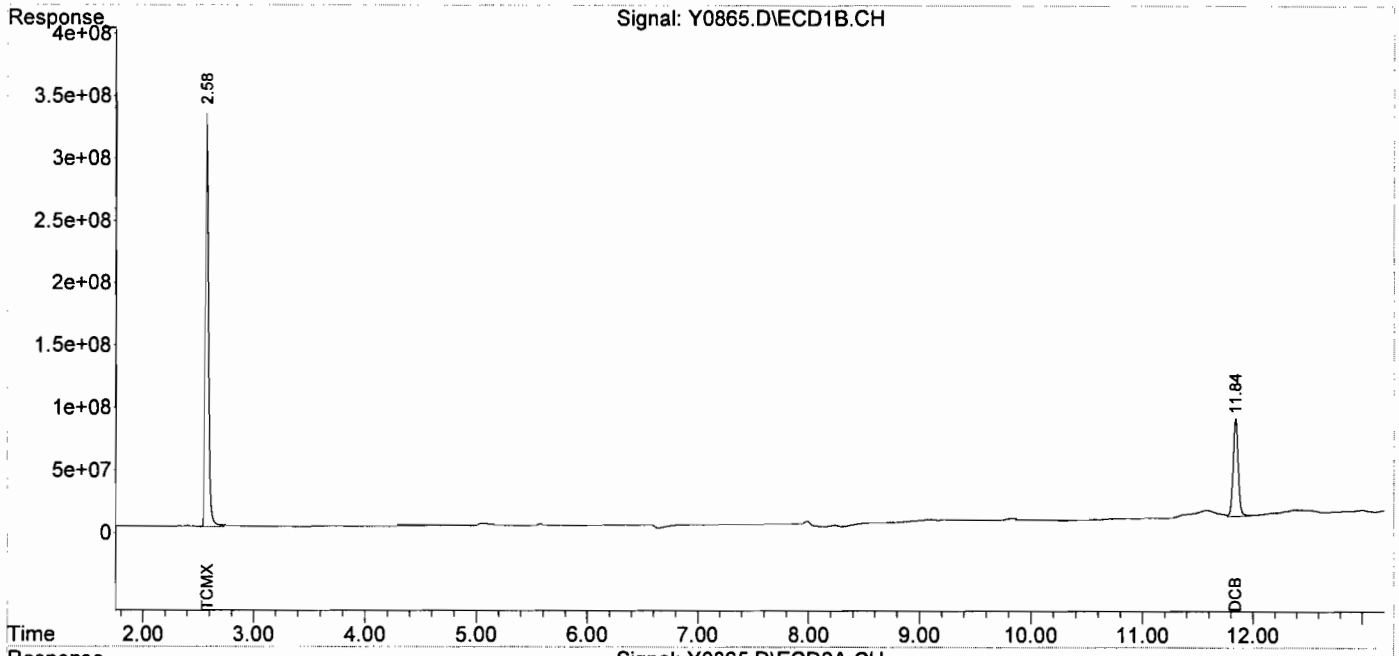
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

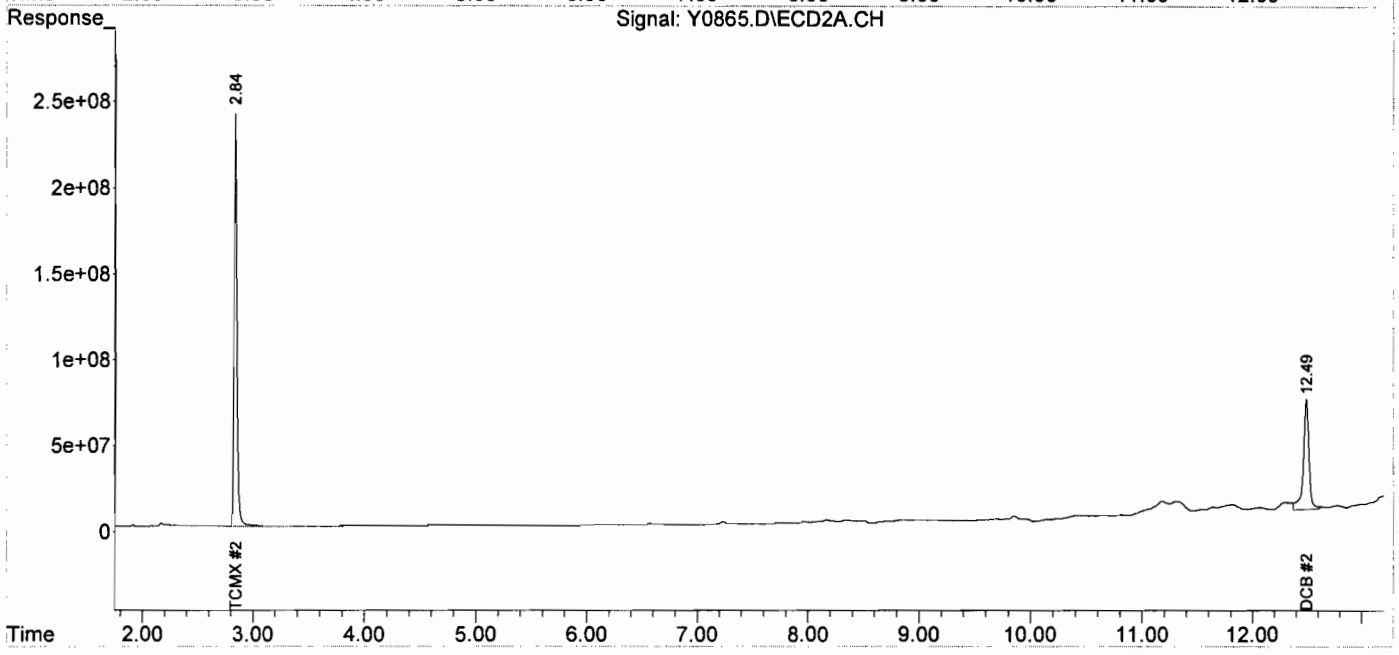
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0865.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:04
Operator : JS
Sample : E-35_(2-,E16-09581-002,S,5.30g,8.80,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:42:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0912.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 11:02
Operator : JS
Sample : E-45_(0.,E16-09581-003,S,5.70g,5.50,20
Misc : 161017-23,10/17/16,10/13/16,2
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.84	3080.6E6	2103.6E6	75.819	78.578
Spiked Amount 200.000			Recovery	=	37.91%	39.29%
2) S DCB	11.84	12.49	1319.3E6	1361.5E6	82.681	128.402m#
Spiked Amount 200.000			Recovery	=	41.34%	64.20%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	1389.4E6	696.9E6	535.440	950.374 #
34) L8 Aroclor-1260 {2}	8.74	8.11	1117.4E6	984.4E6	900.673	891.162
35) L8 Aroclor-1260 {3}	9.22	9.70	3680.0E6	1208.3E6	1080.706	1184.339
36) L8 Aroclor-1260 {4}	9.70	10.21	1825.6E6	2231.6E6	1119.270	1018.040
37) L8 Aroclor-1260 {5}	10.76	10.80	1195.7E6	2135.0E6	1506.985	1373.381
Sum Aroclor-1260			9208.0E6	7256.3E6	5143.073	5417.297
Average Aroclor-1260					1028.615	1083.459
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

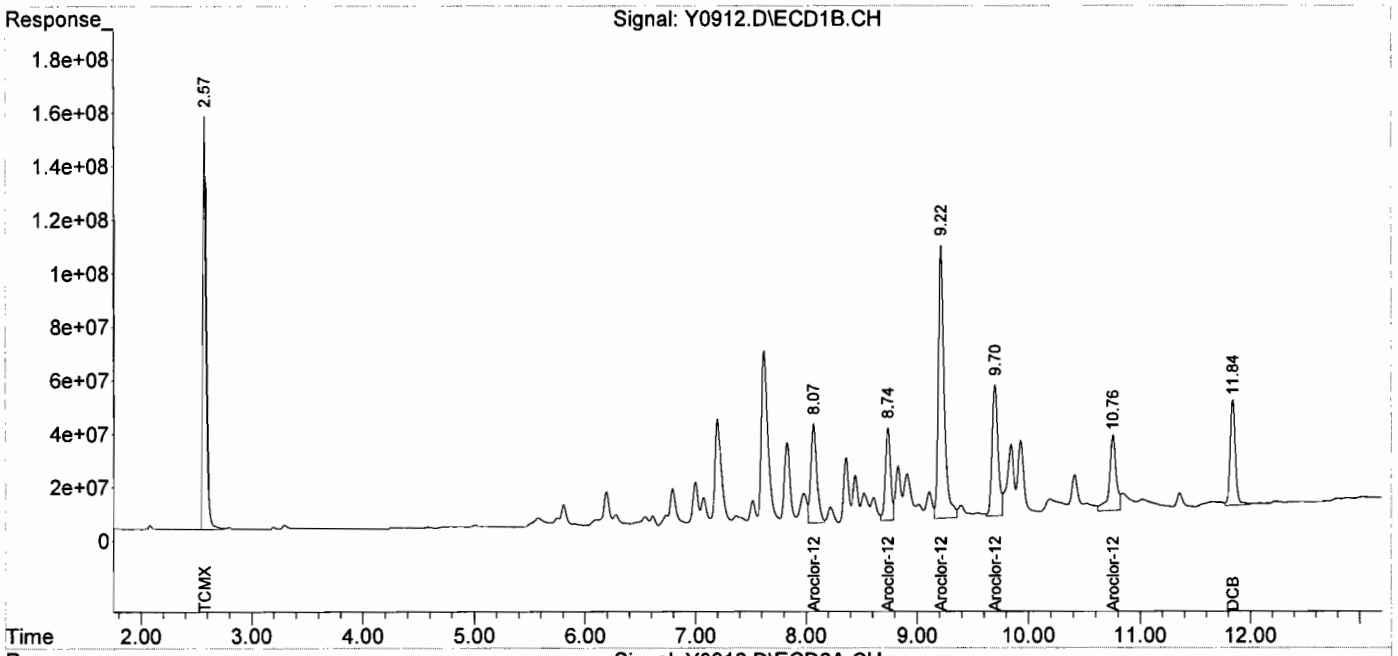
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

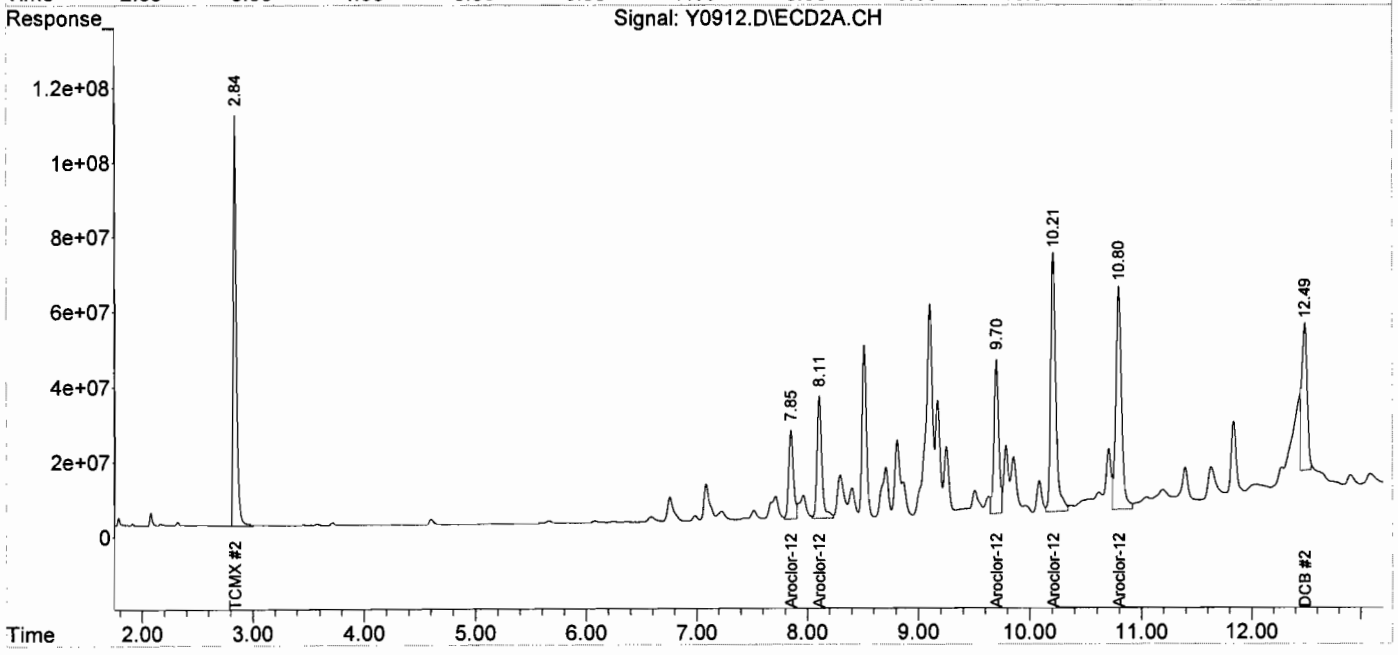
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0912.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 11:02
Operator : JS
Sample : E-45_(0.,E16-09581-003,S,5.70g,5.50,20
Misc : 161017-23,10/17/16,10/13/16,2
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4079.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:21
Operator : JS
Sample : E-45_(2-,E16-09581-004,S,5.80g,8.50,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:59:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2	
System Monitoring Compounds							
1) S TCMX	2.68	2.71	2524.6E6	1937.1E6	157.326	160.971	
Spiked Amount 200.000			Recovery	=	78.66%	80.49%	
2) S DCB	11.97	12.23	1084.1E6	1001.5E6	206.983	207.539m	
Spiked Amount 200.000			Recovery	=	103.49%	103.77%	
Target Compounds							
Sum Aroclor-1016			0	0	N.D.	N.D.	
Average Aroclor-1016					0.000	0.000	
Sum Aroclor-1221			0	0	N.D.	N.D.	
Average Aroclor-1221					0.000	0.000	
Sum Aroclor-1232			0	0	N.D.	N.D.	
Average Aroclor-1232					0.000	0.000	
Sum Aroclor-1242			0	0	N.D.	N.D.	
Average Aroclor-1242					0.000	0.000	
Sum Aroclor-1248			0	0	N.D.	N.D.	
Average Aroclor-1248					0.000	0.000	
Sum Aroclor-1254			0	0	N.D.	N.D.	
Average Aroclor-1254					0.000	0.000	
33) L8 Aroclor-1260	8.17	7.78	756.0E6	378.4E6	731.426	739.850	
34) L8 Aroclor-1260 {2}	8.85	8.17	421.9E6	488.4E6	876.446	854.385	
35) L8 Aroclor-1260 {3}	9.33	9.39	1249.0E6	713.0E6	1025.488	1743.334	#
36) L8 Aroclor-1260 {4}	9.81	9.88	916.0E6	1084.1E6	1443.953	1122.336	
37) L8 Aroclor-1260 {5}	10.87	10.46	377.0E6	1074.3E6	1430.662m	1242.281	
Sum Aroclor-1260			3719.8E6	3738.2E6	5507.974	5702.185	
Average Aroclor-1260					1101.595	1140.437	
Sum Aroclor-1262			0	0	N.D.	N.D.	
Average Aroclor-1262					0.000	0.000	
Sum Aroclor-1268			0	0	N.D.	N.D.	
Average Aroclor-1268					0.000	0.000	

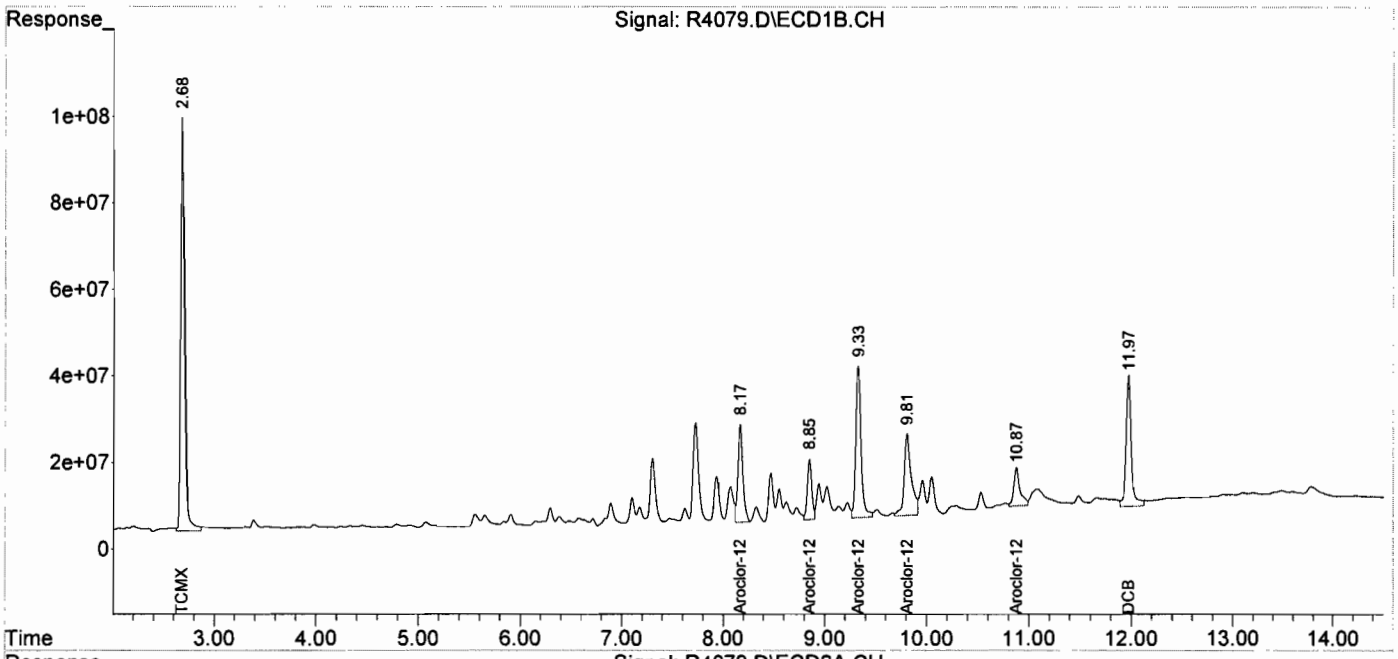
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

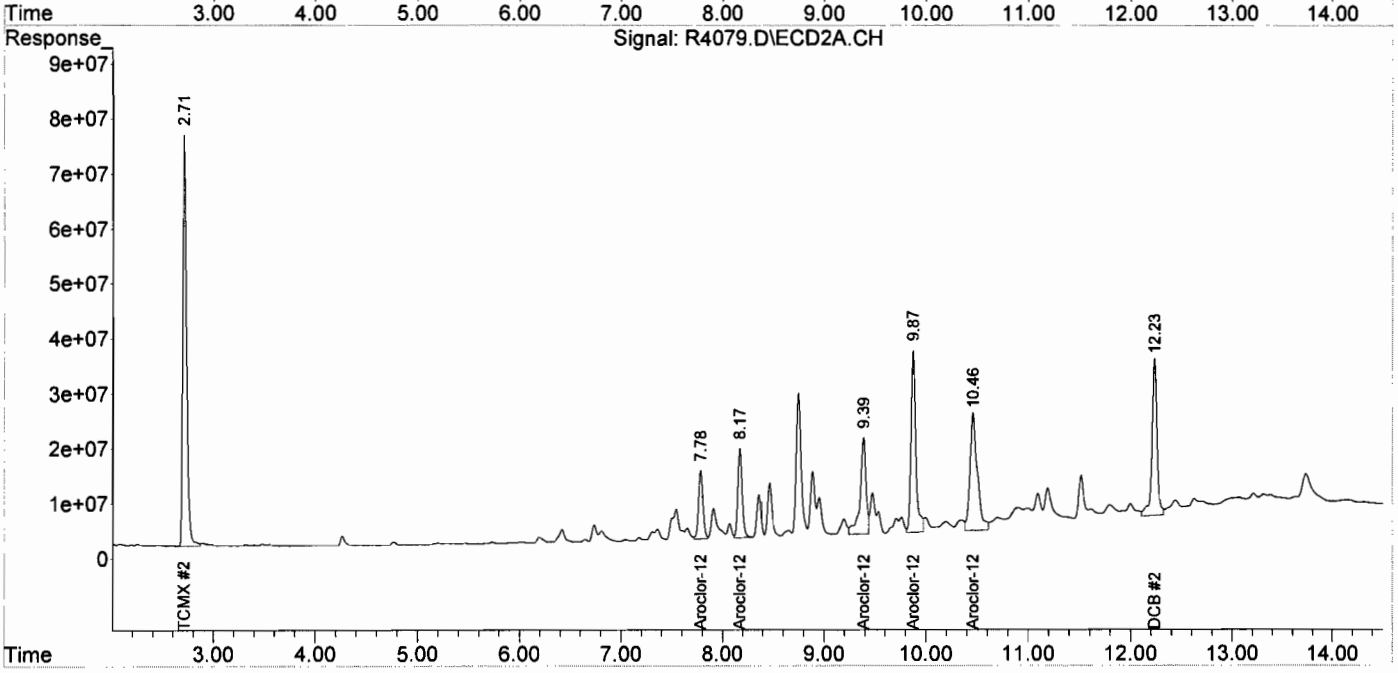
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4079.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:21
Operator : JS
Sample : E-45_(2-,E16-09581-004,S,5.80g,8.50,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 42 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:59:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4080.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:38
Operator : JS
Sample : E-45_(4.,E16-09581-006,S,5.34g,7.10,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:59:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2592.0E6	2019.4E6	161.526	167.810
Spiked Amount 200.000			Recovery	=	80.76%	83.91%
2) S DCB	11.97	12.24	996.8E6	889.6E6	190.311m	184.345m
Spiked Amount 200.000			Recovery	=	95.16%	92.17%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

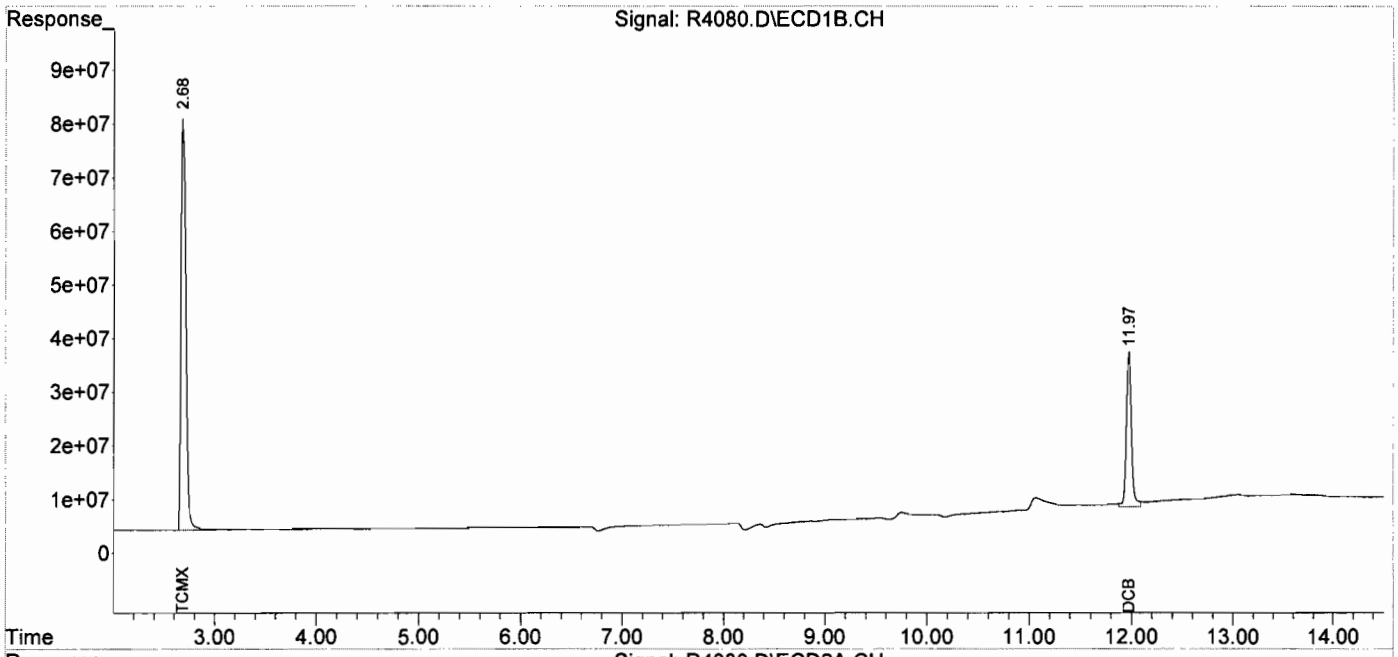
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

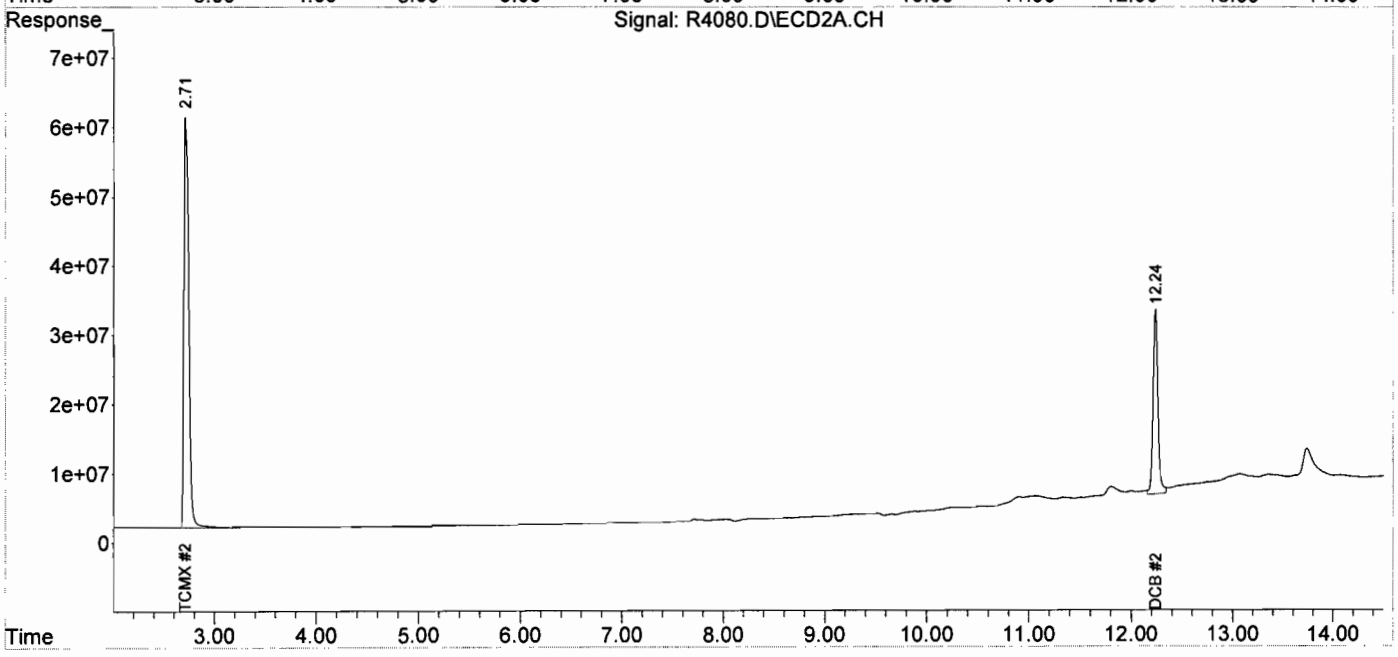
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4080.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:38
Operator : JS
Sample : E-45_(4.,E16-09581-006,S,5.34g,7.10,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 43 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 11:59:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0867.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:38
Operator : JS
Sample : E-53_(0.,E16-09581-007,S,5.23g,18.6,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:21:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6785.2E6	4717.5E6	166.997	176.221
Spiked Amount 200.000			Recovery	=	83.50%	88.11%
2) S DCB	11.84	12.49	2851.5E6	2318.5E6	178.708	218.648m
Spiked Amount 200.000			Recovery	=	89.35%	109.32%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	879.3E6	375.1E6	338.890	511.506 #
34) L8 Aroclor-1260 {2}	8.74	8.11	870.6E6	1070.2E6	701.806	968.843 #
35) L8 Aroclor-1260 {3}	9.22	9.70	2513.9E6	988.1E6	738.263	968.434 #
36) L8 Aroclor-1260 {4}	9.70	10.21	1334.2E6	1434.6E6	817.993	654.453
37) L8 Aroclor-1260 {5}	10.75	10.80	581.6E6	1493.9E6	733.040m	960.960 #
Sum Aroclor-1260			6179.7E6	5361.8E6	3329.993	4064.195
Average Aroclor-1260					665.999	812.839
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

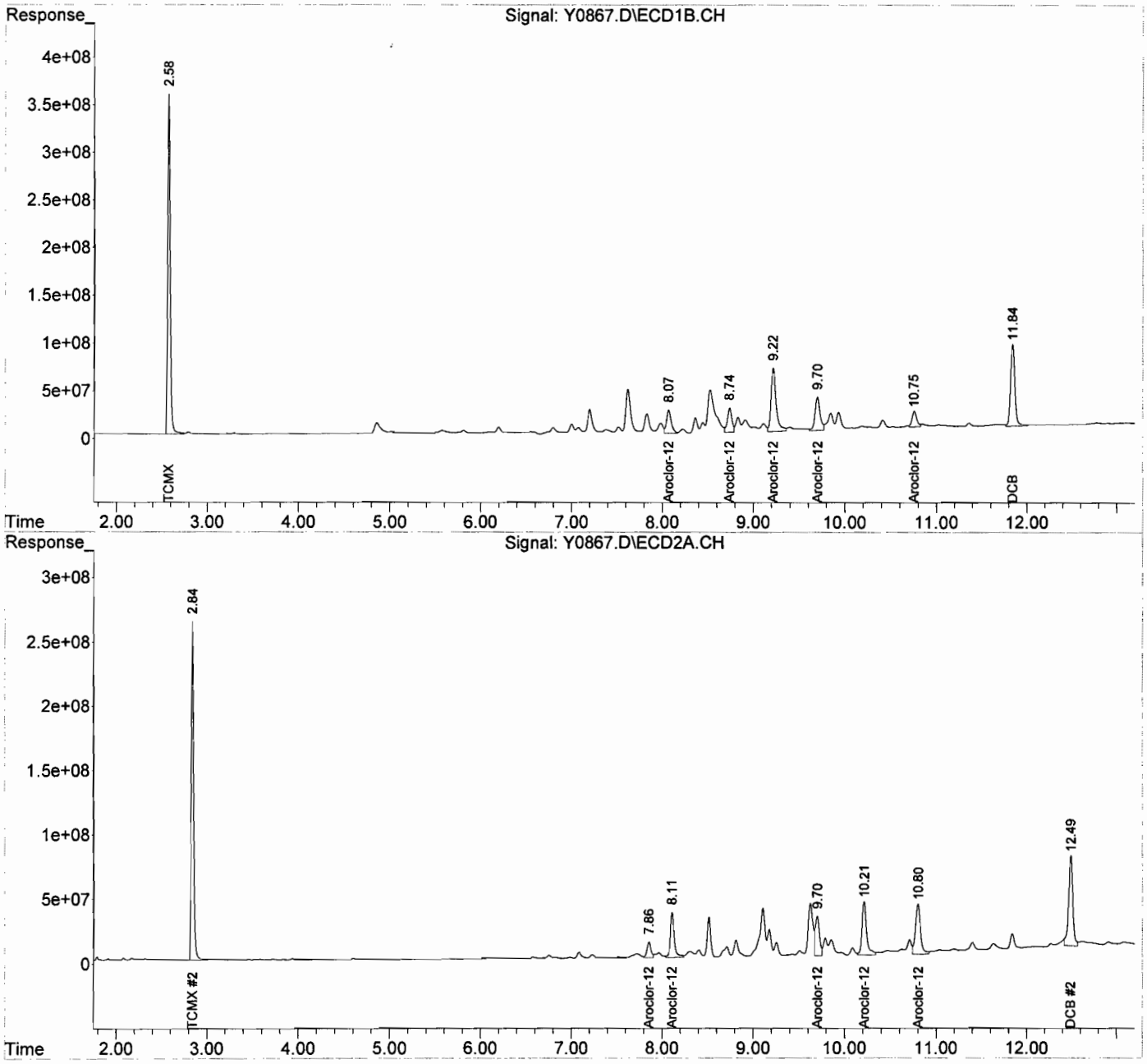
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0867.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:38
Operator : JS
Sample : E-53_(0.,E16-09581-007,S,5.23g,18.6,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 28 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:21:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0868.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:56
Operator : JS
Sample : E-58_(0.,E16-09581-008,S,5.33g,10.3,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:22:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6427.0E6	4419.0E6	158.182	165.070
Spiked Amount 200.000			Recovery	=	79.09%	82.53%
2) S DCB	11.84	12.49	2625.2E6	1967.2E6	164.528	185.518m
Spiked Amount 200.000			Recovery	=	82.26%	92.76%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

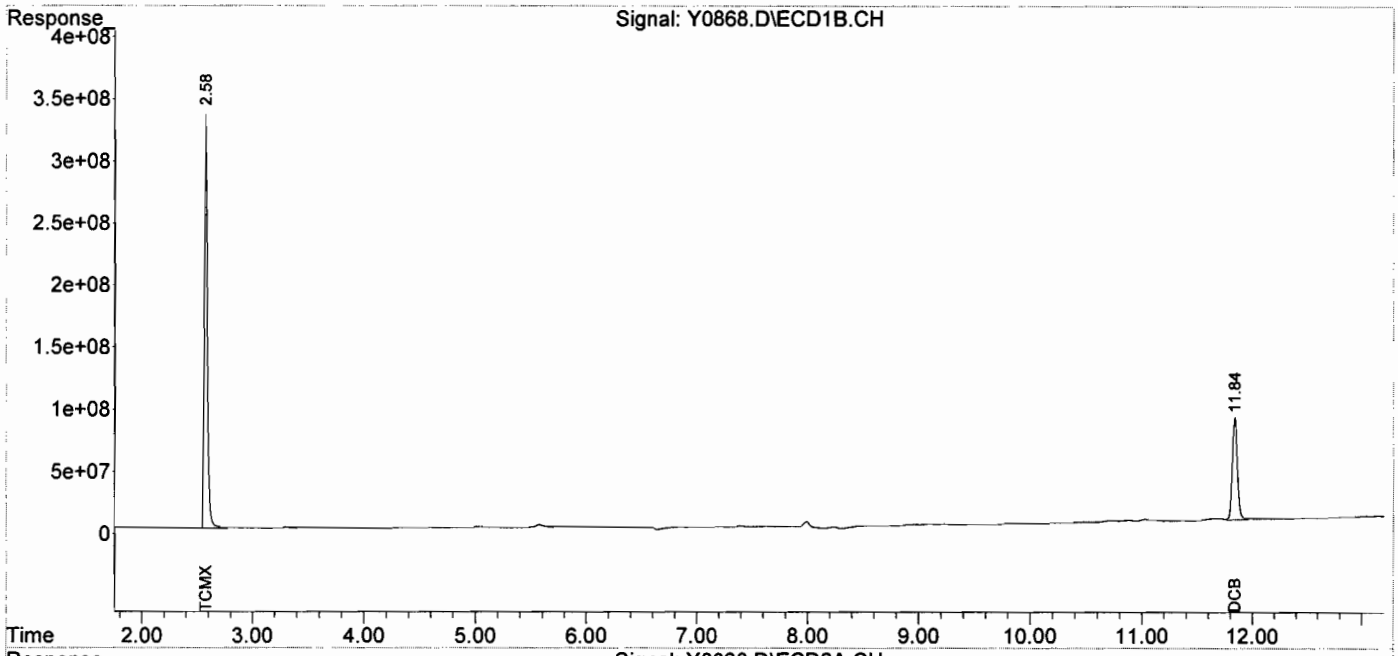
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

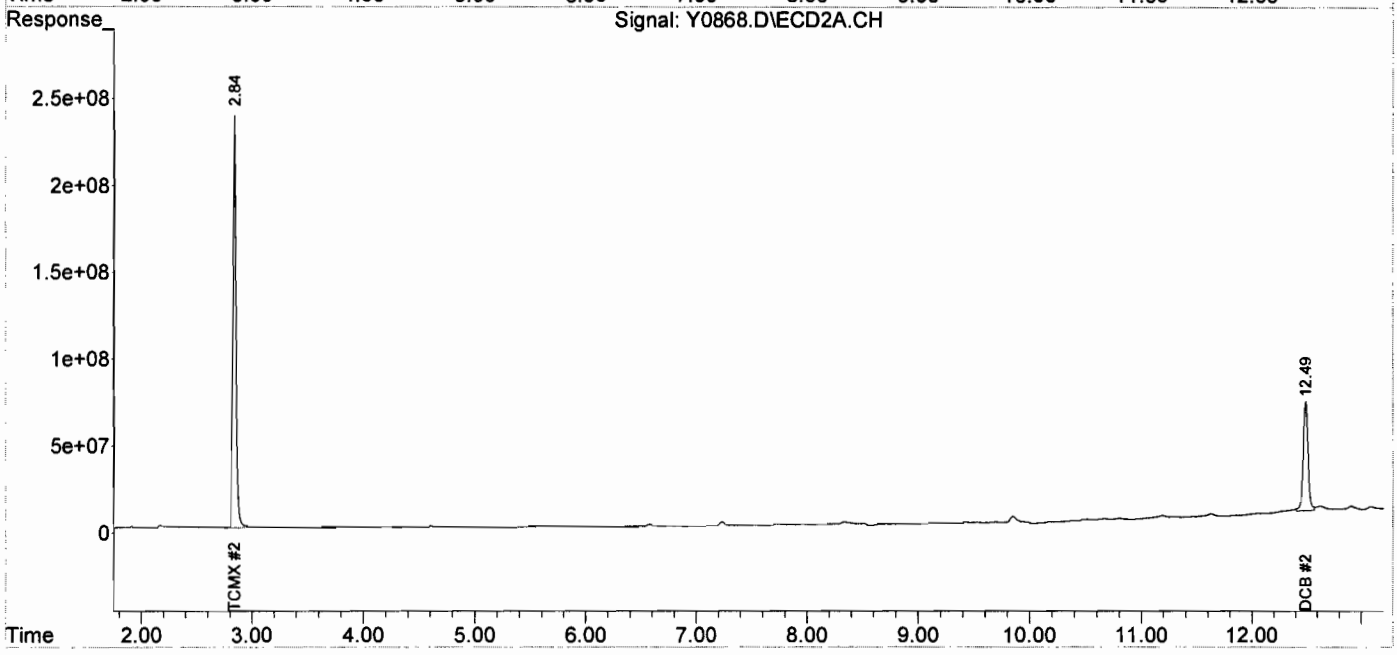
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0868.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 18:56
Operator : JS
Sample : E-58_(0.,E16-09581-008,S,5.33g,10.3,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:22:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0869.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 19:13
Operator : JS
Sample : E-59_(0.,E16-09581-009,S,5.59g,7.00,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:23:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6188.4E6	4338.3E6	152.310	162.056
Spiked Amount 200.000			Recovery	=	76.16%	81.03%
2) S DCB	11.84	12.49	2577.8E6	2369.3E6	161.557	223.440m#
Spiked Amount 200.000			Recovery	=	80.78%	111.72%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

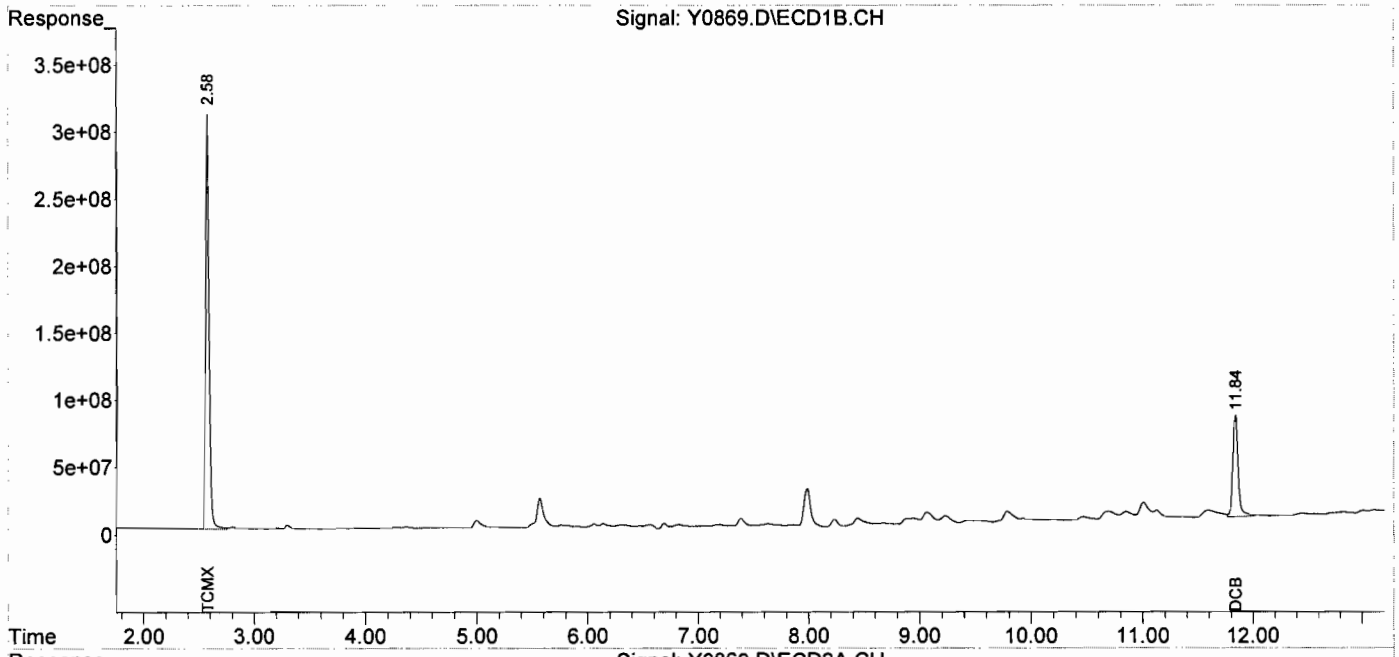
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

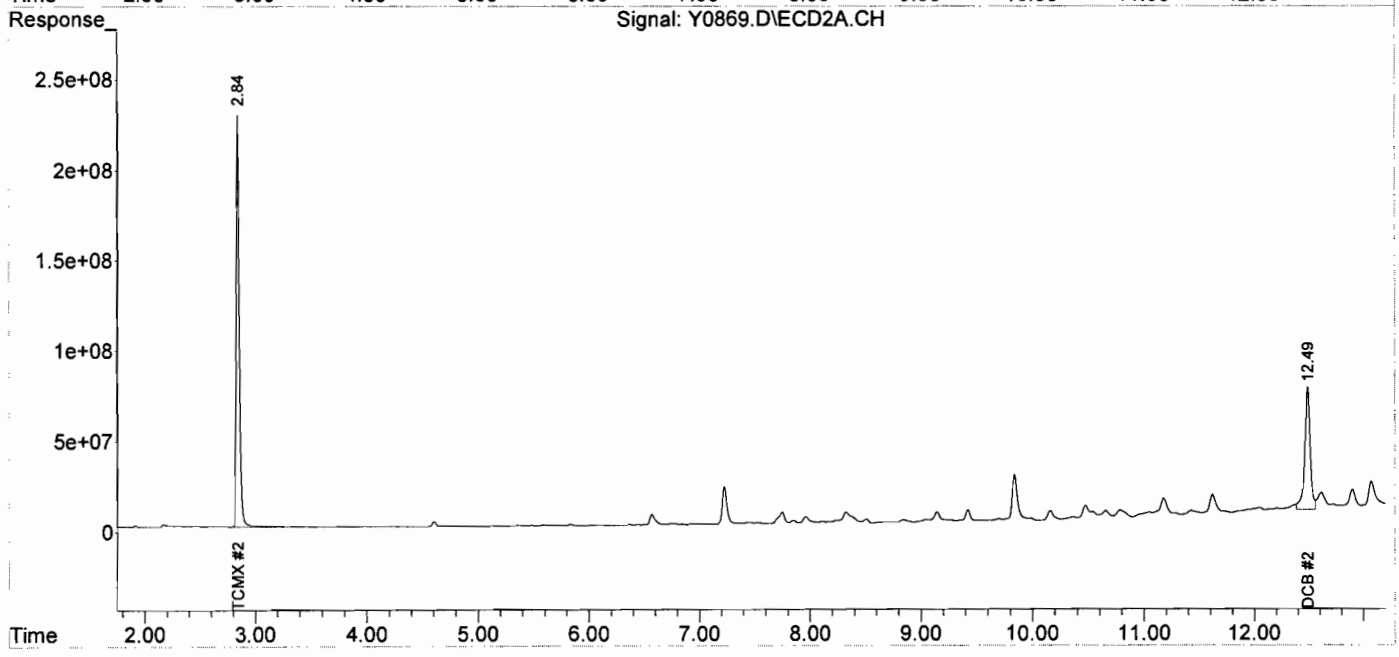
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0869.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 19:13
Operator : JS
Sample : E-59_(0.,E16-09581-009,S,5.59g,7.00,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:23:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 19:30
Operator : JS
Sample : E-48_(0.,E16-09581-010,S,5.75g,19.8,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:37:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6149.2E6	4538.3E6	151.344	169.527
Spiked Amount 200.000			Recovery	=	75.67%	84.76%
2) S DCB	11.84	12.49	3074.3E6	2390.6E6	192.672	225.456m
Spiked Amount 200.000			Recovery	=	96.34%	112.73%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	4683.6E6	2053.8E6	1804.994	2800.815 #
34) L8 Aroclor-1260 {2}	8.74	8.11	3469.6E6	3200.0E6	2796.799	2896.874
35) L8 Aroclor-1260 {3}	9.22	9.70	11450.4E6	4181.4E6	3362.668	4098.413
36) L8 Aroclor-1260 {4}	9.70	10.21	5773.2E6	8855.3E6	3539.489	4039.633
37) L8 Aroclor-1260 {5}	10.75	10.80	3726.6E6	7610.4E6	4696.910	4895.557
Sum Aroclor-1260			29103.5E6	25900.9E6	16200.859	18731.292
Average Aroclor-1260					3240.172	3746.258
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

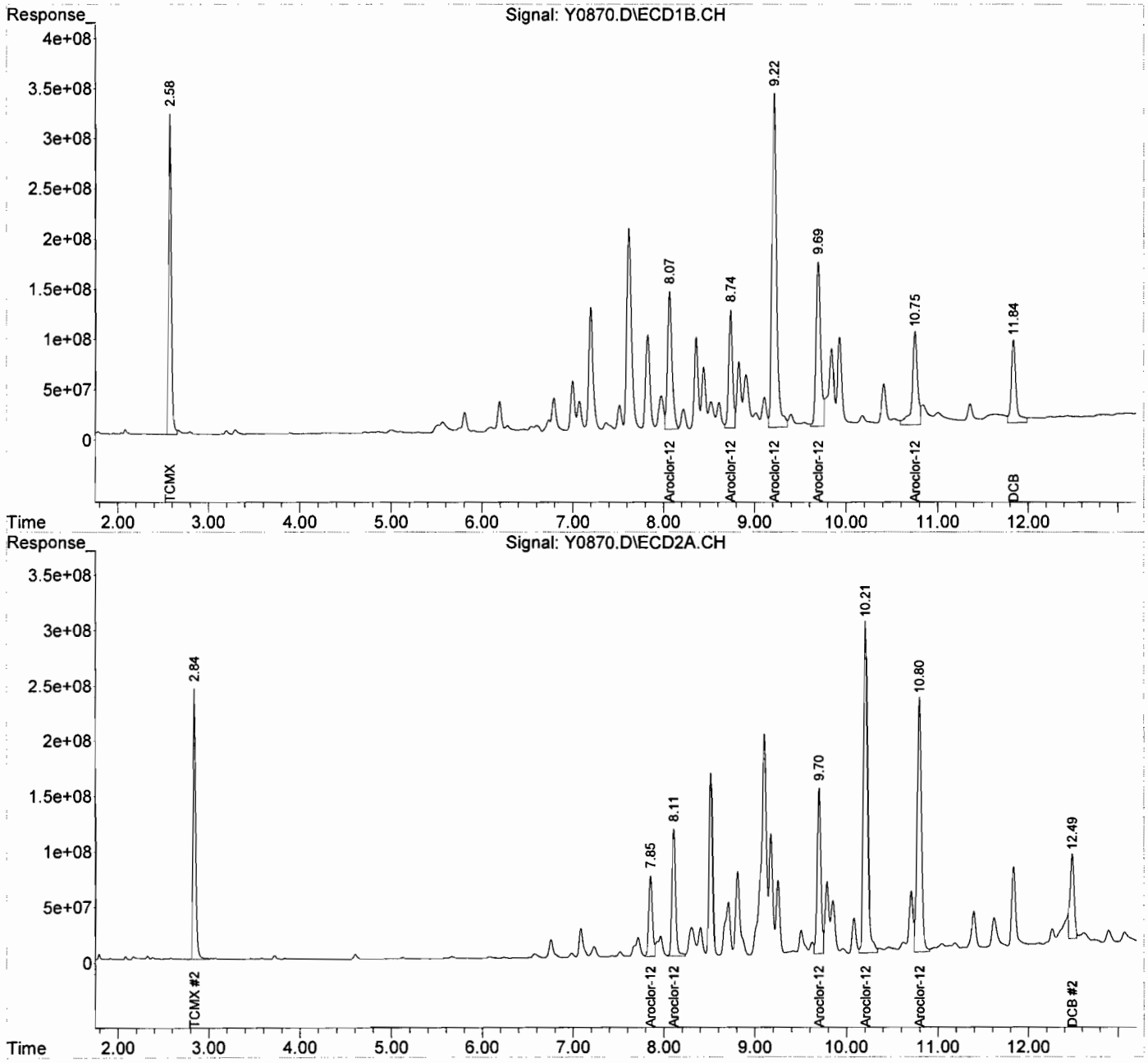
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0870.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 19:30
Operator : JS
Sample : E-48_(0.,E16-09581-010,S,5.75g,19.8,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:37:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0913.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 11:20
Operator : JS
Sample : E-48_(0.,E16-09581-010DL,S,5.75g,19.8,20
Misc : 161017-23,10/17/16,10/13/16,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:32:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	732.1E6	488.1E6	18.019	18.231
Spiked Amount 200.000			Recovery =		9.01%	9.12%
2) S DCB	11.84	12.49	332.9E6	236.6E6	20.865	22.313m
Spiked Amount 200.000			Recovery =		10.43%	11.16%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.86	721.8E6	251.9E6	278.192	343.586
34) L8 Aroclor-1260 {2}	8.74	8.11	486.3E6	385.5E6	391.954	349.012
35) L8 Aroclor-1260 {3}	9.22	9.70	1532.4E6	494.8E6	450.013	484.994
36) L8 Aroclor-1260 {4}	9.70	10.21	771.4E6	967.7E6	472.923	441.453
37) L8 Aroclor-1260 {5}	10.76	10.80	495.6E6	910.7E6	624.682	585.831
Sum Aroclor-1260			4007.5E6	3010.7E6	2217.764	2204.876
Average Aroclor-1260					443.553	440.975
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

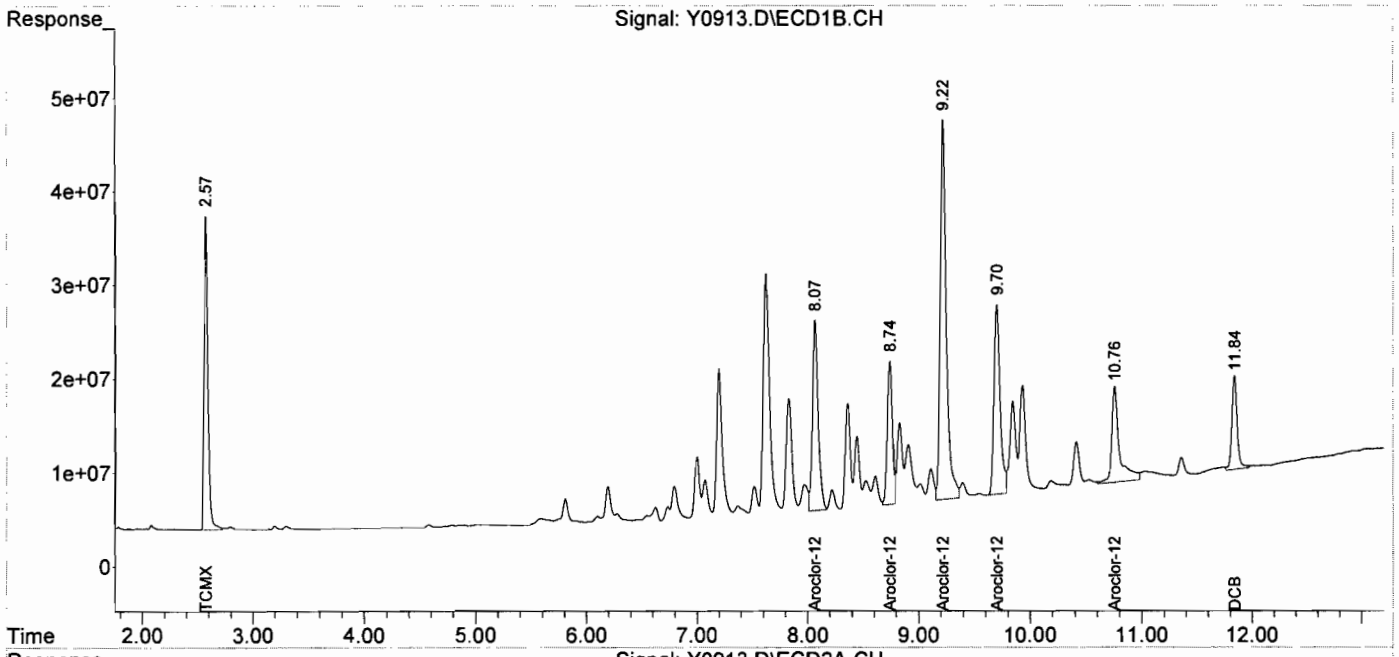
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

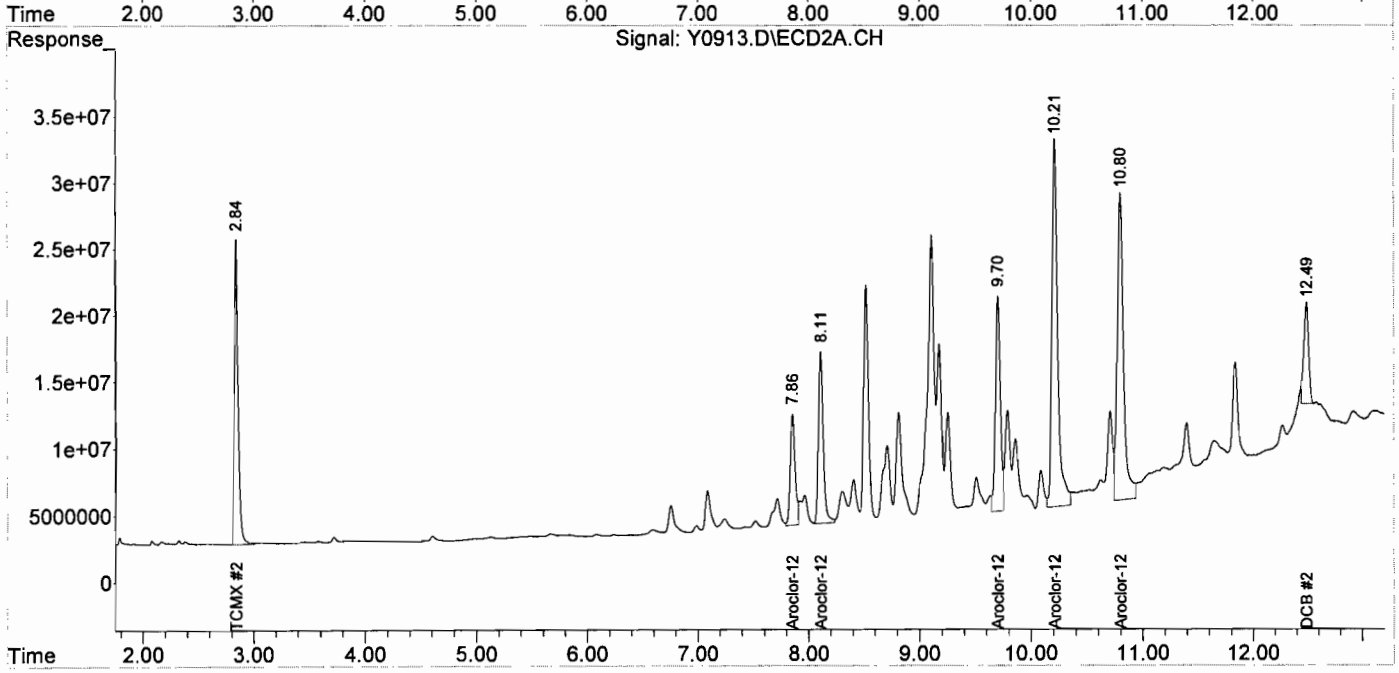
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0913.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 11:20
Operator : JS
Sample : E-48_(0.,E16-09581-010DL,S,5.75g,19.8,20
Misc : 161017-23,10/17/16,10/13/16,10
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:32:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0911.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 10:45
Operator : JS
Sample : E-46_(0.,E16-09581-011,S,5.81g,41.2,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:29:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6970.1E6	5124.9E6	171.550	191.438
Spiked Amount 200.000			Recovery	=	85.78%	95.72%
2) S DCB	11.84	12.49	3368.4E6	2599.1E6	211.104	245.119m
Spiked Amount 200.000			Recovery	=	105.55%	122.56%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.06	7.85	894.4E6	404.2E6	344.673	551.221 #
34) L8 Aroclor-1260 {2}	8.74	8.11	616.5E6	552.2E6	496.974	499.867
35) L8 Aroclor-1260 {3}	9.21	9.70	2648.8E6	761.0E6	777.893	745.912
36) L8 Aroclor-1260 {4}	9.69	10.21	1114.8E6	1811.2E6	683.455	826.244
37) L8 Aroclor-1260 {5}	10.75	10.80	449.8E6	1942.9E6	566.905m	1249.844 #
Sum Aroclor-1260			5724.3E6	5471.5E6	2869.901	3873.088
Average Aroclor-1260					573.980	774.618
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

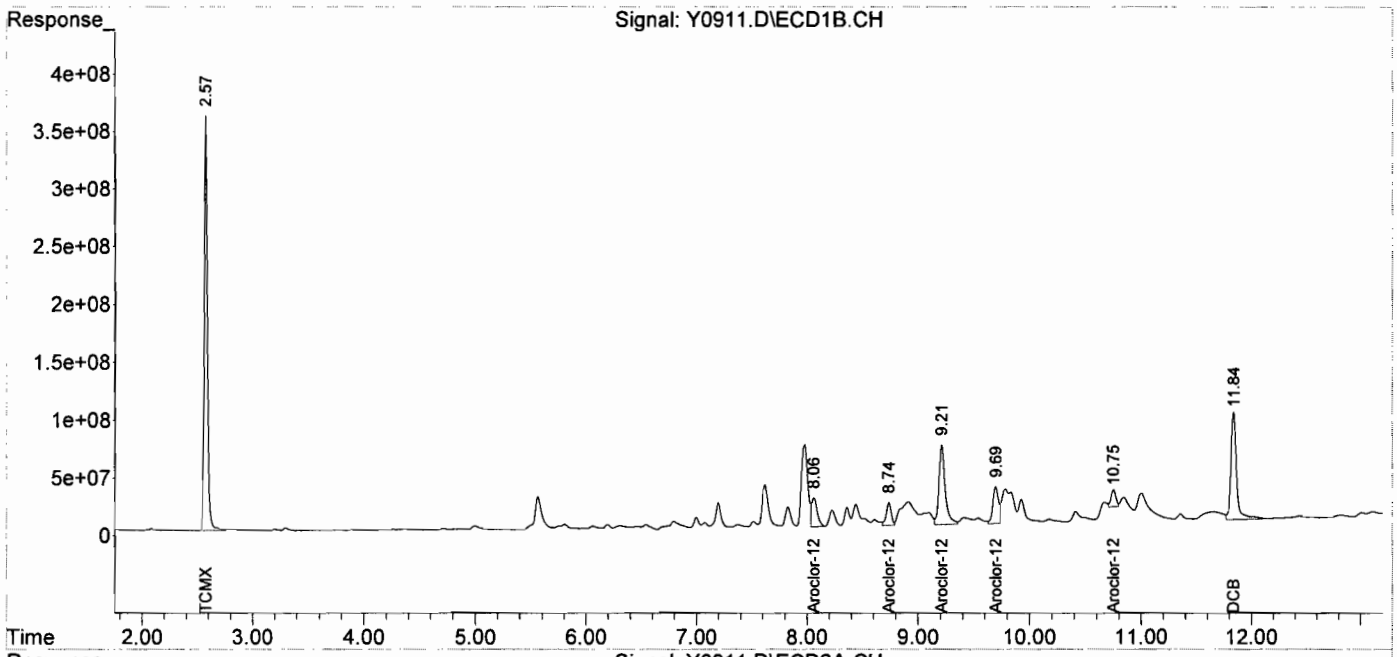
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

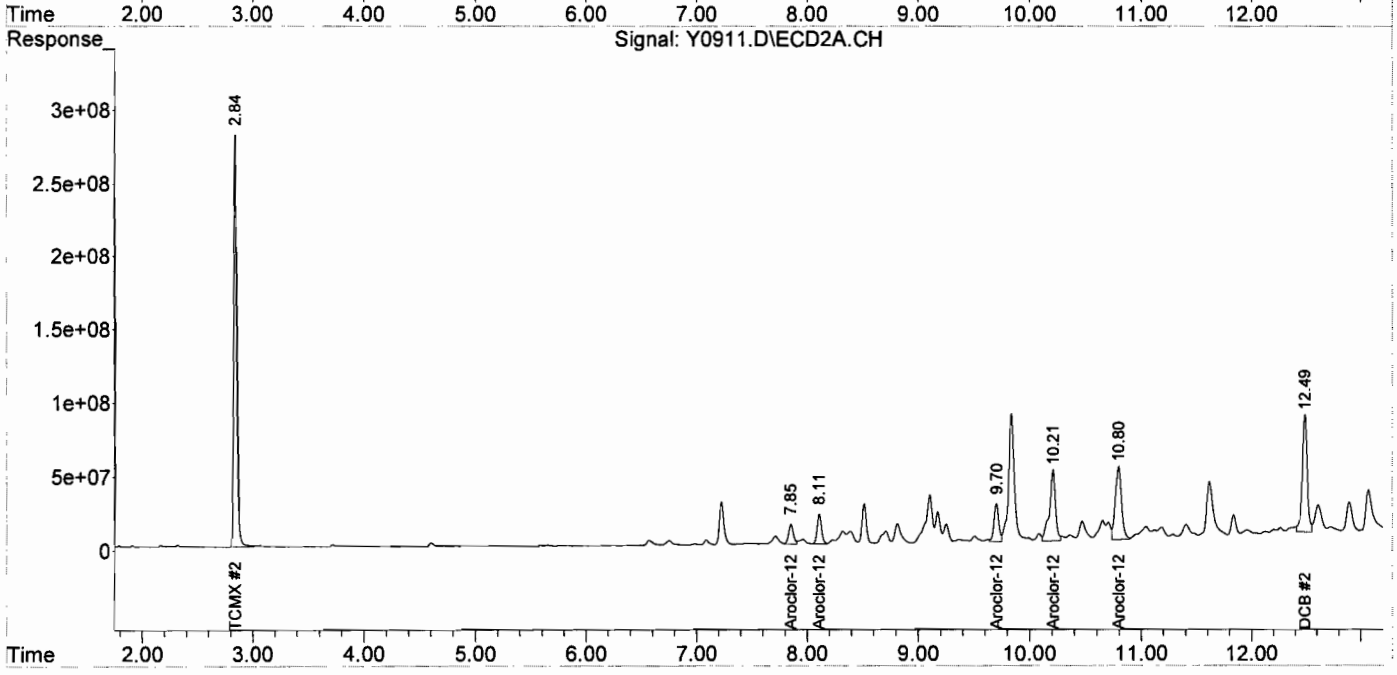
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : Y0911.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 10:45
Operator : JS
Sample : E-46_(0.,E16-09581-011,S,5.81g,41.2,20
Misc : 161017-23,10/17/16,10/13/16,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 14:29:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4081.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:56
Operator : JS
Sample : E-46_(2-,E16-09581-012,S,5.57g,11.4,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:00:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2606.3E6	2028.8E6	162.413	168.590
Spiked Amount 200.000			Recovery	=	81.21%	84.30%
2) S DCB	11.97	12.23	984.2E6	957.0E6	187.903	198.312
Spiked Amount 200.000			Recovery	=	93.95%	99.16%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

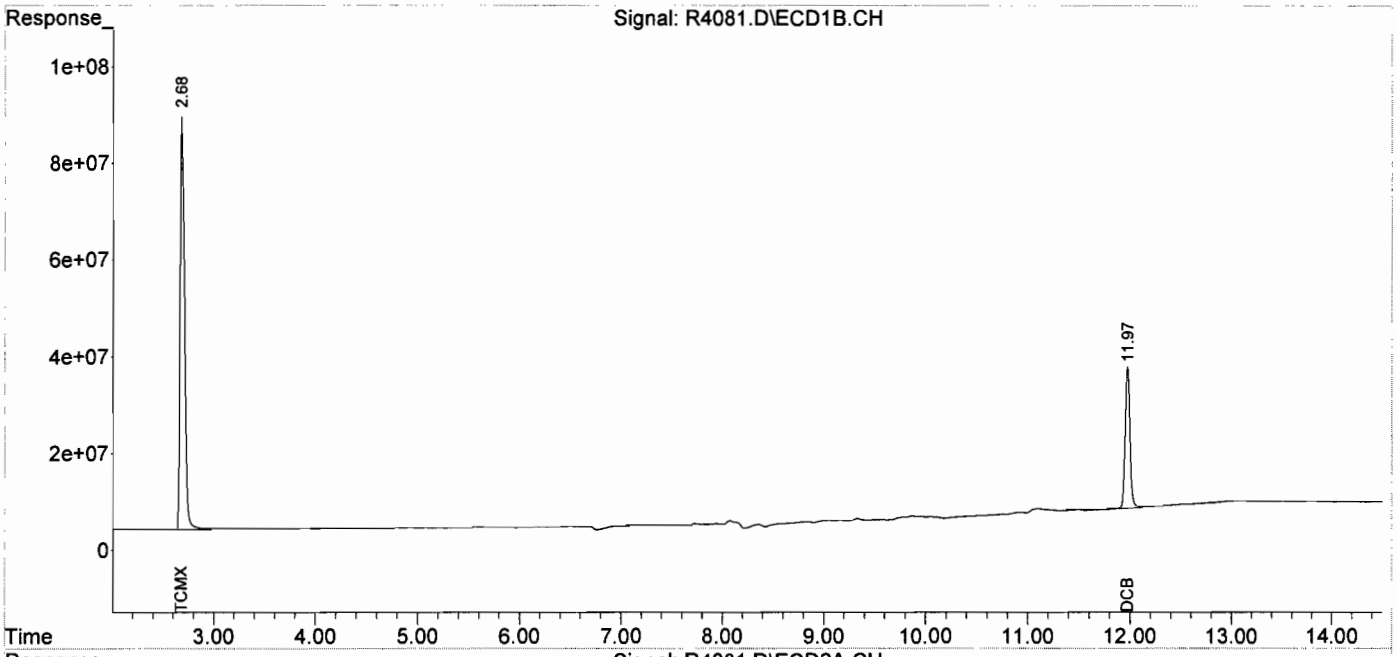
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

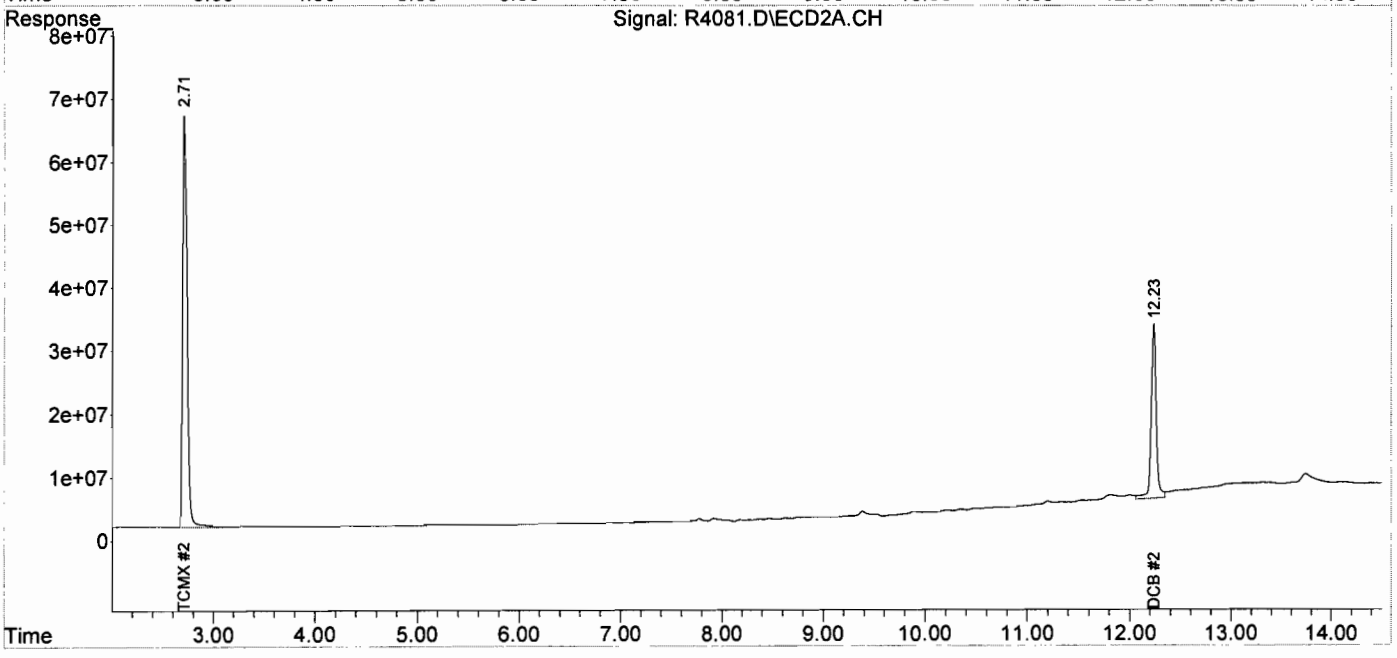
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4081.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 5:56
Operator : JS
Sample : E-46_(2-,E16-09581-012,S,5.57g,11.4,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 44 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:00:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4082.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 6:13
Operator : JS
Sample : E-46_(4.,E16-09581-014,S,5.85g,12.0,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:00:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.68	2.71	2627.9E6	2054.0E6	163.759	170.686
Spiked Amount 200.000			Recovery	=	81.88%	85.34%
2) S DCB	11.97	12.23	1072.2E6	997.3E6	204.700m	206.673m
Spiked Amount 200.000			Recovery	=	102.35%	103.34%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

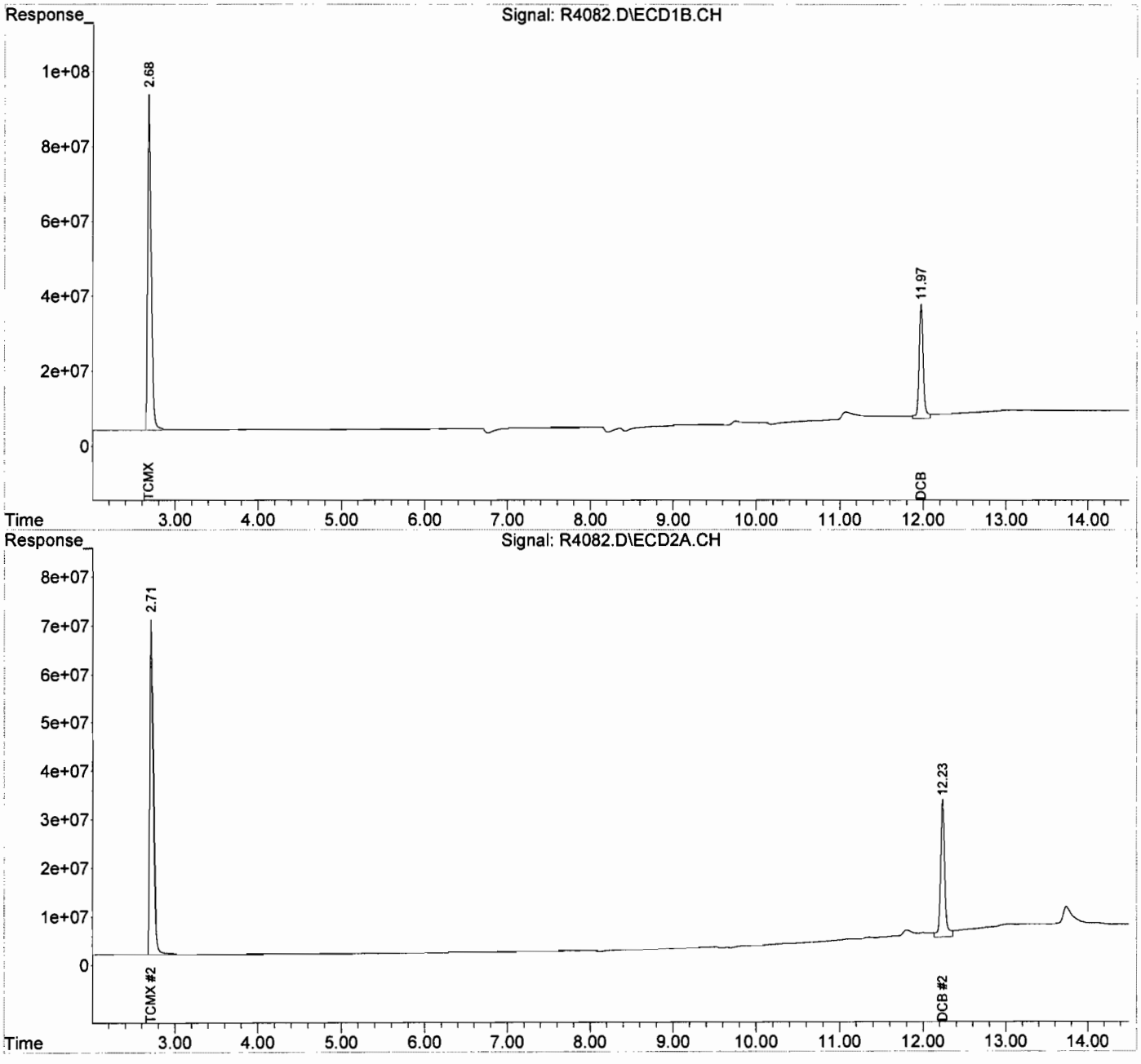
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : R4082.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 6:13
Operator : JS
Sample : E-46_(4.,E16-09581-014,S,5.85g,12.0,20
Misc : 161025-09,10/25/16,10/13/16,1
ALS Vial : 45 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:00:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0877.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 22:41
Operator : JS
Sample : E-38_(0.,E16-09581-015,S,5.86g,15.9,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:09:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	5697.8E6	4334.1E6	140.235	161.901
Spiked Amount 200.000			Recovery	=	70.12%	80.95%
2) S DCB	11.84	12.49	2706.6E6	2360.8E6	169.628	222.643m#
Spiked Amount 200.000			Recovery	=	84.81%	111.32%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	856.1E6	371.5E6	329.949	506.674 #
34) L8 Aroclor-1260 {2}	8.74	8.11	929.3E6	752.0E6	749.061	680.750
35) L8 Aroclor-1260 {3}	9.21	9.70	2974.3E6	895.5E6	873.485	877.677
36) L8 Aroclor-1260 {4}	9.70	10.21	1329.6E6	1717.2E6	815.146	783.349
37) L8 Aroclor-1260 {5}	10.75	10.80	834.9E6	1824.0E6	1052.335m	1173.330
Sum Aroclor-1260			6924.3E6	5560.2E6	3819.976	4021.780
Average Aroclor-1260					763.995	804.356
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

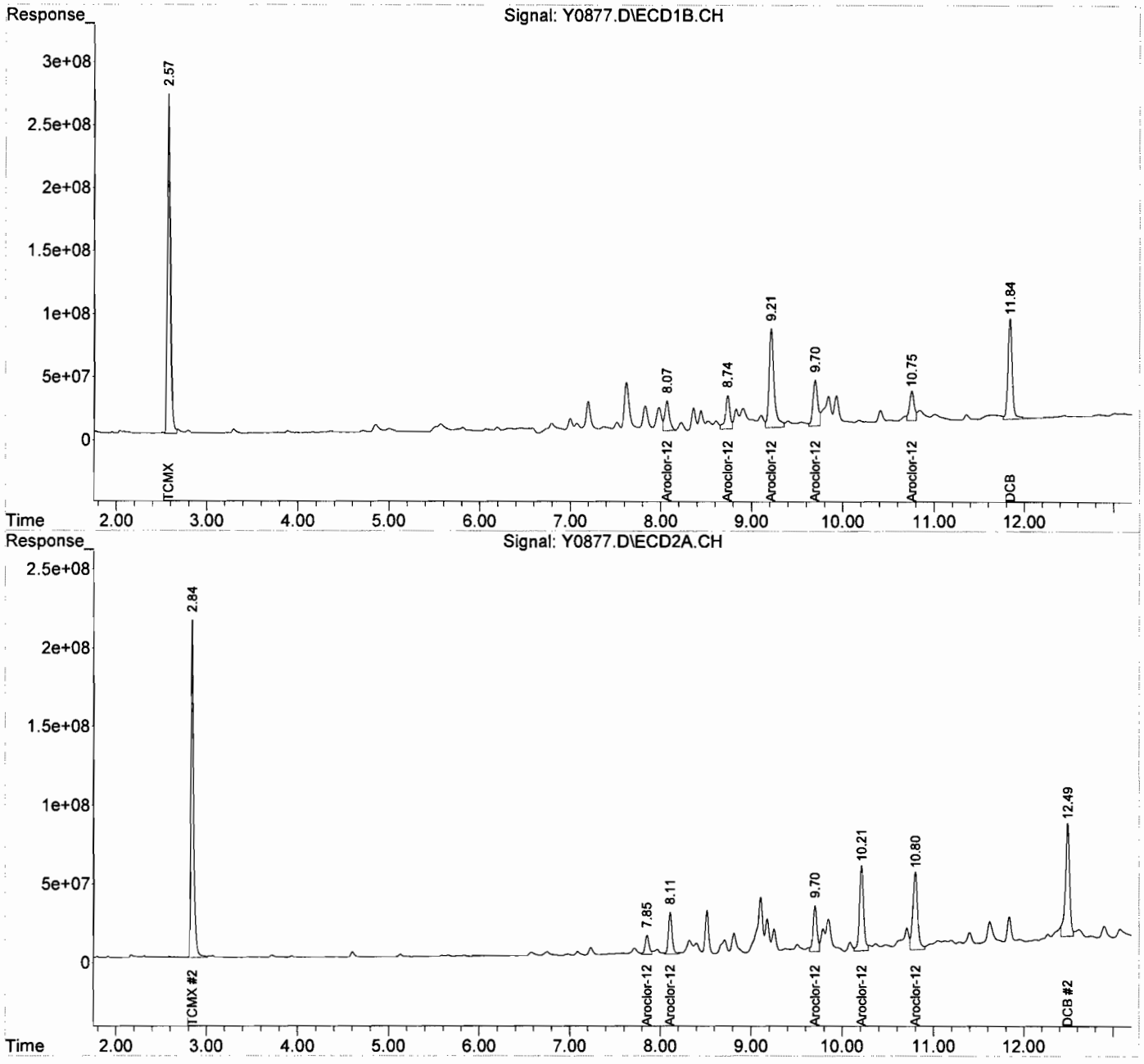
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0877.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 22:41
Operator : JS
Sample : E-38_(0.,E16-09581-015,S,5.86g,15.9,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 37 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:09:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0878.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 22:58
Operator : JS
Sample : E-38_(2-,E16-09581-016,S,5.20g,17.8,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:11:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6016.6E6	4370.3E6	148.082	163.251
Spiked Amount 200.000			Recovery	=	74.04%	81.63%
2) S DCB	11.84	12.49	2582.1E6	2755.5E6	161.823	259.863 #
Spiked Amount 200.000			Recovery	=	80.91%	129.93%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.07	7.85	320.5E6	160.5E6	123.525	218.821 #
34) L8 Aroclor-1260 {2}	8.74	8.11	261.3E6	293.1E6	210.632m	265.310 #
35) L8 Aroclor-1260 {3}	9.22	9.70	1015.5E6	289.1E6	298.239m	283.339m
36) L8 Aroclor-1260 {4}	9.70	10.21	431.1E6	531.3E6	264.307m	242.357
37) L8 Aroclor-1260 {5}	10.76	10.80	217.3E6	586.9E6	273.860m	377.513 #
Sum Aroclor-1260			2245.8E6	1860.7E6	1170.562	1387.341
Average Aroclor-1260					234.112	277.468
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

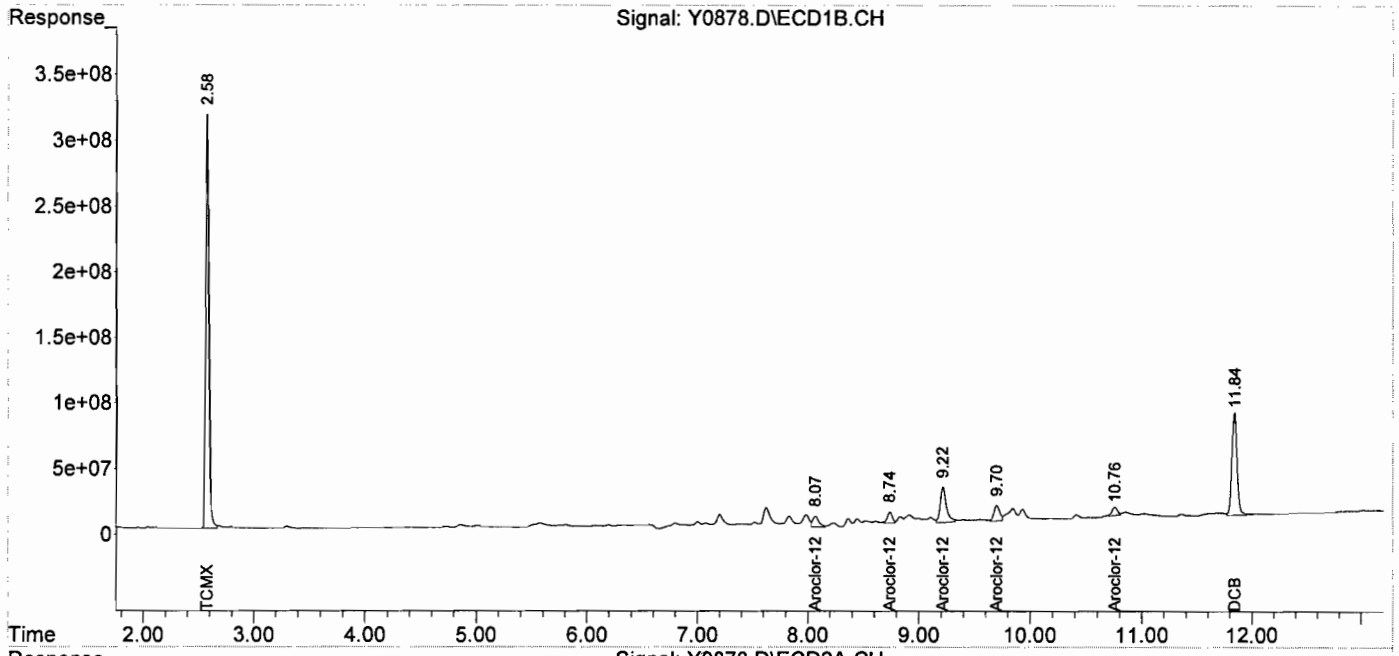
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

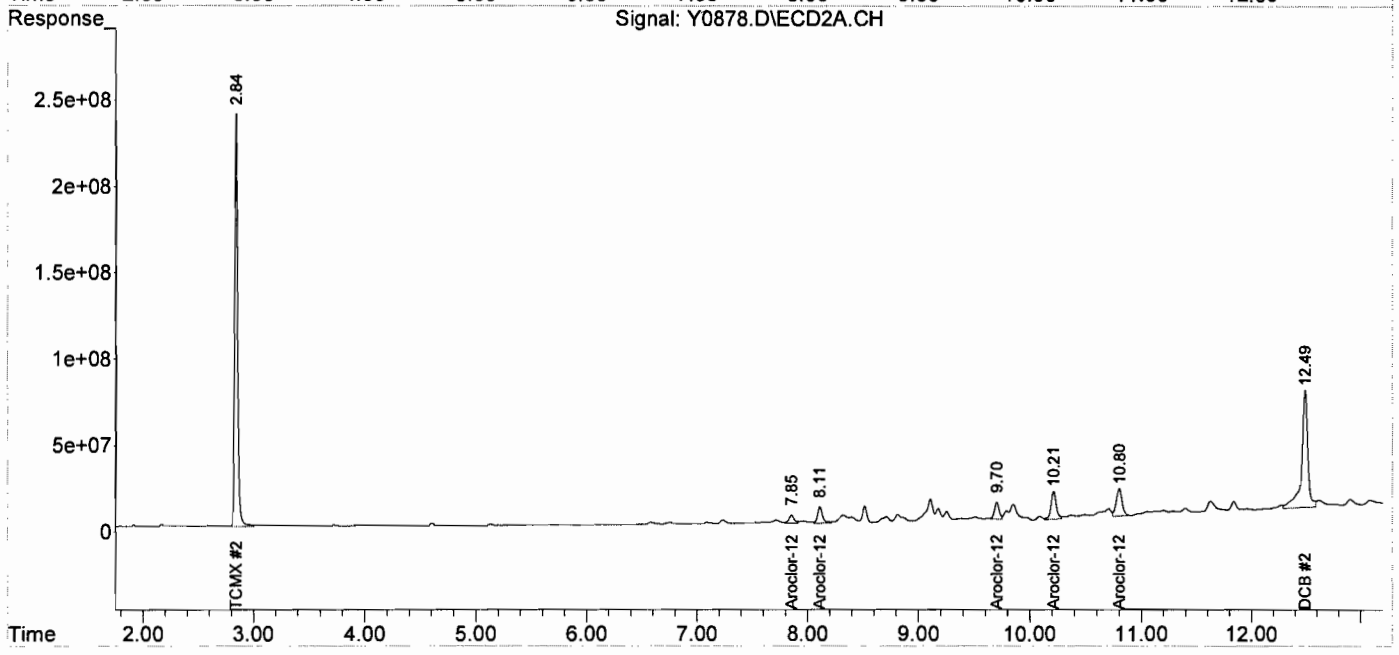
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0878.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 22:58
Operator : JS
Sample : E-38_(2-,E16-09581-016,S,5.20g,17.8,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 38 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:11:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0879.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:15
Operator : JS
Sample : E-38_(4.,E16-09581-017,S,5.29g,9.90,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:14:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6112.4E6	4310.5E6	150.439	161.018
Spiked Amount 200.000			Recovery	=	75.22%	80.51%
2) S DCB	11.84	12.49	2558.0E6	2119.1E6	160.314	199.850m
Spiked Amount 200.000			Recovery	=	80.16%	99.92%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.06	7.85	85104044	40592571	32.798	55.358m#
34) L8 Aroclor-1260 {2}	8.74	8.11	96117337	92722108	77.478m	83.938m
35) L8 Aroclor-1260 {3}	9.21	9.70	308.5E6	78913236	90.600m	77.346m
36) L8 Aroclor-1260 {4}	9.70	10.21	136.0E6	156.6E6	83.366m	71.438m
37) L8 Aroclor-1260 {5}	10.76	10.80	67239001	179.7E6	84.745m	115.579m#
Sum Aroclor-1260			692.9E6	548.5E6	368.988	403.659
Average Aroclor-1260					73.798	80.732
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

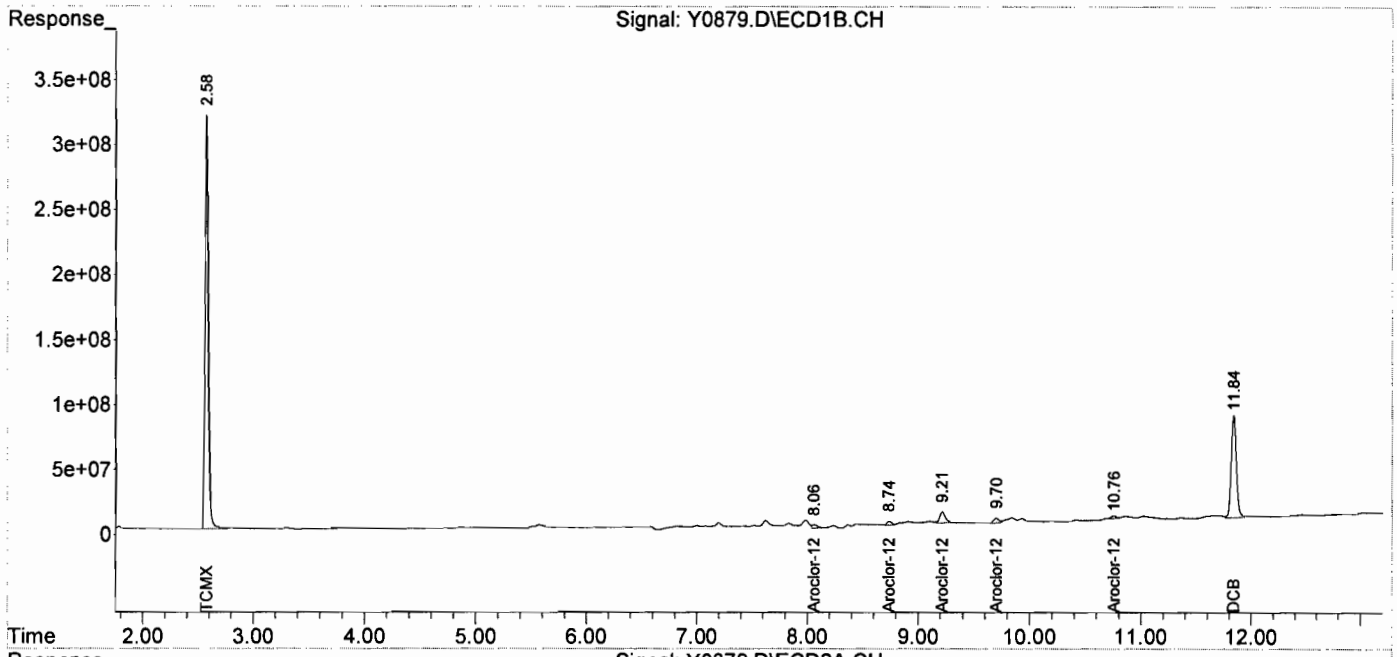
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

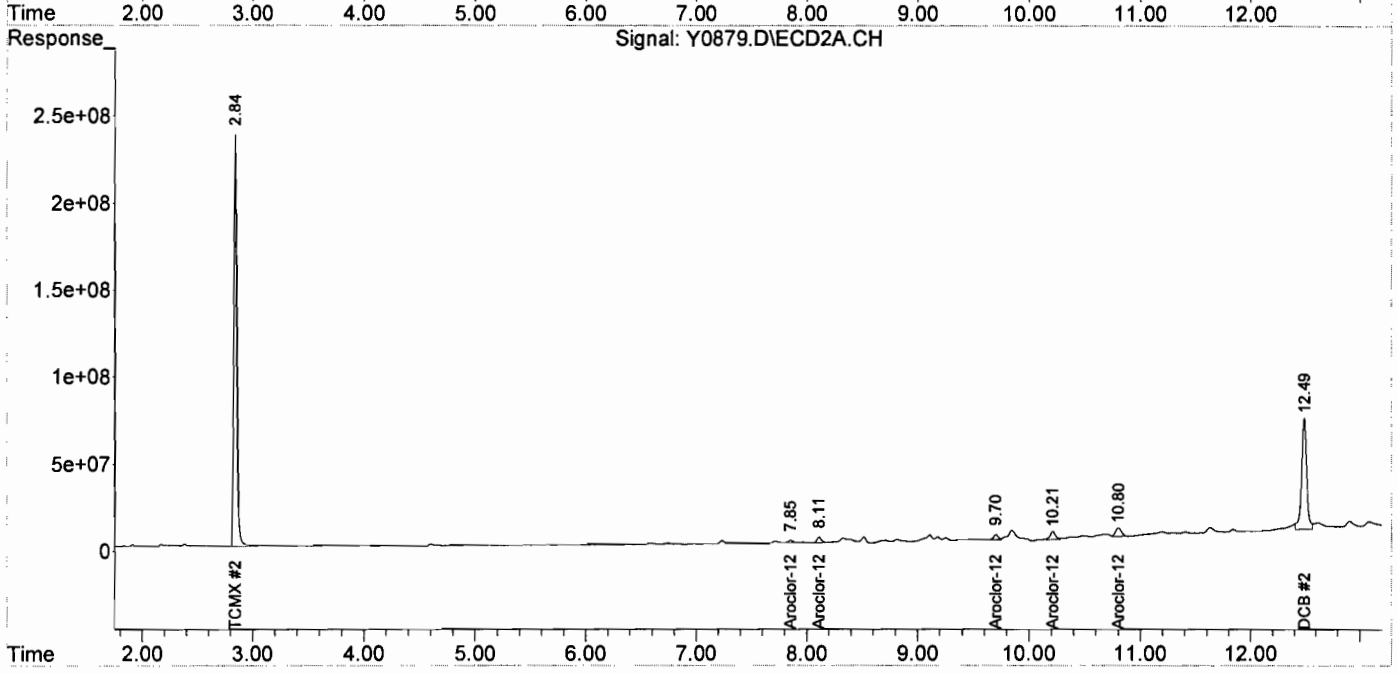
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0879.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:15
Operator : JS
Sample : E-38_(4.,E16-09581-017,S,5.29g,9.90,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:14:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0880.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:32
Operator : JS
Sample : X-3_(0.5,E16-09581-018,S,5.34g,9.10,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:14:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6192.6E6	4378.2E6	152.413	163.545
Spiked Amount 200.000			Recovery	=	76.21%	81.77%
2) S DCB	11.84	12.49	2556.9E6	3477.6E6	160.247	327.960 #
Spiked Amount 200.000			Recovery	=	80.12%	163.98%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

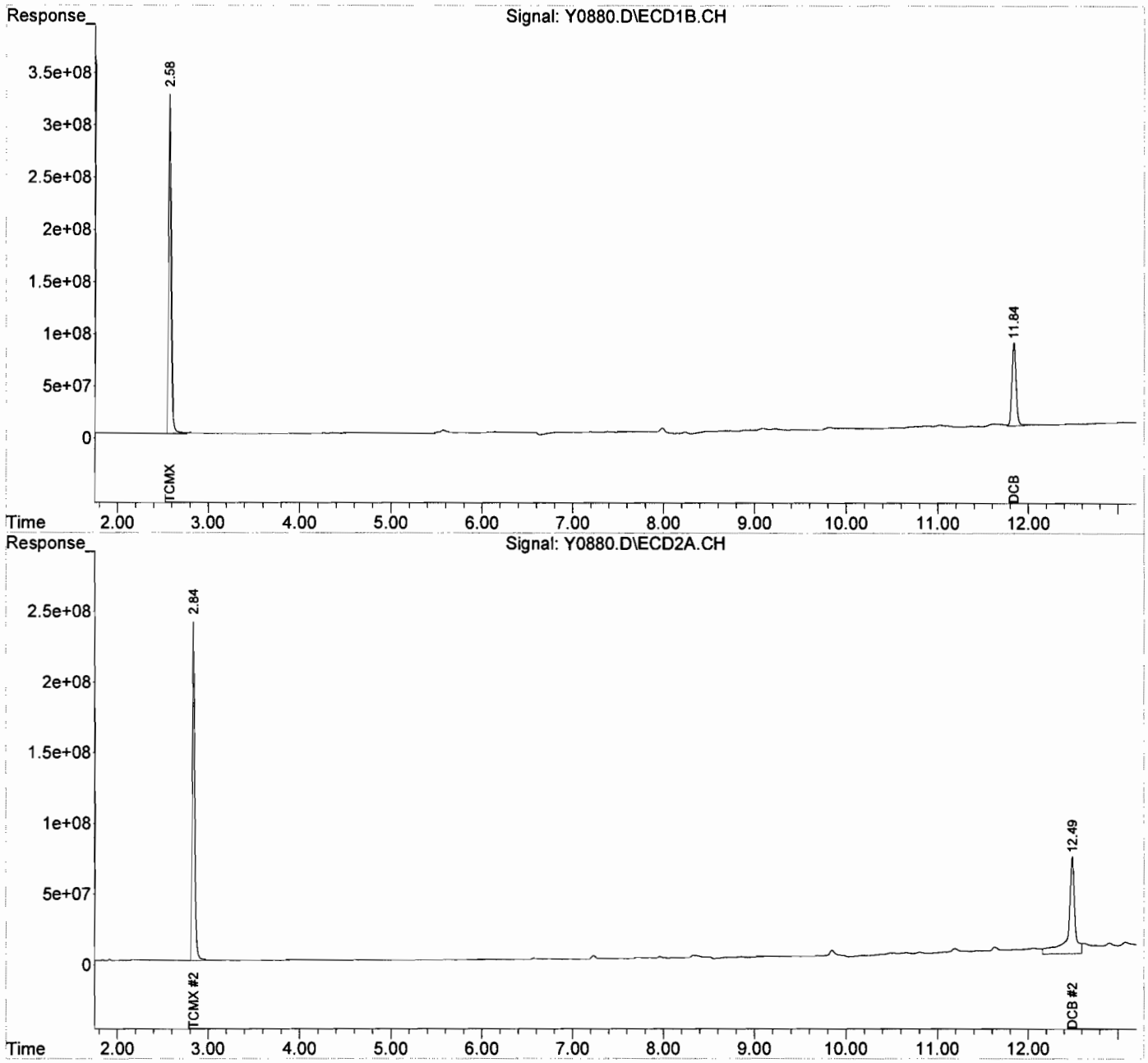
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0880.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:32
Operator : JS
Sample : X-3_(0.5,E16-09581-018,S,5.34g,9.10,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:14:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0881.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:50
Operator : JS
Sample : X-4_(0.5,E16-09581-019,S,5.68g,9.00,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:15:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6201.5E6	4345.6E6	152.632	162.331
Spiked Amount 200.000			Recovery	=	76.32%	81.17%
2) S DCB	11.84	12.49	2489.1E6	2174.6E6	155.998	205.081m#
Spiked Amount 200.000			Recovery	=	78.00%	102.54%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

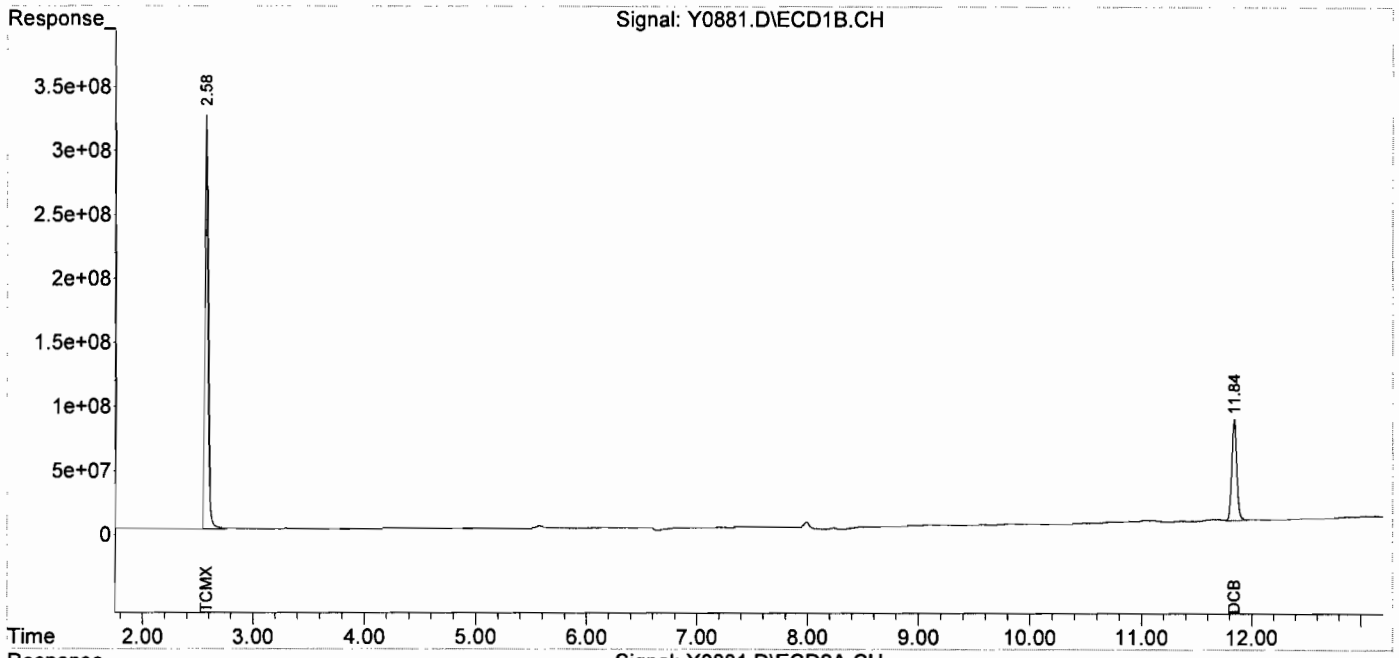
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

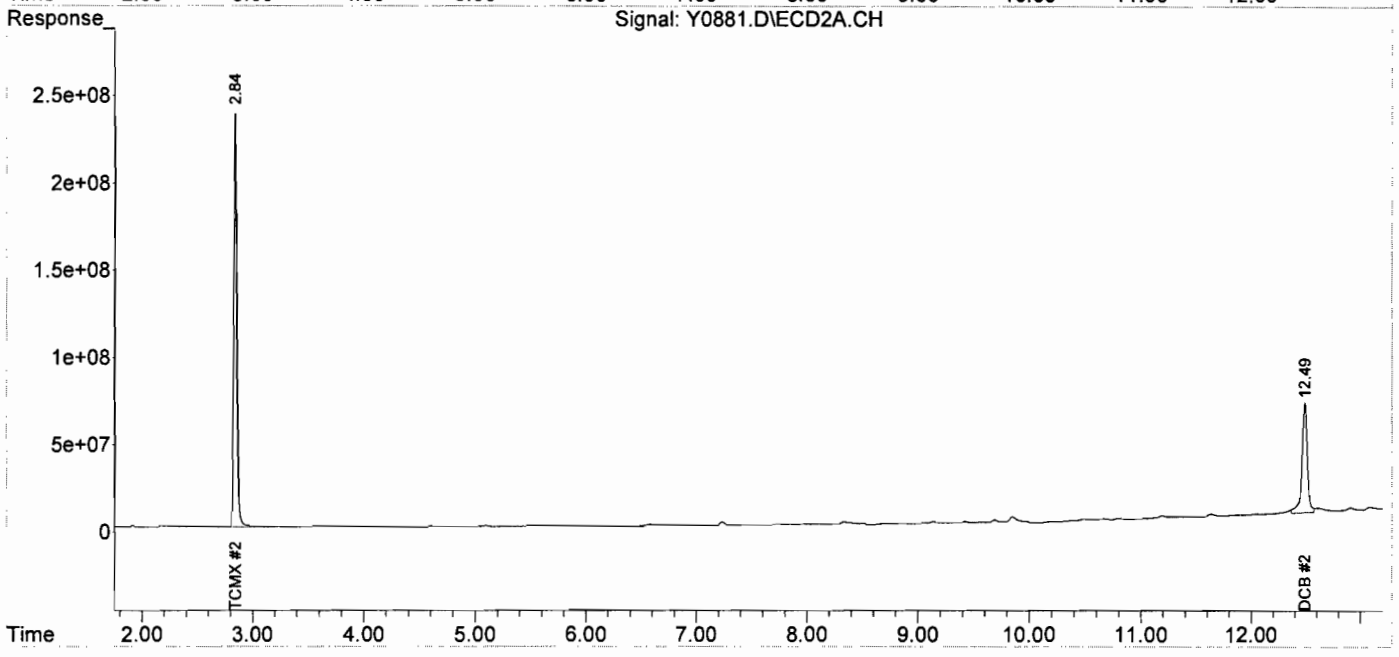
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0881.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 23:50
Operator : JS
Sample : X-4_(0.5,E16-09581-019,S,5.68g,9.00,20
Misc : 161018-01,10/18/16,10/13/16,1
ALS Vial : 41 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:15:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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 : C:\MSDChem\1\DATA\16-10-18\
Data File : R3815.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:47
Operator : JS
Sample : EB-10121,E16-09581-020,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/13/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:54:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.70	2.74	2162.4E6	1580.1E6	134.752	131.307
Spiked Amount 200.000			Recovery	=	67.38%	65.65%
2) S DCB	11.98	12.25	769.2E6	673.5E6	146.849	139.564m
Spiked Amount 200.000			Recovery	=	73.42%	69.78%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

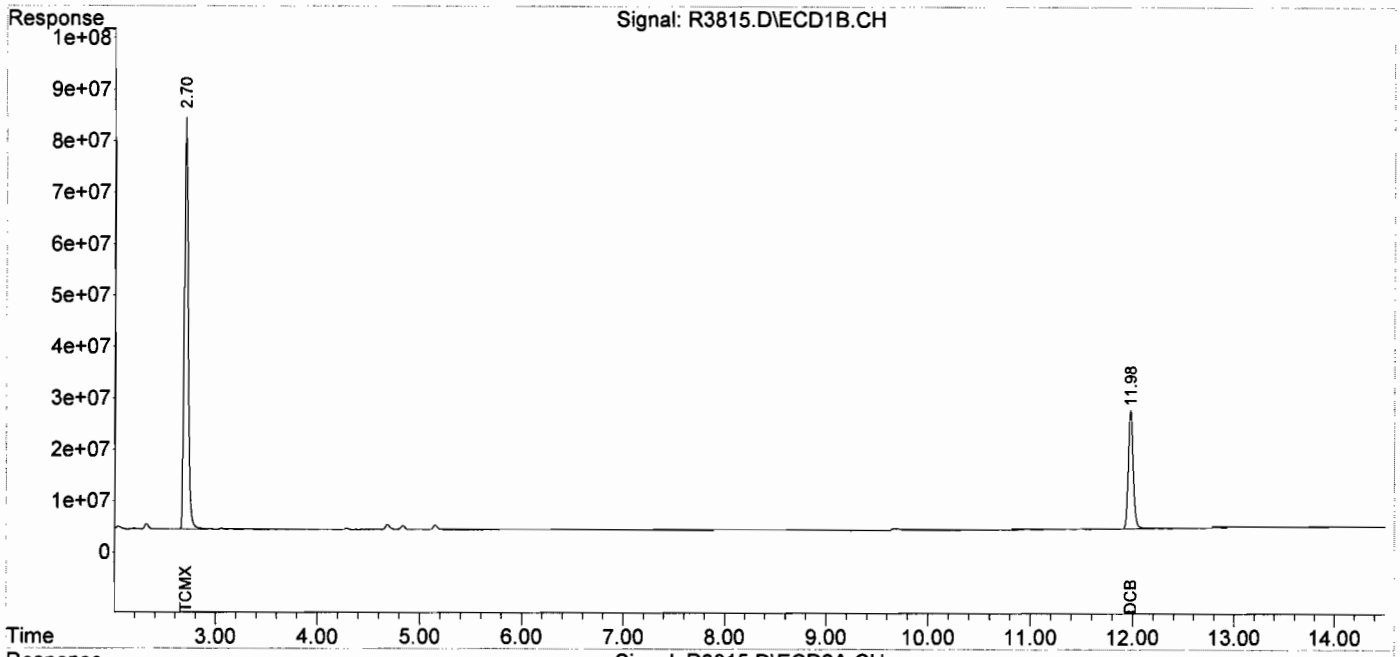
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

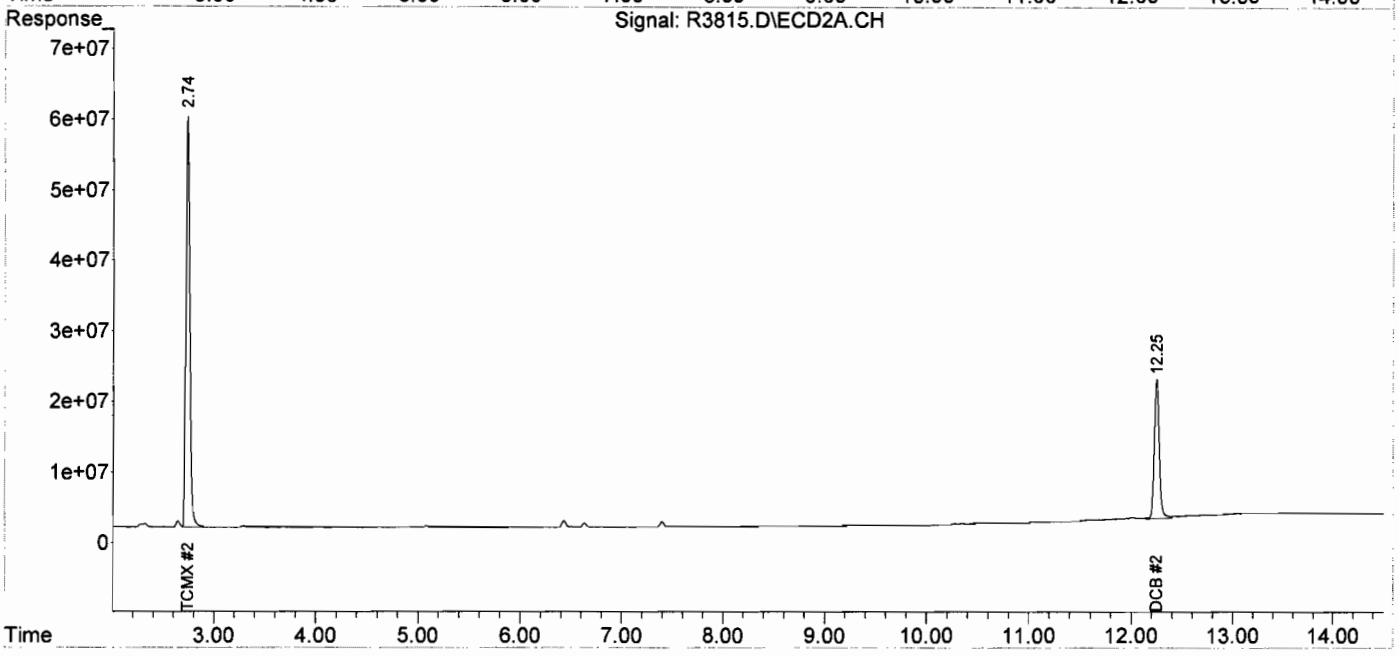
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-18\
Data File : R3815.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 17:47
Operator : JS
Sample : EB-10121,E16-09581-020,A,500ml,100,2.5
Misc : 161017-25,10/17/16,10/13/16,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:54:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA161010-14
Client ID: PCB
Date Received: NA
Date Extracted: 10/10/2016
Date Analyzed: 10/12/2016
Data file: Y0760.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA161017-25
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/18/2016
Data file: R3809.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 15:58
Operator : JS
Sample : PCB,BLKA161017-25,A,1000ml,100,5
Misc : 161017-25,10/17/16,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

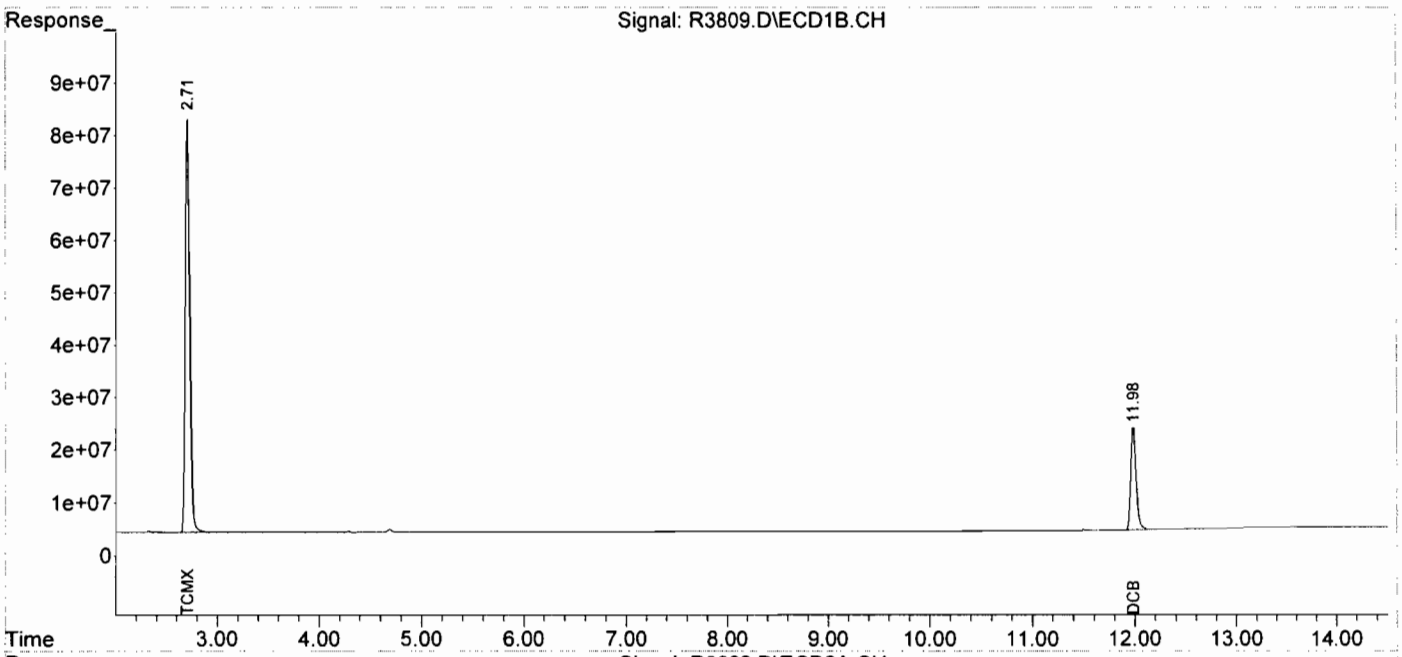
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.74	2321.4E6	1664.0E6	144.660	138.273
Spiked Amount 200.000			Recovery	=	72.33%	69.14%
2) S DCB	11.98	12.26	692.6E6	636.7E6	132.228	131.949m
Spiked Amount 200.000			Recovery	=	66.11%	65.97%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

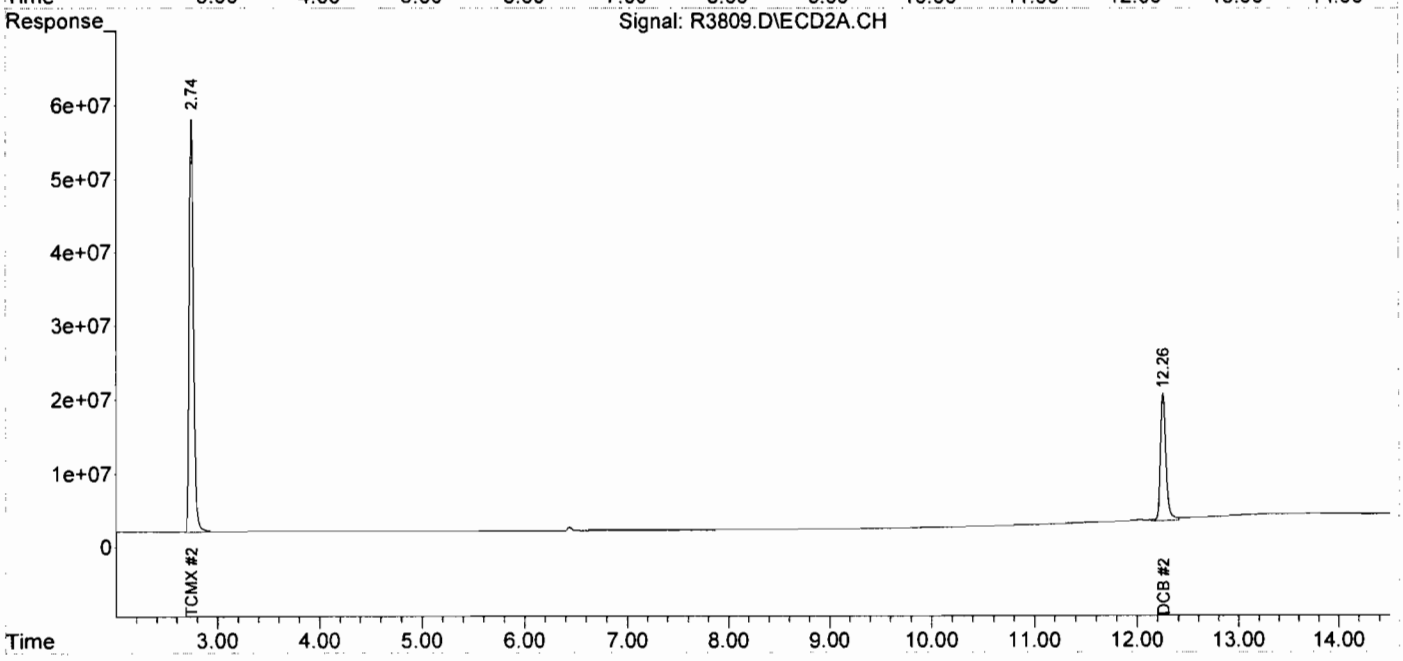
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-18\
Data File : R3809.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 18 Oct 2016 15:58
Operator : JS
Sample : PCB,BLKA161017-25,A,1000ml,100,5
Misc : 161017-25,10/17/16,NA,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 19 09:49:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161017-23
Client ID: PCB
Date Received: NA
Date Extracted: 10/17/2016
Date Analyzed: 10/19/2016
Data file: Y0844.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0844.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 11:16
Operator : JS
Sample : PCB,BLKS161017-23,S,5g,0,20
Misc : 161017-23,10/17/16,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:18:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.57	2.85	6866.7E6	4757.2E6	169.003	177.703
Spiked Amount 200.000			Recovery	=	84.50%	88.85%
2) S DCB	11.84	12.50	3172.1E6	1883.6E6	198.801	177.636
Spiked Amount 200.000			Recovery	=	99.40%	88.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

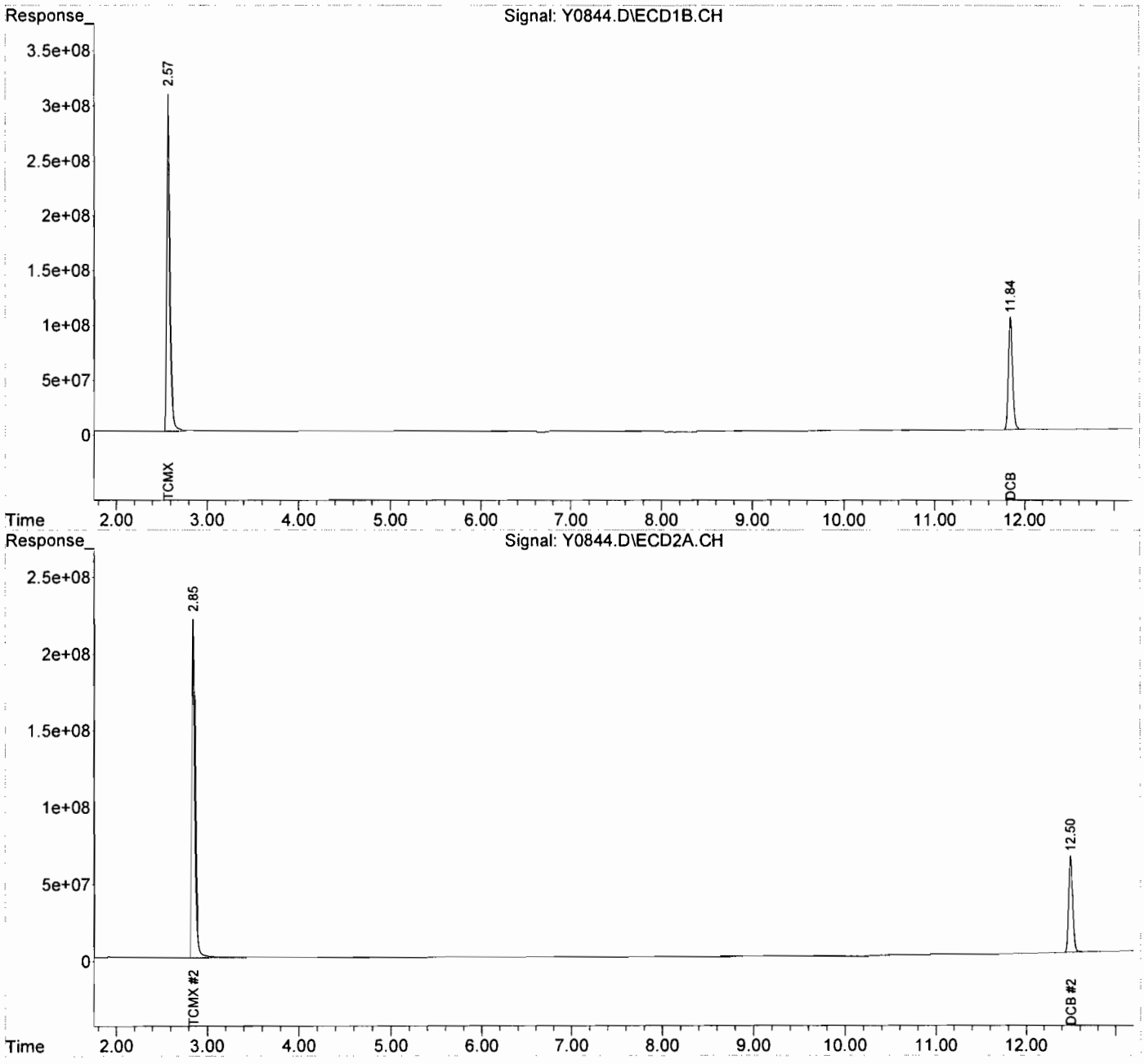
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-19\
Data File : Y0844.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 11:16
Operator : JS
Sample : PCB,BLKS161017-23,S,5g,0,20
Misc : 161017-23,10/17/16,NA,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 12:18:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161018-01
Client ID: PCB
Date Received: NA
Date Extracted: 10/18/2016
Date Analyzed: 10/19/2016
Data file: Y0873.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0873.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 21:31
Operator : JS
Sample : PCB,BLKS161018-01,S,5g,0,20
Misc : 161018-01,10/18/16,NA,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:08:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.58	2.84	6649.3E6	4401.6E6	163.653	164.423
Spiked Amount 200.000			Recovery	=	81.83%	82.21%
2) S DCB	11.84	12.49	3002.5E6	1879.6E6	188.171	177.260
Spiked Amount 200.000			Recovery	=	94.09%	88.63%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

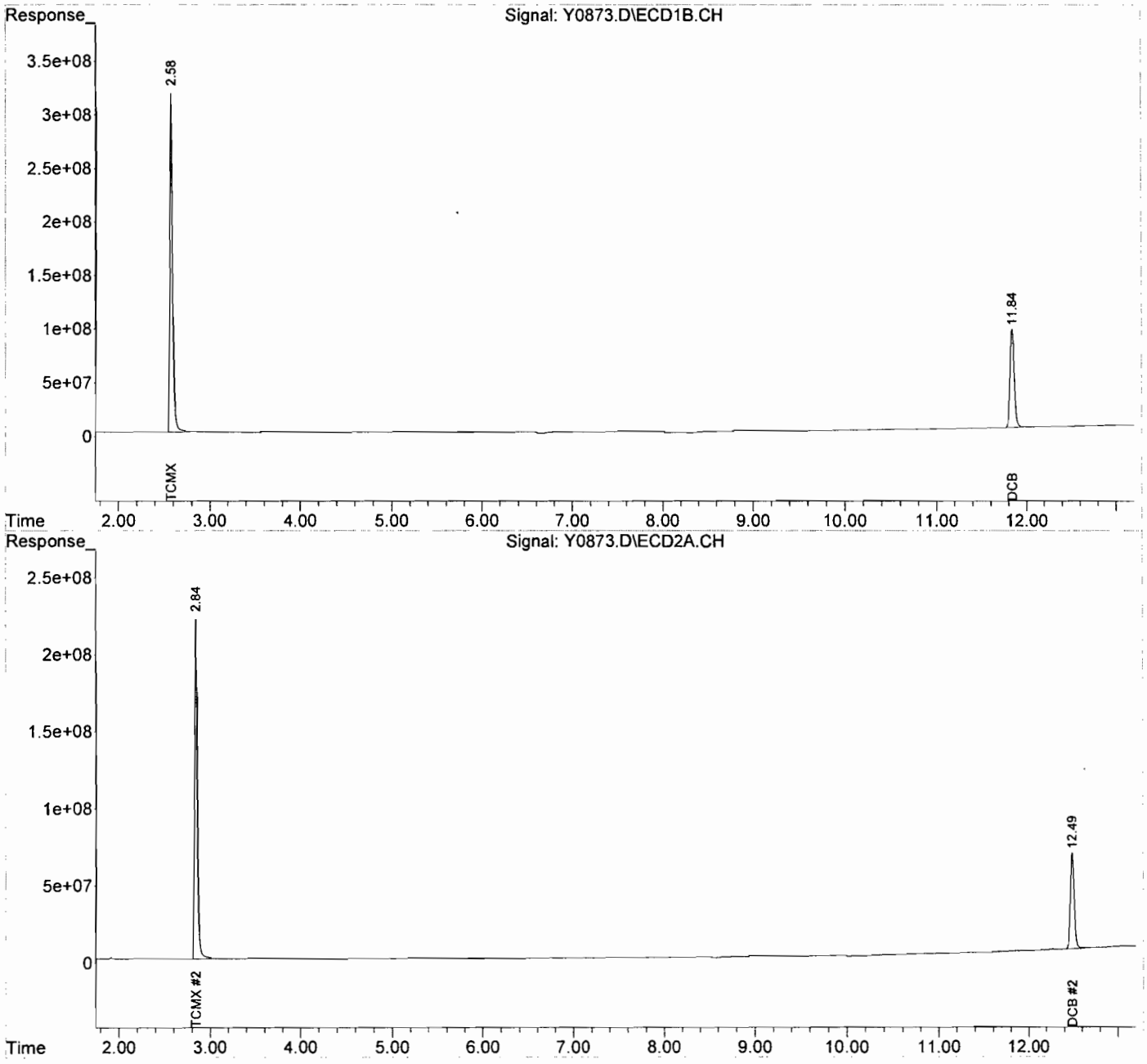
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-19\
Data File : Y0873.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 19 Oct 2016 21:31
Operator : JS
Sample : PCB,BLKS161018-01,S,5g,0,20
Misc : 161018-01,10/18/16,NA,1
ALS Vial : 33 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 16:08:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0928.M
Quant Title :
QLast Update : Wed Sep 28 15:07:23 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS161025-09
Client ID: PCB
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/27/2016
Data file: R4085.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-27\
Data File : R4085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 8:38
Operator : JS
Sample : PCB,BLKS161025-09,S,5g,0,20
Misc : 161025-09,10/25/16,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:02:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.71	2.75	2747.6E6	2178.6E6	171.220	181.040
Spiked Amount 200.000			Recovery	=	85.61%	90.52%
2) S DCB	11.98	12.24	956.4E6	951.6E6	182.601	197.190m
Spiked Amount 200.000			Recovery	=	91.30%	98.59%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

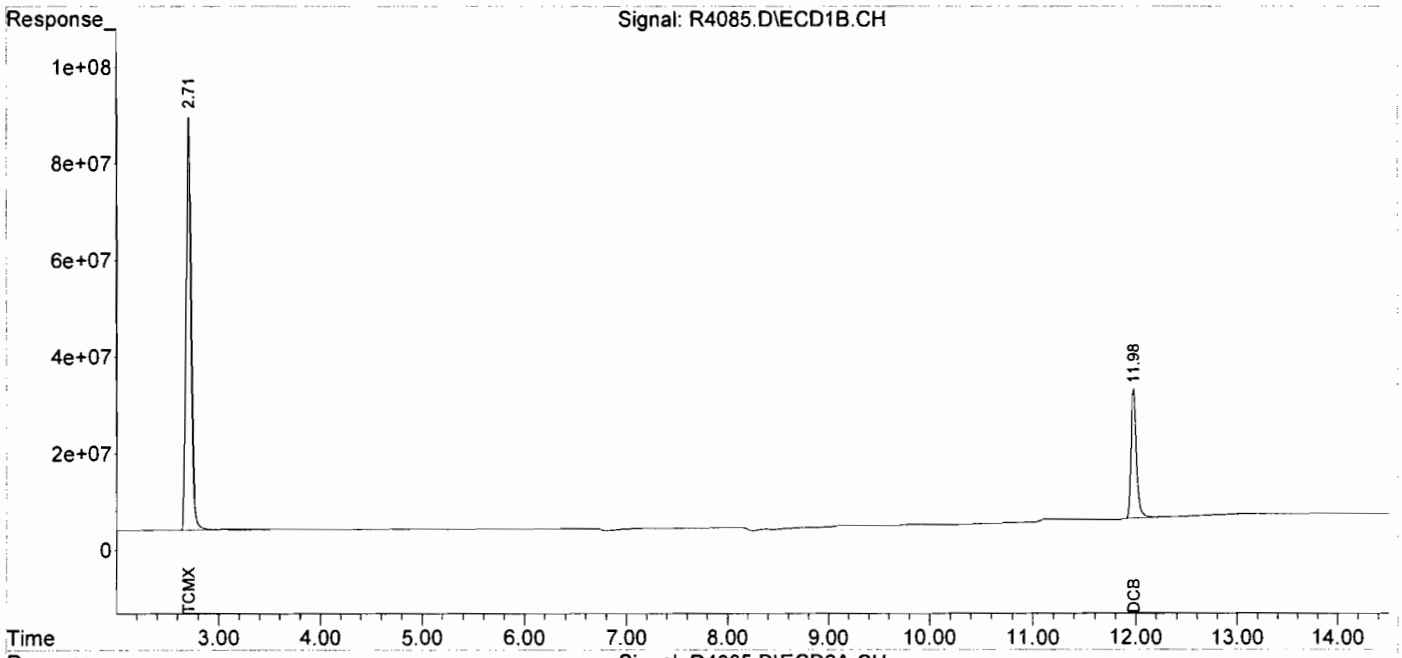
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

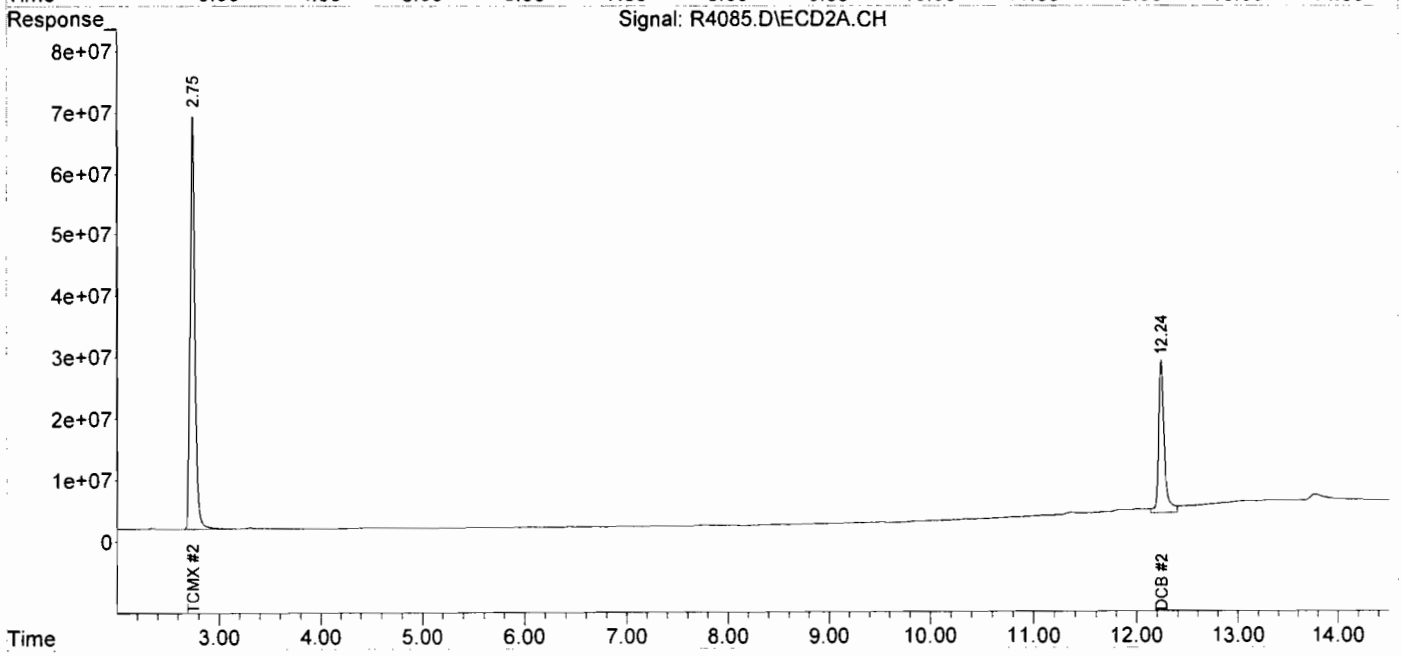
Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\16-10-27\
Data File : R4085.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 27 Oct 2016 8:38
Operator : JS
Sample : PCB,BLKS161025-09,S,5g,0,20
Misc : 161025-09,10/25/16,NA,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 27 12:02:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\RPCB1006.M
Quant Title :
QLast Update : Fri Oct 07 15:48:53 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





PESTICIDE DATA

PESTICIDE QC SUMMARY

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/20/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS161018-06	SOIL	85		108		84		107	
Pest	LCSS161018-06	SOIL	87		92		84		108	
Pest	E16-09605-001MS	SOIL	74		79		67		104	
Pest	E16-09605-001MS	SOIL	76		89		73		95	
VTS-C2-1	E16-09605-001	SOIL	39		51		38		56	
VTS-C2-2	E16-09605-002	SOIL	64		75		62		106	
VTS-C2-3	E16-09605-003	SOIL	70		89		76		111	
VTS-C2-4	E16-09605-004	SOIL	73		90		74		111	
VTS-C2-5	E16-09605-005	SOIL	82		80		86		112	
VTS-B2-1	E16-09603-001	SOIL	77		89		75		102	
VTS-B2-2	E16-09603-002	SOIL	67		73		68		93	
VTS-B2-3	E16-09603-003	SOIL	77		89		76		106	
VTS-B2-4	E16-09603-004	SOIL	70		80		72		94	
VTS-B2-5	E16-09603-005	SOIL	67		77		66		89	
VTS-C1-1	E16-09604-001	SOIL	73		83		73		98	
VTS-C1-2	E16-09604-002	SOIL	66		77		66		85	
VTS-C1-3	E16-09604-003	SOIL	78		86		75		98	
VTS-C1-4	E16-09604-004	SOIL	67		80		68		87	
VTS-C1-5	E16-09604-005	SOIL	69		81		68		93	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	37-120	17-120
DCB = Decachlorobiphenyl	26-154	56-124

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 10/26/2016

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
Pest	BLKS161025-08	SOIL	84		108		90		115	
Pest	LCSS161025-08	SOIL	82		110		86		99	
E-53_(0.	E16-09581-007	SOIL	60		118		60		120	
E-48_(0.	E16-09581-010	SOIL	68		154	M	67		105	
DS-1_COM	E16-09817-001	SOIL	76		78		69		66	
FRINGE_S	E16-09877-001	SOIL	65		72		56		65	
FRINGE_S	E16-09877-002	SOIL	71		82		71		77	
FRINGE_S	E16-09877-003	SOIL	69		73		70		67	
PXSW-1/2	E16-09877-004	SOIL	49		121		49		217	M
PXSW-2/2	E16-09877-005	SOIL	67		79		77		72	
PXSW-3/2	E16-09877-006	SOIL	60		69		68		68	
PXSW-4/2	E16-09877-007	SOIL	62		69		68		84	
COMP-1	E16-09790-001	SOIL	64		74		68		66	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	37-120	17-120
DCB = Decachlorobiphenyl	26-154	56-124

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

Pest

LCS ACCURACY REPORT

Lab ID: LCSS161025-08
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/26/2016
Data file: V7305.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
alpha-BHC	100.0	0.0	102.7	103		26-126
beta-BHC	100.0	0.0	97.7	98		20-121
gamma-BHC (Lindane)	100.0	0.0	106.1	106		25-130
delta-BHC	100.0	0.0	108.1	108		21-123
Heptachlor	100.0	0.0	108.6	109		23-132
Aldrin	100.0	0.0	93.8	94		22-127
Heptachlor epoxide	100.0	0.0	106.7	107		27-129
Endosulfan I	100.0	0.0	109.3	109		26-130
4,4'-DDE	100.0	0.0	113.3	113		23-138
Dieldrin	100.0	0.0	99.9	100		21-116
Endrin	100.0	0.0	108.3	108		18-133
Endosulfan II	100.0	0.0	111.2	111		23-133
4,4'-DDD	100.0	0.0	106.1	106		23-135
Endrin aldehyde	100.0	0.0	96.1	96		22-127
Endosulfan sulfate	100.0	0.0	104.0	104		22-127
4,4'-DDT	100.0	0.0	130.0	130		12-146
Endrin ketone	100.0	0.0	105.5	106		22-132
Methoxychlor	100.0	0.0	126.5	127		19-138
alpha-Chlordane	100.0	0.0	103.8	104		24-128
gamma-Chlordane	100.0	0.0	107.0	107		25-129

	Aqueous	Soil/Sediment
NJ DKQP Limits	40-140	40-140

Column used to flag recovery values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

Pest

MS/MSD ACCURACY REPORT

Lab ID: E16-09605-001
Date Received: NA
Date Extracted: 10/18/2016
Date Analyzed: 10/20/2016
MS Data file: O4568.D
MSD Data file: O4569.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 10g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.3
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
alpha-BHC	100.0	0.0	78.2	78		80.1	80		2		43-101/10
beta-BHC	100.0	0.0	72.2	72		74.7	75		3		25-107/14
gamma-BHC (Lindane)	100.0	0.0	80.3	80		82.5	83		3		43-106/11
delta-BHC	100.0	0.0	81.2	81		84.5	85		4		34-104/12
Heptachlor	100.0	0.0	79.2	79		81.5	82		3		43-109/11
Aldrin	100.0	0.0	76.0	76		77.4	77		2		40-108/11
Heptachlor epoxide	100.0	0.0	77.5	78		79.7	80		3		47-106/10
Endosulfan I	100.0	0.0	76.9	77		81.3	81		6		50-106/9
4,4'-DDE	100.0	1.8	80.7	79		86.4	85		7		49-112/11
Dieldrin	100.0	0.0	71.6	72		74.6	75		4		45-96/9
Endrin	100.0	0.0	86.1	86		89.4	89		4		50-116/11
Endosulfan II	100.0	0.0	80.4	80		82.0	82		2		49-110/10
4,4'-DDD	100.0	1.4	82.0	81		87.8	86		7		45-113/11
Endrin aldehyde	100.0	0.0	63.2	63		71.7	72		13	*	37-110/12
Endosulfan sulfate	100.0	0.0	81.2	81		86.1	86		6		12-154/24
4,4'-DDT	100.0	1.4	93.9	93		95.6	94		2		30-149/20
Endrin ketone	100.0	0.0	83.5	84		89.4	89		7		43-121/13
Methoxychlor	100.0	0.0	110.9	111		110.2	110		1		38-144/18
alpha-Chlordane	100.0	2.2	76.3	74		79.8	78		4		47-107/10
gamma-Chlordane	100.0	1.1	77.5	76		80.1	79		3		46-107/10

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (NJ DKQP)	30-150	30-150
MS/MSD RPD Limits (NJ DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

Pest

MS/MSD ACCURACY REPORT

Lab ID: E16-09735-001
Date Received: 10/19/2016
Date Extracted: 10/20/2016
Date Analyzed: 10/24/2016
MS Data file: V7258.D
MSD Data file: V7259.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30.06g
Matrix-Units: Soil-µg/Kg
% Moisture: 5.20
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
alpha-BHC	100.0	0.0	90.0	90		80.0	80		12	*	43-101/10
beta-BHC	100.0	0.0	75.2	75		62.8	63		18	*	25-107/14
gamma-BHC (Lindane)	100.0	0.0	91.1	91		83.4	83		9		43-106/11
delta-BHC	100.0	0.0	91.5	92		86.5	87		6		34-104/12
Heptachlor	100.0	0.0	80.9	81		76.2	76		6		43-109/11
Aldrin	100.0	0.0	76.6	77		70.6	71		8		40-108/11
Heptachlor epoxide	100.0	0.0	86.6	87		81.1	81		7		47-106/10
Endosulfan I	100.0	0.0	82.5	83		75.6	76		9		50-106/9
4,4'-DDE	100.0	0.0	81.1	81		76.1	76		6		49-112/11
Dieldrin	100.0	0.0	77.9	78		75.4	75		3		45-96/9
Endrin	100.0	0.0	82.4	82		78.7	79		5		50-116/11
Endosulfan II	100.0	0.0	85.3	85		81.7	82		4		49-110/10
4,4'-DDD	100.0	0.0	82.6	83		76.3	76		8		45-113/11
Endrin aldehyde	100.0	0.0	64.3	64		62.3	62		3		37-110/12
Endosulfan sulfate	100.0	0.0	79.8	80		79.6	80		0		12-154/24
4,4'-DDT	100.0	0.0	79.2	79		88.6	89		11		30-149/20
Endrin ketone	100.0	0.0	81.3	81		80.3	80		1		43-121/13
Methoxychlor	100.0	0.0	84.3	84		96.7	97		14		38-144/18
alpha-Chlordane	100.0	0.0	84.4	84		81.2	81		4		47-107/10
gamma-Chlordane	100.0	0.0	67.1	67		60.1	60		11	*	46-107/10

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (NJ DKQP)	30-150	30-150
MS/MSD RPD Limits (NJ DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria

* Values outside of QC limits

$ Values outside of NJ DKQP limits

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: O4566.D

Instrument ID: GC-O

Date Extracted: 10/18/2016

Matrix: SOIL

Date Analyzed: 10/20/2016

Time Analyzed: 14:00

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS161018-06	10/20/2016	14:12
Pest	E16-09605-001MS	10/20/2016	14:25
Pest	E16-09605-001MSD	10/20/2016	14:37
VTS-C2-1	E16-09605-001	10/20/2016	14:50
VTS-C2-2	E16-09605-002	10/20/2016	15:03
VTS-C2-3	E16-09605-003	10/20/2016	15:15
VTS-C2-4	E16-09605-004	10/20/2016	15:28
VTS-C2-5	E16-09605-005	10/20/2016	15:40
VTS-B2-1	E16-09603-001	10/20/2016	15:53
VTS-B2-2	E16-09603-002	10/20/2016	16:05
VTS-B2-3	E16-09603-003	10/20/2016	16:18
VTS-B2-4	E16-09603-004	10/20/2016	16:31
VTS-B2-5	E16-09603-005	10/20/2016	16:43
VTS-C1-1	E16-09604-001	10/20/2016	16:56
VTS-C1-2	E16-09604-002	10/20/2016	17:08
VTS-C1-3	E16-09604-003	10/20/2016	17:21
VTS-C1-4	E16-09604-004	10/20/2016	17:33
VTS-C1-5	E16-09604-005	10/20/2016	17:46

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: V7256.D

Instrument ID: GC-V

Date Extracted: 10/20/2016

Matrix: SOIL

Date Analyzed: 10/24/2016

Time Analyzed: 17:41

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS161020-06	10/24/2016	17:54
Pest	E16-09735-001MS	10/24/2016	18:06
Pest	E16-09735-001MSD	10/24/2016	18:18
WC-1	E16-09735-001	10/24/2016	18:31
FRONT	E16-09675-001	10/24/2016	18:43
SIDE	E16-09675-002	10/24/2016	18:55
BACK	E16-09675-003	10/24/2016	19:08
B-3/.5-1	E16-09703-001	10/24/2016	19:20

PESTICIDE METHOD BLANK SUMMARY

Lab File ID: V7304.D

Instrument ID: GC-V

Date Extracted: 10/25/2016

Matrix: SOIL

Date Analyzed: 10/26/2016

Time Analyzed: 09:53

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
Pest	LCSS161025-08	10/26/2016	10:05
E-53_(0.	E16-09581-007	10/26/2016	10:17
E-48_(0.	E16-09581-010	10/26/2016	10:30
DS-1_COM	E16-09817-001	10/26/2016	10:54
FRINGE_S	E16-09877-001	10/26/2016	11:07
FRINGE_S	E16-09877-002	10/26/2016	11:19
FRINGE_S	E16-09877-003	10/26/2016	11:31
PXSW-1/2	E16-09877-004	10/26/2016	11:44
PXSW-2/2	E16-09877-005	10/26/2016	12:24
PXSW-3/2	E16-09877-006	10/26/2016	12:36
PXSW-4/2	E16-09877-007	10/26/2016	13:20
COMP-1	E16-09790-001	10/26/2016	13:32

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/17/2016 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O4494.D O4493.D O4492.D O4491.D O4490.D

Compound	RT OF STANDARDS 2	50	100	200	300	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	2.45	2.45	2.45	2.45	2.45	2.45	2.39	2.51
beta-BHC	2.74	2.74	2.74	2.74	2.74	2.74	2.68	2.80
gamma-BHC	2.68	2.68	2.68	2.68	2.68	2.68	2.62	2.74
delta-BHC	2.88	2.88	2.88	2.88	2.88	2.88	2.82	2.94
Heptachlor	3.04	3.04	3.04	3.04	3.04	3.04	2.96	3.12
Aldrin	3.29	3.29	3.29	3.29	3.29	3.29	3.21	3.37
Heptachlor epoxide	3.80	3.80	3.80	3.80	3.80	3.80	3.72	3.88
Endosulfan I	4.16	4.16	4.16	4.16	4.16	4.16	4.08	4.24
4,4'-DDE	4.11	4.11	4.11	4.11	4.11	4.11	4.01	4.21
Dieldrin	4.38	4.38	4.38	4.38	4.38	4.38	4.28	4.48
Endrin	4.60	4.60	4.60	4.60	4.60	4.60	4.50	4.70
Endosulfan II	4.82	4.82	4.82	4.82	4.82	4.82	4.72	4.92
4,4'-DDD	4.67	4.67	4.67	4.67	4.67	4.67	4.57	4.77
Endrin aldehyde	5.24	5.24	5.24	5.24	5.24	5.24	5.12	5.36
Endosulfan sulfate	5.68	5.68	5.68	5.68	5.68	5.68	5.56	5.80
4,4'-DDT	4.95	4.95	4.95	4.95	4.95	4.95	4.83	5.07
Endrin ketone	5.97	5.97	5.97	5.97	5.97	5.97	5.85	6.09
Methoxychlor	5.45	5.45	5.45	5.45	5.45	5.45	5.33	5.57
alpha-Chlordane	4.03	4.04	4.04	4.03	4.03	4.03	3.95	4.11
gamma-Chlordane	3.92	3.92	3.92	3.92	3.92	3.92	3.84	4.00
Chlordane 500 ppb			2.98				2.90	3.06
Chlordane {2}			3.40				3.32	3.48
Chlordane {3}			3.92				3.84	4.00
Chlordane {4}			4.03				3.95	4.11
Chlordane {5}			4.75				4.67	4.83
Toxaphene 500 ppb			4.81				4.73	4.89
Toxaphene {2}			4.93				4.85	5.01
Toxaphene {3}			5.15				5.07	5.23
Toxaphene {4}			5.37				5.29	5.45
Toxaphene {5}			5.58				5.50	5.66

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/17/2016 **Instrument ID:** GC-O
GC Column (1st): RTX-CLP1

Data File: O4494.D O4493.D O4492.D O4491.D O4490.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	188421	204388	213782	208753	217482	206565	5.47
beta-BHC	93733	72413	75116	70045	72320	76725	12.61
gamma-BHC	179539	179901	189093	182674	190527	184347	2.80
delta-BHC	167194	173002	189472	178593	188347	179322	5.38
Heptachlor	181162	172188	181189	173365	177620	177105	2.39
Aldrin	183984	177687	185140	178001	183314	181625	1.94
Heptachlor epoxide	179159	158997	164822	155620	159057	163531	5.71
Endosulfan I	169504	149658	156228	146610	150299	154460	5.89
4,4'-DDE	142058	137192	150928	142637	150262	144615	4.05
Dieldrin	180675	155966	165024	154534	161620	163564	6.40
Endrin	132290	122256	131329	125643	131155	128535	3.40
Endosulfan II	150266	127096	136301	124843	131815	134064	7.52
4,4'-DDD	145063	124323	133157	121787	127098	130285	7.12
Endrin aldehyde	140688	104793	110474	101963	106875	112958	14.00
Endosulfan sulfate	159037	112629	119392	110264	115819	123428	16.37
4,4'-DDT	77749	77248	95609	96410	106506	90704	14.11
Endrin ketone	168576	138761	144757	132135	137544	144355	9.88
Methoxychlor	39297	41773	48785	46722	50338	45383	10.34
alpha-Chlordane	173837	153896	162028	155011	161047	161164	4.93
gamma-Chlordane	189874	158882	168088	161639	168146	169326	7.19
Chlordane 500 ppb			4473				
Chlordane {2}			5584				
Chlordane {3}			16220				
Chlordane {4}			25722				
Chlordane {5}			3789				
Toxaphene 500 ppb			4682				
Toxaphene {2}			6205				
Toxaphene {3}			3222				
Toxaphene {4}			2432				
Toxaphene {5}			3031				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/17/2016 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O4494.C O4493.C O4492.C O4491.C O4490.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.84	2.84	2.84	2.85	2.84	2.84	2.78	2.90
beta-BHC	3.22	3.22	3.22	3.22	3.22	3.22	3.16	3.28
gamma-BHC	3.15	3.15	3.15	3.15	3.15	3.15	3.09	3.21
delta-BHC	3.49	3.49	3.49	3.49	3.49	3.49	3.43	3.55
Heptachlor	3.56	3.56	3.56	3.56	3.56	3.56	3.48	3.64
Aldrin	3.87	3.87	3.87	3.87	3.87	3.87	3.79	3.95
Heptachlor epoxide	4.43	4.43	4.43	4.43	4.43	4.43	4.35	4.51
Endosulfan I	4.83	4.83	4.83	4.83	4.83	4.83	4.75	4.91
4,4'-DDE	4.93	4.93	4.93	4.93	4.93	4.93	4.83	5.03
Dieldrin	5.11	5.11	5.11	5.11	5.11	5.11	5.01	5.21
Endrin	5.43	5.43	5.43	5.43	5.43	5.43	5.33	5.53
Endosulfan II	5.66	5.66	5.66	5.66	5.66	5.66	5.56	5.76
4,4'-DDD	5.54	5.54	5.54	5.55	5.54	5.54	5.44	5.64
Endrin aldehyde	6.03	6.03	6.02	6.03	6.03	6.03	5.91	6.15
Endosulfan sulfate	6.33	6.33	6.33	6.33	6.33	6.33	6.21	6.45
4,4'-DDT	5.88	5.88	5.88	5.88	5.88	5.88	5.76	6.00
Endrin ketone	6.93	6.93	6.93	6.93	6.93	6.93	6.81	7.05
Methoxychlor	6.64	6.65	6.65	6.65	6.65	6.65	6.53	6.77
alpha-Chlordane	4.76	4.76	4.76	4.76	4.76	4.76	4.68	4.84
gamma-Chlordane	4.61	4.61	4.61	4.62	4.61	4.61	4.53	4.69
Chlordane 500 ppb			3.42				3.34	3.50
Chlordane {2}			4.00				3.92	4.08
Chlordane {3}			4.61				4.53	4.69
Chlordane {4}			4.71				4.63	4.79
Chlordane {5}			4.76				4.68	4.84
Toxaphene 500 ppb			5.09				5.01	5.17
Toxaphene {2}			5.65				5.57	5.73
Toxaphene {3}			5.75				5.67	5.83
Toxaphene {4}			6.03				5.95	6.11
Toxaphene {5}			6.60				6.52	6.68

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/17/2016 **Instrument ID:** GC-O
GC Column (2nd): RTX-CLP2

Data File: O4494.C O4493.C O4492.C O4491.C O4490.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	350457	373198	390692	384391	402512	380250	5.19
beta-BHC	184232	137378	140069	129950	135223	145370	15.16
gamma-BHC	334811	329349	344693	336559	352470	339576	2.67
delta-BHC	333509	311266	339079	321827	340873	329311	3.81
Heptachlor	343910	300372	312230	302432	312892	314367	5.55
Aldrin	372046	311252	321615	312630	323944	328297	7.64
Heptachlor epoxide	337156	277275	285637	271114	280171	290271	9.21
Endosulfan I	318425	254212	263585	248298	257916	268487	10.60
4,4'-DDE	283767	248590	268864	252897	267275	264279	5.30
Dieldrin	311018	269761	285020	271283	284581	284333	5.82
Endrin	277884	212296	225650	214156	227173	231432	11.58
Endosulfan II	302701	235038	243983	224931	236489	248628	12.46
4,4'-DDD	273192	217930	229315	208833	219713	229796	11.02
Endrin aldehyde	271056	186224	192008	175690	185889	202173	19.27
Endosulfan sulfate	286258	209986	215123	197202	207037	223121	16.09
4,4'-DDT	110155	123040	153987	153823	171794	142560	17.69
Endrin ketone	302711	256892	258416	235267	245783	259814	9.91
Methoxychlor	85128	75199	81909	79470	85487	81438	5.25
alpha-Chlordane	355039	264201	274636	260475	273650	285600	13.76
gamma-Chlordane	326532	274299	287746	275994	289513	290817	7.25
Chlordane 500 ppb			8822				
Chlordane {2}			9076				
Chlordane {3}			27283				
Chlordane {4}			21188				
Chlordane {5}			22513				
Toxaphene 500 ppb			4698				
Toxaphene {2}			5802				
Toxaphene {3}			9786				
Toxaphene {4}			5444				
Toxaphene {5}			4648				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/14/2016 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V7044.D V7043.D V7042.D V7041.D V7040.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	2.53	2.53	2.53	2.53	2.53	2.53	2.47	2.59
beta-BHC	2.82	2.83	2.83	2.83	2.82	2.82	2.76	2.88
gamma-BHC	2.76	2.76	2.77	2.76	2.76	2.76	2.70	2.82
delta-BHC	2.97	2.97	2.97	2.97	2.97	2.97	2.91	3.03
Heptachlor	3.13	3.13	3.13	3.13	3.13	3.13	3.05	3.21
Aldrin	3.38	3.38	3.38	3.38	3.38	3.38	3.30	3.46
Heptachlor epoxide	3.90	3.90	3.90	3.90	3.90	3.90	3.82	3.98
Endosulfan I	4.26	4.26	4.26	4.26	4.26	4.26	4.18	4.34
4,4'-DDE	4.20	4.20	4.21	4.21	4.21	4.21	4.11	4.31
Dieldrin	4.49	4.49	4.49	4.49	4.49	4.49	4.39	4.59
Endrin	4.71	4.71	4.71	4.71	4.71	4.71	4.61	4.81
Endosulfan II	4.93	4.93	4.93	4.93	4.93	4.93	4.83	5.03
4,4'-DDD	4.78	4.78	4.78	4.78	4.78	4.78	4.68	4.88
Endrin aldehyde	5.35	5.35	5.35	5.35	5.35	5.35	5.23	5.47
Endosulfan sulfate	5.80	5.80	5.80	5.80	5.80	5.80	5.68	5.92
4,4'-DDT	5.06	5.05	5.05	5.06	5.05	5.05	4.93	5.17
Endrin ketone	6.09	6.09	6.09	6.09	6.09	6.09	5.97	6.21
Methoxychlor	5.56	5.56	5.56	5.56	5.55	5.56	5.44	5.68
alpha-Chlordane	4.14	4.14	4.14	4.14	4.14	4.14	4.06	4.22
gamma-Chlordane	4.01	4.01	4.01	4.01	4.02	4.01	3.93	4.09
Chlordane 500 ppb			3.07				2.99	3.15
Chlordane {2}			3.49				3.41	3.57
Chlordane {3}			4.01				3.93	4.09
Chlordane {4}			4.13				4.05	4.21
Chlordane {5}			4.86				4.78	4.94
Toxaphene 500 ppb			4.58				4.50	4.66
Toxaphene {2}			4.92				4.84	5.00
Toxaphene {3}			5.04				4.96	5.12
Toxaphene {4}			5.26				5.18	5.34
Toxaphene {5}			5.70				5.62	5.78

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/14/2016 **Instrument ID:** GC-V
GC Column (1st): RTX-CLP1

Data File: V7044.D V7043.D V7042.D V7041.D V7040.D

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	236938	275304	266483	283556	287404	269937	7.46
beta-BHC	109474	105883	97399	101386	111817	105192	5.58
gamma-BHC	223323	239372	231969	241663	241919	235649	3.39
delta-BHC	219676	235096	225921	241732	254684	235422	5.81
Heptachlor	240350	222682	209873	217312	230973	224238	5.28
Aldrin	234191	237917	229557	233074	239383	234824	1.67
Heptachlor epoxide	230195	212633	199001	198123	204586	208908	6.33
Endosulfan I	208521	201105	187760	188039	196773	196439	4.51
4,4'-DDE	171356	176727	170538	180528	195533	178936	5.66
Dieldrin	207618	205146	193691	197280	209370	202621	3.36
Endrin	182275	170727	160976	166967	180441	172277	5.23
Endosulfan II	194892	167363	153517	157192	170586	168710	9.62
4,4'-DDD	158095	174838	159704	165180	178181	167200	5.37
Endrin aldehyde	164812	136373	123582	128382	140258	138681	11.54
Endosulfan sulfate	185275	154125	139041	143749	157613	155961	11.56
4,4'-DDT	108503	86430	85517	109786	129003	103848	17.55
Endrin ketone	211234	184495	166630	171127	188091	184316	9.50
Methoxychlor	65328	49572	47982	58149	69043	58015	16.06
alpha-Chlordane	220853	207421	196657	198458	207862	206250	4.66
gamma-Chlordane	230266	213492	204066	206580	216941	214269	4.82
Chlordane 500 ppb			6074				
Chlordane {2}			7639				
Chlordane {3}			21315				
Chlordane {4}			33918				
Chlordane {5}			4861				
Toxaphene 500 ppb			2028				
Toxaphene {2}			5610				
Toxaphene {3}			4367				
Toxaphene {4}			3633				
Toxaphene {5}			3372				

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/14/2016 **Instrument ID:** GC-V

GC Column (2nd): RTX-CLP2

Data File: V7044.C V7043.C V7042.C V7041.C V7040.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	2	50	100	200	300	RT	FROM	TO
alpha-BHC	3.18	3.17	3.17	3.17	3.17	3.17	3.11	3.23
beta-BHC	3.57	3.56	3.56	3.56	3.56	3.56	3.50	3.62
gamma-BHC	3.50	3.50	3.50	3.50	3.50	3.50	3.44	3.56
delta-BHC	3.85	3.85	3.85	3.85	3.85	3.85	3.79	3.91
Heptachlor	3.93	3.92	3.92	3.92	3.92	3.92	3.84	4.00
Aldrin	4.25	4.25	4.25	4.25	4.25	4.25	4.17	4.33
Heptachlor epoxide	4.83	4.82	4.82	4.82	4.82	4.82	4.74	4.90
Endosulfan I	5.24	5.23	5.23	5.23	5.23	5.23	5.15	5.31
4,4'-DDE	5.33	5.32	5.32	5.32	5.32	5.32	5.22	5.42
Dieldrin	5.53	5.52	5.52	5.52	5.52	5.52	5.42	5.62
Endrin	5.86	5.85	5.85	5.85	5.85	5.85	5.75	5.95
Endosulfan II	6.09	6.08	6.08	6.08	6.08	6.08	5.98	6.18
4,4'-DDD	5.95	5.94	5.94	5.94	5.94	5.94	5.84	6.04
Endrin aldehyde	6.45	6.44	6.44	6.44	6.44	6.45	6.33	6.57
Endosulfan sulfate	6.76	6.75	6.75	6.75	6.75	6.75	6.63	6.87
4,4'-DDT	6.30	6.29	6.29	6.29	6.29	6.29	6.17	6.41
Endrin ketone	7.36	7.35	7.35	7.35	7.35	7.35	7.23	7.47
Methoxychlor	7.05	7.04	7.04	7.04	7.04	7.04	6.92	7.16
alpha-Chlordane	5.17	5.16	5.16	5.16	5.16	5.16	5.08	5.24
gamma-Chlordane	5.02	5.01	5.01	5.01	5.01	5.01	4.93	5.09
Chlordane 500 ppb			3.78				3.70	3.86
Chlordane {2}			4.38				4.30	4.46
Chlordane {3}			5.01				4.93	5.09
Chlordane {4}			5.10				5.02	5.18
Chlordane {5}			5.16				5.08	5.24
Toxaphene 500 ppb			5.50				5.42	5.58
Toxaphene {2}			6.07				5.99	6.15
Toxaphene {3}			6.18				6.10	6.26
Toxaphene {4}			6.46				6.38	6.54
Toxaphene {5}			7.03				6.95	7.11

PESTICIDE INITIAL CALIBRATION SUMMARY

Date Analyzed: 10/14/2016 **Instrument ID:** GC-V
GC Column (2nd): RTX-CLP2

Data File: V7044.C V7043.C V7042.C V7041.C V7040.C

Compound	CALIBRATION FACTORS 2	50	100	200	300	MEAN	%RSD
alpha-BHC	1501083	1511459	1435950	1489895	1556366	1498950	2.89
beta-BHC	614775	563320	508598	521557	562233	554097	7.53
gamma-BHC	1324770	1308297	1232941	1271572	1328096	1293135	3.13
delta-BHC	1224946	1167163	1142762	1126058	1246425	1181471	4.41
Heptachlor	1285480	1142042	1043676	1045276	1113762	1126047	8.78
Aldrin	1382638	1247406	1176445	1158807	1198736	1232806	7.31
Heptachlor epoxide	1253822	1059983	969775	922718	943956	1030051	13.16
Endosulfan I	1083776	964055	878407	845158	873883	929056	10.46
4,4'-DDE	935262	972009	915151	935175	1007084	952936	3.84
Dieldrin	1107134	1017925	935945	917147	960331	987696	7.77
Endrin	966252	797840	723045	718096	763493	793745	12.82
Endosulfan II	955837	860967	759600	759011	812425	829568	9.92
4,4'-DDD	952981	902006	800935	799429	858826	862835	7.67
Endrin aldehyde	860315	660677	575084	572918	620670	657933	18.06
Endosulfan sulfate	914390	765505	654305	668651	734556	747482	13.91
4,4'-DDT	488504	390714	381998	468273	585825	463063	17.92
Endrin ketone	963369	800134	693736	691116	764755	782622	14.22
Methoxychlor	255823	214917	191646	224700	265852	230588	13.15
alpha-Chlordane	1179581	1029758	969555	956876	1010363	1029227	8.66
gamma-Chlordane	1195259	1088950	1026546	1019381	1078168	1081661	6.52
Chlordane 500 ppb			34778				
Chlordane {2}			34863				
Chlordane {3}			103968				
Chlordane {4}			83841				
Chlordane {5}			92127				
Toxaphene 500 ppb			16276				
Toxaphene {2}			19532				
Toxaphene {3}			30722				
Toxaphene {4}			17477				
Toxaphene {5}			12634				

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/20/2016 **Instrument ID:** GC-O

Data File: O4563.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.45	2.39	2.51	206565	207978	0.68
beta-BHC	2.74	2.68	2.80	76725	70524	8.08
gamma-BHC	2.68	2.62	2.74	184347	182998	0.73
delta-BHC	2.88	2.82	2.94	179322	179713	0.22
Heptachlor	3.04	2.96	3.12	177105	178926	1.03
Aldrin	3.29	3.21	3.37	181625	179221	1.32
Heptachlor epoxide	3.80	3.72	3.88	163531	158121	3.31
Endosulfan I	4.16	4.08	4.24	154460	148695	3.73
4,4'-DDE	4.11	4.01	4.21	144615	142922	1.17
Dieldrin	4.38	4.28	4.48	163564	154466	5.56
Endrin	4.60	4.50	4.70	128535	136293	6.04
Endosulfan II	4.82	4.72	4.92	134064	123241	8.07
4,4'-DDD	4.68	4.57	4.77	130285	119433	8.33
Endrin aldehyde	5.24	5.12	5.36	112958	97369	13.80
Endosulfan sulfate	5.68	5.56	5.80	123428	111530	9.64
4,4'-DDT	4.95	4.83	5.07	90704	93564	3.15
Endrin ketone	5.97	5.85	6.09	144355	132750	8.04
Methoxychlor	5.45	5.33	5.57	45383	50670	11.65
alpha-Chlordane	4.04	3.95	4.11	161164	154937	3.86
gamma-Chlordane	3.92	3.84	4.00	169326	161200	4.80
Chlordane 500 ppb	2.98	2.90	3.06	4473	4613	3.14
Chlordane {2}	3.40	3.32	3.48	5584	5678	1.69
Chlordane {3}	3.92	3.84	4.00	16220	16850	3.88
Chlordane {4}	4.03	3.95	4.11	25722	26741	3.96
Chlordane {5}	4.76	4.67	4.83	3789	4216	11.25
Toxaphene 500 ppb	4.81	4.73	4.89	4682	4274	8.70
Toxaphene {2}	4.93	4.85	5.01	6205	5551	10.53
Toxaphene {3}	5.15	5.07	5.23	3222	2901	9.98
Toxaphene {4}	5.37	5.29	5.45	2432	2066	15.05
Toxaphene {5}	5.58	5.50	5.66	3031	2657	12.35

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/20/2016 **Instrument ID:** GC-O

Data File: O4563.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	TO	Avg CF	CC CF	%D
alpha-BHC	2.86	2.78	2.90	380250	378875	0.36
beta-BHC	3.23	3.16	3.28	145370	131958	9.23
gamma-BHC	3.17	3.09	3.21	339576	332918	1.96
delta-BHC	3.51	3.43	3.55	329311	320204	2.77
Heptachlor	3.57	3.48	3.64	314367	308034	2.01
Aldrin	3.89	3.79	3.95	328297	310533	5.41
Heptachlor epoxide	4.45	4.35	4.51	290271	273293	5.85
Endosulfan I	4.85	4.75	4.91	268487	249998	6.89
4,4'-DDE	4.95	4.83	5.03	264279	251407	4.87
Dieldrin	5.13	5.01	5.21	284333	269864	5.09
Endrin	5.45	5.33	5.53	231432	228746	1.16
Endosulfan II	5.68	5.56	5.76	248628	218864	11.97
4,4'-DDD	5.57	5.44	5.64	229796	201525	12.30
Endrin aldehyde	6.05	5.91	6.15	202173	177576	12.17
Endosulfan sulfate	6.35	6.21	6.45	223121	210094	5.84
4,4'-DDT	5.90	5.76	6.00	142560	154034	8.05
Endrin ketone	6.95	6.81	7.05	259814	242751	6.57
Methoxychlor	6.67	6.53	6.77	81438	93058	14.27
alpha-Chlordane	4.78	4.68	4.84	285600	259974	8.97
gamma-Chlordane	4.63	4.53	4.69	290817	272473	6.31
Chlordane 500 ppb	3.42	3.34	3.50	8822	8520	3.42
Chlordane {2}	4.01	3.92	4.08	9076	9216	1.55
Chlordane {3}	4.62	4.53	4.69	27283	28044	2.79
Chlordane {4}	4.71	4.63	4.79	21188	21829	3.03
Chlordane {5}	4.77	4.68	4.84	22513	23077	2.51
Toxaphene 500 ppb	5.11	5.01	5.17	4698	4340	7.61
Toxaphene {2}	5.66	5.57	5.73	5802	5414	6.70
Toxaphene {3}	5.77	5.67	5.83	9786	9218	5.80
Toxaphene {4}	6.05	5.95	6.11	5444	5215	4.22
Toxaphene {5}	6.62	6.52	6.68	4648	4723	1.61

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/20/2016 **Instrument ID:** GC-O

Data File: O4585.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.45	2.39	2.51	206565	202012	2.20
beta-BHC	2.74	2.68	2.80	76725	72544	5.45
gamma-BHC	2.68	2.62	2.74	184347	178546	3.15
delta-BHC	2.88	2.82	2.94	179322	179888	0.32
Heptachlor	3.04	2.96	3.12	177105	149694	15.48
Aldrin	3.29	3.21	3.37	181625	171713	5.46
Heptachlor epoxide	3.81	3.72	3.88	163531	152656	6.65
Endosulfan I	4.16	4.08	4.24	154460	146477	5.17
4,4'-DDE	4.11	4.01	4.21	144615	144910	0.20
Dieldrin	4.38	4.28	4.48	163564	156094	4.57
Endrin	4.61	4.50	4.70	128535	140328	9.18
Endosulfan II	4.82	4.72	4.92	134064	127534	4.87
4,4'-DDD	4.68	4.57	4.77	130285	133957	2.82
Endrin aldehyde	5.24	5.12	5.36	112958	102983	8.83
Endosulfan sulfate	5.68	5.56	5.80	123428	117789	4.57
4,4'-DDT	4.95	4.83	5.07	90704	82326	9.24
Endrin ketone	5.97	5.85	6.09	144355	135038	6.45
Methoxychlor	5.45	5.33	5.57	45383	45551	0.37
alpha-Chlordane	4.04	3.95	4.11	161164	149839	7.03
gamma-Chlordane	3.92	3.84	4.00	169326	155866	7.95

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/20/2016 **Instrument ID:** GC-O

Data File: O4585.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.84	2.78	2.90	380250	364209	4.22
beta-BHC	3.22	3.16	3.28	145370	134456	7.51
gamma-BHC	3.15	3.09	3.21	339576	322156	5.13
delta-BHC	3.49	3.43	3.55	329311	324508	1.46
Heptachlor	3.56	3.48	3.64	314367	263983	16.03
Aldrin	3.87	3.79	3.95	328297	289376	11.86
Heptachlor epoxide	4.43	4.35	4.51	290271	251899	13.22
Endosulfan I	4.83	4.75	4.91	268487	242465	9.69
4,4'-DDE	4.93	4.83	5.03	264279	248596	5.93
Dieldrin	5.11	5.01	5.21	284333	258091	9.23
Endrin	5.43	5.33	5.53	231432	229296	0.92
Endosulfan II	5.66	5.56	5.76	248628	213428	14.16
4,4'-DDD	5.54	5.44	5.64	229796	219472	4.49
Endrin aldehyde	6.03	5.91	6.15	202173	193002	4.54
Endosulfan sulfate	6.33	6.21	6.45	223121	209195	6.24
4,4'-DDT	5.88	5.76	6.00	142560	135664	4.84
Endrin ketone	6.93	6.81	7.05	259814	231569	10.87
Methoxychlor	6.64	6.53	6.77	81438	69649	14.48
alpha-Chlordane	4.76	4.68	4.84	285600	246789	13.59
gamma-Chlordane	4.61	4.53	4.69	290817	252278	13.25

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/26/2016 **Instrument ID:** GC-V

Data File: V7301.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.47	2.59	269937	279954	3.71
beta-BHC	2.83	2.76	2.88	105192	96899	7.88
gamma-BHC	2.76	2.70	2.82	235649	239526	1.65
delta-BHC	2.97	2.91	3.03	235422	220519	6.33
Heptachlor	3.13	3.05	3.21	224238	230578	2.83
Aldrin	3.38	3.30	3.46	234824	233691	0.48
Heptachlor epoxide	3.90	3.82	3.98	208908	202644	3.00
Endosulfan I	4.26	4.18	4.34	196439	194618	0.93
4,4'-DDE	4.21	4.11	4.31	178936	163399	8.68
Dieldrin	4.49	4.39	4.59	202621	195187	3.67
Endrin	4.71	4.61	4.81	172277	163577	5.05
Endosulfan II	4.93	4.83	5.03	168710	156239	7.39
4,4'-DDD	4.78	4.68	4.88	167200	158446	5.24
Endrin aldehyde	5.35	5.23	5.47	138681	124800	10.01
Endosulfan sulfate	5.80	5.68	5.92	155961	144444	7.38
4,4'-DDT	5.06	4.93	5.17	103848	97924	5.70
Endrin ketone	6.09	5.97	6.21	184316	170552	7.47
Methoxychlor	5.56	5.44	5.68	58015	58129	0.20
alpha-Chlordane	4.14	4.06	4.22	206250	193622	6.12
gamma-Chlordane	4.01	3.93	4.09	214269	200651	6.36
Chlordane 500 ppb	3.07	2.99	3.15	6074	6169	1.55
Chlordane {2}	3.49	3.41	3.57	7639	7569	0.92
Chlordane {3}	4.01	3.93	4.09	21315	20426	4.17
Chlordane {4}	4.13	4.05	4.21	33918	32395	4.49
Chlordane {5}	4.86	4.78	4.94	4861	4112	15.42
Toxaphene 500 ppb	4.58	4.50	4.66	2028	1974	2.70
Toxaphene {2}	4.93	4.84	5.00	5610	5349	4.66
Toxaphene {3}	5.04	4.96	5.12	4367	3920	10.23
Toxaphene {4}	5.26	5.18	5.34	3633	3343	7.99
Toxaphene {5}	5.70	5.62	5.78	3372	3272	2.98

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/26/2016 **Instrument ID:** GC-V

Data File: V7301.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	3.17	3.11	3.23	1498950	1546355	3.16
beta-BHC	3.56	3.50	3.62	554097	529301	4.48
gamma-BHC	3.50	3.44	3.56	1293135	1313747	1.59
delta-BHC	3.85	3.79	3.91	1181471	1090975	7.66
Heptachlor	3.93	3.84	4.00	1126047	1183426	5.10
Aldrin	4.25	4.17	4.33	1232806	1217288	1.26
Heptachlor epoxide	4.82	4.74	4.90	1030051	1006686	2.27
Endosulfan I	5.24	5.15	5.31	929056	907785	2.29
4,4'-DDE	5.33	5.22	5.42	952936	939273	1.43
Dieldrin	5.53	5.42	5.62	987696	967526	2.04
Endrin	5.86	5.75	5.95	793745	748711	5.67
Endosulfan II	6.08	5.98	6.18	829568	777266	6.30
4,4'-DDD	5.95	5.84	6.04	862835	806773	6.50
Endrin aldehyde	6.45	6.33	6.57	657933	579097	11.98
Endosulfan sulfate	6.76	6.63	6.87	747482	665127	11.02
4,4'-DDT	6.29	6.17	6.41	463063	445390	3.82
Endrin ketone	7.35	7.23	7.47	782622	710416	9.23
Methoxychlor	7.05	6.92	7.16	230588	223579	3.04
alpha-Chlordane	5.17	5.08	5.24	1029227	969368	5.82
gamma-Chlordane	5.02	4.93	5.09	1081661	1024962	5.24
Chlordane 500 ppb	3.78	3.70	3.86	34778	33883	2.57
Chlordane {2}	4.38	4.30	4.46	34863	33603	3.61
Chlordane {3}	5.01	4.93	5.09	103968	98227	5.52
Chlordane {4}	5.10	5.02	5.18	83841	79866	4.74
Chlordane {5}	5.16	5.08	5.24	92127	87148	5.40
Toxaphene 500 ppb	5.50	5.42	5.58	16276	15233	6.41
Toxaphene {2}	6.07	5.99	6.15	19532	17795	8.90
Toxaphene {3}	6.18	6.10	6.26	30722	28269	7.99
Toxaphene {4}	6.45	6.38	6.54	17477	16440	5.94
Toxaphene {5}	7.03	6.95	7.11	12634	11563	8.48

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/26/2016 **Instrument ID:** GC-V

Data File: V7318.D **GC Column (1st):** RTX-CLP1

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	2.53	2.47	2.59	269937	272177	0.83
beta-BHC	2.82	2.76	2.88	105192	108243	2.90
gamma-BHC	2.76	2.70	2.82	235649	234494	0.49
delta-BHC	2.97	2.91	3.03	235422	247695	5.21
Heptachlor	3.13	3.05	3.21	224238	220913	1.48
Aldrin	3.38	3.30	3.46	234824	238374	1.51
Heptachlor epoxide	3.90	3.82	3.98	208908	216263	3.52
Endosulfan I	4.26	4.18	4.34	196439	213952	8.91
4,4'-DDE	4.21	4.11	4.31	178936	195347	9.17
Dieldrin	4.49	4.39	4.59	202621	223109	10.11
Endrin	4.71	4.61	4.81	172277	196877	14.28
Endosulfan II	4.93	4.83	5.03	168710	189598	12.38
4,4'-DDD	4.78	4.68	4.88	167200	195656	17.02
Endrin aldehyde	5.35	5.23	5.47	138681	153847	10.94
Endosulfan sulfate	5.80	5.68	5.92	155961	174464	11.86
4,4'-DDT	5.06	4.93	5.17	103848	109957	5.88
Endrin ketone	6.09	5.97	6.21	184316	202216	9.71
Methoxychlor	5.56	5.44	5.68	58015	62927	8.47
alpha-Chlordane	4.14	4.06	4.22	206250	214793	4.14
gamma-Chlordane	4.02	3.93	4.09	214269	222334	3.76

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Date Analyzed: 10/26/2016 **Instrument ID:** GC-V

Data File: V7318.C **GC Column (2nd):** RTX-CLP2

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
alpha-BHC	3.17	3.11	3.23	1498950	1494731	0.28
beta-BHC	3.56	3.50	3.62	554097	556574	0.45
gamma-BHC	3.50	3.44	3.56	1293135	1291364	0.14
delta-BHC	3.85	3.79	3.91	1181471	1177505	0.34
Heptachlor	3.93	3.84	4.00	1126047	1129166	0.28
Aldrin	4.25	4.17	4.33	1232806	1214536	1.48
Heptachlor epoxide	4.83	4.74	4.90	1030051	1042200	1.18
Endosulfan I	5.24	5.15	5.31	929056	971251	4.54
4,4'-DDE	5.33	5.22	5.42	952936	1057714	11.00
Dieldrin	5.53	5.42	5.62	987696	1067438	8.07
Endrin	5.86	5.75	5.95	793745	868950	9.47
Endosulfan II	6.09	5.98	6.18	829568	911184	9.84
4,4'-DDD	5.95	5.84	6.04	862835	946277	9.67
Endrin aldehyde	6.45	6.33	6.57	657933	680912	3.49
Endosulfan sulfate	6.76	6.63	6.87	747482	778855	4.20
4,4'-DDT	6.30	6.17	6.41	463063	479740	3.60
Endrin ketone	7.36	7.23	7.47	782622	800241	2.25
Methoxychlor	7.05	6.92	7.16	230588	238052	3.24
alpha-Chlordane	5.17	5.08	5.24	1029227	1037062	0.76
gamma-Chlordane	5.02	4.93	5.09	1081661	1100603	1.75

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-O **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 2.09 **DCB 1** 7.08 **TCMX 2** 2.36 **DCB 2** 8.61

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS161018-06	10/20/2016	14:00	2.09		7.08		2.36		8.61	
Pest	LCSS161018-06	10/20/2016	14:12	2.09		7.08		2.36		8.60	
Pest	E16-09605-001MS	10/20/2016	14:25	2.09		7.08		2.36		8.60	
Pest	E16-09605-001MSD	10/20/2016	14:37	2.09		7.08		2.36		8.60	
VTS-C2-1	E16-09605-001	10/20/2016	14:50	2.09		7.08		2.36		8.60	
VTS-C2-2	E16-09605-002	10/20/2016	15:03	2.09		7.08		2.36		8.60	
VTS-C2-3	E16-09605-003	10/20/2016	15:15	2.09		7.08		2.36		8.60	
VTS-C2-4	E16-09605-004	10/20/2016	15:28	2.09		7.08		2.36		8.60	
VTS-C2-5	E16-09605-005	10/20/2016	15:40	2.09		7.08		2.36		8.60	
VTS-B2-1	E16-09603-001	10/20/2016	15:53	2.09		7.08		2.36		8.60	
VTS-B2-2	E16-09603-002	10/20/2016	16:05	2.09		7.08		2.36		8.60	
VTS-B2-3	E16-09603-003	10/20/2016	16:18	2.09		7.08		2.36		8.60	
VTS-B2-4	E16-09603-004	10/20/2016	16:31	2.09		7.08		2.36		8.60	
VTS-B2-5	E16-09603-005	10/20/2016	16:43	2.09		7.08		2.36		8.60	
VTS-C1-1	E16-09604-001	10/20/2016	16:56	2.09		7.08		2.36		8.60	
VTS-C1-2	E16-09604-002	10/20/2016	17:08	2.09		7.08		2.36		8.60	
VTS-C1-3	E16-09604-003	10/20/2016	17:21	2.09		7.08		2.36		8.60	
VTS-C1-4	E16-09604-004	10/20/2016	17:33	2.09		7.08		2.36		8.60	
VTS-C1-5	E16-09604-005	10/20/2016	17:46	2.09		7.08		2.36		8.60	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PESTICIDE RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-V **Column:** RTX-CLP1/CLP2

Surrogate RT from initial calibration :

TCMX 1 2.16 **DCB 1** 7.18 **TCMX 2** 2.66 **DCB 2** 8.74

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
Pest	BLKS161025-08	10/26/2016	09:53	2.16		7.18		2.66		8.74	
Pest	LCSS161025-08	10/26/2016	10:05	2.16		7.18		2.66		8.73	
E-53_(0.	E16-09581-007	10/26/2016	10:17	2.16		7.18		2.66		8.73	
E-48_(0.	E16-09581-010	10/26/2016	10:30	2.16		7.18		2.66		8.73	
DS-1_COM	E16-09817-001	10/26/2016	10:54	2.16		7.17		2.66		8.72	
FRINGE_S	E16-09877-001	10/26/2016	11:07	2.16		7.18		2.66		8.73	
FRINGE_S	E16-09877-002	10/26/2016	11:19	2.16		7.18		2.66		8.73	
FRINGE_S	E16-09877-003	10/26/2016	11:31	2.16		7.18		2.66		8.73	
PXSW-1/2	E16-09877-004	10/26/2016	11:44	2.16		7.18		2.66		8.75	
PXSW-2/2	E16-09877-005	10/26/2016	12:24	2.16		7.18		2.66		8.73	
PXSW-3/2	E16-09877-006	10/26/2016	12:36	2.16		7.18		2.66		8.73	
PXSW-4/2	E16-09877-007	10/26/2016	13:20	2.16		7.18		2.66		8.74	
COMP-1	E16-09790-001	10/26/2016	13:32	2.16		7.18		2.66		8.73	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

Date Analyzed: 10/20/2016

Data file: O4561.D Thu Oct 20 12:05:40 2016

				% Breakdown	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	10696722	Endrin (1)	13042618	4.19	4.54
DDD	468007	Endrin ketone	481053		
DDE	0	Endrin aldehyde	138529		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	17572895	Endrin (2)	22870973	5.28	5.22
DDD	979505	Endrin ketone	836437		
DDE	0	Endrin aldehyde	422924		

Date Analyzed: 10/26/2016

Data file: V7299.D	Wed Oct 26 08:09:36 2016			**% Breakdown**	
1st Column				**DDT (1)**	**Endrin (1)**
DDT (1)	8931960	Endrin (1)	13446229	11.92	6.44
DDD	1209064	Endrin ketone	700751		
DDE	0	Endrin aldehyde	224765		
2nd Column				**DDT (2)**	**Endrin (2)**
DDT (2)	41367768	Endrin (2)	61298671	14.01	6.23
DDD	6739355	Endrin ketone	2448590		
DDE	0	Endrin aldehyde	1621654		

PESTICIDE SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7306.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 10:17
Operator : IB
Sample : E-53_(0.,E16-09581-007,S,30.47g,18.6,5
Misc : 161025-08,10/25/16,10/13/16,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:49:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.16	2.66	16591327	79607932	120.857	120.195
Spiked Amount 200.000			Recovery	=	60.43%	60.10%
2) S DCB	7.18	8.73	14046936	60287688	235.364	239.363
Spiked Amount 200.000			Recovery	=	117.68%	119.68%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

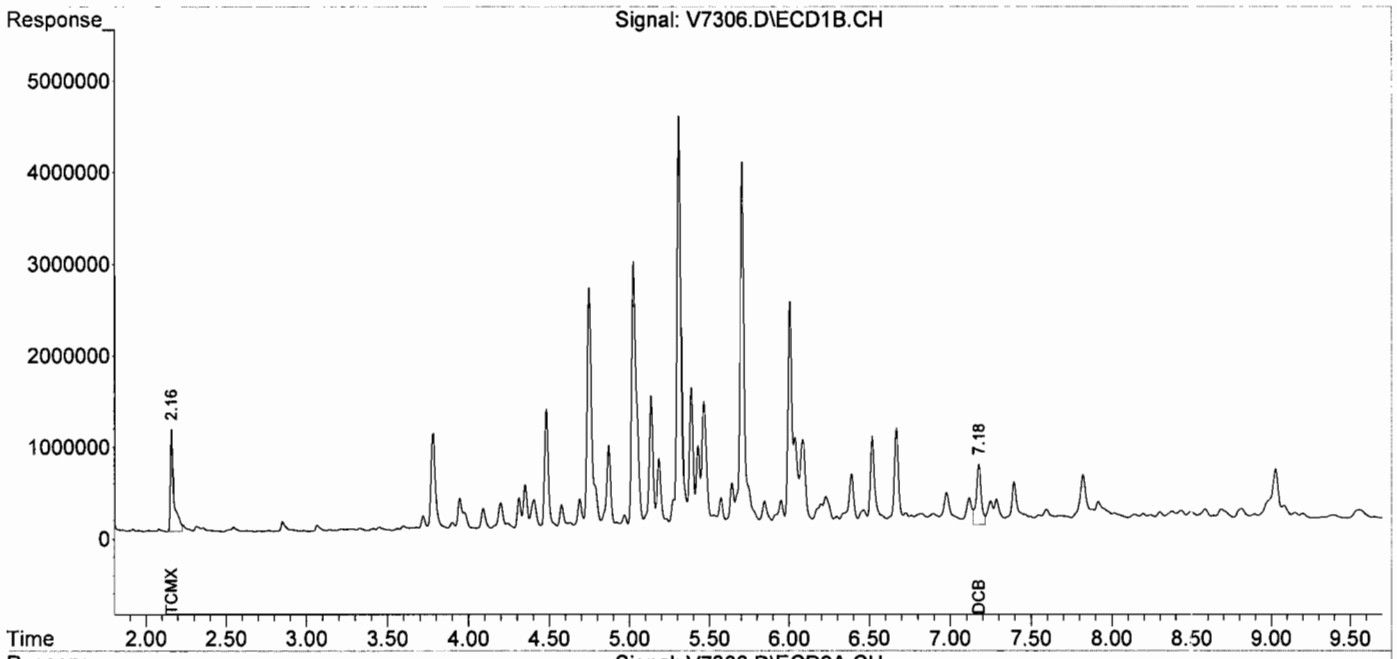
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

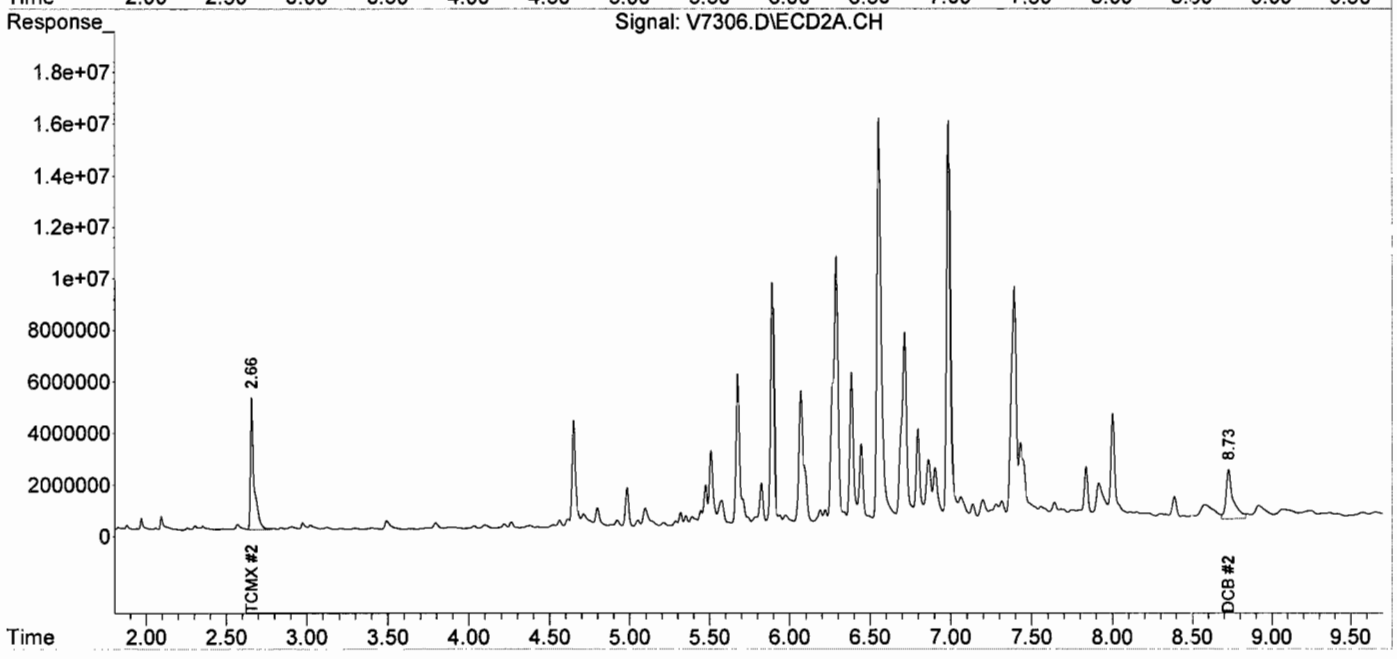
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7306.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 10:17
Operator : IB
Sample : E-53_(0.,E16-09581-007,S,30.47g,18.6,5
Misc : 161025-08,10/25/16,10/13/16,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:49:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7307.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 10:30
Operator : IB
Sample : E-48_(0.,E16-09581-010,S,30.27g,19.8,5
Misc : 161025-08,10/25/16,10/13/16,2
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:54:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.16	2.66	9273272	44663600	67.550	67.435
Spiked Amount 200.000			Recovery	=	33.77%	33.72%
2) S DCB	7.18	8.73	9203319	26347627	154.207m	104.609m#
Spiked Amount 200.000			Recovery	=	77.10%	52.30%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

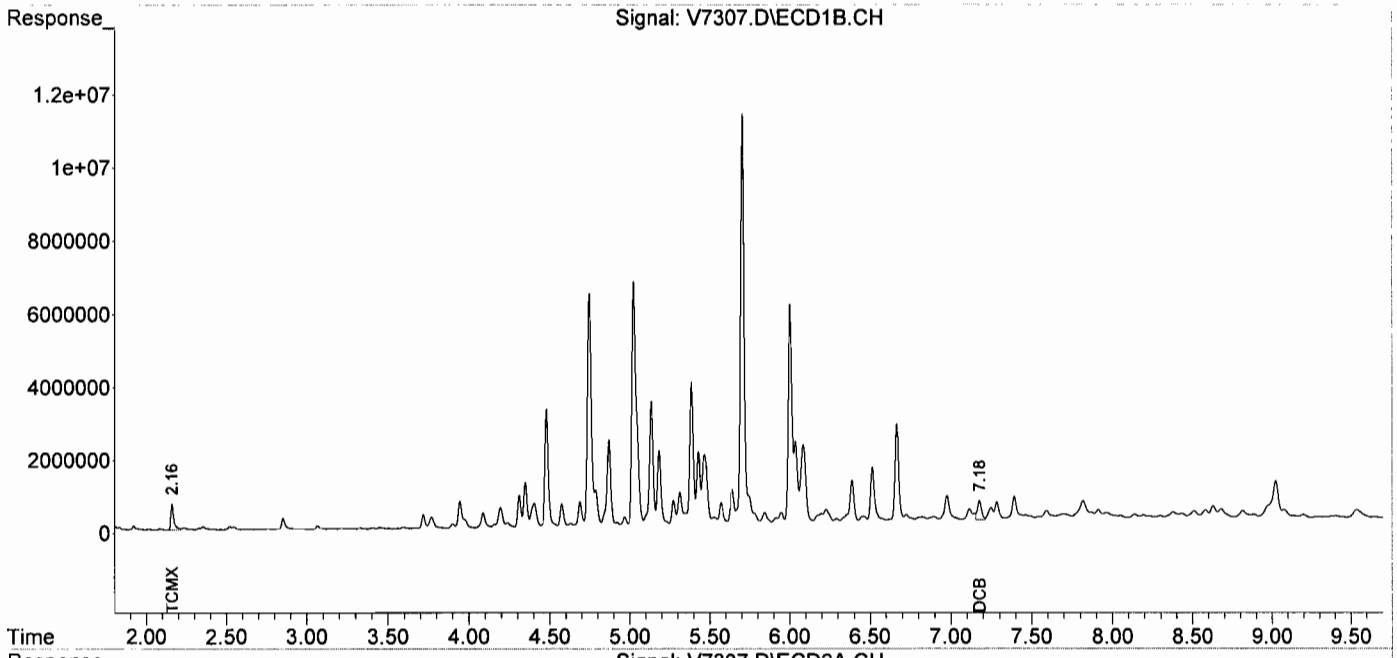
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

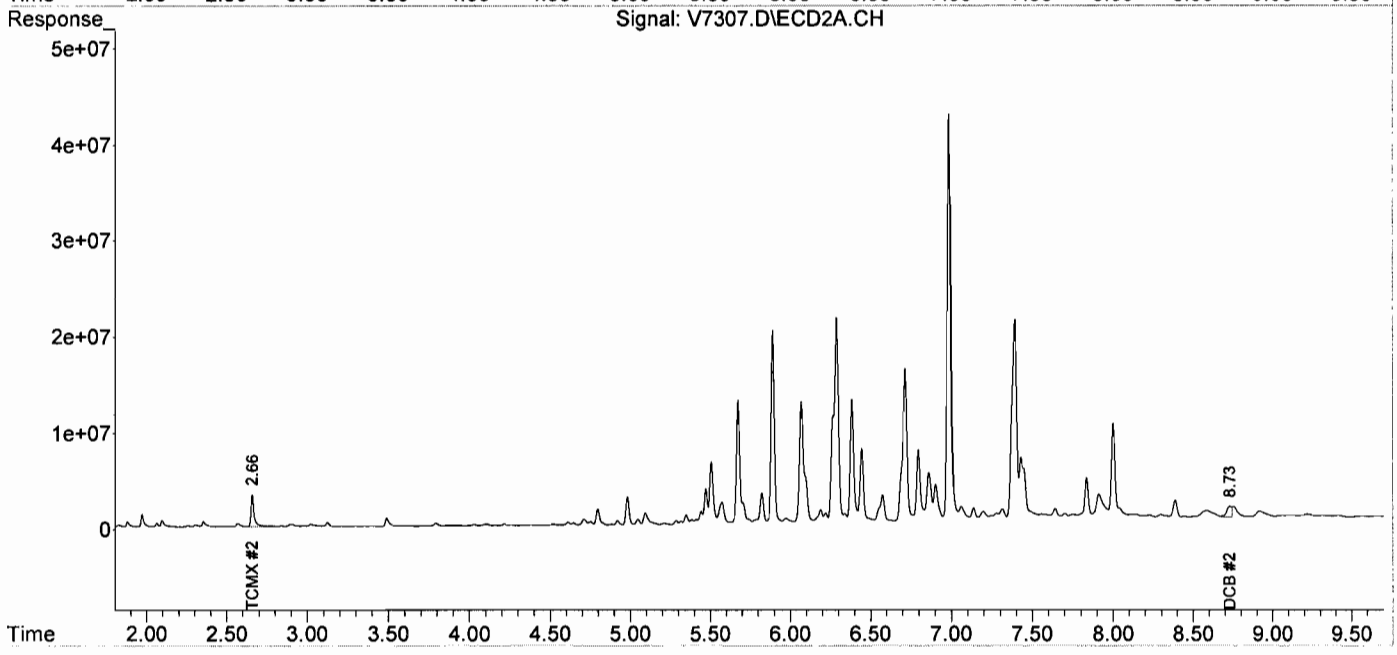
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7307.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 10:30
Operator : IB
Sample : E-48_(0.,E16-09581-010,S,30.27g,19.8,5
Misc : 161025-08,10/25/16,10/13/16,2
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:54:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS161018-06
Client ID: Pest
Date Received: NA
Date Extracted: 10/18/2016
Date Analyzed: 10/20/2016
Data file: O4566.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS161020-06
Client ID: Pest
Date Received: NA
Date Extracted: 10/20/2016
Date Analyzed: 10/24/2016
Data file: V7256.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PESTICIDES

Lab ID: BLKS161025-08
Client ID: Pest
Date Received: NA
Date Extracted: 10/25/2016
Date Analyzed: 10/26/2016
Data file: V7304.D

GC Column: RTX-CLP1/CLP2
Sample wt/vol: 30g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
alpha-BHC	ND		0.000334	0.000167
beta-BHC	ND		0.000334	0.000167
gamma-BHC (Lindane)	ND		0.000334	0.000167
delta-BHC	ND		0.000334	0.000167
Heptachlor	ND		0.000334	0.000167
Aldrin	ND		0.000334	0.000167
Heptachlor epoxide	ND		0.000334	0.000167
Endosulfan I	ND		0.000334	0.000167
4,4'-DDE	ND		0.000334	0.000167
Dieldrin	ND		0.000334	0.000167
Endrin	ND		0.000334	0.000167
Endosulfan II	ND		0.000334	0.000167
4,4'-DDD	ND		0.000334	0.000167
Endrin aldehyde	ND		0.000334	0.000167
Endosulfan sulfate	ND		0.000334	0.000167
4,4'-DDT	ND		0.000334	0.000167
Endrin ketone	ND		0.000334	0.000167
Methoxychlor	ND		0.000334	0.000167
alpha-Chlordane	ND		0.000334	0.000167
gamma-Chlordane	ND		0.000334	0.000167
Toxaphene	ND		0.00418	0.002
Endosulfan (I and II)	ND		0.000334	0.000167
Chlordane (alpha and gamma)	ND		0.000334	0.000167

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : O4566.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 14:00
Operator : IB
Sample : Pest,BLKS161018-06,S,30g,0,5
Misc : 161018-06,10/18/16,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 15:48:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\OPST1017.M
Quant Title :
QLast Update : Thu Oct 20 13:33:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.09	2.36	16791501	32636327	170.780	168.013
Spiked Amount 200.000	Range 10 - 180		Recovery =		85.39%	84.01%
2) S DCB	7.08	8.61	10443245	17174285	215.974	214.279
Spiked Amount 200.000	Range 10 - 180		Recovery =		107.99%	107.14%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

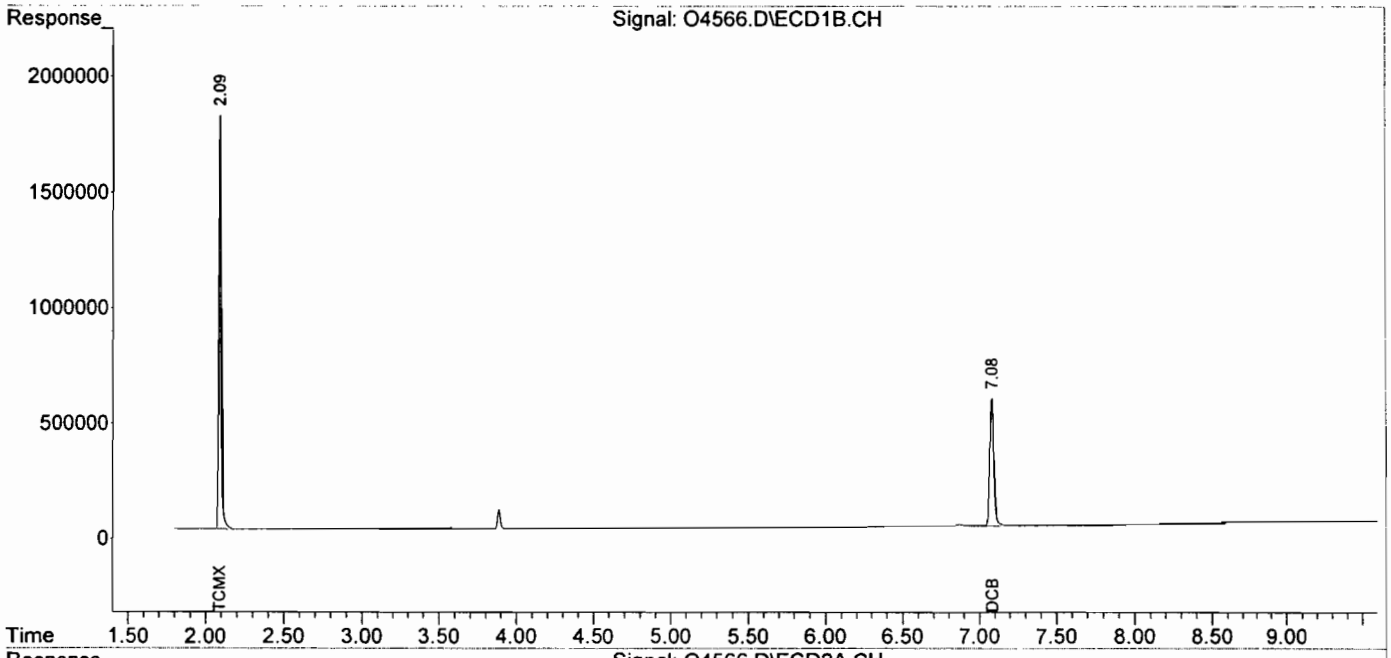
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

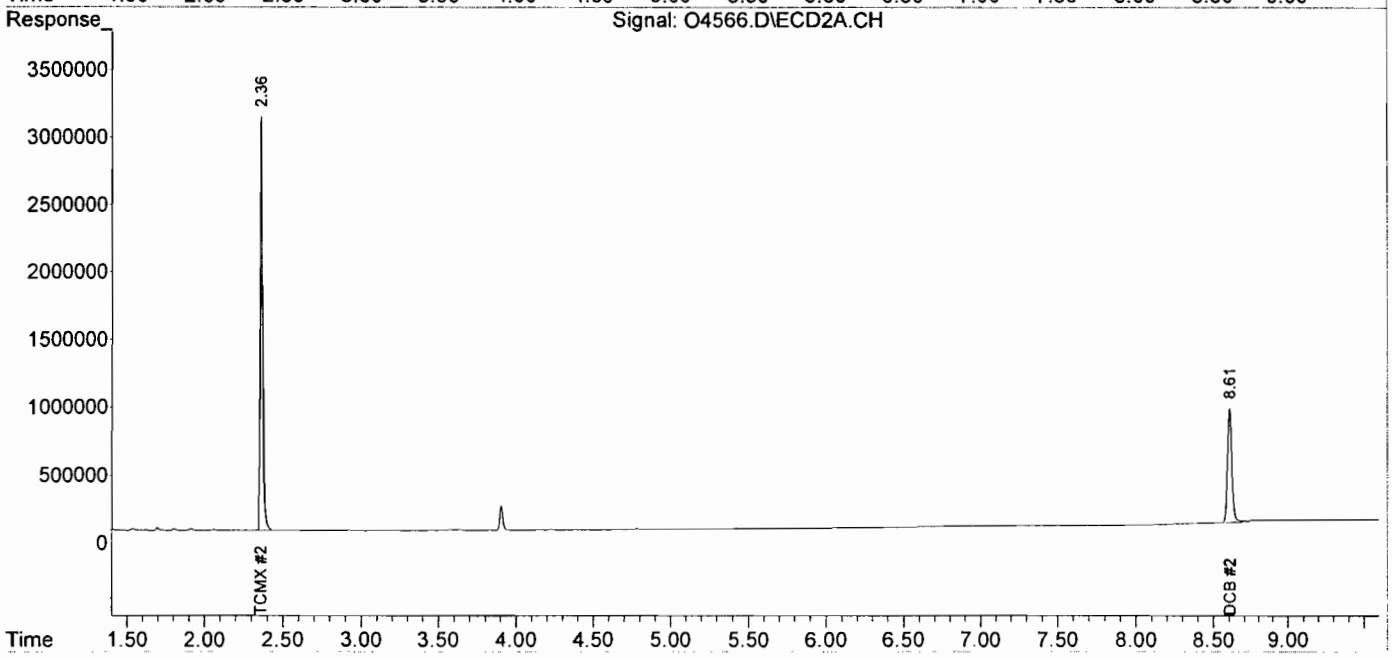
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\16-10-20\
Data File : O4566.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 20 Oct 2016 14:00
Operator : IB
Sample : Pest,BLKS161018-06,S,30g,0,5
Misc : 161018-06,10/18/16,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 20 15:48:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\OPST1017.M
Quant Title :
QLast Update : Thu Oct 20 13:33:51 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7304.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 9:53
Operator : IB
Sample : Pest,BLKS161025-08,S,30g,0,5
Misc : 161025-08,10/25/16,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:46:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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

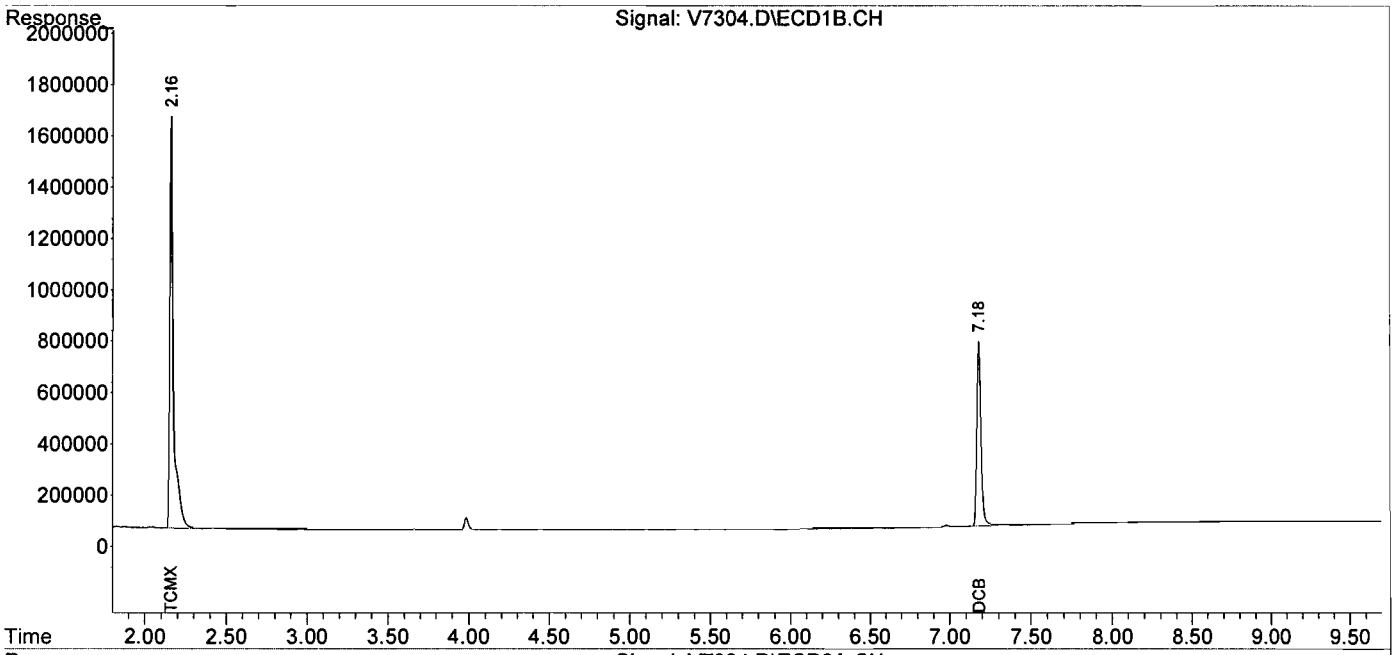
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.16	2.66	23155359	118.5E6	168.671	178.925
Spiked Amount 200.000			Recovery	=	84.34%	89.46%
2) S DCB	7.18	8.74	12928169	58040691	216.618	230.442
Spiked Amount 200.000			Recovery	=	108.31%	115.22%
Target Compounds						
Sum Chlordane			0	0	N.D.	N.D.
Average Chlordane					0.000	0.000
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

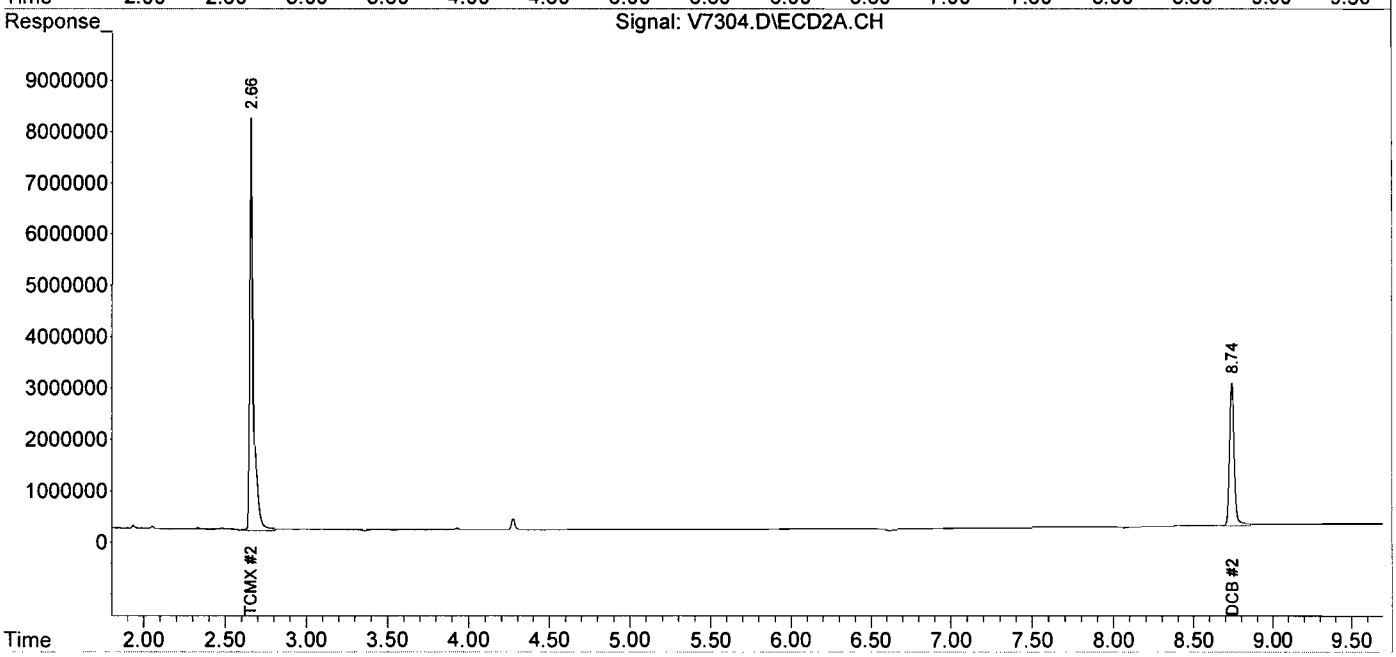
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\16-10-26\
Data File : V7304.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 26 Oct 2016 9:53
Operator : IB
Sample : Pest,BLKS161025-08,S,30g,0,5
Misc : 161025-08,10/25/16,NA,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Oct 26 11:46:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\VPST1014.M
Quant Title :
QLast Update : Wed Oct 26 09:00:09 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

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





SAMPLE TRACKING

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE
SUITE 405 SOMERSET NJ 08873
Telephone #: 1-732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address:
Project Name: AMTRAK-EAST BARRACKS
Project Location (State): NJ
Bottle Order #:
☑ "Report to"/"Invoice To" same as above
Sampled by: NDF, SR

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

****Rush TAT Charge**

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☒ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (*only* if pre-approved)**
Hard Copy: Std 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☒ IGW	☐ GWEL (TOGS Table 5)
☒ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-35-0.5-1.0		10-12-16	1305	S	1	1	X	
E-35-2.0-2.5			1255	S	1	2	X	
E-45-0.5-1.0			1110	S	1	3	X	
E-45-2.0-2.5			1130	S	1	4	H	HOLD
E-45-3.0-3.5			1140	S	1	5	H	HOLD
E-45-4.5-5.0			1145	S	1	6	H	HOLD
E-53-0.5-1.0			1218	S	1	7	X	
E-58-0.5-1.0			1300	S	1	8	X	

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

H = HOLD; CONTINGENT - PLEASE MEET NJDKQ PROTOCOL

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AFW	10-13-16	1032		10/13/16	10:30
	10/13/16	5:30		10/13/16	5:30

FOR LAB USE ONLY
SDG #: 9581
Cooler Temp: 5 °C

PAGE: 1 of 3

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

E16-09581 Page 20

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.lalonline.com

Customer Information

Company: AMEC Foster Wheeler
Address:
Telephone #:
Fax #:
Project Manager: Sal Pg 1
EMAIL Address:
Project Name:
Project Location (State):
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	☐ ASP Category B*
☐ Regulatory/ Full*	

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
TAT for PHC (If other than 2 weeks):
☐ DRO-8015

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-59-0.5-1.0		10-12-16	1428	S	1	9	X	
E-48-0.5-1.0			1214	S	1	10	X	
E-46-0.5-1.0			1150	S	1	11	X	
E-46-2.0-2.5			1200	S	1	12	H	Hold
E-46-3.0-3.5			~~1211~~ Hold	S	1	13	H	Hold
E-46-4.5-5.0			1215	S	1	14	H	Hold
E-38-0.5-1.0			0937	S	1	15	X	
E-38-2.0-2.5		↓	0943	S	1	16	X	

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code)
Container Type (use code)

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 9981
Cooler Temp: 5 °C

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
AFW	10-13-16	1032		10/13/16	10:30
	10/13/16	1532			

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

ACCUTEST LABORATORIES IAL

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
Tel: 732-329-0200 FAX: 732-329-3499/3480
www. acutest.com

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job #

Client / Reporting Information

Company Name: AMEC FOSTER WHEELER
Street Address:
City State Zip:
Project Contact: See pg 1 E-mail:
Phone # Fax #:
Sampler(s) Name(s) Phone #:

Project Information

Project Name: AMTRAK - EAST BARRACKS
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	PCB	~~VOC~~ PCE (no)	8081	LAB USE ONLY
	E-38-4.5-5.0		10-12-16	0958		S	1									X		-17	
	X-3-0.5-1.0			-		S	1									X		-18	
	X-4-0.5-1.0			-		S	1									X		-19	
	EB-101216			1450		EB	5									X	X	-16	
	TRIP BLANK		-	-		TB	2										X	-21	

Turnaround Time (Business days)

- ☐ Std. 15 Business Days
- ☐ Std. 10 Business Days (by Contract only)
- ☐ 10 Day *RUSH*
- ☐ 5 Day *RUSH*
- ☐ 3 Day *EMERGENCY*
- ☐ 2 Day *EMERGENCY*
- ☐ 1 Day *EMERGENCY*

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☐ Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	10-13-16 0032	1	2	10/13/16	2
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐	Cooler Temp.
5	10/13/16 5:30	5					

E16-0998 2252

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09581: AMTRAK EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: marlene.lindhardt@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Oct 13, 2016 @ 17:30	NA	Nov 07, 2016	Nov 14, 2016 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. SRP TXT, EQ EDD

**** QC Requirement (must meet):** NJ IGW

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
09581-001	E-35 (0.5-1)	0.5/1	10/12/16@13:05	Soil	mg/Kg (ppm)	
09581-002	E-35 (2-2.5)	2/2.5	10/12/16@12:55	Soil	mg/Kg (ppm)	
09581-003	E-45 (0.5-1)	0.5/1	10/12/16@11:10	Soil	mg/Kg (ppm)	
09581-004	E-45 (2-2.5)	2/2.5	10/12/16@11:30	Soil	mg/Kg (ppm)	
09581-005	E-45 (3-3.5)	3/3.5	10/12/16@11:40	Soil	mg/Kg (ppm)	
09581-006	E-45 (4.5-5)	4.5/5	10/12/16@11:45	Soil	mg/Kg (ppm)	
09581-007	E-53 (0.5-1)	0.5/1	10/12/16@12:18	Soil	mg/Kg (ppm)	
09581-008	E-58 (0.5-1)	0.5/1	10/12/16@13:00	Soil	mg/Kg (ppm)	
09581-009	E-59 (0.5-1)	0.5/1	10/12/16@14:28	Soil	mg/Kg (ppm)	
09581-010	E-48 (0.5-1)	0.5/1	10/12/16@12:14	Soil	mg/Kg (ppm)	
09581-011	E-46 (0.5-1)	0.5/1	10/12/16@11:50	Soil	mg/Kg (ppm)	
09581-012	E-46 (2-2.5)	2/2.5	10/12/16@12:00	Soil	mg/Kg (ppm)	
09581-013	E-46 (3-3.5)	3/3.5	10/12/16@12:12	Soil	mg/Kg (ppm)	
09581-014	E-46 (4.5-5)	4.5/5	10/12/16@12:15	Soil	mg/Kg (ppm)	
09581-015	E-38 (0.5-1)	0.5/1	10/12/16@09:37	Soil	mg/Kg (ppm)	
09581-016	E-38 (2-2.5)	2/2.5	10/12/16@09:43	Soil	mg/Kg (ppm)	
09581-017	E-38 (4.5-5)	4.5/5	10/12/16@09:58	Soil	mg/Kg (ppm)	
09581-018	X-3 (0.5-1)	0.5/1	10/12/16	Soil	mg/Kg (ppm)	
09581-019	X-4 (0.5-1)	0.5/1	10/12/16	Soil	mg/Kg (ppm)	
09581-020	EB-101216	NA	10/12/16@14:50	Aqueous	mg/L (ppm)	
09581-021	TRIP BLANK	NA	10/12/16	Aqueous	mg/L (ppm)	

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
002	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
003	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
004	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL
Integrated Analytical Laboratories LLC

PROJECT INFORMATION

RUSH

E16-09581: AMTRAK EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
005	TCL PCB	Cancel	8082A	RUSH 1 WK	10/12/2017
006	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017
007	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
	Special Pesticides	Analyze	8081B	STD/2 WKS	10/26/2016
008	GC-ECD Project Revision	Analyze		STD/2 WKS	10/26/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
009	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
010	Special Pesticides	Analyze	8081B	STD/2 WKS	10/26/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
011	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
012	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017
013	TCL PCB	Cancel	8082A	RUSH 1 WK	10/12/2017
014	TCL PCB	Analyze	8082A	STD/2 WKS	10/12/2017
015	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
016	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
017	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
018	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
019	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
020	Special VO	Analyze	8260C	RUSH 1 WK	10/26/2016
	TCL PCB	Analyze	8082A	RUSH 1 WK	10/12/2017
021	Special VO	Analyze	8260C	RUSH 1 WK	10/26/2016

Project Notes:

NOTE 2 taken by Frank on 10/13/2016 10:30
FOR SPECIAL VO REPORT PCE ONLY.

REV 1 taken by epacella on 10/14/2016 03:22
AS PER MARLENE LINDHARDT, PLEASE EXPEDITE SAMPLES TO 1 WEEK TAT, DUE 10/20

REV 2 taken by Mark on 10/24/2016 04:09
REV 02 DUE 11/7/16

PER MARLENE LINDHART, ANALYZE SAMPLES #007 & 010 FOR DIELDRIN.

ID FOR SAMPLE #008 IS E-58(0.5-1). PLEASE REVISE ALL APPROPRIATE PAGES OF REPORT.

ORIGINAL RESULTS SENT 10/24/16

REV 3 taken by Mark on 10/25/2016 01:00
REV 03 DUE 11/7/16

PER MARLENE L., ANALYZE SAMPLES #004, 006, 012 & 014 FOR PCB

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 16** **09581** CLIENT: Amec

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

Comments

COC: (COMPLETE) / INCOMPLETE

KEY

✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 10/13/16

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ☐

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 10/14/16

Laboratory Custody Chronicle

IAL Case No.

E16-09581

Client AMEC-SMRST

Project AMTRAK EAST BARRACKS

Received On 10/13/2016@17:30

Department: Volatiles			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special VO	09581-020	Aqueous	n/a	n/a	10/19/16	Barbara
"	-021	"	n/a	n/a	10/19/16	Barbara

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
Special Pesticides	-007	Soil	10/25/16	Archimede	10/26/16	Iwona
"	-010	"	10/25/16	Archimede	10/26/16	Iwona
TCL PCB	-001	Soil	10/17/16	Archimede	10/20/16	Justyna
"	-002	"	10/17/16	Archimede	10/20/16	Justyna
"	-003	"	10/17/16	Archimede	10/20/16	Justyna
"	-004	"	10/25/16	Archimede	10/27/16	Justyna
"	-006	"	10/25/16	Archimede	10/27/16	Justyna
"	-007	"	10/17/16	Archimede	10/20/16	Justyna
"	-008	"	10/17/16	Archimede	10/20/16	Justyna
"	-009	"	10/17/16	Archimede	10/20/16	Justyna
"	-010	"	10/17/16	Archimede	10/20/16	Justyna
"	-011	"	10/17/16	Archimede	10/19/16	Justyna
"	-012	"	10/25/16	Archimede	10/27/16	Justyna
"	-014	"	10/25/16	Archimede	10/27/16	Justyna
"	-015	"	10/18/16	Archimede	10/19/16	Justyna
"	-016	"	10/18/16	Archimede	10/19/16	Justyna
"	-017	"	10/18/16	Archimede	10/19/16	Justyna
"	-018	"	10/18/16	Archimede	10/19/16	Justyna
"	-019	"	10/18/16	Archimede	10/19/16	Justyna
"	-020	Aqueous	10/17/16	Archimede	10/18/16	Justyna

Integrated Analytical Labs ~ 273 Franklin Road, Randolph, NJ 07869 ~ (973) 361-4252 ~ Fax (973) 989-5288

LAST PAGE OF DOCUMENT

Integrated Analytical Laboratories LLC

ANALYTICAL DATA REPORT

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873

Project Name: **AMTRAK - EAST BARRACKS**
IAL Case Number: **E17-02179**

These data have been reviewed and accepted by:

Michael H. Leffin, Ph.D.
Laboratory Director

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

IAL is a NELAP accredited lab (TNI01284) and maintains certification in Connecticut (PH-0699), New Jersey (14751), New York (11402), and Pennsylvania (68-00773).

Integrated Analytical Laboratories - Table of Contents

Sample Summary

IAL Case No.

E17-02179

Client AMEC-SMRST

Project AMTRAK - EAST BARRACKS

Received On 3/17/2017@14:45

Lab ID	*Client Sample ID*	*Depth Top/Bottom*	*Sampling Time*	*Matrix*	*# of Container*
02179-001	E-61-0.5-1.0	0.5/1.0	3/16/2017@11:40	Soil	1
02179-002	E-61-2.0-2.5	2.0/2.5	3/16/2017@11:45	Soil	1
02179-003	E-62-0.5-1.0	0.5/1.0	3/16/2017@11:50	Soil	1
02179-004	E-62-2.0-2.5	2.0/2.5	3/16/2017@11:55	Soil	1
02179-005	E-63-0.5-1.0	0.5/1.0	3/16/2017@11:20	Soil	1
02179-006	E-63-2.0-2.5	2.0/2.5	3/16/2017@11:30	Soil	1
02179-007	E-64-0.5-1.0	0.5/1.0	3/16/2017@12:00	Soil	1
02179-008	E-64-2.0-2.5	2.0/2.5	3/16/2017@12:05	Soil	1
02179-009	E-65-0.5-1.0	0.5/1.0	3/16/2017@12:09	Soil	1
02179-010	E-65-2.0-2.5	2.0/2.5	3/16/2017@12:15	Soil	1
02179-011	E-66-0.5-1.0	.5/1.0	3/16/2017@12:06	Soil	1
02179-012	E-66-2.0-2.5	2/2.5	3/16/2017@12:07	Soil	1
02179-013	E-67-0.5-1.0	.5/1.0	3/16/2017@11:00	Soil	1
02179-014	E-67-2.0-2.5	2.0/2.5	3/16/2017@11:10	Soil	1
02179-015	E-68-0.5-1.0	0.5/1.0	3/16/2017@12:24	Soil	1
02179-016	E-68-2.0-2.5	2.0/2.5	3/16/2017@12:28	Soil	1
02179-017	X-1-0.5-1.0	0.5/1.0	3/16/2017	Soil	1
02179-018	E-69-0.5-1.0	05./1.0	3/16/2017@12:33	Soil	1
02179-019	E-69-2.0-2.5	2.0/2.5	3/16/2017@12:40	Soil	1
02179-020	E-70-0.5-1.0	.5/1.0	3/16/2017@12:44	Soil	1
02179-021	E-70-2.0-2.5	2.0/2.5	3/16/2017@12:47	Soil	1
02179-022	E-71-0.5-1.0	0.5/1.0	3/16/2017@13:00	Soil	1
02179-023	E-71-2.0-2.5	2.0/2.5	3/16/2017@13:12	Soil	1
02179-024	X-2-0.5-1.0	0.5/1.0	3/16/2017	Soil	1
02179-025	E-72-0.5-1.0	0.5/1.0	3/16/2017@12:57	Soil	1
02179-026	E-72-2.0-2.5	2.0/2.5	3/16/2017@13:00	Soil	1
02179-027	EB-01-031617	n/a	3/16/2017@14:16	Aqueous	2

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DEFINITIONS / QUALIFIERS

DATA QUALIFIERS

B Indicates the analyte was found in the associated method blank as well as in the sample. It indicates probable laboratory contamination.

C Indicates analyte is a common laboratory contaminant.

D Indicates analyte was reported from diluted analysis.

E Identifies a compound concentration that exceeds the upper level of the calibration range of the instrument.

J Indicates an estimated value. This flag is used when the concentration in the sample is below the RL but above the MDL or for qualification of tentatively identified compounds.

N Presumptive evidence of a compound from the use of GC/MS library search.

X Indicates samples analyzed for total and dissolved metals differ at ≤20% RPD.

Z Indicates internal standard failure. Sample results are either biased high or biased low.

REPORTING DEFINITIONS

RL Reporting Limit. The RL is determined by the lowest concentration in the calibration curve. For most Wet Chemistry methods, the RL is defined by using the PQL.

MDL Method Detection Limit as determined according to 40CFR Part 136 Appendix B.

PQL Practical Quantitation Limit. Usually defined as a value 3-5 times the MDL.

ND Indicates analyte was analyzed for but not detected above the MDL.

DF Dilution Factor

LCS Laboratory Control Sample

LCSD Laboratory Control Sample Duplicate

MS Matrix Spike

MSD Matrix Spike Duplicate

DUP Duplicate

SAMPLE DELIVERY GROUP CASE NARRATIVE
(Conformance / Non-Conformance Summary)

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E17-02179

Integrated Analytical Laboratories, LLC. received twenty-seven (27) samples** from AMEC-SMRST (IAL SDG# **E17-02179**, Project: AMTRAK - EAST BARRACKS) on March 17, 2017 for the analysis of :

(24) TCL PCB

**Number of samples listed above may be greater than what is listed on the chain of custody. Any samples that require in-house filtration or splitting will be counted as separate samples.

Samples were received in good condition with documentation in order.
Cooler temperature was acceptable at 4 ± 2°C

PCB By 8082A	**Batch: 170320-14**	**Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery did not meet QC criteria due to matrix interference for sample 001. NJDEP DKQP criteria not met.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The following samples were cleaned up using method 3665A: 001, 002, 003, 004, 005, 006, 007, 008, 009, 011, 012, 013.
- The following samples were cleaned up using method 3660B to remove sulfur: 001, 002, 003, 004, 005, 006, 007, 008, 009, 011, 012, 013.

E17-02179

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E17-02179-001	1;50	Target compound(s).
E17-02179-002	1;50	Target compound(s).
E17-02179-003	1	NA
E17-02179-004	1	NA
E17-02179-005	1;50	Target compound(s).
E17-02179-006	100	Target compound(s).
E17-02179-007	1	NA
E17-02179-008	1	NA
E17-02179-009	1	NA
E17-02179-011	1	NA
E17-02179-012	1	NA
E17-02179-013	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E17-02179

PCB By 8082A | **Batch: 170320-16** | **Matrix: Soil**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.
- The RPD between the primary and secondary column was >40% for the following samples: #025;026. Per SW-846 8000D, the lower of the two concentrations was reported.
- The following samples were cleaned up using method 3660B to remove sulfur: 014, 015, 016, 017, 018, 020, 021, 022, 024, 025, 026.

E17-02179

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E17-02179-014	1	NA
E17-02179-015	1	NA
E17-02179-016	1	NA
E17-02179-017	1	NA
E17-02179-018	1	NA
E17-02179-020	1	NA
E17-02179-021	1	NA
E17-02179-022	1	NA
E17-02179-024	1	NA
E17-02179-025	1	NA
E17-02179-026	1	NA

PCB By 8082A | **Batch: 170323-07** | **Matrix: Aqueous**

QC

- Calibration curve met QC criteria.
- Surrogate percent recovery met QC criteria.
- Method blank met QC criteria.
- LCS Percent Recovery met QC criteria.
- RPD between MS/MSD met QC criteria.
- MS/MSD Percent Recovery met QC criteria.

E17-02179

- All samples were extracted within holding time.
- All samples were analyzed within holding time.
- Retention Time Shift met QC criteria.

Dilution Summary:

Sample ID	DF(s)	Dilution For
E17-02179-027	1	NA

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE DELIVERY GROUP CASE NARRATIVE

SDG#: E17-02179

A review of the QA/QC measures for the analysis of the sample(s) contained in this report has been performed by:

Reviewed by

4/7/2017
Date

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Integrated Analytical Laboratories
Client: AMEC-SMRST
Project Location: AMTRAK - EAST BARRACKS
IAL Project #: E17-02179
IAL Sample ID(s): E17-02179-001 ~ -027
Sampling Date(s): 3/16/2017

List of DKQP Method Used:
TCL PCB by 8082A

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information is provided in the case narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."

		YES	NO	N/A
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP	X		
1A	Were the method specified handling, preservation, and holding time requirements met?	X		
1B	EPH Method: Was the EPH method conducted without significant modifications? (see Section 11.3 of respective DKQ methods)			X
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	X		
3	Were samples received at an appropriate temperature (4±2° C)?	X		
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?		X	
5A	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	X		
5B	Were these reporting limits met?		X	
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	X		
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	X		

RESULTS SUMMARY REPORT

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK - EAST BARRACKS
Lab Case No.: E17-02179

Lab ID:	**02179-027**		
Client ID:	**EB-01-031617**		
Matrix:	**Aqueous**		
Sampled Date	**3/16/17**		
PARAMETER(Units)	Conc	Q	MDL
PCB's (Units)	*(mg/L)*		
Aroclor-1016	ND		0.00002
Aroclor-1221	ND		0.00002
Aroclor-1232	ND		0.00002
Aroclor-1242	ND		0.00002
Aroclor-1248	ND		0.00002
Aroclor-1254	ND		0.00002
Aroclor-1260	ND		0.00002
Aroclor-1262	ND		0.00002
Aroclor-1268	ND		0.00002
PCBs	ND		0.00002

Lab ID:	**02179-001**			**02179-002**			**02179-003**			**02179-004**	
Client ID:	**E-61-0.5-1.0**			**E-61-2.0-2.5**			**E-62-0.5-1.0**			**E-62-2.0-2.5**	
Depth:	**0.5/1.0**			**2.0/2.5**			**0.5/1.0**			**2.0/2.5**	
Matrix:	**Soil**			**Soil**			**Soil**			**Soil**	
Sampled Date	**3/16/17**			**3/16/17**			**3/16/17**			**3/16/17**	
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*	
Aroclor-1016	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1221	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1232	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1242	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1248	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1254	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1260	136	D	0.886	84.6	D	0.017	ND		0.018	ND	0.018
Aroclor-1262	ND		0.018	ND		0.017	ND		0.018	ND	0.018
Aroclor-1268	ND		0.018	ND		0.017	ND		0.018	ND	0.018
PCBs	136	D	0.886	84.6	D	0.017	ND		0.018	ND	0.018

Lab ID:	**02179-005**			**02179-006**			**02179-007**			**02179-008**	
Client ID:	**E-63-0.5-1.0**			**E-63-2.0-2.5**			**E-64-0.5-1.0**			**E-64-2.0-2.5**	
Depth:	**0.5/1.0**			**2.0/2.5**			**0.5/1.0**			**2.0/2.5**	
Matrix:	**Soil**			**Soil**			**Soil**			**Soil**	
Sampled Date	**3/16/17**			**3/16/17**			**3/16/17**			**3/16/17**	
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*	
Aroclor-1016	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1221	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1232	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1242	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1248	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1254	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1260	110	D	0.966	167	D	1.57	ND		0.017	ND	0.016
Aroclor-1262	ND		0.019	ND		1.57	ND		0.017	ND	0.016
Aroclor-1268	ND		0.019	ND		1.57	ND		0.017	ND	0.016
PCBs	110	D	0.966	167	D	1.57	ND		0.017	ND	0.016

ND = Analyzed for but Not Detected at the MDL

J = Concentration detected at a value below the RL and above the MDL for target compounds. For non-target compounds (i.e. TICs), qualifier indicates estimated concentrations.

D = The compound was reported from the Diluted analysis

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK - EAST BARRACKS
Lab Case No.: E17-02179

Lab ID:	02179-009			02179-010			02179-011			02179-012		
Client ID:	E-65-0.5-1.0			E-65-2.0-2.5			E-66-0.5-1.0			E-66-2.0-2.5		
Depth:	0.5/1.0			2.0/2.5			.5/1.0			2/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	3/16/17			3/16/17			3/16/17			3/16/17		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1221	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1232	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1242	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1248	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1254	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1260	ND		0.020	~		~	1.24		0.019	ND		0.016
Aroclor-1262	ND		0.020	~		~	ND		0.019	ND		0.016
Aroclor-1268	ND		0.020	~		~	ND		0.019	ND		0.016
PCBs	ND		0.020	~		~	1.24		0.019	ND		0.016

Lab ID:	02179-013			02179-014			02179-015			02179-016		
Client ID:	E-67-0.5-1.0			E-67-2.0-2.5			E-68-0.5-1.0			E-68-2.0-2.5		
Depth:	.5/1.0			2.0/2.5			0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	3/16/17			3/16/17			3/16/17			3/16/17		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1221	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1232	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1242	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1248	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1254	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1260	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1262	ND		0.017	ND		0.017	ND		0.018	ND		0.018
Aroclor-1268	ND		0.017	ND		0.017	ND		0.018	ND		0.018
PCBs	ND		0.017	ND		0.017	ND		0.018	ND		0.018

Lab ID:	02179-017			02179-018			02179-019			02179-020		
Client ID:	X-1-0.5-1.0			E-69-0.5-1.0			E-69-2.0-2.5			E-70-0.5-1.0		
Depth:	0.5/1.0			05./1.0			2.0/2.5			.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	3/16/17			3/16/17			3/16/17			3/16/17		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1221	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1232	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1242	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1248	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1254	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1260	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1262	ND		0.019	ND		0.018	~		~	ND		0.017
Aroclor-1268	ND		0.019	ND		0.018	~		~	ND		0.017
PCBs	ND		0.019	ND		0.018	~		~	ND		0.017

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL

INTEGRATED ANALYTICAL LABORATORIES, LLC.

SUMMARY REPORT
Client: AMEC-SMRST
Project: AMTRAK - EAST BARRACKS
Lab Case No.: E17-02179

Lab ID:	02179-021			02179-022			02179-023			02179-024		
Client ID:	E-70-2.0-2.5			E-71-0.5-1.0			E-71-2.0-2.5			X-2-0.5-1.0		
Depth:	2.0/2.5			0.5/1.0			2.0/2.5			0.5/1.0		
Matrix:	Soil			Soil			Soil			Soil		
Sampled Date	3/16/17			3/16/17			3/16/17			3/16/17		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1221	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1232	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1242	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1248	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1254	ND		0.018	ND		0.018	~		~	0.135		0.017
Aroclor-1260	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1262	ND		0.018	ND		0.018	~		~	ND		0.017
Aroclor-1268	ND		0.018	ND		0.018	~		~	ND		0.017
PCBs	ND		0.018	ND		0.018	~		~	0.135		0.017

Lab ID:	02179-025			02179-026		
Client ID:	E-72-0.5-1.0			E-72-2.0-2.5		
Depth:	0.5/1.0			2.0/2.5		
Matrix:	Soil			Soil		
Sampled Date	3/16/17			3/16/17		
PARAMETER(Units)	Conc	Q	MDL	Conc	Q	MDL
PCB's (Units)	*(mg/Kg)*			*(mg/Kg)*		
Aroclor-1016	ND		0.016	ND		0.015
Aroclor-1221	ND		0.016	ND		0.015
Aroclor-1232	ND		0.016	ND		0.015
Aroclor-1242	ND		0.016	ND		0.015
Aroclor-1248	ND		0.016	ND		0.015
Aroclor-1254	0.261		0.016	0.081		0.015
Aroclor-1260	ND		0.016	ND		0.015
Aroclor-1262	ND		0.016	ND		0.015
Aroclor-1268	ND		0.016	ND		0.015
PCBs	0.261		0.016	0.081		0.015

~ = Sample not analyzed for
ND = Analyzed for but Not Detected at the MDL
D = The compound was reported from the Diluted analysis

ANALYTICAL RESULTS

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-001
Client ID: E-61-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6898.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.52g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 18.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	98.0	E	0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	98.0	E	0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-001DL
Client ID: E-61-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6916.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.52g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 50
% Moisture: 18.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		2.21	0.886
Aroclor-1221	ND		2.21	0.886
Aroclor-1232	ND		2.21	0.886
Aroclor-1242	ND		2.21	0.886
Aroclor-1248	ND		2.21	0.886
Aroclor-1254	ND		2.21	0.886
Aroclor-1260	136	D	2.21	0.886
Aroclor-1262	ND		2.21	0.886
Aroclor-1268	ND		2.21	0.886
PCBs	136	D	2.21	0.886

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-002
Client ID: E-61-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6899.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.49g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 14.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	69.7	E	0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	69.7	E	0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-002DL
Client ID: E-61-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6917.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.49g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 50
% Moisture: 14.4

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		2.13	0.851
Aroclor-1221	ND		2.13	0.851
Aroclor-1232	ND		2.13	0.851
Aroclor-1242	ND		2.13	0.851
Aroclor-1248	ND		2.13	0.851
Aroclor-1254	ND		2.13	0.851
Aroclor-1260	84.6	D	2.13	0.851
Aroclor-1262	ND		2.13	0.851
Aroclor-1268	ND		2.13	0.851
PCBs	84.6	D	2.13	0.851

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-003
Client ID: E-62-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6900.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.04g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	ND		0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	ND		0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-004
Client ID: E-62-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6901.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.16g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-005
Client ID: E-63-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6902.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.40g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.048	0.019
Aroclor-1221	ND		0.048	0.019
Aroclor-1232	ND		0.048	0.019
Aroclor-1242	ND		0.048	0.019
Aroclor-1248	ND		0.048	0.019
Aroclor-1254	ND		0.048	0.019
Aroclor-1260	79.5	E	0.048	0.019
Aroclor-1262	ND		0.048	0.019
Aroclor-1268	ND		0.048	0.019
PCBs	79.5	E	0.048	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-005DL
Client ID: E-63-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6918.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.40g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 50
% Moisture: 23.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		2.41	0.966
Aroclor-1221	ND		2.41	0.966
Aroclor-1232	ND		2.41	0.966
Aroclor-1242	ND		2.41	0.966
Aroclor-1248	ND		2.41	0.966
Aroclor-1254	ND		2.41	0.966
Aroclor-1260	110	D	2.41	0.966
Aroclor-1262	ND		2.41	0.966
Aroclor-1268	ND		2.41	0.966
PCBs	110	D	2.41	0.966

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-006
Client ID: E-63-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6919.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.83g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 100
% Moisture: 12.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		3.93	1.57
Aroclor-1221	ND		3.93	1.57
Aroclor-1232	ND		3.93	1.57
Aroclor-1242	ND		3.93	1.57
Aroclor-1248	ND		3.93	1.57
Aroclor-1254	ND		3.93	1.57
Aroclor-1260	167	D	3.93	1.57
Aroclor-1262	ND		3.93	1.57
Aroclor-1268	ND		3.93	1.57
PCBs	167	D	3.93	1.57

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve
B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-007
Client ID: E-64-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6915.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.34g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 11.7

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	ND		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	ND		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-008
Client ID: E-64-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6905.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.27g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 6.80

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	ND		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	ND		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-009
Client ID: E-65-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6906.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.24g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 23.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-011
Client ID: E-66-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6897.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.5

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.046	0.019
Aroclor-1221	ND		0.046	0.019
Aroclor-1232	ND		0.046	0.019
Aroclor-1242	ND		0.046	0.019
Aroclor-1248	ND		0.046	0.019
Aroclor-1254	ND		0.046	0.019
Aroclor-1260	1.24		0.046	0.019
Aroclor-1262	ND		0.046	0.019
Aroclor-1268	ND		0.046	0.019
PCBs	1.24		0.046	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-012
Client ID: E-66-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6907.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.75g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.039	0.016
Aroclor-1221	ND		0.039	0.016
Aroclor-1232	ND		0.039	0.016
Aroclor-1242	ND		0.039	0.016
Aroclor-1248	ND		0.039	0.016
Aroclor-1254	ND		0.039	0.016
Aroclor-1260	ND		0.039	0.016
Aroclor-1262	ND		0.039	0.016
Aroclor-1268	ND		0.039	0.016
PCBs	ND		0.039	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-013
Client ID: E-67-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: R6908.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.76g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.042	0.017
Aroclor-1221	ND		0.042	0.017
Aroclor-1232	ND		0.042	0.017
Aroclor-1242	ND		0.042	0.017
Aroclor-1248	ND		0.042	0.017
Aroclor-1254	ND		0.042	0.017
Aroclor-1260	ND		0.042	0.017
Aroclor-1262	ND		0.042	0.017
Aroclor-1268	ND		0.042	0.017
PCBs	ND		0.042	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-014
Client ID: E-67-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2663.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.31g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	ND		0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	ND		0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-015
Client ID: E-68-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2664.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.39g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.2

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-016
Client ID: E-68-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2665.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.13g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 10.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-017
Client ID: X-1-0.5-
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2667.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.19g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 17.8

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.047	0.019
Aroclor-1221	ND		0.047	0.019
Aroclor-1232	ND		0.047	0.019
Aroclor-1242	ND		0.047	0.019
Aroclor-1248	ND		0.047	0.019
Aroclor-1254	ND		0.047	0.019
Aroclor-1260	ND		0.047	0.019
Aroclor-1262	ND		0.047	0.019
Aroclor-1268	ND		0.047	0.019
PCBs	ND		0.047	0.019

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-018
Client ID: E-69-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2668.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.47g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 16.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-020
Client ID: E-70-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2670.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.40g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.9

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	ND		0.043	0.017
Aroclor-1260	ND		0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	ND		0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-021
Client ID: E-70-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2671.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.10g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 12.1

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.045	0.018
Aroclor-1221	ND		0.045	0.018
Aroclor-1232	ND		0.045	0.018
Aroclor-1242	ND		0.045	0.018
Aroclor-1248	ND		0.045	0.018
Aroclor-1254	ND		0.045	0.018
Aroclor-1260	ND		0.045	0.018
Aroclor-1262	ND		0.045	0.018
Aroclor-1268	ND		0.045	0.018
PCBs	ND		0.045	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-022
Client ID: E-71-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2672.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.28g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.6

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.044	0.018
Aroclor-1221	ND		0.044	0.018
Aroclor-1232	ND		0.044	0.018
Aroclor-1242	ND		0.044	0.018
Aroclor-1248	ND		0.044	0.018
Aroclor-1254	ND		0.044	0.018
Aroclor-1260	ND		0.044	0.018
Aroclor-1262	ND		0.044	0.018
Aroclor-1268	ND		0.044	0.018
PCBs	ND		0.044	0.018

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-024
Client ID: X-2-0.5-
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2673.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.42g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.3

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.043	0.017
Aroclor-1221	ND		0.043	0.017
Aroclor-1232	ND		0.043	0.017
Aroclor-1242	ND		0.043	0.017
Aroclor-1248	ND		0.043	0.017
Aroclor-1254	0.135		0.043	0.017
Aroclor-1260	ND		0.043	0.017
Aroclor-1262	ND		0.043	0.017
Aroclor-1268	ND		0.043	0.017
PCBs	0.135		0.043	0.017

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-025
Client ID: E-72-0.5
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2674.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.67g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 13.0

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.041	0.016
Aroclor-1221	ND		0.041	0.016
Aroclor-1232	ND		0.041	0.016
Aroclor-1242	ND		0.041	0.016
Aroclor-1248	ND		0.041	0.016
Aroclor-1254	0.261		0.041	0.016
Aroclor-1260	ND		0.041	0.016
Aroclor-1262	ND		0.041	0.016
Aroclor-1268	ND		0.041	0.016
PCBs	0.261		0.041	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-026
Client ID: E-72-2.0
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2675.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.87g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: 5.70

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.036	0.015
Aroclor-1221	ND		0.036	0.015
Aroclor-1232	ND		0.036	0.015
Aroclor-1242	ND		0.036	0.015
Aroclor-1248	ND		0.036	0.015
Aroclor-1254	0.081		0.036	0.015
Aroclor-1260	ND		0.036	0.015
Aroclor-1262	ND		0.036	0.015
Aroclor-1268	ND		0.036	0.015
PCBs	0.081		0.036	0.015

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: E17-02179-027
Client ID: EB-01-03
Date Received: 03/17/2017
Date Extracted: 03/23/2017
Date Analyzed: 03/23/2017
Data file: R6950.D

GC Column: DB-5/DB1701P
Sample wt/vol: 400ml
Matrix-Units: Aqueous-mg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.00005	0.00002
Aroclor-1221	ND		0.00005	0.00002
Aroclor-1232	ND		0.00005	0.00002
Aroclor-1242	ND		0.00005	0.00002
Aroclor-1248	ND		0.00005	0.00002
Aroclor-1254	ND		0.00005	0.00002
Aroclor-1260	ND		0.00005	0.00002
Aroclor-1262	ND		0.00005	0.00002
Aroclor-1268	ND		0.00005	0.00002
PCBs	ND		0.00005	0.00002

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

PCB DATA

PCB QC SUMMARY

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/10/2017

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA170309-12	AQUEOUS	77		67		79		70	
PCB	LCSA170309-12	AQUEOUS	79		70		80		73	
PCB	E17-01857-001MS	AQUEOUS	72		82		78		84	
PCB	E17-01857-001MS	AQUEOUS	74		80		78		82	
550TP	E17-01032-009	AQUEOUS	52		70		68		75	
CY-B2	E17-01032-010	AQUEOUS	62		59		64		62	
CY-B1	E17-01032-011	AQUEOUS	42	M	57	M	57		63	
FB-4	E17-01032-012	AQUEOUS	39	M	54	M	56		63	
TW-1	E17-01857-001	AQUEOUS	63		65		69		77	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/23/2017

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKA170323-07	AQUEOUS	75		82		87		88	
PCB	LCSA170323-07	AQUEOUS	79		82		86		91	
EB-01-03	E17-02179-027	AQUEOUS	76		98		87		109	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/21/2017

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS170320-14	SOIL	89		89		98		97	
PCB	LCSS170320-14	SOIL	94		91		98		114	
PCB	E17-02190-001MS	SOIL	90		88		96		108	
PCB	E17-02190-001MS	SOIL	91		89		97		100	
PX-1	E17-02182-001	SOLID	96		96		98		118	
PX-2	E17-02182-002	SOLID	82		86		98		104	
PX-3	E17-02182-003	SOLID	97		104		103		120	
PX-4	E17-02182-004	SOLID	79		84		92		106	
PX-5	E17-02182-005	SOLID	86		79		95		109	
S-6	E17-02182-006	SOLID	65		106		91		136	
TP-2-COM	E17-02190-001	SOIL	91		83		102		101	
TP-3-COM	E17-02190-002	SOIL	92		85		103		103	
E-66-0.5	E17-02179-011	SOIL	87		87		103		116	
E-61-0.5	E17-02179-001	SOIL	79		90		101		134	
E-61-2.0	E17-02179-002	SOIL	81		93		102		118	
E-62-0.5	E17-02179-003	SOIL	91		88		102		109	
E-62-2.0	E17-02179-004	SOIL	91		90		102		114	
E-63-0.5	E17-02179-005	SOIL	85		96		107		120	
E-64-2.0	E17-02179-008	SOIL	89		87		102		113	
E-65-0.5	E17-02179-009	SOIL	95		94		109		113	
E-66-2.0	E17-02179-012	SOIL	90		97		103		110	
E-67-0.5	E17-02179-013	SOIL	96		94		106		111	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/21/2017

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS170320-14	SOIL	89		89		98		97	
E-64-0.5	E17-02179-007	SOIL	92		86		105		105	
E-61-0.5	E17-02179-001DL	SOIL	110		115		125		190	M
E-61-2.0	E17-02179-002DL	SOIL	95		95		110		110	
E-63-0.5	E17-02179-005DL	SOIL	115		125		130		140	
E-63-2.0	E17-02179-006	SOIL	130		130		150		130	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

\# Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SURROGATE PERCENT RECOVERY SUMMARY

Date Analyzed: 03/22/2017

Client ID	Lab Sample ID	Matrix	TCMX 1 % rec	#	DCB 1 % rec	#	TCMX 2 % rec	#	DCB 2 % rec	#
PCB	BLKS170320-16	SOIL	96		89		92		87	
PCB	LCSS170320-16	SOIL	96		90		93		88	
PCB	E17-02160-004MS	SOLID	91		87		93		94	
PCB	E17-02160-004MS	SOLID	89		85		92		95	
E-67-2.0	E17-02179-014	SOIL	97		91		97		102	
E-68-0.5	E17-02179-015	SOIL	92		87		94		96	
E-68-2.0	E17-02179-016	SOIL	94		88		95		95	
X-1-0.5-	E17-02179-017	SOIL	93		88		96		96	
E-69-0.5	E17-02179-018	SOIL	93		89		95		92	
E-70-0.5	E17-02179-020	SOIL	93		85		94		90	
E-70-2.0	E17-02179-021	SOIL	94		85		95		95	
E-71-0.5	E17-02179-022	SOIL	95		87		95		98	
X-2-0.5-	E17-02179-024	SOIL	92		80		96		96	
E-72-0.5	E17-02179-025	SOIL	92		81		97		97	
E-72-2.0	E17-02179-026	SOIL	90		80		92		89	
CRT-1	E17-02160-001	SOLID	90		82		92		89	
CRT-2	E17-02160-002	SOLID	86		82		91		89	
CRT-3	E17-02160-003	SOLID	89		84		92		95	
CRT-4	E17-02160-004	SOLID	86		81		93		95	
CRT-5	E17-02160-005	SOLID	86		83		92		91	
CRT-6	E17-02160-006	SOLID	89		84		92		89	
CRT-7	E17-02160-007	SOLID	91		85		94		95	
CRT-8	E17-02160-008	SOLID	88		82		91		92	
CRT-9	E17-02160-009	SOLID	89		85		93		90	

Surrogate QC Limits	Soil	Aqueous/Leachate
TCMX = Tetrachloro-m-xylene	25-162	52-131
DCB = Decachlorobiphenyl	24-172	58-149

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSA170323-07
Date Received: NA
Date Extracted: 03/23/2017
Date Analyzed: 03/23/2017
Data file: R6949.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	326.6	65		32-132
Aroclor-1260	500	0.0	370.3	74		46-137

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS170320-14
Date Received: NA
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6885.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	403.6	81		40-137
Aroclor-1260	500	0.0	425.1	85		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB LCS ACCURACY REPORT

Lab ID: LCSS170320-16
Date Received: NA
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2660.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-µg/Kg
% Moisture: NA
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. LCS	%Rec. LCS	#	QC Limits
Aroclor-1016	500	0.0	406.3	81		40-137
Aroclor-1260	500	0.0	420.1	84		57-147

	Aqueous	Soil/Sediment
LCS Recovery Limits (DKQP)	40-140	40-140

Column used to flag recovery values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E17-01857-001
Date Received: 03/03/2017
Date Extracted: 03/09/2017
Date Analyzed: 03/10/2017
MS Data file: Y2508.D
MSD Data file: Y2509.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
% Moisture: 100
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	333.6	67		334.1	67		0		15-144/21
Aroclor-1260	500	0.0	411.3	82		395.2	79		4		35-160/21

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E17-02190-001
Date Received: 03/17/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
MS Data file: R6886.D
MSD Data file: R6887.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.00g
Matrix-Units: Soil-µg/Kg
% Moisture: 12.5
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	376.4	75		381.5	76		1		12-163/25
Aroclor-1260	500	0.0	435.3	87		451.8	90		4		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

INTEGRATED ANALYTICAL LABORATORIES

PCB MS/MSD ACCURACY REPORT

Lab ID: E17-02160-004
Date Received: 03/16/2017
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
MS Data file: Y2661.D
MSD Data file: Y2662.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5.01g
Matrix-Units: Solid-ug/Kg
% Moisture: NA
Dilution Factor: 1
Dilution Factor: 1

Compound	Conc. Add	Sample	Conc. MS	%Rec. MS	#	Conc. MSD	%Rec. MSD	#	%RPD	#	QC Limits
Aroclor-1016	500	0.0	391.9	78		386.5	77		1		12-163/25
Aroclor-1260	500	0.0	437.9	88		435.8	87		0		16-178/27

	Aqueous	Soil/Sediment
MS/MSD Recovery Limits (DKQP)	30-150	30-150
MS/MSD RPD Limits (DKQP)	20	30

Column used to flag recovery and RPD values that did not meet criteria
* Values outside of QC limits
$ Values outside of NJ DKQP limits
NC Not calculable

PCB METHOD BLANK SUMMARY

Lab File ID: Y2506.D

Instrument ID: GC-Y

Date Extracted: 03/09/2017

Matrix: AQUEOUS

Date Analyzed: 03/10/2017

Time Analyzed: 17:26

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA170309-12	03/10/2017	17:44
PCB	E17-01857-001MS	03/10/2017	18:01
PCB	E17-01857-001MSD	03/10/2017	18:18
550TP	E17-01032-009	03/10/2017	18:36
CY-B2	E17-01032-010	03/10/2017	18:53
CY-B1	E17-01032-011	03/10/2017	19:10
FB-4	E17-01032-012	03/10/2017	19:28
TW-1	E17-01857-001	03/10/2017	19:45

PCB METHOD BLANK SUMMARY

Lab File ID:	R6948.D	Instrument ID:	GC-R
Date Extracted:	03/23/2017	Matrix:	AQUEOUS
Date Analyzed:	03/23/2017	Time Analyzed:	15:06

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSA170323-07	03/23/2017	15:23
EB-01-03	E17-02179-027	03/23/2017	15:40

PCB METHOD BLANK SUMMARY

Lab File ID:	R6884.D	Instrument ID:	GC-R
Date Extracted:	03/20/2017	Matrix:	SOIL
Date Analyzed:	03/21/2017	Time Analyzed:	15:56

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS170320-14	03/21/2017	16:13
PCB	E17-02190-001MS	03/21/2017	16:30
PCB	E17-02190-001MSD	03/21/2017	16:48
PX-1	E17-02182-001	03/21/2017	17:05
PX-2	E17-02182-002	03/21/2017	17:40
PX-3	E17-02182-003	03/21/2017	18:14
PX-4	E17-02182-004	03/21/2017	18:49
PX-5	E17-02182-005	03/21/2017	19:23
S-6	E17-02182-006	03/21/2017	19:58
TP-2-COM	E17-02190-001	03/21/2017	20:32
TP-3-COM	E17-02190-002	03/21/2017	20:49
E-66-0.5	E17-02179-011	03/21/2017	21:58
E-61-0.5	E17-02179-001	03/21/2017	22:16
E-61-2.0	E17-02179-002	03/21/2017	22:33
E-62-0.5	E17-02179-003	03/21/2017	23:07
E-62-2.0	E17-02179-004	03/21/2017	23:25
E-63-0.5	E17-02179-005	03/21/2017	23:42
E-64-2.0	E17-02179-008	03/22/2017	00:51
E-65-0.5	E17-02179-009	03/22/2017	01:08
E-66-2.0	E17-02179-012	03/22/2017	01:26
E-67-0.5	E17-02179-013	03/22/2017	01:43

PCB METHOD BLANK SUMMARY

Lab File ID:	R6884.D	Instrument ID:	GC-R
Date Extracted:	03/20/2017	Matrix:	SOIL
Date Analyzed:	03/21/2017	Time Analyzed:	15:56

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
E-64-0.5	E17-02179-007	03/22/2017	11:16
E-61-0.5	E17-02179-001DL	03/22/2017	11:33
E-61-2.0	E17-02179-002DL	03/22/2017	11:50
E-63-0.5	E17-02179-005DL	03/22/2017	12:08
E-63-2.0	E17-02179-006	03/22/2017	12:25

PCB METHOD BLANK SUMMARY

Lab File ID: Y2659.D Instrument ID: GC-Y

Date Extracted: 03/20/2017 Matrix: SOIL

Date Analyzed: 03/22/2017 Time Analyzed: 09:22

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, LCS or LCSD, MS or MSD:

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed
PCB	LCSS170320-16	03/22/2017	09:40
PCB	E17-02160-004MS	03/22/2017	09:57
PCB	E17-02160-004MSD	03/22/2017	10:14
E-67-2.0	E17-02179-014	03/22/2017	10:32
E-68-0.5	E17-02179-015	03/22/2017	10:49
E-68-2.0	E17-02179-016	03/22/2017	11:07
X-1-0.5-	E17-02179-017	03/22/2017	12:05
E-69-0.5	E17-02179-018	03/22/2017	12:22
E-70-0.5	E17-02179-020	03/22/2017	12:57
E-70-2.0	E17-02179-021	03/22/2017	13:14
E-71-0.5	E17-02179-022	03/22/2017	13:32
X-2-0.5-	E17-02179-024	03/22/2017	13:49
E-72-0.5	E17-02179-025	03/22/2017	14:06
E-72-2.0	E17-02179-026	03/22/2017	14:24
CRT-1	E17-02160-001	03/22/2017	14:41
CRT-2	E17-02160-002	03/22/2017	14:59
CRT-3	E17-02160-003	03/22/2017	15:16
CRT-4	E17-02160-004	03/22/2017	15:33
CRT-5	E17-02160-005	03/22/2017	15:51
CRT-6	E17-02160-006	03/22/2017	16:08
CRT-7	E17-02160-007	03/22/2017	16:26
CRT-8	E17-02160-008	03/22/2017	16:43
CRT-9	E17-02160-009	03/22/2017	17:00

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2303.D Y2302.D Y2301.D Y2300.D Y2299.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.29	3.29	3.29	3.29	3.29	3.29	3.22	3.36
Aroclor-1016 {2}	4.13	4.13	4.13	4.13	4.13	4.13	4.06	4.20
Aroclor-1016 {3}	4.68	4.68	4.68	4.68	4.68	4.68	4.61	4.75
Aroclor-1016 {4}	5.19	5.19	5.19	5.19	5.19	5.19	5.12	5.26
Aroclor-1016 {5}	5.59	5.59	5.59	5.59	5.59	5.59	5.52	5.66
Aroclor-1221			2.17				2.10	2.24
Aroclor-1221 {2}			3.08				3.01	3.15
Aroclor-1221 {3}			3.21				3.14	3.28
Aroclor-1221 {4}			3.29				3.22	3.36
Aroclor-1221 {5}			3.89				3.82	3.96
Aroclor-1232			3.29				3.22	3.36
Aroclor-1232 {2}			4.13				4.06	4.20
Aroclor-1232 {3}			4.80				4.73	4.87
Aroclor-1232 {4}			5.39				5.32	5.46
Aroclor-1232 {5}			5.59				5.52	5.66
Aroclor-1242			4.13				4.06	4.20
Aroclor-1242 {2}			5.07				5.00	5.14
Aroclor-1242 {3}			5.39				5.32	5.46
Aroclor-1242 {4}			6.09				6.02	6.16
Aroclor-1242 {5}			6.36				6.29	6.43
Aroclor-1248			4.53				4.45	4.61
Aroclor-1248 {2}			5.07				4.99	5.15
Aroclor-1248 {3}			5.39				5.31	5.47
Aroclor-1248 {4}			6.09				6.01	6.17
Aroclor-1248 {5}			6.36				6.28	6.44
Aroclor-1254			6.49				6.41	6.57
Aroclor-1254 {2}			6.93				6.85	7.01
Aroclor-1254 {3}			7.09				7.00	7.18
Aroclor-1254 {4}			7.53				7.44	7.62
Aroclor-1254 {5}			8.37				8.28	8.46
Aroclor-1260	8.37	8.37	8.37	8.37	8.37	8.37	7.47	9.27
Aroclor-1260 {2}	9.05	9.05	9.05	9.05	9.05	9.05	8.15	9.95
Aroclor-1260 {3}	9.52	9.52	9.52	9.52	9.52	9.52	8.62	10.42
Aroclor-1260 {4}	10.00	10.00	10.00	10.00	10.01	10.00	9.10	10.90
Aroclor-1260 {5}	11.07	11.07	11.07	11.06	11.07	11.07	10.17	11.97

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2303.D Y2302.D Y2301.D Y2300.D Y2299.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	563288	624852	659937	655192	656466	631947	6.47
Aroclor-1016 {2}	881825	831270	904305	893696	876865	877592	3.19
Aroclor-1016 {3}	1250660	1117697	1212993	1195204	1164369	1188185	4.23
Aroclor-1016 {4}	558653	493755	551246	543301	540267	537445	4.74
Aroclor-1016 {5}	887316	876806	958766	965738	959124	929550	4.69
Aroclor-1221			259653				
Aroclor-1221 {2}			446645				
Aroclor-1221 {3}			298600				
Aroclor-1221 {4}			1014199				
Aroclor-1221 {5}			220452				
Aroclor-1232			713525				
Aroclor-1232 {2}			399985				
Aroclor-1232 {3}			375688				
Aroclor-1232 {4}			401445				
Aroclor-1232 {5}			503980				
Aroclor-1242			730048				
Aroclor-1242 {2}			480383				
Aroclor-1242 {3}			673029				
Aroclor-1242 {4}			989334				
Aroclor-1242 {5}			928893				
Aroclor-1248			1595947				
Aroclor-1248 {2}			922630				
Aroclor-1248 {3}			1198925				
Aroclor-1248 {4}			1853262				
Aroclor-1248 {5}			1544791				
Aroclor-1254			2119504				
Aroclor-1254 {2}			1392988				
Aroclor-1254 {3}			2544402				
Aroclor-1254 {4}			2714056				
Aroclor-1254 {5}			2517612				
Aroclor-1260	2856839	2692647	2928573	2914275	2811022	2840671	3.35
Aroclor-1260 {2}	1365377	1279014	1392409	1349403	1340608	1345362	3.12
Aroclor-1260 {3}	3513715	3322902	3783939	3788268	3753988	3632563	5.71
Aroclor-1260 {4}	1757335	1624145	1816704	1799691	1783658	1756307	4.39
Aroclor-1260 {5}	727936	915000	847800	847601	844332	836534	8.08
					Average %RSD		4.80

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2303.C Y2302.C Y2301.C Y2300.C Y2299.C

Compound	RT OF STANDARDS					MEAN	RT WI NDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.76	3.76	3.76	3.76	3.76	3.76	3.69	3.83
Aroclor-1016 {2}	4.36	4.36	4.36	4.36	4.36	4.36	4.29	4.43
Aroclor-1016 {3}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {4}	5.32	5.32	5.32	5.32	5.32	5.32	5.25	5.39
Aroclor-1016 {5}	5.50	5.50	5.50	5.50	5.50	5.50	5.43	5.57
Aroclor-1221			2.43				2.36	2.50
Aroclor-1221 {2}			3.44				3.37	3.51
Aroclor-1221 {3}			3.67				3.60	3.74
Aroclor-1221 {4}			3.77				3.70	3.84
Aroclor-1221 {5}			5.12				5.05	5.19
Aroclor-1232			3.67				3.60	3.74
Aroclor-1232 {2}			4.67				4.60	4.74
Aroclor-1232 {3}			5.11				5.04	5.18
Aroclor-1232 {4}			5.32				5.25	5.39
Aroclor-1232 {5}			6.10				6.03	6.17
Aroclor-1242			4.75				4.68	4.82
Aroclor-1242 {2}			5.50				5.43	5.57
Aroclor-1242 {3}			6.10				6.03	6.17
Aroclor-1242 {4}			6.25				6.18	6.32
Aroclor-1242 {5}			6.79				6.72	6.86
Aroclor-1248			5.11				5.03	5.19
Aroclor-1248 {2}			5.70				5.62	5.78
Aroclor-1248 {3}			6.10				6.02	6.18
Aroclor-1248 {4}			6.25				6.17	6.33
Aroclor-1248 {5}			6.60				6.52	6.68
Aroclor-1254			7.10				7.02	7.18
Aroclor-1254 {2}			7.68				7.60	7.76
Aroclor-1254 {3}			8.12				8.03	8.21
Aroclor-1254 {4}			8.29				8.20	8.38
Aroclor-1254 {5}			9.12				9.03	9.21
Aroclor-1260	7.87	7.87	7.87	7.87	7.87	7.87	6.97	8.77
Aroclor-1260 {2}	8.12	8.12	8.12	8.12	8.12	8.12	7.22	9.02
Aroclor-1260 {3}	9.72	9.71	9.71	9.71	9.71	9.71	8.81	10.61
Aroclor-1260 {4}	10.22	10.22	10.22	10.22	10.22	10.22	9.32	11.12
Aroclor-1260 {5}	10.81	10.81	10.81	10.81	10.81	10.81	9.91	11.71

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2303.C Y2302.C Y2301.C Y2300.C Y2299.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	448224	416033	402962	385314	387450	407997	6.30
Aroclor-1016 {2}	915651	821007	778445	758513	748678	804459	8.46
Aroclor-1016 {3}	2127768	1788680	1832697	1822446	1828357	1879990	7.43
Aroclor-1016 {4}	829192	794627	786663	777683	771551	791943	2.85
Aroclor-1016 {5}	739242	638872	612966	607525	609426	641606	8.73
Aroclor-1221			175443				
Aroclor-1221 {2}			267809				
Aroclor-1221 {3}			171381				
Aroclor-1221 {4}			621352				
Aroclor-1221 {5}			118428				
Aroclor-1232			107165				
Aroclor-1232 {2}			118037				
Aroclor-1232 {3}			802533				
Aroclor-1232 {4}			356431				
Aroclor-1232 {5}			389308				
Aroclor-1242			281059				
Aroclor-1242 {2}			499877				
Aroclor-1242 {3}			654070				
Aroclor-1242 {4}			553151				
Aroclor-1242 {5}			1082104				
Aroclor-1248			969639				
Aroclor-1248 {2}			1444184				
Aroclor-1248 {3}			1055072				
Aroclor-1248 {4}			914058				
Aroclor-1248 {5}			524893				
Aroclor-1254			1399827				
Aroclor-1254 {2}			1092996				
Aroclor-1254 {3}			730417				
Aroclor-1254 {4}			1133148				
Aroclor-1254 {5}			1550926				
Aroclor-1260	822605	813234	752575	745566	732588	773314	5.36
Aroclor-1260 {2}	1310728	1160582	1084096	1069509	1052217	1135427	9.37
Aroclor-1260 {3}	1177686	1064491	1035720	1033120	1037729	1069749	5.76
Aroclor-1260 {4}	2430314	2084008	2246960	2274911	2332292	2273697	5.59
Aroclor-1260 {5}	1771046	1531510	1634556	1657713	1705790	1660123	5.35
					Average %RSD		6.52

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2303.D Y2302.D Y2301.D Y2300.D Y2299.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.67				8.55	8.79
Aroclor-1262 {2}			9.52				9.40	9.64
Aroclor-1262 {3}			10.16				10.04	10.28
Aroclor-1262 {4}			10.24				10.12	10.36
Aroclor-1262 {5}			11.07				10.95	11.19
Aroclor-1268			10.16				10.04	10.28
Aroclor-1268 {2}			10.24				10.12	10.36
Aroclor-1268 {3}			10.71				10.59	10.83
Aroclor-1268 {4}			10.84				10.72	10.96
Aroclor-1268 {5}			11.67				11.55	11.79

GC Column (2nd): DB-1701P

Data File: Y2303.C Y2302.C Y2301.C Y2300.C Y2299.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.71				9.59	9.83
Aroclor-1262 {2}			10.22				10.10	10.34
Aroclor-1262 {3}			10.72				10.60	10.84
Aroclor-1262 {4}			10.80				10.68	10.92
Aroclor-1262 {5}			11.40				11.28	11.52
Aroclor-1268			10.72				10.60	10.84
Aroclor-1268 {2}			10.80				10.68	10.92
Aroclor-1268 {3}			11.05				10.93	11.17
Aroclor-1268 {4}			11.84				11.72	11.96
Aroclor-1268 {5}			12.27				12.15	12.39

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 02/21/2017 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2303.D Y2302.D Y2301.D Y2300.D Y2299.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2735763				
Aroclor-1262 {2}			5169827				
Aroclor-1262 {3}			2080775				
Aroclor-1262 {4}			2239336				
Aroclor-1262 {5}			1729474				
Aroclor-1268			5327458				
Aroclor-1268 {2}			5940168				
Aroclor-1268 {3}			4996895				
Aroclor-1268 {4}			1178719				
Aroclor-1268 {5}			14174651				

GC Column (2nd): DB-1701P

Data File: Y2303.C Y2302.C Y2301.C Y2300.C Y2299.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1362335				
Aroclor-1262 {2}			3021641				
Aroclor-1262 {3}			1084324				
Aroclor-1262 {4}			2102782				
Aroclor-1262 {5}			389495				
Aroclor-1268			3247005				
Aroclor-1268 {2}			3142460				
Aroclor-1268 {3}			2643428				
Aroclor-1268 {4}			1102191				
Aroclor-1268 {5}			8672851				

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R6746.D R6745.D R6744.D R6743.D R6742.D

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.26	3.26	3.26	3.26	3.26	3.26	3.19	3.33
Aroclor-1016 {2}	4.09	4.10	4.10	4.10	4.09	4.10	4.03	4.17
Aroclor-1016 {3}	4.65	4.65	4.65	4.65	4.65	4.65	4.58	4.72
Aroclor-1016 {4}	5.16	5.16	5.16	5.16	5.16	5.16	5.09	5.23
Aroclor-1016 {5}	5.56	5.56	5.56	5.56	5.56	5.56	5.49	5.63
Aroclor-1221			2.15				2.08	2.22
Aroclor-1221 {2}			3.06				2.99	3.13
Aroclor-1221 {3}			3.18				3.11	3.25
Aroclor-1221 {4}			3.26				3.19	3.33
Aroclor-1221 {5}			3.86				3.79	3.93
Aroclor-1232			3.26				3.19	3.33
Aroclor-1232 {2}			4.10				4.03	4.17
Aroclor-1232 {3}			4.77				4.70	4.84
Aroclor-1232 {4}			5.36				5.29	5.43
Aroclor-1232 {5}			5.56				5.49	5.63
Aroclor-1242			4.10				4.03	4.17
Aroclor-1242 {2}			5.04				4.97	5.11
Aroclor-1242 {3}			5.36				5.29	5.43
Aroclor-1242 {4}			6.06				5.99	6.13
Aroclor-1242 {5}			6.34				6.27	6.41
Aroclor-1248			4.50				4.42	4.58
Aroclor-1248 {2}			5.04				4.96	5.12
Aroclor-1248 {3}			5.36				5.28	5.44
Aroclor-1248 {4}			6.06				5.98	6.14
Aroclor-1248 {5}			6.34				6.26	6.42
Aroclor-1254			6.46				6.38	6.54
Aroclor-1254 {2}			6.90				6.82	6.98
Aroclor-1254 {3}			7.06				6.97	7.15
Aroclor-1254 {4}			7.51				7.42	7.60
Aroclor-1254 {5}			8.35				8.26	8.44
Aroclor-1260	8.35	8.35	8.35	8.35	8.35	8.35	7.45	9.25
Aroclor-1260 {2}	9.03	9.03	9.03	9.03	9.03	9.03	8.13	9.93
Aroclor-1260 {3}	9.51	9.51	9.51	9.51	9.51	9.51	8.61	10.41
Aroclor-1260 {4}	9.99	9.99	9.99	9.99	9.99	9.99	9.09	10.89
Aroclor-1260 {5}	11.06	11.06	11.06	11.06	11.06	11.06	10.16	11.96

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R6746.D R6745.D R6744.D R6743.D R6742.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	1042384	1036505	906240	838528	741735	913078	14.17
Aroclor-1016 {2}	1482241	1309515	1194118	1109001	993687	1217713	15.42
Aroclor-1016 {3}	2014301	1838049	1561366	1458087	1254200	1625201	18.62
Aroclor-1016 {4}	915864	914078	746384	676617	579836	766556	19.29
Aroclor-1016 {5}	1554816	1423510	1234686	1167974	1037640	1283725	16.03
Aroclor-1221			390833				
Aroclor-1221 {2}			676284				
Aroclor-1221 {3}			436991				
Aroclor-1221 {4}			1363916				
Aroclor-1221 {5}			330465				
Aroclor-1232			942628				
Aroclor-1232 {2}			557564				
Aroclor-1232 {3}			519172				
Aroclor-1232 {4}			572426				
Aroclor-1232 {5}			702464				
Aroclor-1242			966173				
Aroclor-1242 {2}			673824				
Aroclor-1242 {3}			921345				
Aroclor-1242 {4}			1276541				
Aroclor-1242 {5}			1162201				
Aroclor-1248			2024299				
Aroclor-1248 {2}			1219598				
Aroclor-1248 {3}			1529858				
Aroclor-1248 {4}			2285038				
Aroclor-1248 {5}			1874969				
Aroclor-1254			2722898				
Aroclor-1254 {2}			1769741				
Aroclor-1254 {3}			3152821				
Aroclor-1254 {4}			3421890				
Aroclor-1254 {5}			3018340				
Aroclor-1260	4633097	3777458	3351922	3247353	2993442	3600654	17.85
Aroclor-1260 {2}	2092642	1781250	1595021	1515274	1449186	1686675	15.34
Aroclor-1260 {3}	4926120	4185445	3717717	3682308	3479786	3998275	14.49
Aroclor-1260 {4}	2370100	2182878	1973729	1942612	1866839	2067232	9.96
Aroclor-1260 {5}	919598	941742	826240	814293	880472	876469	6.38
					Average %RSD		14.76

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R

GC Column (2nd): DB-1701P

Data File: R6746.C R6745.C R6744.C R6743.C R6742.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.73	3.73	3.73	3.73	3.73	3.73	3.66	3.80
Aroclor-1016 {2}	4.34	4.34	4.34	4.34	4.34	4.34	4.27	4.41
Aroclor-1016 {3}	5.09	5.09	5.09	5.09	5.09	5.09	5.02	5.16
Aroclor-1016 {4}	5.30	5.30	5.30	5.30	5.30	5.30	5.23	5.37
Aroclor-1016 {5}	5.47	5.47	5.47	5.47	5.48	5.47	5.40	5.54
Aroclor-1221			2.40				2.33	2.47
Aroclor-1221 {2}			3.41				3.34	3.48
Aroclor-1221 {3}			3.64				3.57	3.71
Aroclor-1221 {4}			3.73				3.66	3.80
Aroclor-1221 {5}			5.09				5.02	5.16
Aroclor-1232			3.73				3.66	3.80
Aroclor-1232 {2}			4.72				4.65	4.79
Aroclor-1232 {3}			5.30				5.23	5.37
Aroclor-1232 {4}			5.47				5.40	5.54
Aroclor-1232 {5}			6.08				6.01	6.15
Aroclor-1242			4.72				4.65	4.79
Aroclor-1242 {2}			5.47				5.40	5.54
Aroclor-1242 {3}			6.08				6.01	6.15
Aroclor-1242 {4}			6.23				6.16	6.30
Aroclor-1242 {5}			6.78				6.71	6.85
Aroclor-1248			5.09				5.01	5.17
Aroclor-1248 {2}			5.68				5.60	5.76
Aroclor-1248 {3}			6.08				6.00	6.16
Aroclor-1248 {4}			6.23				6.15	6.31
Aroclor-1248 {5}			6.58				6.50	6.66
Aroclor-1254			7.08				7.00	7.16
Aroclor-1254 {2}			7.67				7.59	7.75
Aroclor-1254 {3}			8.11				8.02	8.20
Aroclor-1254 {4}			8.29				8.20	8.38
Aroclor-1254 {5}			9.11				9.02	9.20
Aroclor-1260	8.11	8.11	8.11	8.11	8.11	8.11	7.21	9.01
Aroclor-1260 {2}	8.52	8.52	8.52	8.52	8.52	8.52	7.62	9.42
Aroclor-1260 {3}	9.72	9.71	9.72	9.71	9.72	9.72	8.82	10.62
Aroclor-1260 {4}	10.22	10.22	10.22	10.22	10.23	10.22	9.32	11.12
Aroclor-1260 {5}	10.82	10.82	10.82	10.82	10.82	10.82	9.92	11.72

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R
GC Column (2nd): DB-1701P

Data File: R6746.C R6745.C R6744.C R6743.C R6742.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	301458	270532	243416	227394	208404	250241	14.62
Aroclor-1016 {2}	644851	573016	471019	445629	414392	509781	18.86
Aroclor-1016 {3}	1331941	1128226	1026535	1014949	971524	1094635	13.21
Aroclor-1016 {4}	549072	510876	458184	433890	403447	471094	12.46
Aroclor-1016 {5}	479994	415421	348758	333149	313414	378147	18.15
Aroclor-1221			112136				
Aroclor-1221 {2}			166449				
Aroclor-1221 {3}			107182				
Aroclor-1221 {4}			362990				
Aroclor-1221 {5}			74921				
Aroclor-1232			251554				
Aroclor-1232 {2}			98683				
Aroclor-1232 {3}			214605				
Aroclor-1232 {4}			165893				
Aroclor-1232 {5}			235016				
Aroclor-1242			172926				
Aroclor-1242 {2}			288414				
Aroclor-1242 {3}			385416				
Aroclor-1242 {4}			323227				
Aroclor-1242 {5}			607800				
Aroclor-1248			548438				
Aroclor-1248 {2}			837968				
Aroclor-1248 {3}			607655				
Aroclor-1248 {4}			522840				
Aroclor-1248 {5}			305865				
Aroclor-1254			803172				
Aroclor-1254 {2}			626674				
Aroclor-1254 {3}			417954				
Aroclor-1254 {4}			610596				
Aroclor-1254 {5}			873590				
Aroclor-1260	846005	718234	602148	576002	545475	657573	18.85
Aroclor-1260 {2}	925482	814748	677310	637545	568465	724710	19.84
Aroclor-1260 {3}	720019	697607	546716	531349	504187	599976	16.81
Aroclor-1260 {4}	1437045	1251076	1092852	1093898	1059898	1186954	13.34
Aroclor-1260 {5}	925847	916151	811559	815131	801044	853946	7.20
					Average %RSD		15.33

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R
GC Column (1st): DB-5

Data File: R6746.D R6745.D R6744.D R6743.D R6742.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			8.65				8.53	8.77
Aroclor-1262 {2}			9.51				9.39	9.63
Aroclor-1262 {3}			10.15				10.03	10.27
Aroclor-1262 {4}			10.23				10.11	10.35
Aroclor-1262 {5}			11.06				10.94	11.18
Aroclor-1268			10.15				10.03	10.27
Aroclor-1268 {2}			10.23				10.11	10.35
Aroclor-1268 {3}			10.70				10.58	10.82
Aroclor-1268 {4}			10.84				10.72	10.96
Aroclor-1268 {5}			11.67				11.55	11.79

GC Column (2nd): DB-1701P

Data File: R6746.C R6745.C R6744.C R6743.C R6742.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WI NDOW FROM	TO
Aroclor-1262			9.71				9.59	9.83
Aroclor-1262 {2}			10.22				10.10	10.34
Aroclor-1262 {3}			10.73				10.61	10.85
Aroclor-1262 {4}			10.81				10.69	10.93
Aroclor-1262 {5}			11.42				11.30	11.54
Aroclor-1268			10.73				10.61	10.85
Aroclor-1268 {2}			10.81				10.69	10.93
Aroclor-1268 {3}			11.06				10.94	11.18
Aroclor-1268 {4}			11.86				11.74	11.98
Aroclor-1268 {5}			12.29				12.17	12.41

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/15/2017 **Instrument ID:** GC-R

GC Column (1st): DB-5

Data File: R6746.D R6745.D R6744.D R6743.D R6742.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			2909204				
Aroclor-1262 {2}			5178636				
Aroclor-1262 {3}			2013882				
Aroclor-1262 {4}			2200719				
Aroclor-1262 {5}			1666438				
Aroclor-1268			5106823				
Aroclor-1268 {2}			4938019				
Aroclor-1268 {3}			4091405				
Aroclor-1268 {4}			1095644				
Aroclor-1268 {5}			11944939				

GC Column (2nd): DB-1701P

Data File: R6746.C R6745.C R6744.C R6743.C R6742.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			733700				
Aroclor-1262 {2}			1520049				
Aroclor-1262 {3}			550979				
Aroclor-1262 {4}			1047634				
Aroclor-1262 {5}			211681				
Aroclor-1268			1544436				
Aroclor-1268 {2}			1464348				
Aroclor-1268 {3}			1239692				
Aroclor-1268 {4}			525926				
Aroclor-1268 {5}			3863198				

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2540.D Y2541.D Y2542.D Y2543.D Y2544.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1016	3.28	3.28	3.28	3.28	3.28	3.28	3.21	3.35
Aroclor-1016 {2}	4.12	4.12	4.12	4.12	4.12	4.12	4.05	4.19
Aroclor-1016 {3}	4.67	4.67	4.67	4.67	4.67	4.67	4.60	4.74
Aroclor-1016 {4}	5.19	5.19	5.19	5.19	5.18	5.19	5.12	5.26
Aroclor-1016 {5}	5.58	5.58	5.58	5.58	5.58	5.58	5.51	5.65
Aroclor-1221			2.17				2.10	2.24
Aroclor-1221 {2}			3.07				3.00	3.14
Aroclor-1221 {3}			3.20				3.13	3.27
Aroclor-1221 {4}			3.28				3.21	3.35
Aroclor-1221 {5}			3.88				3.81	3.95
Aroclor-1232			3.28				3.21	3.35
Aroclor-1232 {2}			4.12				4.05	4.19
Aroclor-1232 {3}			4.79				4.72	4.86
Aroclor-1232 {4}			5.39				5.32	5.46
Aroclor-1232 {5}			5.58				5.51	5.65
Aroclor-1242			4.12				4.05	4.19
Aroclor-1242 {2}			5.06				4.99	5.13
Aroclor-1242 {3}			5.39				5.32	5.46
Aroclor-1242 {4}			6.08				6.01	6.15
Aroclor-1242 {5}			6.36				6.29	6.43
Aroclor-1248			4.52				4.44	4.60
Aroclor-1248 {2}			5.06				4.98	5.14
Aroclor-1248 {3}			5.39				5.31	5.47
Aroclor-1248 {4}			6.09				6.01	6.17
Aroclor-1248 {5}			6.36				6.28	6.44
Aroclor-1254			6.48				6.40	6.56
Aroclor-1254 {2}			6.92				6.84	7.00
Aroclor-1254 {3}			7.08				6.99	7.17
Aroclor-1254 {4}			7.52				7.43	7.61
Aroclor-1254 {5}			8.37				8.28	8.46
Aroclor-1260	8.37	8.37	8.37	8.37	8.37	8.37	7.47	9.27
Aroclor-1260 {2}	9.05	9.05	9.05	9.05	9.05	9.05	8.15	9.95
Aroclor-1260 {3}	9.52	9.52	9.52	9.52	9.52	9.52	8.62	10.42
Aroclor-1260 {4}	10.00	10.00	10.00	10.00	10.00	10.00	9.10	10.90
Aroclor-1260 {5}	11.06	11.06	11.06	11.06	11.06	11.06	10.16	11.96

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2540.D Y2541.D Y2542.D Y2543.D Y2544.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	736368	638515	665230	667614	632493	668044	6.18
Aroclor-1016 {2}	968328	880261	941442	921630	878303	917993	4.25
Aroclor-1016 {3}	1391883	1228463	1246337	1222121	1161472	1250055	6.84
Aroclor-1016 {4}	538889	538697	565994	560257	543124	549392	2.33
Aroclor-1016 {5}	873881	933195	997639	1000299	969010	954805	5.52
Aroclor-1221			306367				
Aroclor-1221 {2}			525396				
Aroclor-1221 {3}			347091				
Aroclor-1221 {4}			1116855				
Aroclor-1221 {5}			244077				
Aroclor-1232			732062				
Aroclor-1232 {2}			437162				
Aroclor-1232 {3}			410187				
Aroclor-1232 {4}			438901				
Aroclor-1232 {5}			551542				
Aroclor-1242			785448				
Aroclor-1242 {2}			520833				
Aroclor-1242 {3}			719777				
Aroclor-1242 {4}			1051740				
Aroclor-1242 {5}			981976				
Aroclor-1248			1666529				
Aroclor-1248 {2}			974704				
Aroclor-1248 {3}			1250961				
Aroclor-1248 {4}			1906336				
Aroclor-1248 {5}			1585783				
Aroclor-1254			2216811				
Aroclor-1254 {2}			1459404				
Aroclor-1254 {3}			2661244				
Aroclor-1254 {4}			2982390				
Aroclor-1254 {5}			2698323				
Aroclor-1260	3100338	2977462	3238389	3232491	3138294	3137395	3.43
Aroclor-1260 {2}	1450093	1426637	1526797	1518069	1506388	1485597	3.00
Aroclor-1260 {3}	3991643	3791510	4376664	4422253	4402913	4196997	6.86
Aroclor-1260 {4}	1938797	1886493	2132709	2167855	2196049	2064380	6.86
Aroclor-1260 {5}	899479	941557	983752	1036094	1064078	984992	6.82
					Average %RSD		5.21

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2540.C Y2541.C Y2542.C Y2543.C Y2544.C

Compound	RT OF STANDARDS					MEAN	RT WINDOW	
	10	50	500	1000	2000	RT	FROM	TO
Aroclor-1016	3.75	3.75	3.75	3.75	3.76	3.75	3.68	3.82
Aroclor-1016 {2}	4.36	4.35	4.35	4.35	4.36	4.36	4.29	4.43
Aroclor-1016 {3}	5.11	5.11	5.11	5.11	5.11	5.11	5.04	5.18
Aroclor-1016 {4}	5.32	5.32	5.32	5.32	5.32	5.32	5.25	5.39
Aroclor-1016 {5}	5.49	5.49	5.49	5.49	5.50	5.49	5.42	5.56
Aroclor-1221			2.42				2.35	2.49
Aroclor-1221 {2}			3.42				3.35	3.49
Aroclor-1221 {3}			3.66				3.59	3.73
Aroclor-1221 {4}			3.75				3.68	3.82
Aroclor-1221 {5}			5.11				5.04	5.18
Aroclor-1232			3.66				3.59	3.73
Aroclor-1232 {2}			4.67				4.60	4.74
Aroclor-1232 {3}			5.10				5.03	5.17
Aroclor-1232 {4}			5.32				5.25	5.39
Aroclor-1232 {5}			6.09				6.02	6.16
Aroclor-1242			4.74				4.67	4.81
Aroclor-1242 {2}			5.49				5.42	5.56
Aroclor-1242 {3}			6.09				6.02	6.16
Aroclor-1242 {4}			6.25				6.18	6.32
Aroclor-1242 {5}			6.78				6.71	6.85
Aroclor-1248			5.10				5.02	5.18
Aroclor-1248 {2}			5.69				5.61	5.77
Aroclor-1248 {3}			6.09				6.01	6.17
Aroclor-1248 {4}			6.25				6.17	6.33
Aroclor-1248 {5}			6.60				6.52	6.68
Aroclor-1254			7.09				7.01	7.17
Aroclor-1254 {2}			7.68				7.60	7.76
Aroclor-1254 {3}			8.12				8.03	8.21
Aroclor-1254 {4}			8.29				8.20	8.38
Aroclor-1254 {5}			9.12				9.03	9.21
Aroclor-1260	7.87	7.87	7.87	7.87	7.87	7.87	6.97	8.77
Aroclor-1260 {2}	8.12	8.12	8.12	8.12	8.13	8.12	7.22	9.02
Aroclor-1260 {3}	9.72	9.72	9.72	9.72	9.72	9.72	8.82	10.62
Aroclor-1260 {4}	10.22	10.22	10.22	10.22	10.23	10.22	9.32	11.12
Aroclor-1260 {5}	10.81	10.81	10.81	10.81	10.82	10.81	9.91	11.71

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y

GC Column (2nd): DB-1701P

Data File: Y2540.C Y2541.C Y2542.C Y2543.C Y2544.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1016	508385	478956	436200	420464	411167	451034	9.15
Aroclor-1016 {2}	984385	913045	856401	824659	836188	882935	7.49
Aroclor-1016 {3}	2379510	2023714	1963324	1916926	1963920	2049479	9.19
Aroclor-1016 {4}	847147	917192	876475	855197	841767	867556	3.54
Aroclor-1016 {5}	769954	745114	684901	670044	661230	706248	6.85
Aroclor-1221			209319				
Aroclor-1221 {2}			289536				
Aroclor-1221 {3}			196552				
Aroclor-1221 {4}			711034				
Aroclor-1221 {5}			143429				
Aroclor-1232			121855				
Aroclor-1232 {2}			136493				
Aroclor-1232 {3}			910381				
Aroclor-1232 {4}			415452				
Aroclor-1232 {5}			454849				
Aroclor-1242			322159				
Aroclor-1242 {2}			583074				
Aroclor-1242 {3}			757498				
Aroclor-1242 {4}			639272				
Aroclor-1242 {5}			1250679				
Aroclor-1248			1075555				
Aroclor-1248 {2}			1641137				
Aroclor-1248 {3}			1199064				
Aroclor-1248 {4}			1040436				
Aroclor-1248 {5}			599329				
Aroclor-1254			1614094				
Aroclor-1254 {2}			1259856				
Aroclor-1254 {3}			845614				
Aroclor-1254 {4}			1333425				
Aroclor-1254 {5}			1830890				
Aroclor-1260	952036	902087	862225	846663	829835	878569	5.58
Aroclor-1260 {2}	1433430	1303343	1236206	1206254	1179992	1271845	7.97
Aroclor-1260 {3}	1301602	1237530	1210093	1192510	1194026	1227153	3.70
Aroclor-1260 {4}	2883840	2656358	2831968	2854711	2964442	2838264	3.99
Aroclor-1260 {5}	2129064	1903788	2034214	2038060	2126649	2046355	4.49
					Average %RSD		6.20

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y

GC Column (1st): DB-5

Data File: Y2540.D Y2541.D Y2542.D Y2543.D Y2544.D

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			8.66				8.54	8.78
Aroclor-1262 {2}			9.52				9.40	9.64
Aroclor-1262 {3}			10.16				10.04	10.28
Aroclor-1262 {4}			10.24				10.12	10.36
Aroclor-1262 {5}			11.06				10.94	11.18
Aroclor-1268			10.15				10.03	10.27
Aroclor-1268 {2}			10.24				10.12	10.36
Aroclor-1268 {3}			10.71				10.59	10.83
Aroclor-1268 {4}			10.84				10.72	10.96
Aroclor-1268 {5}			11.67				11.55	11.79

GC Column (2nd): DB-1701P

Data File: Y2540.C Y2541.C Y2542.C Y2543.C Y2544.C

Compound	RT OF STANDARDS 10	50	500	1000	2000	MEAN RT	RT WINDOW FROM	TO
Aroclor-1262			9.71				9.59	9.83
Aroclor-1262 {2}			10.22				10.10	10.34
Aroclor-1262 {3}			10.72				10.60	10.84
Aroclor-1262 {4}			10.81				10.69	10.93
Aroclor-1262 {5}			11.41				11.29	11.53
Aroclor-1268			10.72				10.60	10.84
Aroclor-1268 {2}			10.80				10.68	10.92
Aroclor-1268 {3}			11.06				10.94	11.18
Aroclor-1268 {4}			11.85				11.73	11.97
Aroclor-1268 {5}			12.28				12.16	12.40

AROCLOR INITIAL CALIBRATION SUMMARY

Date Analyzed: 03/16/2017 **Instrument ID:** GC-Y
GC Column (1st): DB-5

Data File: Y2540.D Y2541.D Y2542.D Y2543.D Y2544.D

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			3002729				
Aroclor-1262 {2}			5937685				
Aroclor-1262 {3}			2281289				
Aroclor-1262 {4}			2634223				
Aroclor-1262 {5}			2060770				
Aroclor-1268			6351787				
Aroclor-1268 {2}			6612642				
Aroclor-1268 {3}			5566663				
Aroclor-1268 {4}			1367257				
Aroclor-1268 {5}			16188506				

GC Column (2nd): DB-1701P

Data File: Y2540.C Y2541.C Y2542.C Y2543.C Y2544.C

Compound	CALIBRATION FACTORS 10	50	500	1000	2000	MEAN	%RSD
Aroclor-1262			1662952				
Aroclor-1262 {2}			3966254				
Aroclor-1262 {3}			1504621				
Aroclor-1262 {4}			2766261				
Aroclor-1262 {5}			534886				
Aroclor-1268			4271832				
Aroclor-1268 {2}			4098588				
Aroclor-1268 {3}			3544957				
Aroclor-1268 {4}			1428383				
Aroclor-1268 {5}			11025385				

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/10/2017 **Instrument ID:** GC-Y

Data File: Y2495.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.29	3.22	3.36	631947	625200	1.07
Aroclor-1016 {2}	4.13	4.06	4.20	877592	820927	6.46
Aroclor-1016 {3}	4.69	4.61	4.75	1188185	1125967	5.24
Aroclor-1016 {4}	5.20	5.12	5.26	537445	513665	4.42
Aroclor-1016 {5}	5.59	5.52	5.66	929550	897624	3.43
Aroclor-1260	8.38	7.47	9.27	2840671	2722596	4.16
Aroclor-1260 {2}	9.06	8.15	9.95	1345362	1155872	14.08
Aroclor-1260 {3}	9.53	8.62	10.42	3632563	3395786	6.52
Aroclor-1260 {4}	10.01	9.10	10.90	1756307	1598906	8.96
Aroclor-1260 {5}	11.07	10.17	11.97	836534	715247	14.50

Data File: Y2495.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.69	3.83	407997	397718	2.52
Aroclor-1016 {2}	4.36	4.29	4.43	804459	771004	4.16
Aroclor-1016 {3}	5.11	5.04	5.18	1879990	1842874	1.97
Aroclor-1016 {4}	5.33	5.25	5.39	791943	787781	0.53
Aroclor-1016 {5}	5.50	5.43	5.57	641606	624930	2.60
Aroclor-1260	7.87	6.97	8.77	773314	746266	3.50
Aroclor-1260 {2}	8.12	7.22	9.02	1135427	1065719	6.14
Aroclor-1260 {3}	9.72	8.81	10.61	1069749	1038723	2.90
Aroclor-1260 {4}	10.22	9.32	11.12	2273697	2279939	0.27
Aroclor-1260 {5}	10.81	9.91	11.71	1660123	1656052	0.25

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/10/2017 **Instrument ID:** GC-Y

Data File: Y2515.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.29	3.22	3.36	631947	628684	0.52
Aroclor-1016 {2}	4.13	4.06	4.20	877592	830301	5.39
Aroclor-1016 {3}	4.69	4.61	4.75	1188185	1139974	4.06
Aroclor-1016 {4}	5.20	5.12	5.26	537445	527282	1.89
Aroclor-1016 {5}	5.60	5.52	5.66	929550	918968	1.14
Aroclor-1260	8.38	7.47	9.27	2840671	2944888	3.67
Aroclor-1260 {2}	9.06	8.15	9.95	1345362	1272505	5.42
Aroclor-1260 {3}	9.53	8.62	10.42	3632563	3875505	6.69
Aroclor-1260 {4}	10.01	9.10	10.90	1756307	1865926	6.24
Aroclor-1260 {5}	11.07	10.17	11.97	836534	844402	0.94

Data File: Y2515.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.69	3.83	407997	415815	1.92
Aroclor-1016 {2}	4.37	4.29	4.43	804459	804112	0.04
Aroclor-1016 {3}	5.12	5.04	5.18	1879990	1896181	0.86
Aroclor-1016 {4}	5.33	5.25	5.39	791943	812888	2.64
Aroclor-1016 {5}	5.50	5.43	5.57	641606	644324	0.42
Aroclor-1260	7.87	6.97	8.77	773314	807549	4.43
Aroclor-1260 {2}	8.12	7.22	9.02	1135427	1158246	2.01
Aroclor-1260 {3}	9.72	8.81	10.61	1069749	1130054	5.64
Aroclor-1260 {4}	10.22	9.32	11.12	2273697	2500669	9.98
Aroclor-1260 {5}	10.81	9.91	11.71	1660123	1816721	9.43

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/21/2017 **Instrument ID:** GC-R

Data File: R6883.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	883954	3.19
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1174578	3.54
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1534914	5.56
Aroclor-1016 {4}	5.16	5.09	5.23	766556	750037	2.16
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1261073	1.76
Aroclor-1260	8.35	7.45	9.25	3600654	3318395	7.84
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1612843	4.38
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4013672	0.39
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2115376	2.33
Aroclor-1260 {5}	11.06	10.16	11.96	876469	890651	1.62

Data File: R6883.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.74	3.66	3.80	250241	255709	2.19
Aroclor-1016 {2}	4.35	4.27	4.41	509781	495616	2.78
Aroclor-1016 {3}	5.10	5.02	5.16	1094635	1100054	0.50
Aroclor-1016 {4}	5.31	5.23	5.37	471094	488409	3.68
Aroclor-1016 {5}	5.49	5.40	5.54	378147	376857	0.34
Aroclor-1260	8.12	7.21	9.01	657573	640863	2.54
Aroclor-1260 {2}	8.53	7.62	9.42	724710	755327	4.22
Aroclor-1260 {3}	9.72	8.82	10.62	599976	584025	2.66
Aroclor-1260 {4}	10.23	9.32	11.12	1186954	1281904	8.00
Aroclor-1260 {5}	10.82	9.92	11.72	853946	948266	11.05

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/21/2017 **Instrument ID:** GC-R

Data File: R6896.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	905115	0.87
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1203260	1.19
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1595156	1.85
Aroclor-1016 {4}	5.16	5.09	5.23	766556	746396	2.63
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1286870	0.25
Aroclor-1260	8.36	7.45	9.25	3600654	3569433	0.87
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1572229	6.79
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4001645	0.08
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2079918	0.61
Aroclor-1260 {5}	11.06	10.16	11.96	876469	899447	2.62

Data File: R6896.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	266081	6.33
Aroclor-1016 {2}	4.33	4.27	4.41	509781	520726	2.15
Aroclor-1016 {3}	5.09	5.02	5.16	1094635	1166314	6.55
Aroclor-1016 {4}	5.30	5.23	5.37	471094	508530	7.95
Aroclor-1016 {5}	5.47	5.40	5.54	378147	393895	4.16
Aroclor-1260	8.11	7.21	9.01	657573	675768	2.77
Aroclor-1260 {2}	8.52	7.62	9.42	724710	786630	8.54
Aroclor-1260 {3}	9.71	8.82	10.62	599976	621367	3.57
Aroclor-1260 {4}	10.22	9.32	11.12	1186954	1316006	10.87
Aroclor-1260 {5}	10.81	9.92	11.72	853946	953391	11.65

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-R

Data File: R6909.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	931379	2.00
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1236019	1.50
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1650842	1.58
Aroclor-1016 {4}	5.16	5.09	5.23	766556	772031	0.71
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1331291	3.71
Aroclor-1260	8.36	7.45	9.25	3600654	3871684	7.53
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1669035	1.05
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4401210	10.08
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2297001	11.11
Aroclor-1260 {5}	11.06	10.16	11.96	876469	991946	13.18

Data File: R6909.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	270078	7.93
Aroclor-1016 {2}	4.33	4.27	4.41	509781	539839	5.90
Aroclor-1016 {3}	5.09	5.02	5.16	1094635	1211767	10.70
Aroclor-1016 {4}	5.30	5.23	5.37	471094	523354	11.09
Aroclor-1016 {5}	5.47	5.40	5.54	378147	405054	7.12
Aroclor-1260	8.11	7.21	9.01	657573	704111	7.08
Aroclor-1260 {2}	8.52	7.62	9.42	724710	822026	13.43
Aroclor-1260 {3}	9.71	8.82	10.62	599976	652590	8.77
Aroclor-1260 {4}	10.22	9.32	11.12	1186954	1382806	16.50
Aroclor-1260 {5}	10.81	9.92	11.72	853946	1008307	18.08

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-R

Data File: R6910.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	871532	4.55
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1162266	4.55
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1537469	5.40
Aroclor-1016 {4}	5.16	5.09	5.23	766556	730976	4.64
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1249441	2.67
Aroclor-1260	8.35	7.45	9.25	3600654	3673425	2.02
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1695807	0.54
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4156939	3.97
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2177395	5.33
Aroclor-1260 {5}	11.06	10.16	11.96	876469	913498	4.22

Data File: R6910.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	253151	1.16
Aroclor-1016 {2}	4.34	4.27	4.41	509781	492249	3.44
Aroclor-1016 {3}	5.09	5.02	5.16	1094635	1099911	0.48
Aroclor-1016 {4}	5.30	5.23	5.37	471094	484388	2.82
Aroclor-1016 {5}	5.47	5.40	5.54	378147	369427	2.31
Aroclor-1260	8.11	7.21	9.01	657573	650240	1.12
Aroclor-1260 {2}	8.52	7.62	9.42	724710	766536	5.77
Aroclor-1260 {3}	9.71	8.82	10.62	599976	607331	1.23
Aroclor-1260 {4}	10.22	9.32	11.12	1186954	1294842	9.09
Aroclor-1260 {5}	10.81	9.92	11.72	853946	940101	10.09

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-R

Data File: R6920.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	840883	7.91
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1132043	7.04
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1493361	8.11
Aroclor-1016 {4}	5.16	5.09	5.23	766556	717807	6.36
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1220293	4.94
Aroclor-1260	8.35	7.45	9.25	3600654	3498890	2.83
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1601022	5.08
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	3935800	1.56
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2062531	0.23
Aroclor-1260 {5}	11.06	10.16	11.96	876469	844980	3.59

Data File: R6920.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	250345	0.04
Aroclor-1016 {2}	4.33	4.27	4.41	509781	492165	3.46
Aroclor-1016 {3}	5.09	5.02	5.16	1094635	1105201	0.97
Aroclor-1016 {4}	5.30	5.23	5.37	471094	489987	4.01
Aroclor-1016 {5}	5.47	5.40	5.54	378147	371955	1.64
Aroclor-1260	8.11	7.21	9.01	657573	649536	1.22
Aroclor-1260 {2}	8.52	7.62	9.42	724710	763111	5.30
Aroclor-1260 {3}	9.71	8.82	10.62	599976	598752	0.20
Aroclor-1260 {4}	10.22	9.32	11.12	1186954	1281133	7.93
Aroclor-1260 {5}	10.81	9.92	11.72	853946	939092	9.97

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/23/2017 **Instrument ID:** GC-R

Data File: R6947.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	872840	4.41
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1166777	4.18
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1552523	4.47
Aroclor-1016 {4}	5.16	5.09	5.23	766556	750969	2.03
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1267947	1.23
Aroclor-1260	8.36	7.45	9.25	3600654	3597658	0.08
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1700209	0.80
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4250831	6.32
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2243467	8.53
Aroclor-1260 {5}	11.06	10.16	11.96	876469	959907	9.52

Data File: R6947.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	258652	3.36
Aroclor-1016 {2}	4.33	4.27	4.41	509781	505993	0.74
Aroclor-1016 {3}	5.08	5.02	5.16	1094635	1131175	3.34
Aroclor-1016 {4}	5.29	5.23	5.37	471094	500657	6.28
Aroclor-1016 {5}	5.47	5.40	5.54	378147	383037	1.29
Aroclor-1260	8.11	7.21	9.01	657573	676667	2.90
Aroclor-1260 {2}	8.51	7.62	9.42	724710	802607	10.75
Aroclor-1260 {3}	9.71	8.82	10.62	599976	644068	7.35
Aroclor-1260 {4}	10.21	9.32	11.12	1186954	1371284	15.53
Aroclor-1260 {5}	10.81	9.92	11.72	853946	999563	17.05

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/23/2017 **Instrument ID:** GC-R

Data File: R6951.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.26	3.19	3.33	913078	852493	6.64
Aroclor-1016 {2}	4.10	4.03	4.17	1217713	1132699	6.98
Aroclor-1016 {3}	4.65	4.58	4.72	1625201	1504287	7.44
Aroclor-1016 {4}	5.16	5.09	5.23	766556	736437	3.93
Aroclor-1016 {5}	5.56	5.49	5.63	1283725	1236886	3.65
Aroclor-1260	8.35	7.45	9.25	3600654	3696409	2.66
Aroclor-1260 {2}	9.03	8.13	9.93	1686675	1669358	1.03
Aroclor-1260 {3}	9.51	8.61	10.41	3998275	4231360	5.83
Aroclor-1260 {4}	9.99	9.09	10.89	2067232	2244293	8.57
Aroclor-1260 {5}	11.06	10.16	11.96	876469	963035	9.88

Data File: R6951.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.73	3.66	3.80	250241	254475	1.69
Aroclor-1016 {2}	4.33	4.27	4.41	509781	494246	3.05
Aroclor-1016 {3}	5.09	5.02	5.16	1094635	1100685	0.55
Aroclor-1016 {4}	5.30	5.23	5.37	471094	492079	4.45
Aroclor-1016 {5}	5.47	5.40	5.54	378147	375268	0.76
Aroclor-1260	8.11	7.21	9.01	657573	665607	1.22
Aroclor-1260 {2}	8.51	7.62	9.42	724710	792412	9.34
Aroclor-1260 {3}	9.71	8.82	10.62	599976	637664	6.28
Aroclor-1260 {4}	10.22	9.32	11.12	1186954	1363239	14.85
Aroclor-1260 {5}	10.81	9.92	11.72	853946	994868	16.50

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-Y

Data File: Y2658.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.28	3.21	3.35	668044	678224	1.52
Aroclor-1016 {2}	4.12	4.05	4.19	917993	925589	0.83
Aroclor-1016 {3}	4.68	4.60	4.74	1250055	1238295	0.94
Aroclor-1016 {4}	5.19	5.12	5.26	549392	567771	3.35
Aroclor-1016 {5}	5.59	5.51	5.65	954805	989020	3.58
Aroclor-1260	8.37	7.47	9.27	3137395	3331260	6.18
Aroclor-1260 {2}	9.05	8.15	9.95	1485597	1563654	5.25
Aroclor-1260 {3}	9.52	8.62	10.42	4196997	4471607	6.54
Aroclor-1260 {4}	10.01	9.10	10.90	2064380	2160262	4.64
Aroclor-1260 {5}	11.07	10.16	11.96	984992	983057	0.20

Data File: Y2658.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.76	3.68	3.82	451034	430216	4.62
Aroclor-1016 {2}	4.36	4.29	4.43	882935	827662	6.26
Aroclor-1016 {3}	5.11	5.04	5.18	2049479	1979817	3.40
Aroclor-1016 {4}	5.32	5.25	5.39	867556	852177	1.77
Aroclor-1016 {5}	5.50	5.42	5.56	706248	666170	5.67
Aroclor-1260	7.87	6.97	8.77	878569	849402	3.32
Aroclor-1260 {2}	8.12	7.22	9.02	1271845	1211662	4.73
Aroclor-1260 {3}	9.72	8.82	10.62	1227153	1212279	1.21
Aroclor-1260 {4}	10.22	9.32	11.12	2838264	2878517	1.42
Aroclor-1260 {5}	10.81	9.91	11.71	2046355	2039843	0.32

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-Y

Data File: Y2669.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.28	3.21	3.35	668044	650522	2.62
Aroclor-1016 {2}	4.12	4.05	4.19	917993	886942	3.38
Aroclor-1016 {3}	4.68	4.60	4.74	1250055	1185073	5.20
Aroclor-1016 {4}	5.19	5.12	5.26	549392	537654	2.14
Aroclor-1016 {5}	5.59	5.51	5.65	954805	939307	1.62
Aroclor-1260	8.37	7.47	9.27	3137395	3059639	2.48
Aroclor-1260 {2}	9.05	8.15	9.95	1485597	1445111	2.73
Aroclor-1260 {3}	9.52	8.62	10.42	4196997	4178305	0.45
Aroclor-1260 {4}	10.00	9.10	10.90	2064380	2039110	1.22
Aroclor-1260 {5}	11.06	10.16	11.96	984992	1015391	3.09

Data File: Y2669.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	451034	422166	6.40
Aroclor-1016 {2}	4.35	4.29	4.43	882935	821497	6.96
Aroclor-1016 {3}	5.11	5.04	5.18	2049479	1907132	6.95
Aroclor-1016 {4}	5.32	5.25	5.39	867556	842369	2.90
Aroclor-1016 {5}	5.49	5.42	5.56	706248	659595	6.61
Aroclor-1260	7.86	6.97	8.77	878569	847736	3.51
Aroclor-1260 {2}	8.12	7.22	9.02	1271845	1212721	4.65
Aroclor-1260 {3}	9.71	8.82	10.62	1227153	1183139	3.59
Aroclor-1260 {4}	10.22	9.32	11.12	2838264	2763206	2.64
Aroclor-1260 {5}	10.81	9.91	11.71	2046355	2009361	1.81

AROCLOR CALIBRATION VERIFICATION SUMMARY

Date/Time Analyzed: 03/22/2017 **Instrument ID:** GC-Y

Data File: Y2685.D **GC Column (1st):** DB-5

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.28	3.21	3.35	668044	628846	5.87
Aroclor-1016 {2}	4.12	4.05	4.19	917993	861187	6.19
Aroclor-1016 {3}	4.68	4.60	4.74	1250055	1152298	7.82
Aroclor-1016 {4}	5.19	5.12	5.26	549392	524049	4.61
Aroclor-1016 {5}	5.59	5.51	5.65	954805	915221	4.15
Aroclor-1260	8.37	7.47	9.27	3137395	3048936	2.82
Aroclor-1260 {2}	9.05	8.15	9.95	1485597	1427536	3.91
Aroclor-1260 {3}	9.52	8.62	10.42	4196997	4124426	1.73
Aroclor-1260 {4}	10.00	9.10	10.90	2064380	2010909	2.59
Aroclor-1260 {5}	11.06	10.16	11.96	984992	930000	5.58

Data File: Y2685.C **GC Column (2nd):** DB-1701P

Compound	RT	RT WINDOW FROM	RT WINDOW TO	Avg CF	CC CF	%D
Aroclor-1016	3.75	3.68	3.82	451034	418007	7.32
Aroclor-1016 {2}	4.35	4.29	4.43	882935	815800	7.60
Aroclor-1016 {3}	5.11	5.04	5.18	2049479	1893861	7.59
Aroclor-1016 {4}	5.32	5.25	5.39	867556	833225	3.96
Aroclor-1016 {5}	5.49	5.42	5.56	706248	652522	7.61
Aroclor-1260	7.86	6.97	8.77	878569	832120	5.29
Aroclor-1260 {2}	8.12	7.22	9.02	1271845	1189353	6.49
Aroclor-1260 {3}	9.71	8.82	10.62	1227153	1185673	3.38
Aroclor-1260 {4}	10.22	9.32	11.12	2838264	2792253	1.62
Aroclor-1260 {5}	10.81	9.91	11.71	2046355	2004250	2.06

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.82 **DCB 1** 12.17 **TCMX 2** 2.88 **DCB 2** 12.50

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA170309-12	03/10/2017	17:26	2.82		12.17		2.88		12.50	
PCB	LCSA170309-12	03/10/2017	17:44	2.82		12.17		2.88		12.50	
PCB	E17-01857-001MS	03/10/2017	18:01	2.82		12.17		2.88		12.50	
PCB	E17-01857-001MSD	03/10/2017	18:18	2.82		12.17		2.88		12.50	
550TP	E17-01032-009	03/10/2017	18:36	2.82		12.17		2.88		12.50	
CY-B2	E17-01032-010	03/10/2017	18:53	2.82		12.17		2.88		12.50	
CY-B1	E17-01032-011	03/10/2017	19:10	2.82		12.17		2.88		12.50	
FB-4	E17-01032-012	03/10/2017	19:28	2.83		12.17		2.89		12.50	
TW-1	E17-01857-001	03/10/2017	19:45	2.82		12.17		2.88		12.50	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.79 **DCB 1** 12.16 **TCMX 2** 2.87 **DCB 2** 12.52

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS170320-14	03/21/2017	15:56	2.79		12.16		2.87		12.52	
PCB	LCSS170320-14	03/21/2017	16:13	2.79		12.16		2.86		12.52	
PCB	E17-02190-001MS	03/21/2017	16:30	2.80		12.16		2.86		12.52	
PCB	E17-02190-001MSD	03/21/2017	16:48	2.80		12.16		2.86		12.51	
PX-1	E17-02182-001	03/21/2017	17:05	2.80		12.16		2.86		12.51	
PX-2	E17-02182-002	03/21/2017	17:40	2.80		12.16		2.85		12.51	
PX-3	E17-02182-003	03/21/2017	18:14	2.80		12.16		2.85		12.51	
PX-4	E17-02182-004	03/21/2017	18:49	2.80		12.16		2.85		12.51	
PX-5	E17-02182-005	03/21/2017	19:23	2.79		12.16		2.86		12.51	
S-6	E17-02182-006	03/21/2017	19:58	2.80		12.16		2.86		12.51	
TP-2-COM	E17-02190-001	03/21/2017	20:32	2.80		12.16		2.86		12.51	
TP-3-COM	E17-02190-002	03/21/2017	20:49	2.80		12.16		2.86		12.51	
E-66-0.5	E17-02179-011	03/21/2017	21:58	2.80		12.16		2.86		12.51	
E-61-0.5	E17-02179-001	03/21/2017	22:16	2.80		12.16		2.86		12.51	
E-61-2.0	E17-02179-002	03/21/2017	22:33	2.80		12.16		2.86		12.51	
E-62-0.5	E17-02179-003	03/21/2017	23:07	2.80		12.16		2.85		12.51	
E-62-2.0	E17-02179-004	03/21/2017	23:25	2.80		12.16		2.86		12.51	
E-63-0.5	E17-02179-005	03/21/2017	23:42	2.80		12.16		2.86		12.51	
E-64-2.0	E17-02179-008	03/22/2017	00:51	2.80		12.16		2.86		12.52	
E-65-0.5	E17-02179-009	03/22/2017	01:08	2.79		12.16		2.86		12.51	
E-66-2.0	E17-02179-012	03/22/2017	01:26	2.80		12.16		2.85		12.51	
E-67-0.5	E17-02179-013	03/22/2017	01:43	2.80		12.16		2.86		12.51	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.79 **DCB 1** 12.16 **TCMX 2** 2.87 **DCB 2** 12.52

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS170320-14	03/21/2017	15:56	2.79		12.16		2.87		12.52	
E-64-0.5	E17-02179-007	03/22/2017	11:16	2.80		12.16		2.86		12.51	
E-61-0.5	E17-02179-001DL	03/22/2017	11:33	2.80		12.16		2.85		12.51	
E-61-2.0	E17-02179-002DL	03/22/2017	11:50	2.80		12.16		2.85		12.51	
E-63-0.5	E17-02179-005DL	03/22/2017	12:08	2.79		12.16		2.85		12.51	
E-63-2.0	E17-02179-006	03/22/2017	12:25	2.80		12.16		2.85		12.51	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-Y **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 **2.81** **DCB 1** **12.16** **TCMX 2** **2.88** **DCB 2** **12.51**

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKS170320-16	03/22/2017	09:22	2.81		12.16		2.88		12.51	
PCB	LCSS170320-16	03/22/2017	09:40	2.81		12.16		2.87		12.50	
PCB	E17-02160-004MS	03/22/2017	09:57	2.81		12.16		2.87		12.50	
PCB	E17-02160-004MSD	03/22/2017	10:14	2.81		12.16		2.87		12.50	
E-67-2.0	E17-02179-014	03/22/2017	10:32	2.81		12.16		2.87		12.50	
E-68-0.5	E17-02179-015	03/22/2017	10:49	2.81		12.16		2.87		12.50	
E-68-2.0	E17-02179-016	03/22/2017	11:07	2.81		12.16		2.87		12.50	
X-1-0.5-	E17-02179-017	03/22/2017	12:05	2.81		12.16		2.87		12.50	
E-69-0.5	E17-02179-018	03/22/2017	12:22	2.81		12.16		2.87		12.50	
E-70-0.5	E17-02179-020	03/22/2017	12:57	2.81		12.16		2.87		12.50	
E-70-2.0	E17-02179-021	03/22/2017	13:14	2.81		12.16		2.87		12.50	
E-71-0.5	E17-02179-022	03/22/2017	13:32	2.81		12.16		2.87		12.50	
X-2-0.5-	E17-02179-024	03/22/2017	13:49	2.81		12.16		2.87		12.50	
E-72-0.5	E17-02179-025	03/22/2017	14:06	2.81		12.16		2.87		12.50	
E-72-2.0	E17-02179-026	03/22/2017	14:24	2.81		12.16		2.87		12.50	
CRT-1	E17-02160-001	03/22/2017	14:41	2.81		12.16		2.87		12.50	
CRT-2	E17-02160-002	03/22/2017	14:59	2.81		12.16		2.87		12.50	
CRT-3	E17-02160-003	03/22/2017	15:16	2.81		12.16		2.87		12.50	
CRT-4	E17-02160-004	03/22/2017	15:33	2.81		12.16		2.87		12.50	
CRT-5	E17-02160-005	03/22/2017	15:51	2.81		12.16		2.87		12.50	
CRT-6	E17-02160-006	03/22/2017	16:08	2.81		12.16		2.87		12.50	
CRT-7	E17-02160-007	03/22/2017	16:26	2.81		12.16		2.87		12.50	
CRT-8	E17-02160-008	03/22/2017	16:43	2.81		12.16		2.87		12.50	
CRT-9	E17-02160-009	03/22/2017	17:00	2.81		12.16		2.87		12.50	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB RETENTION TIME SHIFT SUMMARY

Instrument ID: GC-R **Column:** DB-5/DB-1701P

Surrogate RT from initial calibration :

TCMX 1 2.79 **DCB 1** 12.16 **TCMX 2** 2.87 **DCB 2** 12.52

Client ID	Lab Sample ID	Date Analyzed	Time Analyzed	TCMX 1 RT	#	DCB 1 RT	#	TCMX 2 RT	#	DCB 2 RT	#
PCB	BLKA170323-07	03/23/2017	15:06	2.79		12.16		2.87		12.52	
PCB	LCSA170323-07	03/23/2017	15:23	2.79		12.16		2.85		12.51	
EB-01-03	E17-02179-027	03/23/2017	15:40	2.80		12.16		2.86		12.51	

Surrogate QC Limits

TCMX = Tetrachloro-m-xylene (± 0.10 Minutes)

DCB = Decachlorobiphenyl (± 0.10 Minutes)

\# Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out
M Matrix interference

PCB SAMPLE DATA

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6898.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 22:16
Operator : JS
Sample : E-61-0.5,E17-02179-001,S,5.52g,18.2,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:21:26 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	7552.1E6	2732.4E6	158.761	202.667 #
Spiked Amount 200.000			Recovery	=	79.38%	101.33%
2) S DCB	12.16	12.51	5680.8E6	2714.6E6	180.120	267.320m#
Spiked Amount 200.000			Recovery	=	90.06%	133.66%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.36	8.11	51861.2E6	15803.8E6	14403.280	24033.540 #
34) L8 Aroclor-1260 {2}	9.04	8.52	35618.3E6	22239.5E6	21117.447	30687.473 #
35) L8 Aroclor-1260 {3}	9.54	9.71	93980.5E6	17913.2E6	23505.273	29856.524 #
36) L8 Aroclor-1260 {4}	9.99	10.22	55992.5E6	45134.1E6	27085.745	38025.134 #
37) L8 Aroclor-1260 {5}	11.06	10.81	21513.3E6	34256.9E6	24545.449	40115.947 #
Sum Aroclor-1260			258965.9E6	135347.4E6	110657.193	162718.617
Average Aroclor-1260					22131.439	32543.723
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

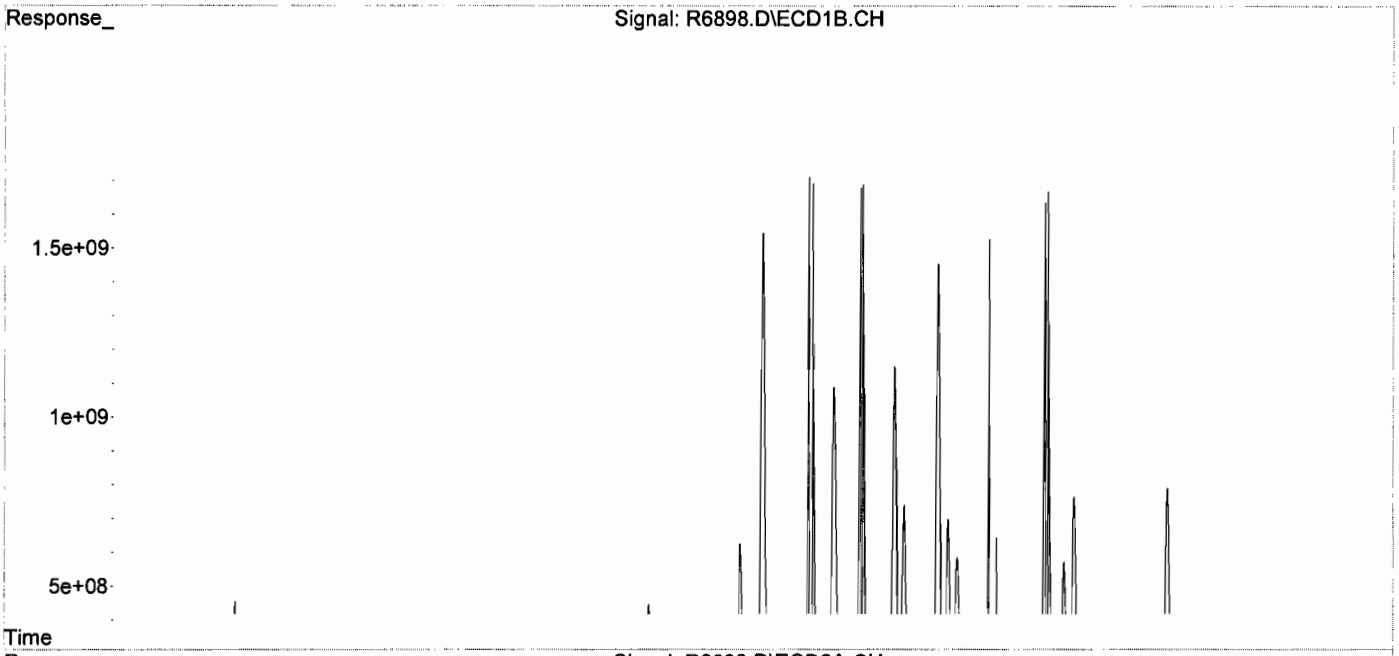
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

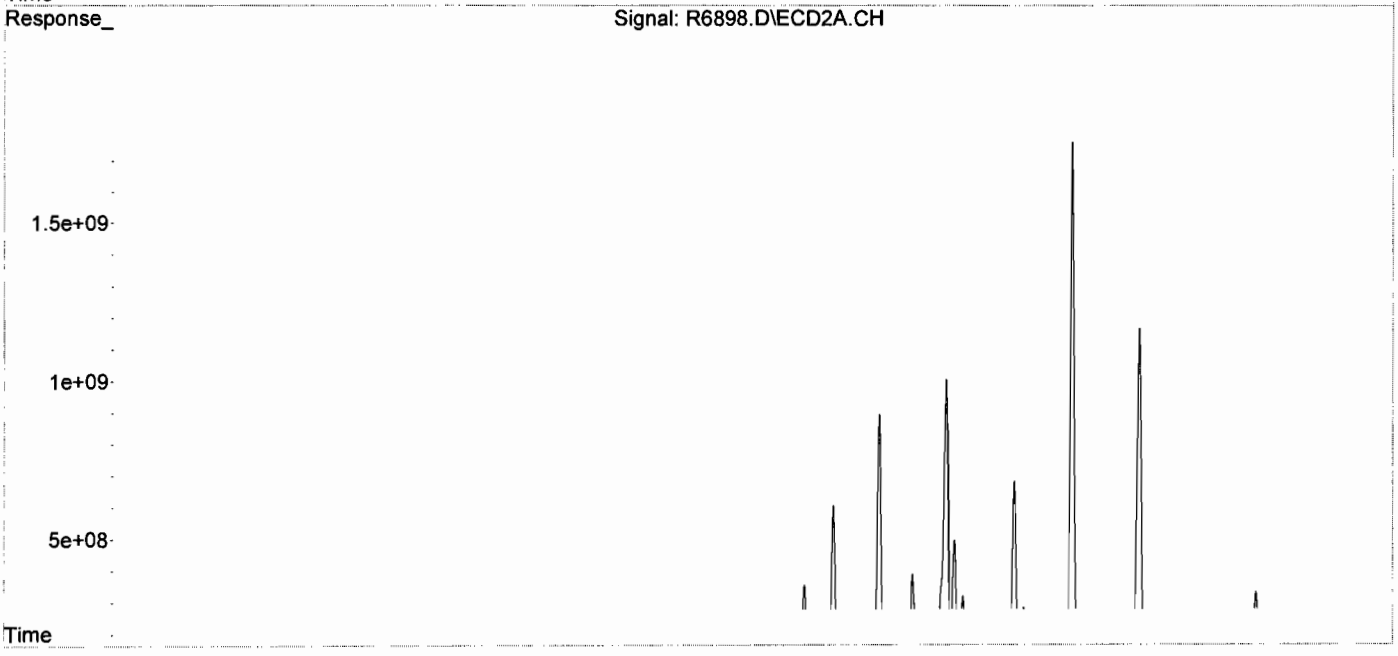
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6898.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 22:16
Operator : JS
Sample : E-61-0.5,E17-02179-001,S,5.52g,18.2,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 15 Sample Multiplier: 1

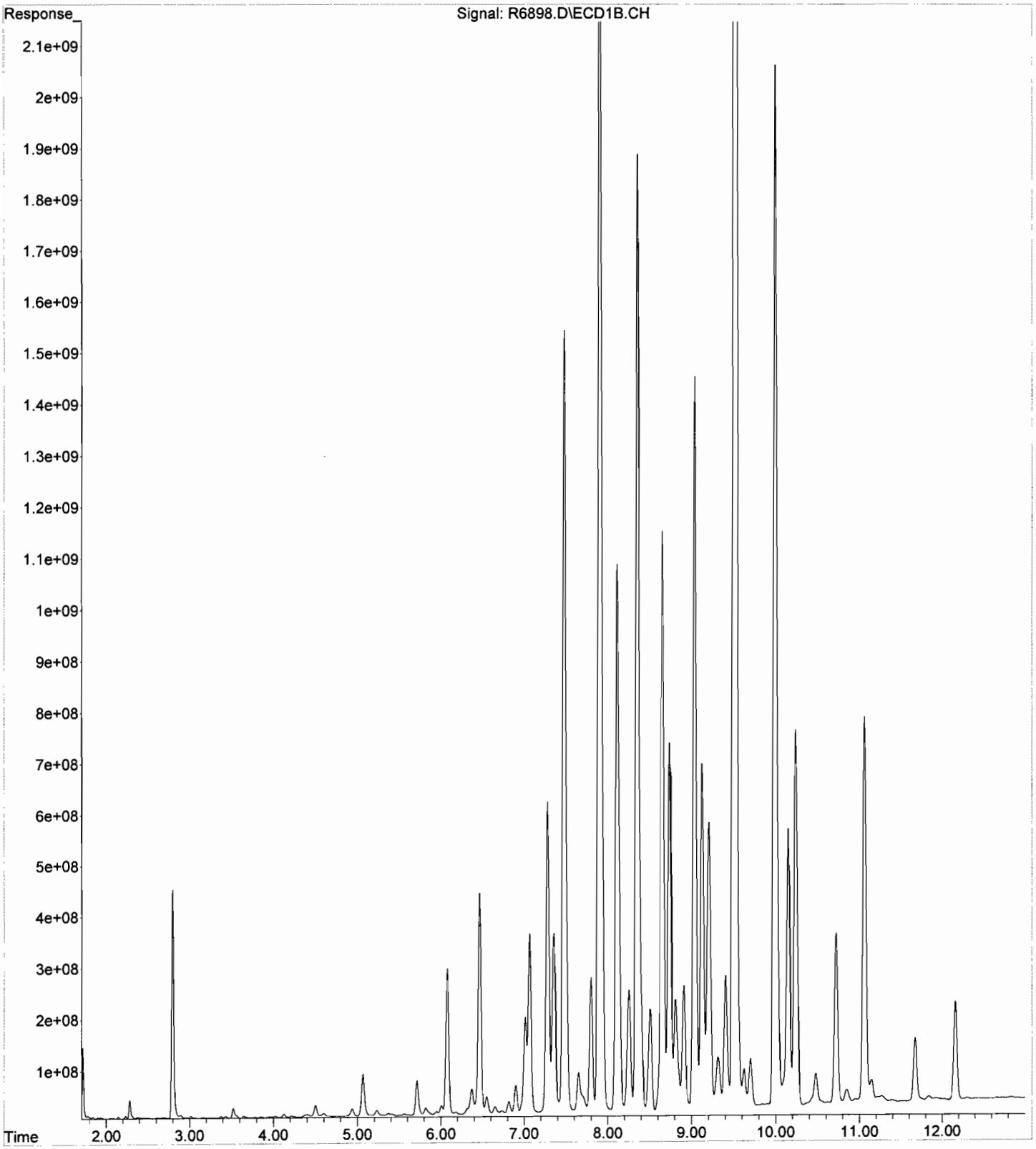
Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:21:26 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

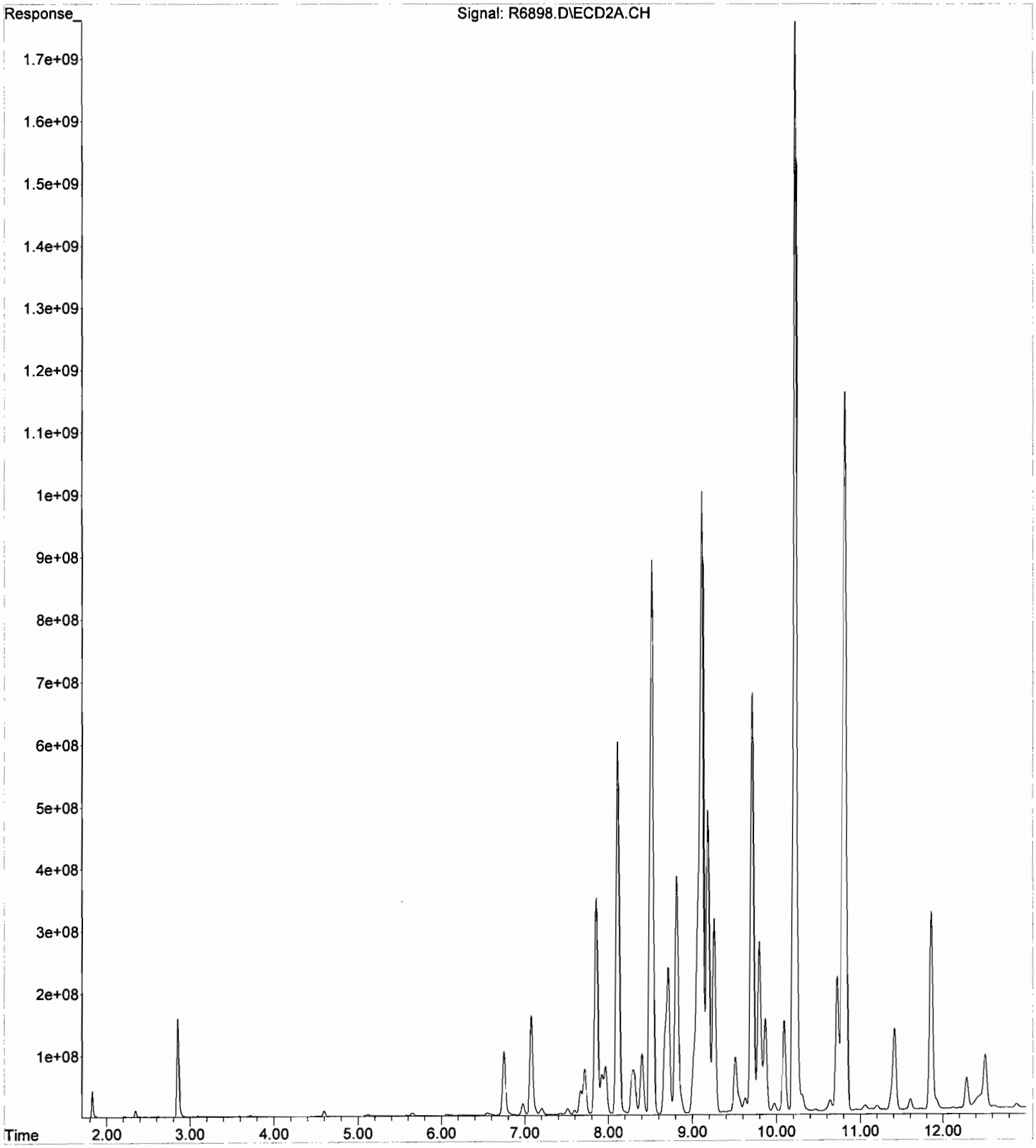




File :C:\MSDCHEM\1\DATA\17-03-21\R6898.D
Operator : JS
Acquired : 21 Mar 2017 22:16 using AcqMethod RPCB0315.M
Instrument : GC_R
Sample Name: E-61-0.5,E17-02179-001,S,5.52g,18.2,20
Misc Info : 170320-14,03/20/17,03/17/17,1
Vial Number: 15



File :C:\MSDCHEM\1\DATA\17-03-21\R6898.D
Operator : JS
Acquired : 21 Mar 2017 22:16 using AcqMethod RPCB0315.M
Instrument : GC_R
Sample Name: E-61-0.5,E17-02179-001,S,5.52g,18.2,20
Misc Info : 170320-14,03/20/17,03/17/17,1
Vial Number: 15



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6916.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:33
Operator : JS
Sample : E-61-0.5,E17-02179-001DL,S,5.52g,18.2,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:42:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.85	213.7E6	67190928	4.492	4.984
Spiked Amount 200.000			Recovery	=	2.25%	2.49%
2) S DCB	12.16	12.51	147.1E6	76697119	4.663m	7.553m#
Spiked Amount 200.000			Recovery	=	2.33%	3.78%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	1809.8E6	369.2E6	502.621	561.398
34) L8 Aroclor-1260 {2}	9.03	8.52	970.0E6	486.2E6	575.072	670.938
35) L8 Aroclor-1260 {3}	9.51	9.71	2608.3E6	377.0E6	652.352	628.370
36) L8 Aroclor-1260 {4}	9.99	10.22	1411.9E6	839.4E6	682.985	707.197
37) L8 Aroclor-1260 {5}	11.06	10.81	567.8E6	643.1E6	647.804	753.057
Sum Aroclor-1260			7367.7E6	2714.9E6	3060.834	3320.960
Average Aroclor-1260					612.167	664.192
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

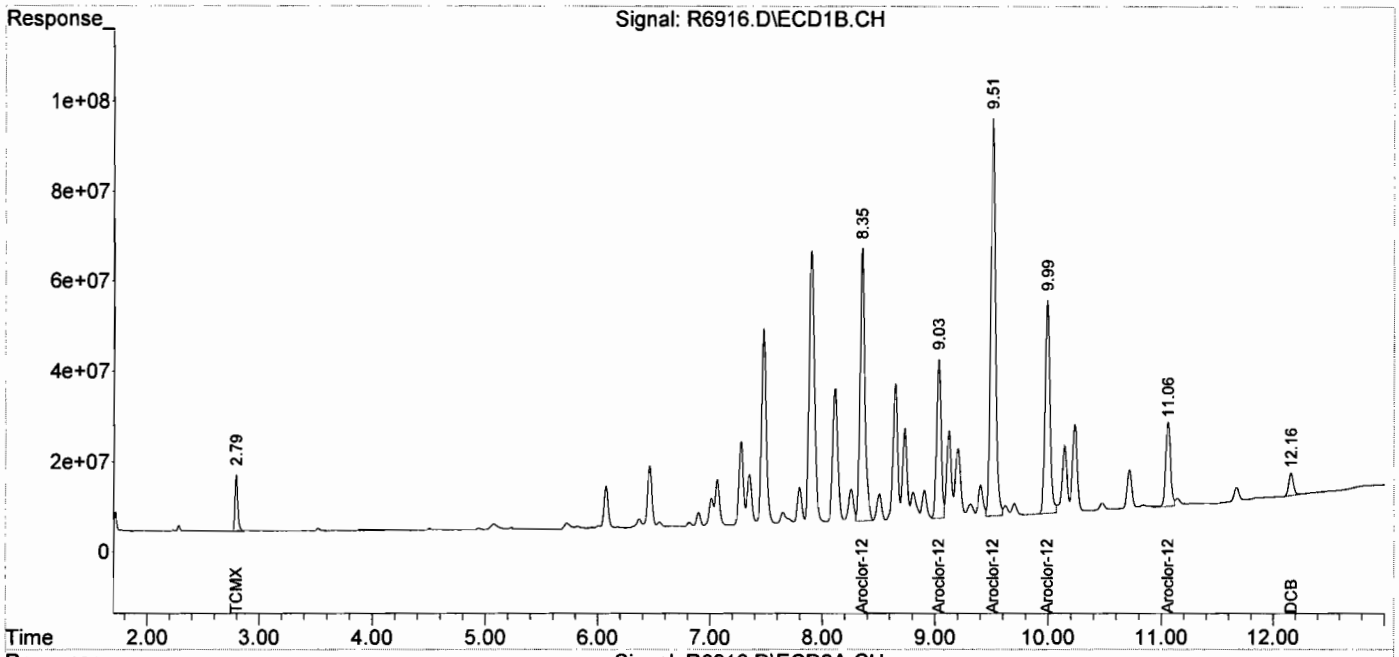
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

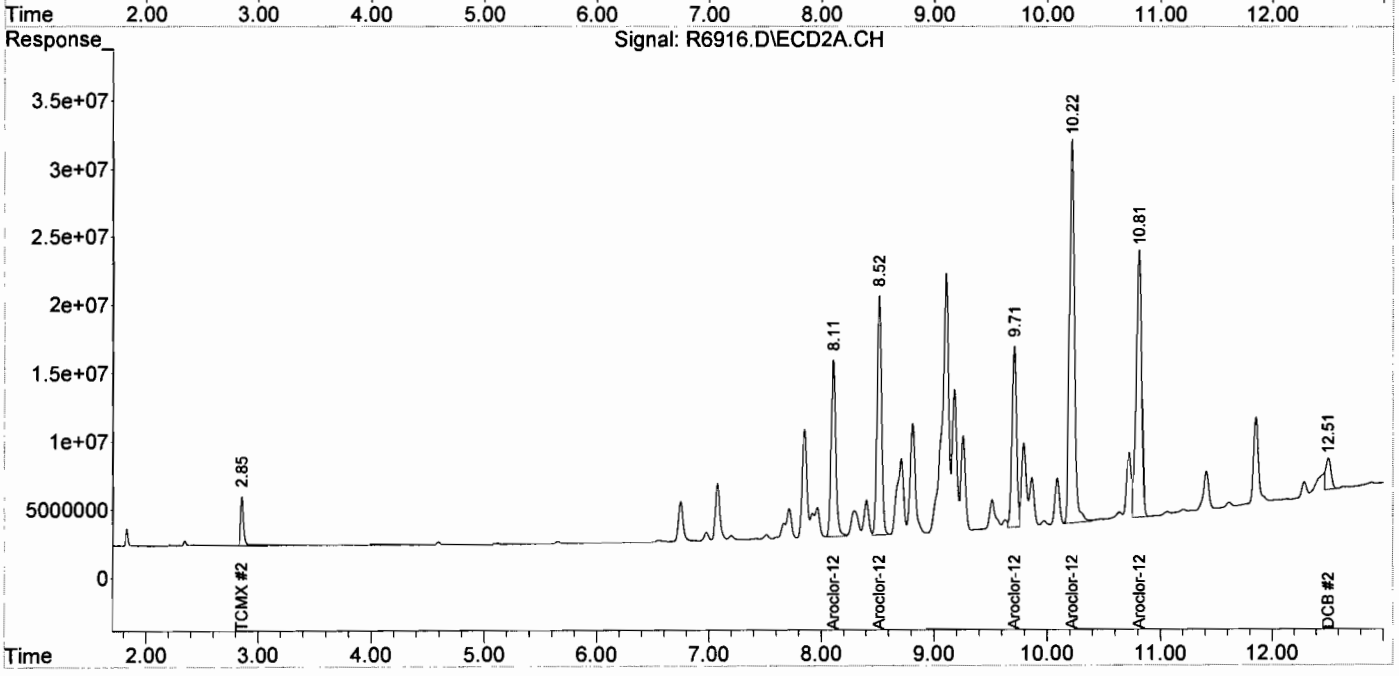
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6916.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:33
Operator : JS
Sample : E-61-0.5,E17-02179-001DL,S,5.52g,18.2,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:42:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6899.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 22:33
Operator : JS
Sample : E-61-2.0,E17-02179-002,S,5.49g,14.4,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:21:57 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	7691.6E6	2751.1E6	161.691	204.058 #
Spiked Amount 200.000			Recovery	=	80.85%	102.03%
2) S DCB	12.16	12.51	5831.6E6	2388.8E6	184.902	235.232m#
Spiked Amount 200.000			Recovery	=	92.45%	117.62%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	33217.9E6	9921.6E6	9225.525	15088.146 #
34) L8 Aroclor-1260 {2}	9.03	8.52	23703.2E6	13800.5E6	14053.209	19042.727 #
35) L8 Aroclor-1260 {3}	9.52	9.71	69395.3E6	12190.6E6	17356.311	20318.470
36) L8 Aroclor-1260 {4}	9.99	10.22	40111.5E6	30067.8E6	19403.492	25331.884 #
37) L8 Aroclor-1260 {5}	11.06	10.81	19101.5E6	23633.0E6	21793.666	27675.017 #
Sum Aroclor-1260			185529.4E6	89613.4E6	81832.203	107456.244
Average Aroclor-1260					16366.441	21491.249
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

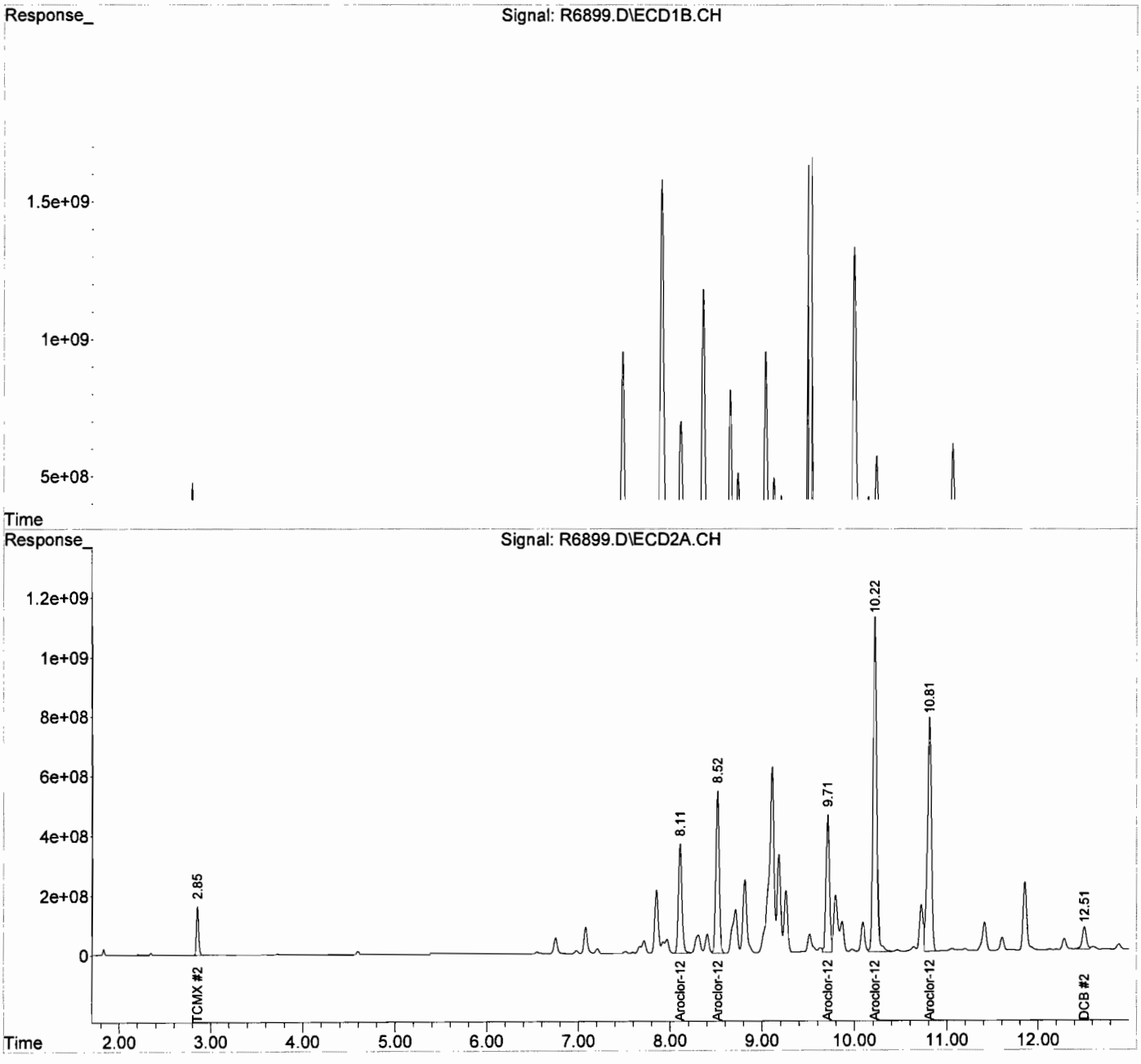
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

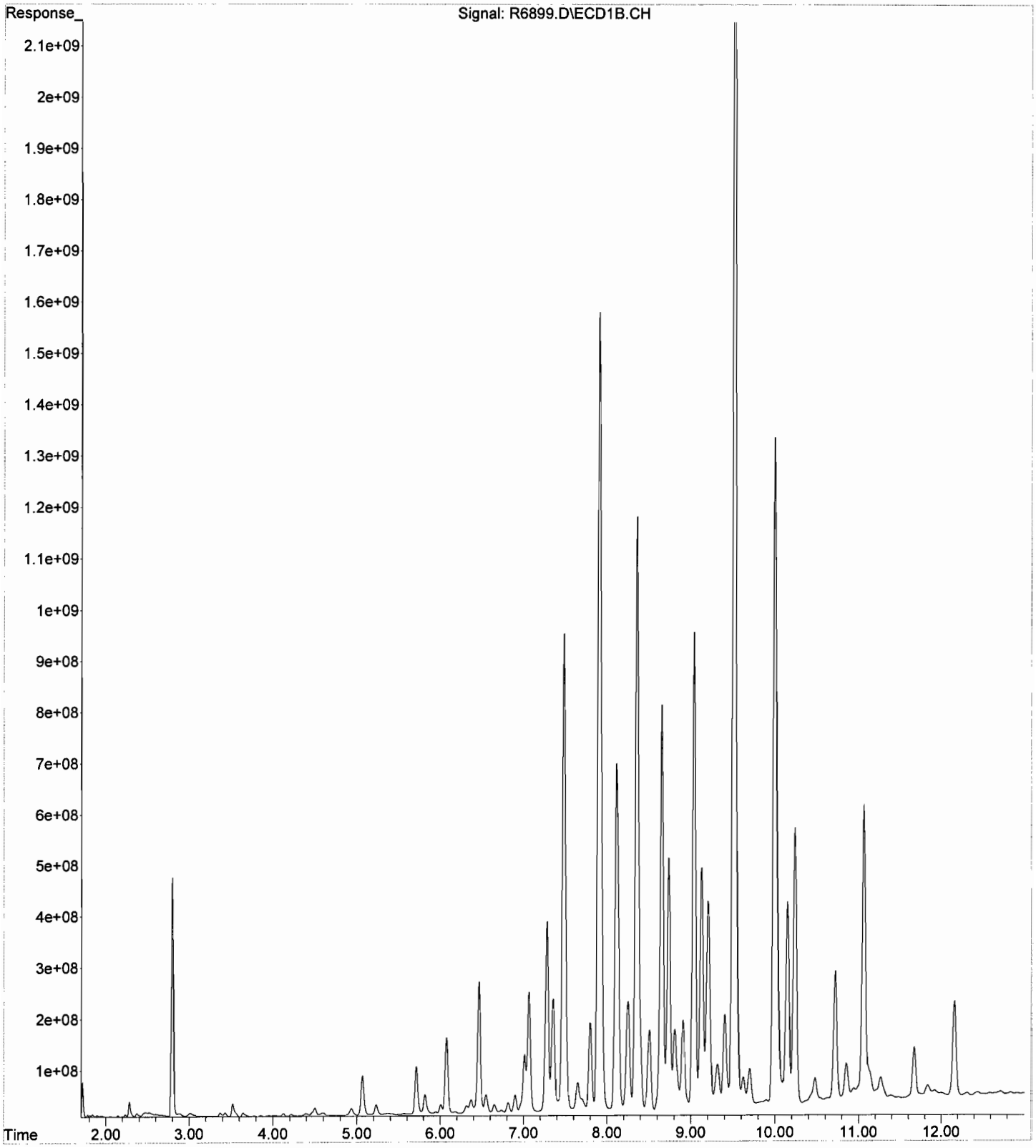
Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6899.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 22:33
Operator : JS
Sample : E-61-2.0,E17-02179-002,S,5.49g,14.4,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:21:57 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



File :C:\MSDCHEM\1\DATA\17-03-21\R6899.D
Operator : JS
Acquired : 21 Mar 2017 22:33 using AcqMethod RPCB0315.M
Instrument : GC_R
Sample Name: E-61-2.0,E17-02179-002,S,5.49g,14.4,20
Misc Info : 170320-14,03/20/17,03/17/17,1
Vial Number: 16



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6917.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:50
Operator : JS
Sample : E-61-2.0,E17-02179-002DL,S,5.49g,14.4,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:42:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.85	184.9E6	58100084	3.887	4.309
Spiked Amount 200.000			Recovery	=	1.94%	2.15%
2) S DCB	12.16	12.51	120.0E6	45014380	3.803m	4.433m
Spiked Amount 200.000			Recovery	=	1.90%	2.22%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	1116.7E6	211.4E6	310.142	321.532
34) L8 Aroclor-1260 {2}	9.03	8.52	610.9E6	285.6E6	362.174	394.145
35) L8 Aroclor-1260 {3}	9.51	9.71	1627.7E6	235.1E6	407.112	391.871
36) L8 Aroclor-1260 {4}	9.99	10.22	945.2E6	515.6E6	457.230	434.423
37) L8 Aroclor-1260 {5}	11.06	10.81	395.8E6	403.0E6	451.570	471.873
Sum Aroclor-1260			4696.3E6	1650.8E6	1988.228	2013.843
Average Aroclor-1260					397.646	402.769
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

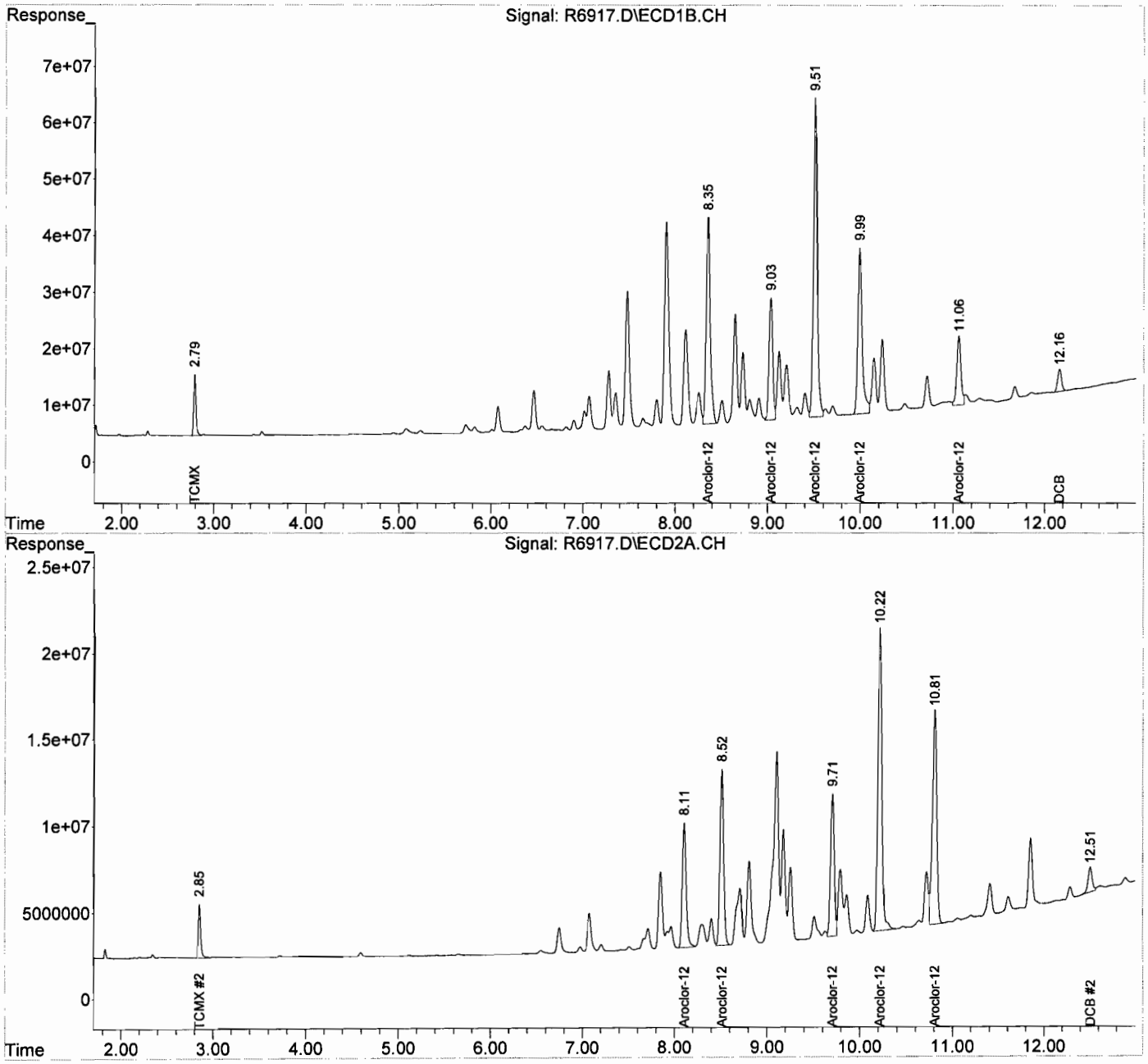
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6917.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:50
Operator : JS
Sample : E-61-2.0,E17-02179-002DL,S,5.49g,14.4,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:42:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6900.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:07
Operator : JS
Sample : E-62-0.5,E17-02179-003,S,5.04g,12.0,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:08:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.85	8695.6E6	2752.3E6	182.799	204.149
Spiked Amount 200.000			Recovery	=	91.40%	102.07%
2) S DCB	12.16	12.51	5557.5E6	2204.4E6	176.210	217.079
Spiked Amount 200.000			Recovery	=	88.11%	108.54%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

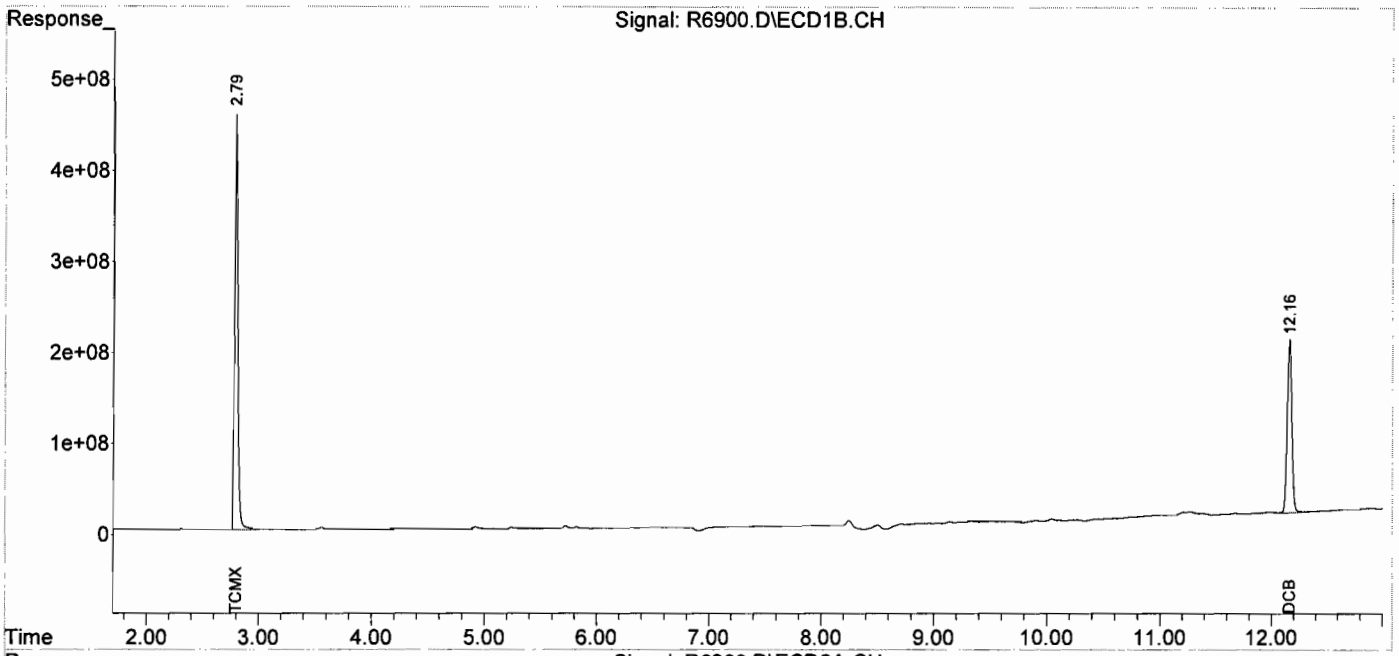
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

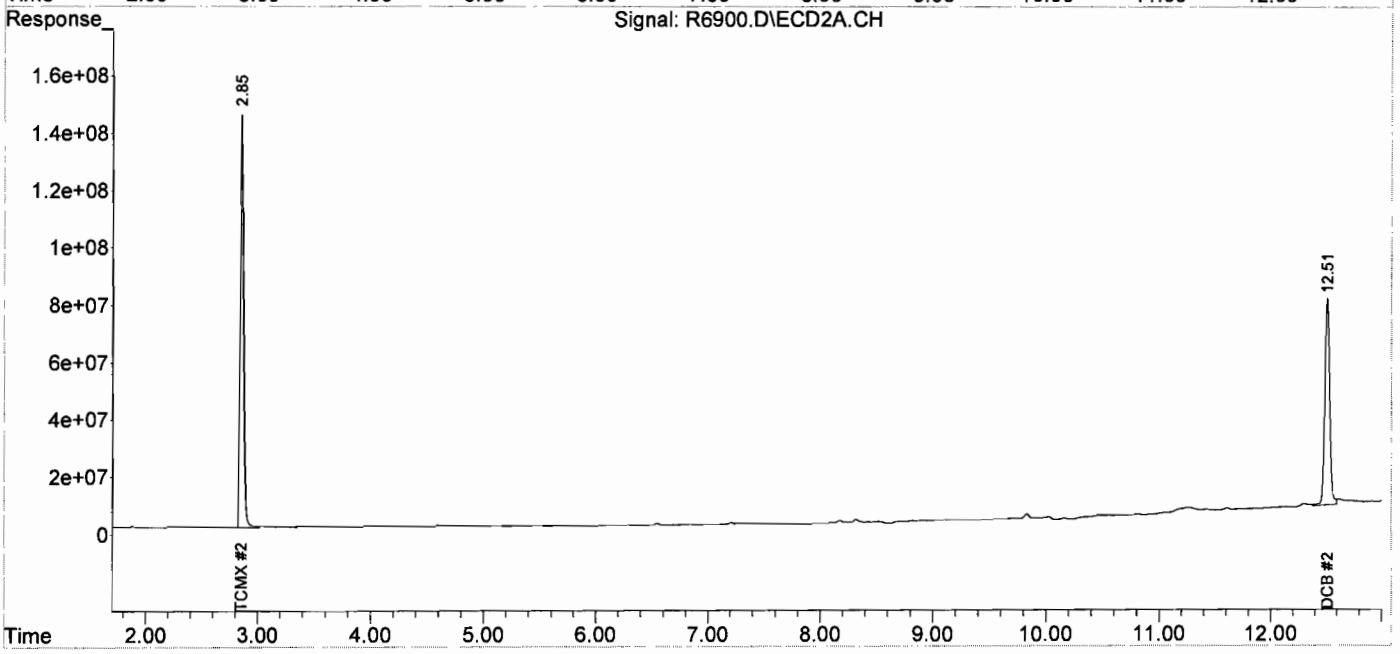
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6900.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:07
Operator : JS
Sample : E-62-0.5,E17-02179-003,S,5.04g,12.0,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:08:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6901.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:25
Operator : JS
Sample : E-62-2.0,E17-02179-004,S,5.16g,11.8,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:09:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	8635.1E6	2749.5E6	181.526	203.938
Spiked Amount 200.000			Recovery	=	90.76%	101.97%
2) S DCB	12.16	12.51	5674.3E6	2321.9E6	179.913	228.649 #
Spiked Amount 200.000			Recovery	=	89.96%	114.32%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

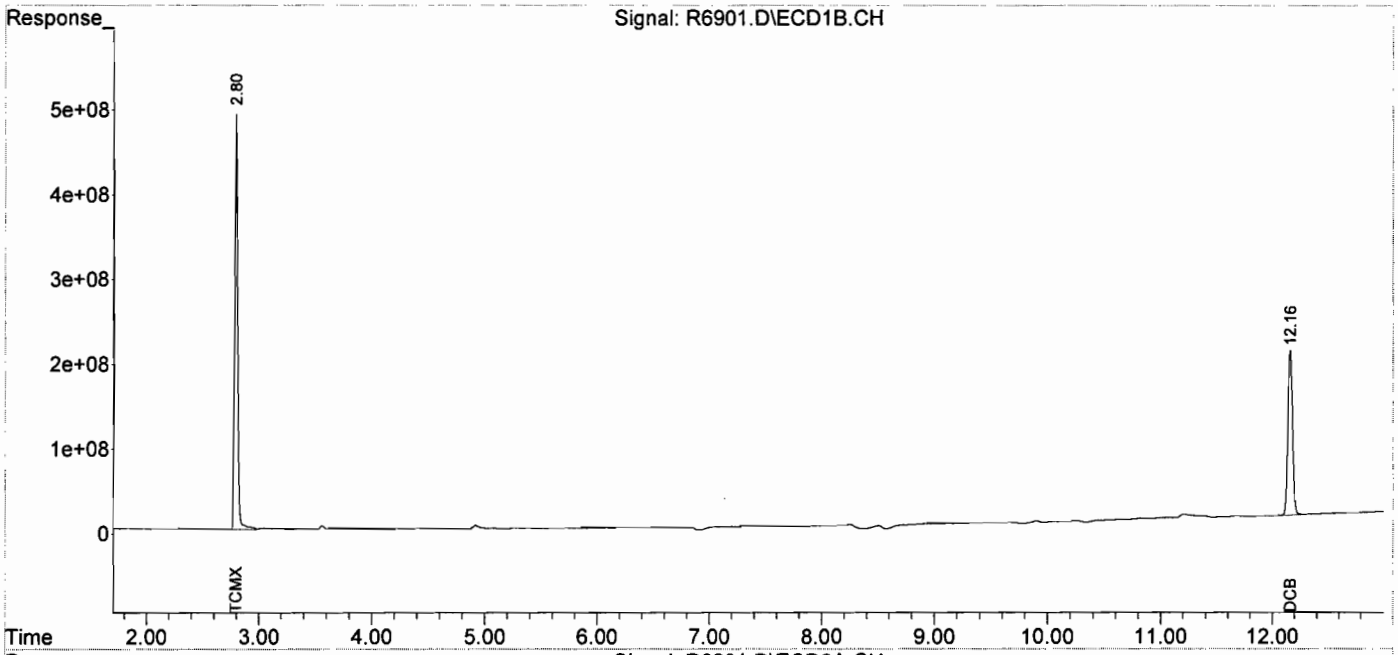
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

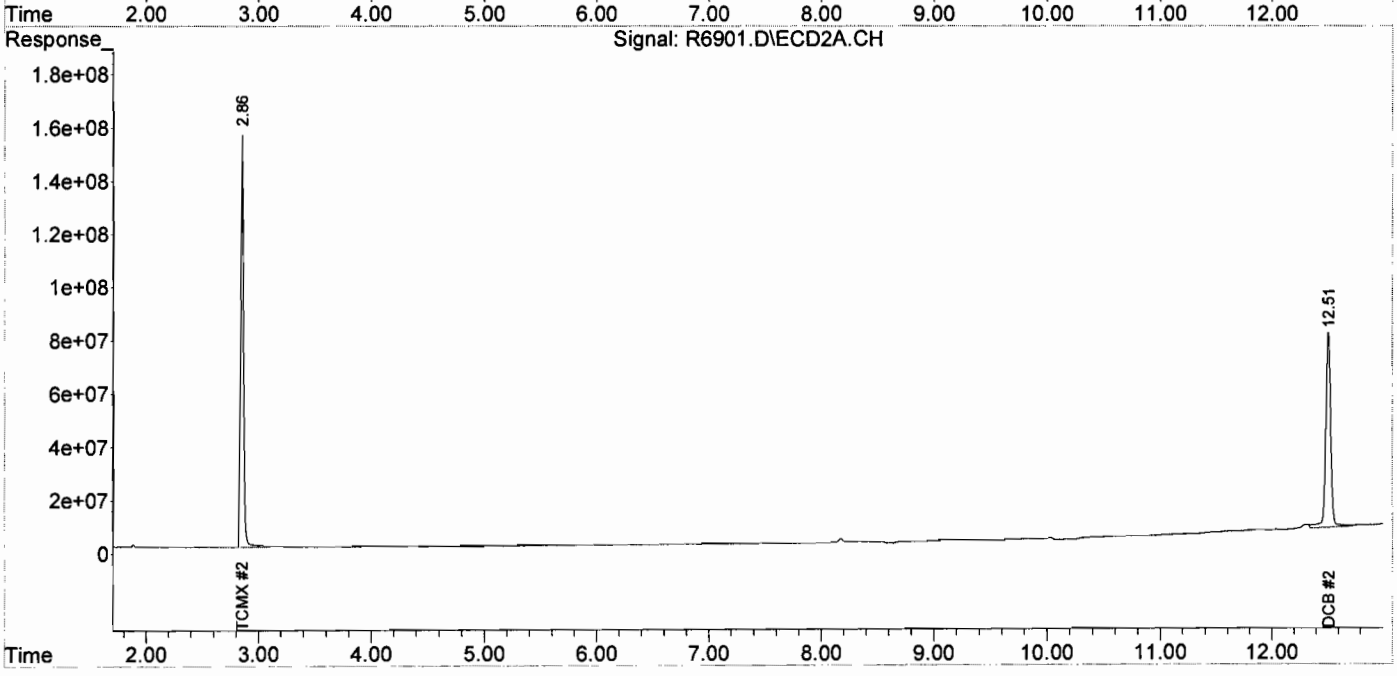
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6901.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:25
Operator : JS
Sample : E-62-2.0,E17-02179-004,S,5.16g,11.8,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:09:19 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6902.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:42
Operator : JS
Sample : E-63-0.5,E17-02179-005,S,5.40g,23.3,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:22:29 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	8042.6E6	2872.2E6	169.071	213.040 #
Spiked Amount 200.000			Recovery	=	84.54%	106.52%
2) S DCB	12.16	12.51	6026.9E6	2426.3E6	191.094	238.927 #
Spiked Amount 200.000			Recovery	=	95.55%	119.46%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	32467.5E6	9411.4E6	9017.111	14312.330 #
34) L8 Aroclor-1260 {2}	9.03	8.52	24282.0E6	13575.9E6	14396.354	18732.835 #
35) L8 Aroclor-1260 {3}	9.52	9.71	69849.9E6	12162.4E6	17470.004	20271.521
36) L8 Aroclor-1260 {4}	9.99	10.22	39296.8E6	28717.6E6	19009.381	24194.383 #
37) L8 Aroclor-1260 {5}	11.06	10.81	19658.7E6	23360.6E6	22429.449	27356.022
Sum Aroclor-1260			185554.9E6	87227.9E6	82322.299	104867.091
Average Aroclor-1260					16464.460	20973.418
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

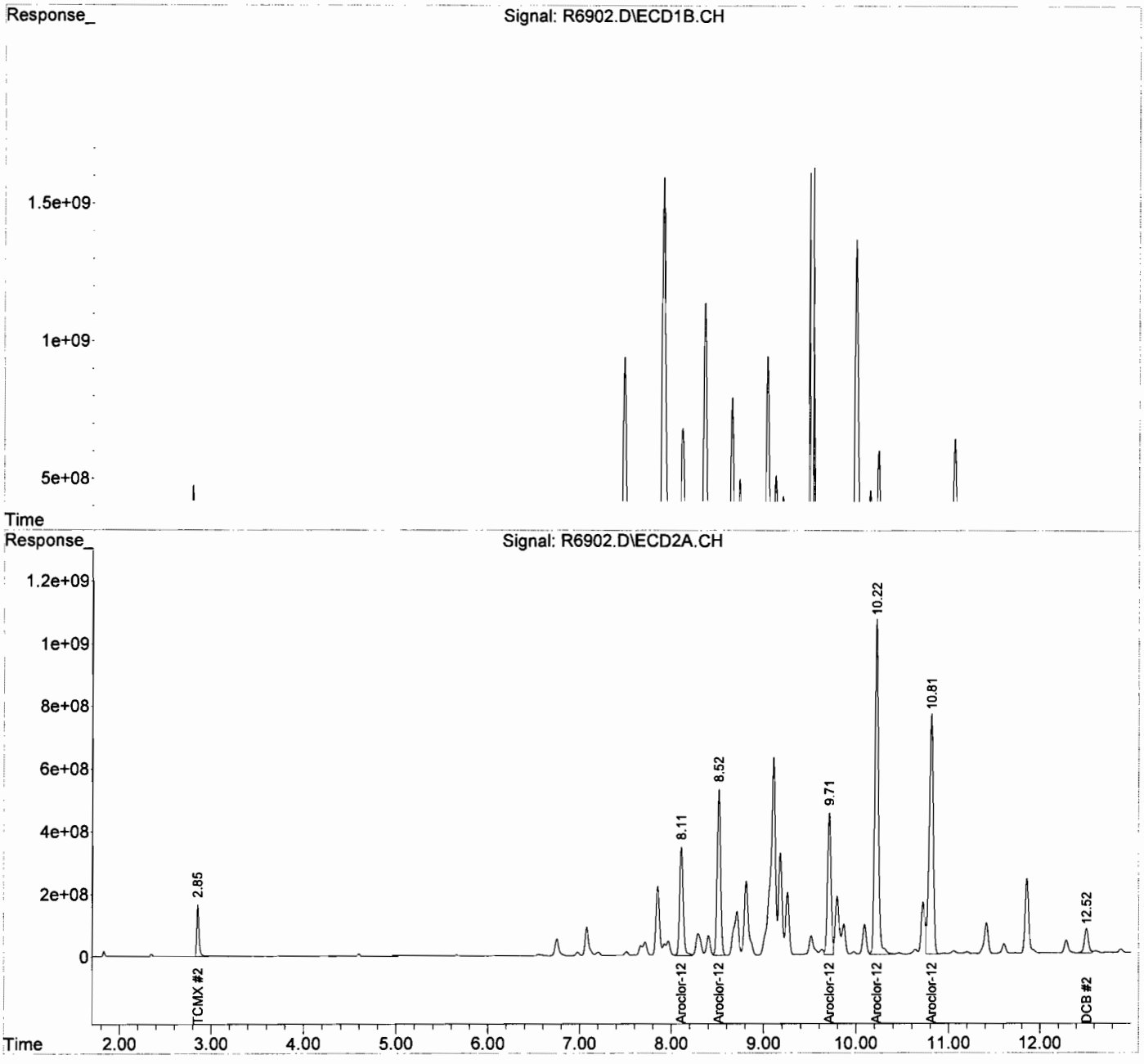
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

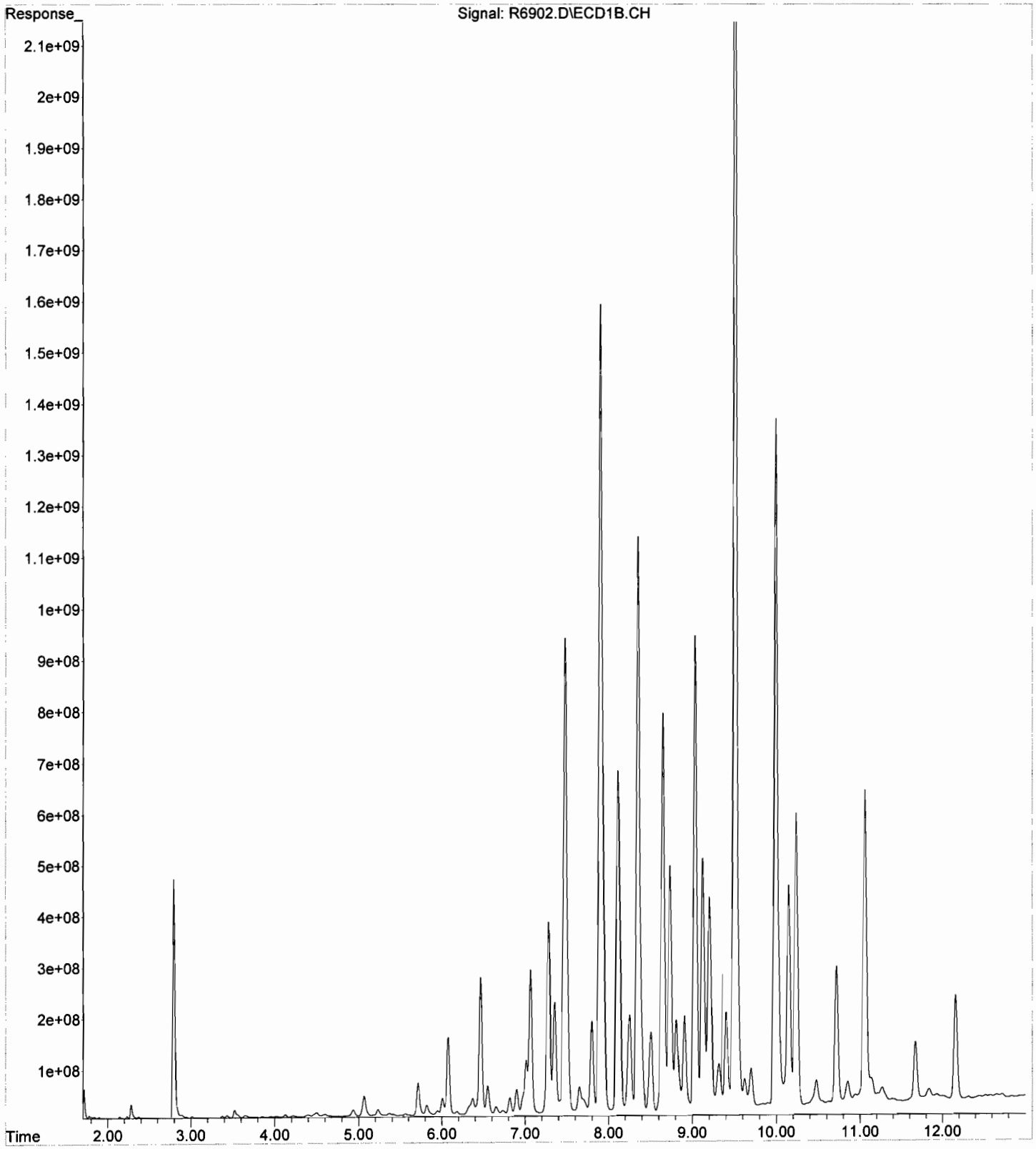
Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6902.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 23:42
Operator : JS
Sample : E-63-0.5,E17-02179-005,S,5.40g,23.3,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:22:29 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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



File :C:\MSDCHEM\1\DATA\17-03-21\R6902.D
Operator : JS
Acquired : 21 Mar 2017 23:42 using AcqMethod RPCB0315.M
Instrument : GC_R
Sample Name: E-63-0.5,E17-02179-005,S,5.40g,23.3,20
Misc Info : 170320-14,03/20/17,03/17/17,1
Vial Number: 19



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6918.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:08
Operator : JS
Sample : E-63-0.5,E17-02179-005DL,S,5.40g,23.3,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:43:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.85	221.0E6	69915330	4.645	5.186
Spiked Amount 200.000			Recovery	=	2.32%	2.59%
2) S DCB	12.16	12.51	157.5E6	56460890	4.994	5.560m
Spiked Amount 200.000			Recovery	=	2.50%	2.78%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	1279.7E6	236.5E6	355.417	359.635
34) L8 Aroclor-1260 {2}	9.03	8.52	697.9E6	321.9E6	413.769	444.230
35) L8 Aroclor-1260 {3}	9.51	9.71	1852.7E6	270.0E6	463.373	450.069
36) L8 Aroclor-1260 {4}	9.99	10.22	1071.0E6	586.4E6	518.087	494.054
37) L8 Aroclor-1260 {5}	11.06	10.81	456.9E6	463.1E6	521.314	542.315
Sum Aroclor-1260			5358.2E6	1878.0E6	2271.960	2290.303
Average Aroclor-1260					454.392	458.061
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

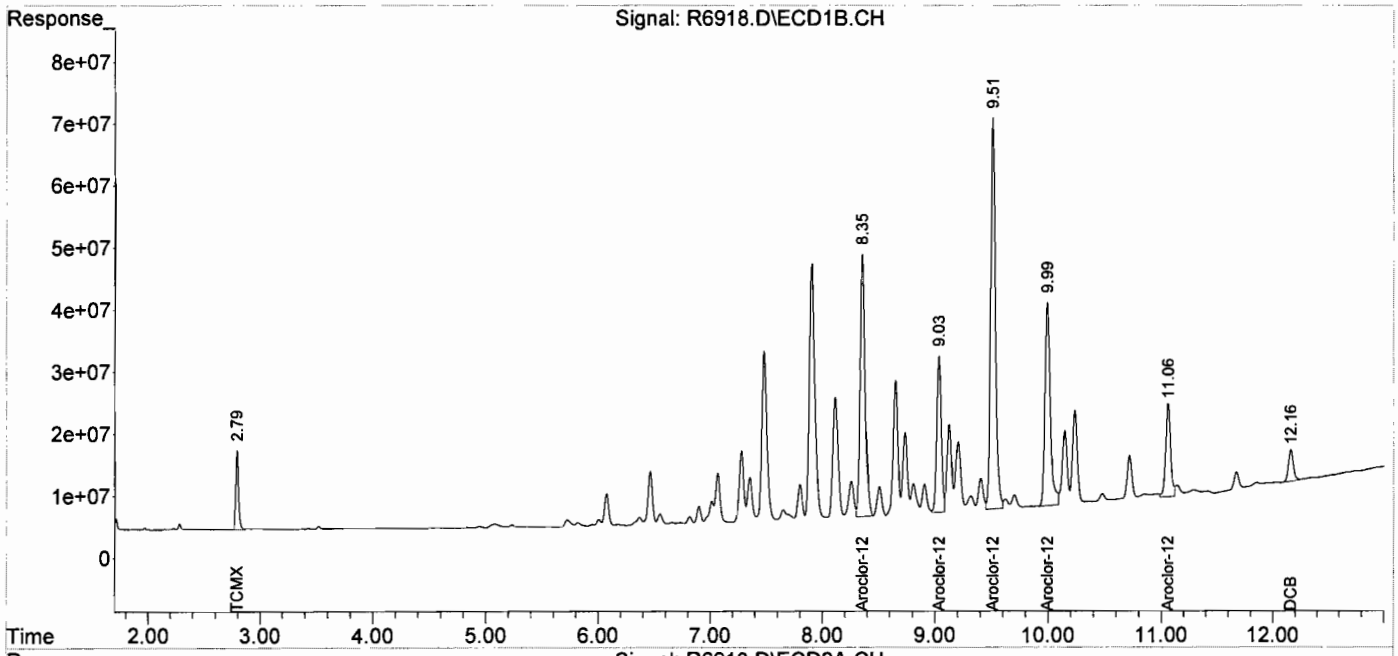
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

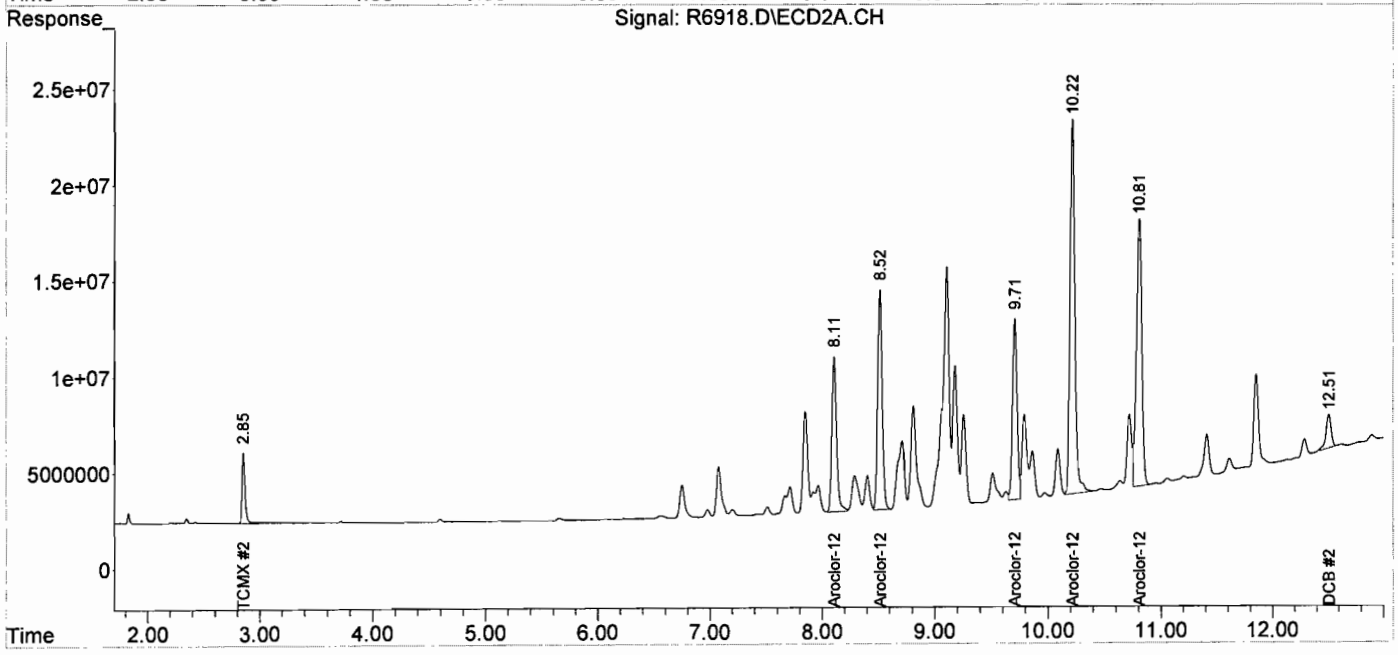
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6918.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:08
Operator : JS
Sample : E-63-0.5,E17-02179-005DL,S,5.40g,23.3,20
Misc : 170320-14,03/20/17,03/17/17,50
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:43:31 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6919.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:25
Operator : JS
Sample : E-63-2.0,E17-02179-006,S,5.83g,12.7,20
Misc : 170320-14,03/20/17,03/17/17,100
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:44:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.85	119.9E6	39470458	2.520	2.928
Spiked Amount 200.000			Recovery	=	1.26%	1.46%
2) S DCB	12.16	12.51	80488062	25710331	2.552m	2.532m
Spiked Amount 200.000			Recovery	=	1.28%	1.27%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	1222.2E6	199.0E6	339.439	302.623
34) L8 Aroclor-1260 {2}	9.04	8.52	627.0E6	280.6E6	371.717	387.248
35) L8 Aroclor-1260 {3}	9.51	9.71	1824.9E6	245.8E6	456.411	409.643
36) L8 Aroclor-1260 {4}	9.99	10.22	1098.3E6	577.9E6	531.279	486.865
37) L8 Aroclor-1260 {5}	11.06	10.81	507.7E6	459.4E6	579.216	537.983
Sum Aroclor-1260			5280.0E6	1762.7E6	2278.062	2124.363
Average Aroclor-1260					455.612	424.873
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

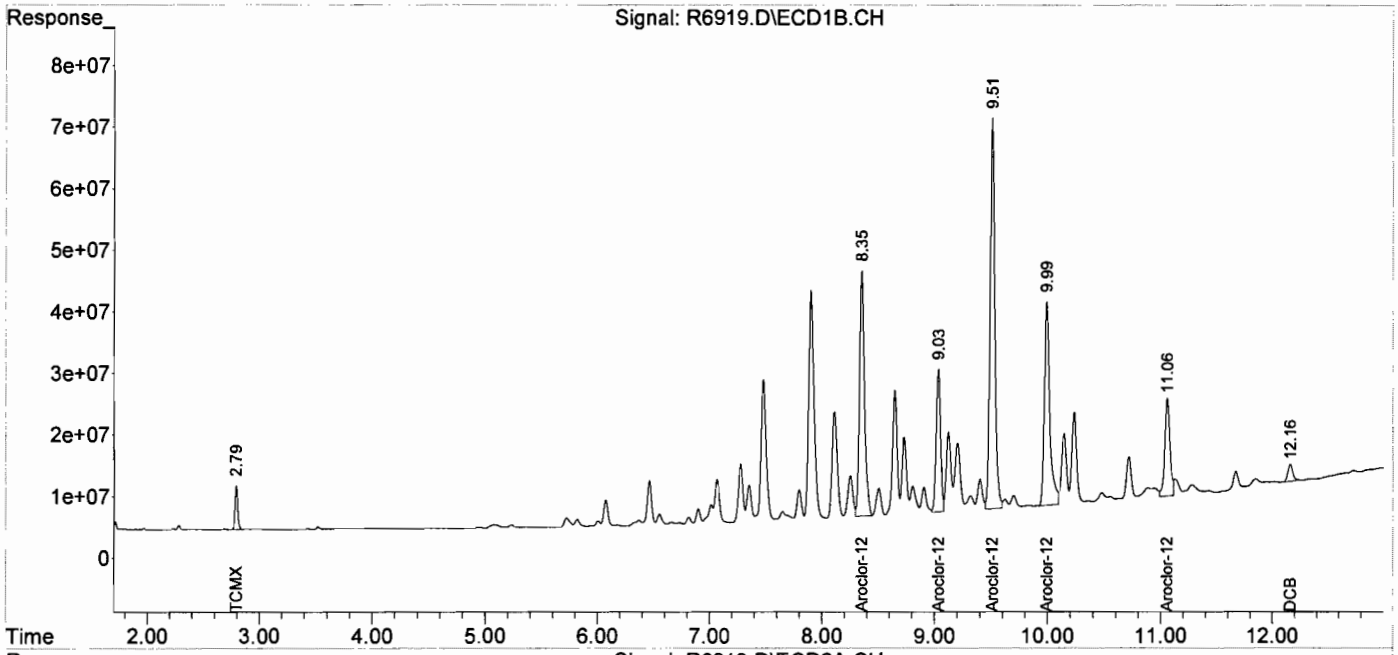
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

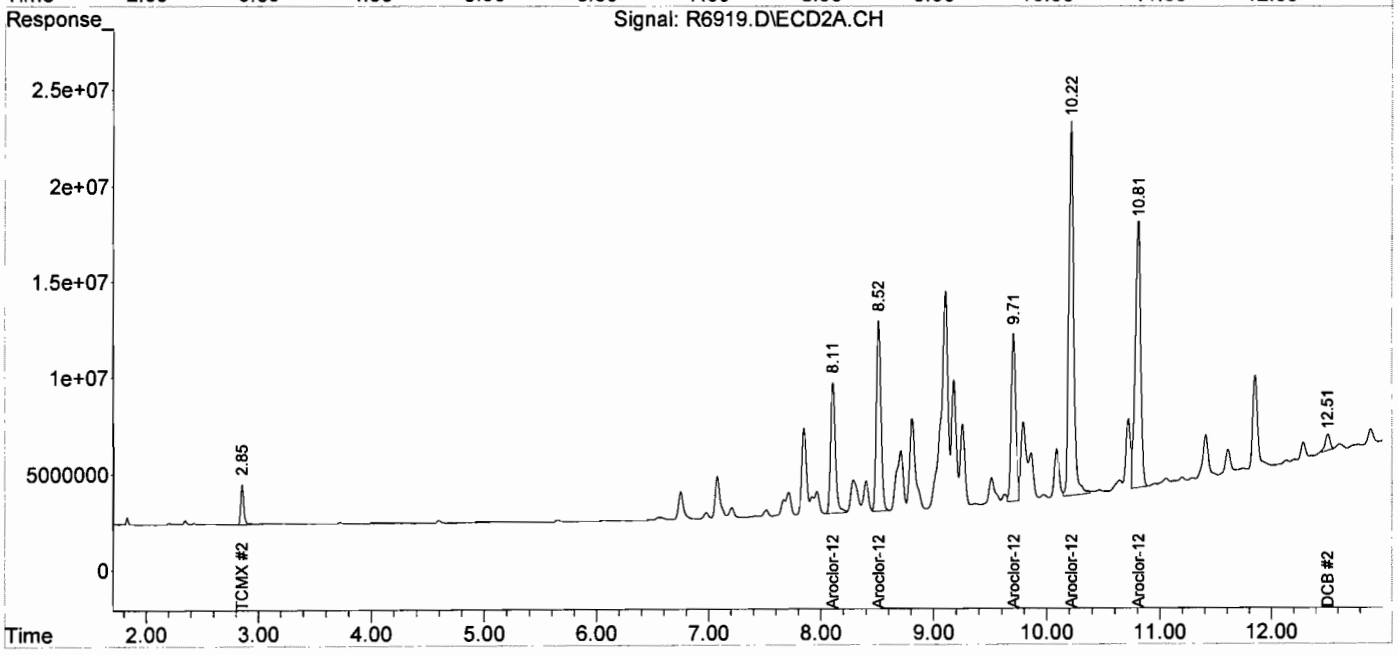
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6919.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:25
Operator : JS
Sample : E-63-2.0,E17-02179-006,S,5.83g,12.7,20
Misc : 170320-14,03/20/17,03/17/17,100
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:44:08 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6915.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:16
Operator : JS
Sample : E-64-0.5,E17-02179-007,S,5.34g,11.7,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:40:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	8761.0E6	2838.8E6	184.173	210.565
Spiked Amount 200.000			Recovery	=	92.09%	105.28%
2) S DCB	12.16	12.51	5441.2E6	2141.6E6	172.522	210.899
Spiked Amount 200.000			Recovery	=	86.26%	105.45%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

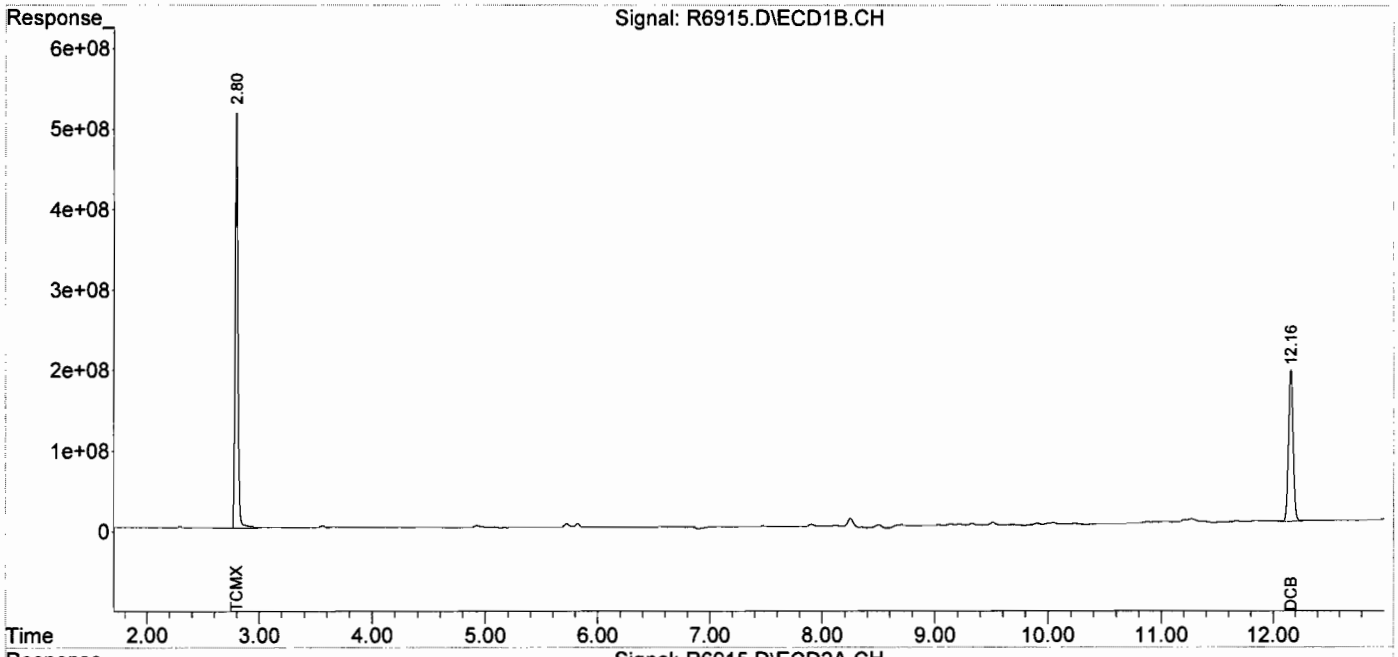
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

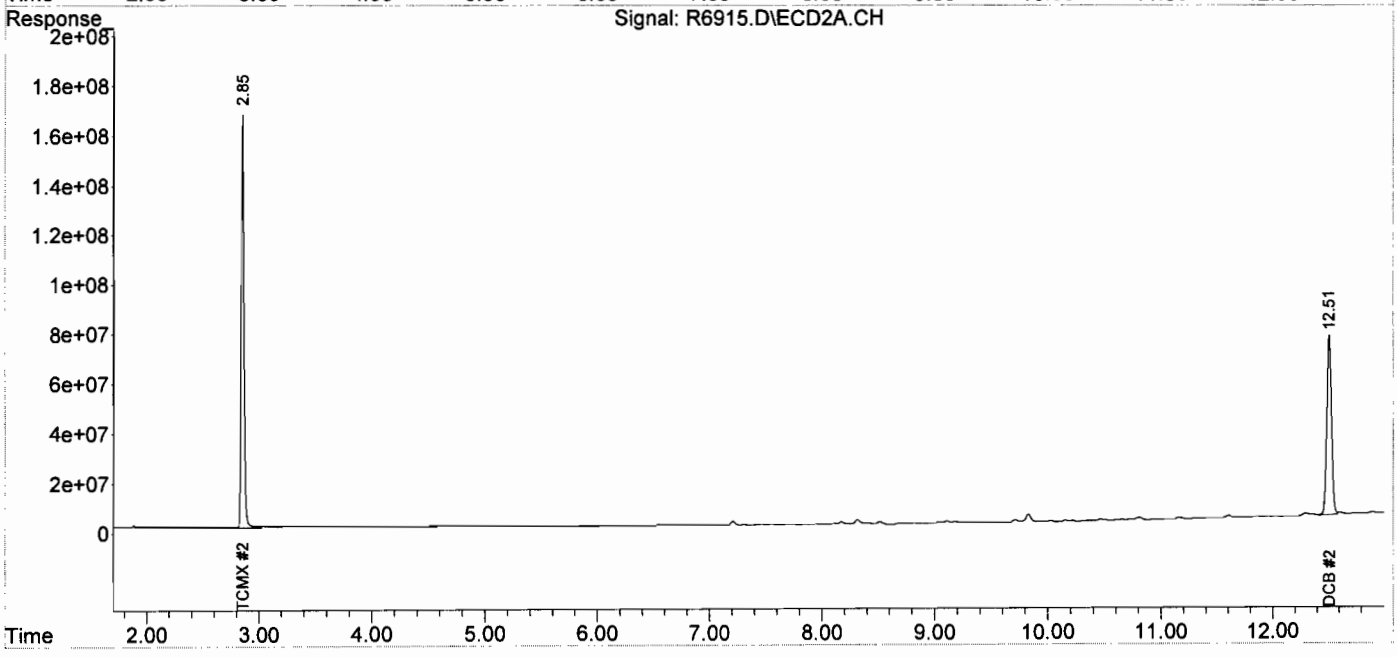
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : R6915.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:16
Operator : JS
Sample : E-64-0.5,E17-02179-007,S,5.34g,11.7,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:40:18 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6905.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 00:51
Operator : JS
Sample : E-64-2.0,E17-02179-008,S,5.27g,6.80,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:10:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	8509.6E6	2744.4E6	178.887	203.563
Spiked Amount 200.000			Recovery	=	89.44%	101.78%
2) S DCB	12.16	12.52	5511.6E6	2298.1E6	174.756	226.304m#
Spiked Amount 200.000			Recovery	=	87.38%	113.15%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

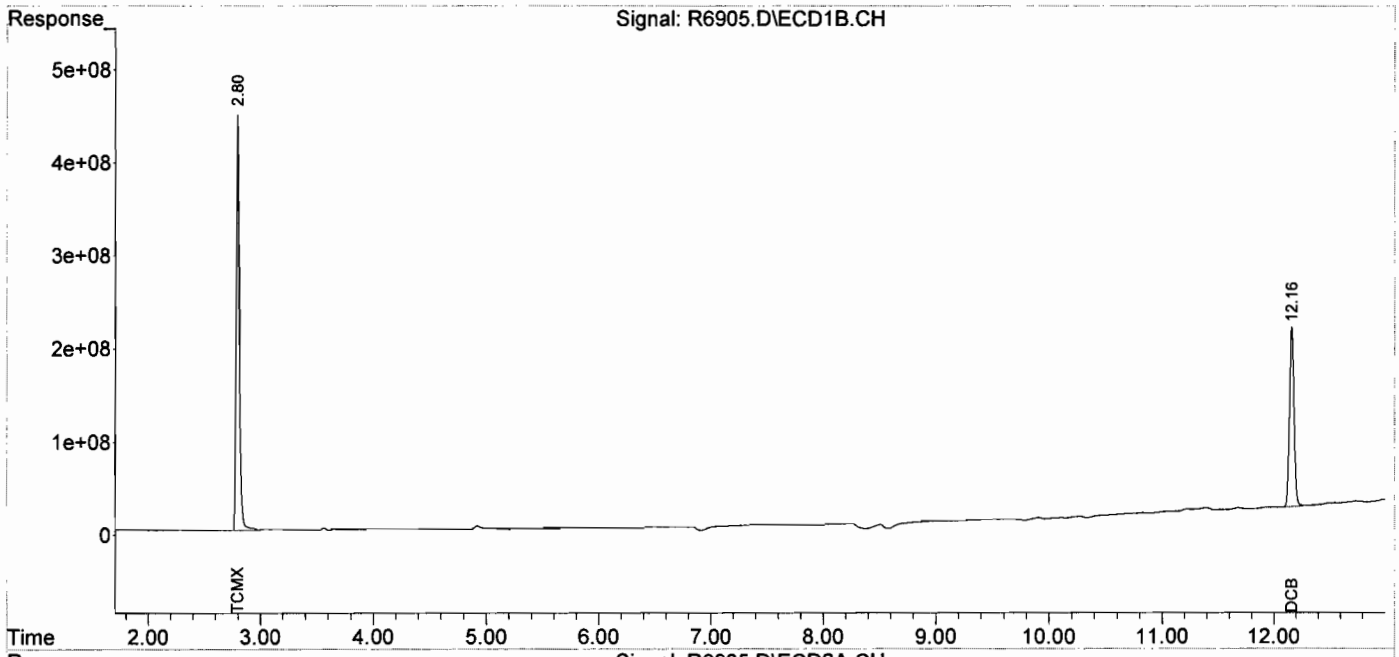
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

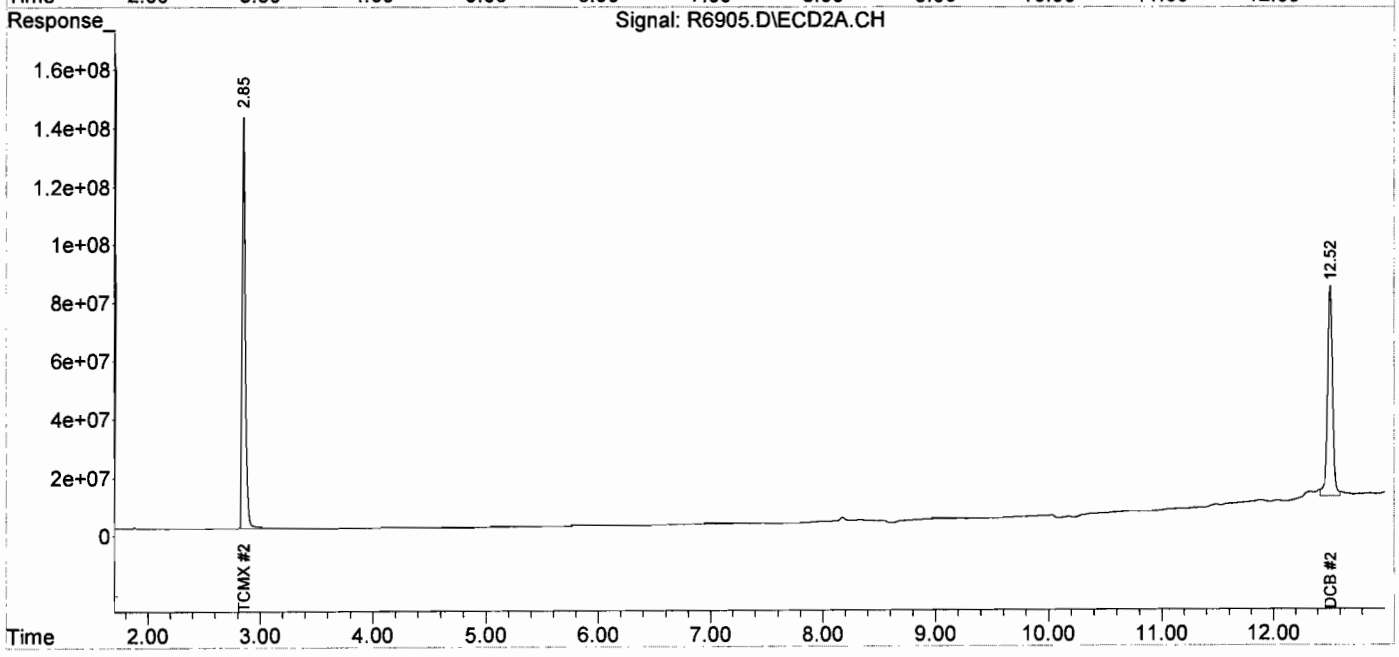
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6905.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 00:51
Operator : JS
Sample : E-64-2.0,E17-02179-008,S,5.27g,6.80,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:10:58 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6906.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:08
Operator : JS
Sample : E-65-0.5,E17-02179-009,S,5.24g,23.6,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.86	9056.1E6	2929.5E6	190.377	217.292
Spiked Amount 200.000			Recovery	=	95.19%	108.65%
2) S DCB	12.16	12.51	5921.1E6	2285.8E6	187.738	225.097
Spiked Amount 200.000			Recovery	=	93.87%	112.55%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

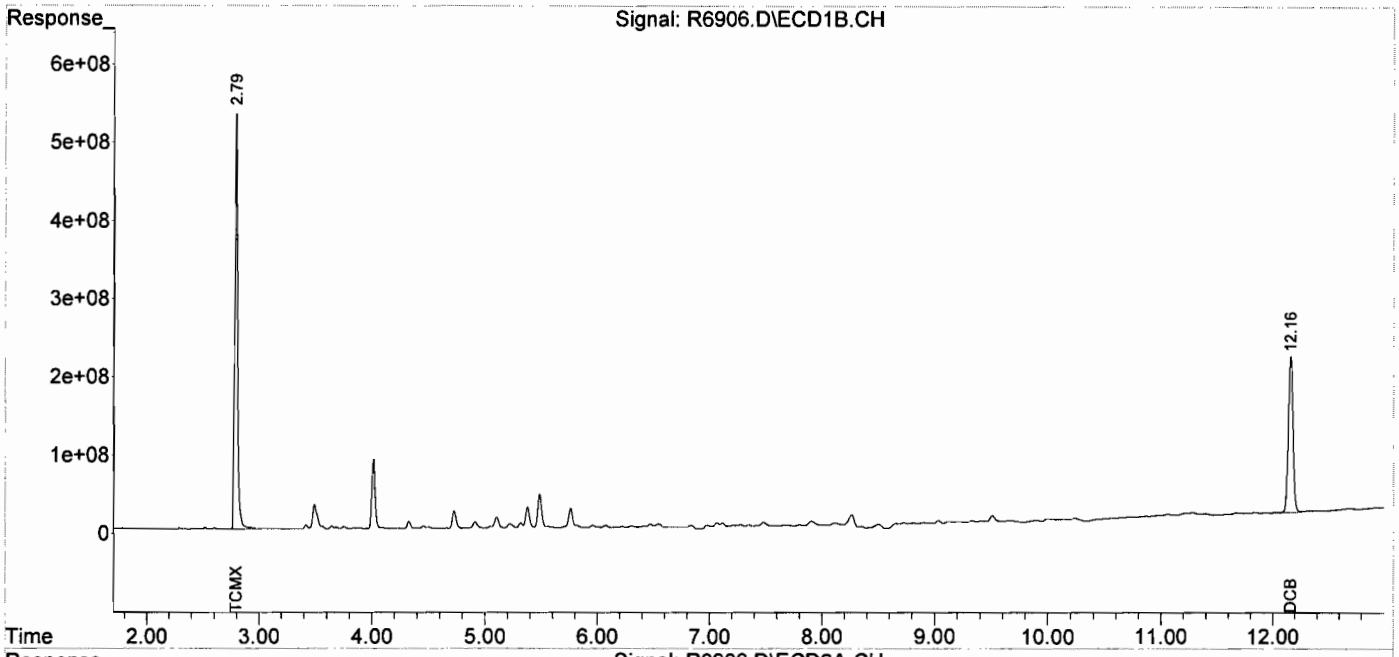
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

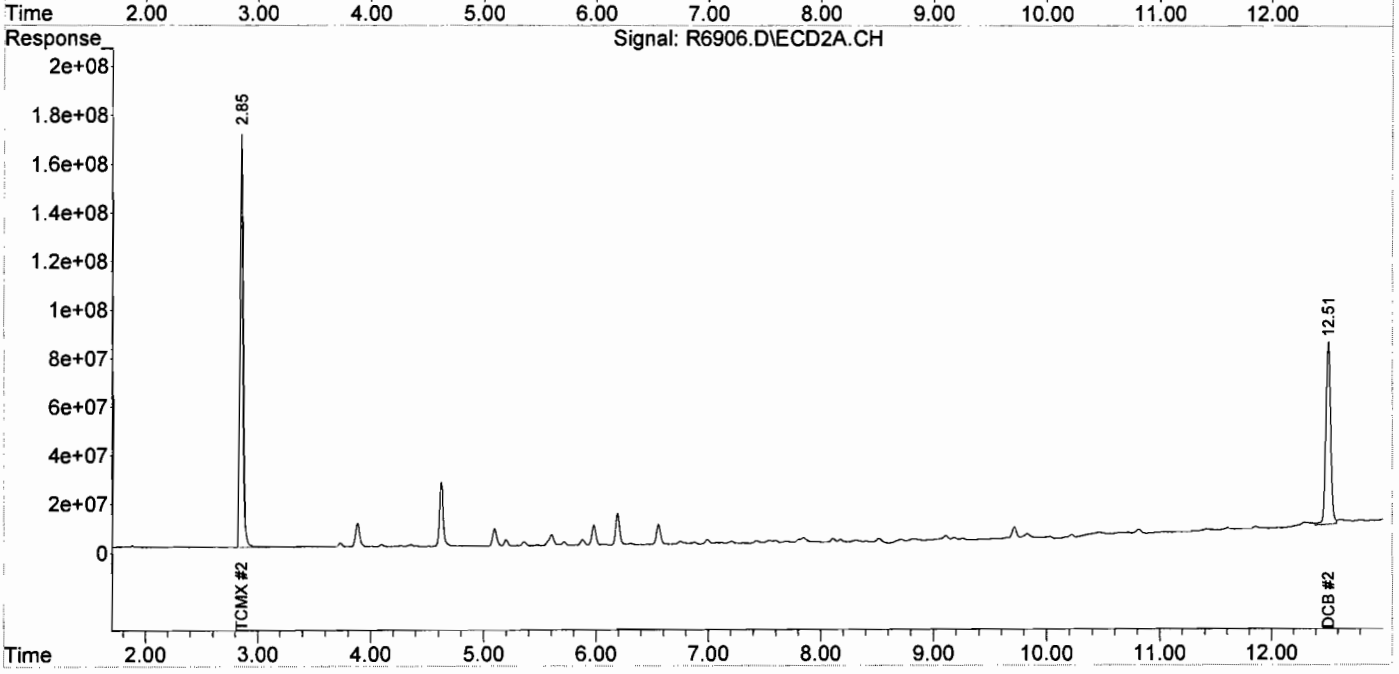
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6906.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:08
Operator : JS
Sample : E-65-0.5,E17-02179-009,S,5.24g,23.6,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:03 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6897.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 21:58
Operator : JS
Sample : E-66-0.5,E17-02179-011,S,5.19g,16.5,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:06:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	8269.6E6	2775.3E6	173.843	205.850
Spiked Amount 200.000			Recovery	=	86.92%	102.93%
2) S DCB	12.16	12.51	5457.8E6	2346.7E6	173.047	231.091 #
Spiked Amount 200.000			Recovery	=	86.52%	115.55%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
33) L8 Aroclor-1260	8.35	8.11	547.3E6	216.7E6	152.005	329.531 #
34) L8 Aroclor-1260 {2}	9.03	8.52	469.0E6	313.1E6	278.083	432.079 #
35) L8 Aroclor-1260 {3}	9.51	9.71	1534.5E6	301.8E6	383.780	502.977 #
36) L8 Aroclor-1260 {4}	10.01	10.22	639.7E6	327.3E6	309.445m	275.776
37) L8 Aroclor-1260 {5}	11.06	10.81	192.3E6	476.1E6	219.440m	557.577 #
Sum Aroclor-1260			3382.8E6	1635.1E6	1342.752	2097.939
Average Aroclor-1260					268.550	419.588
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

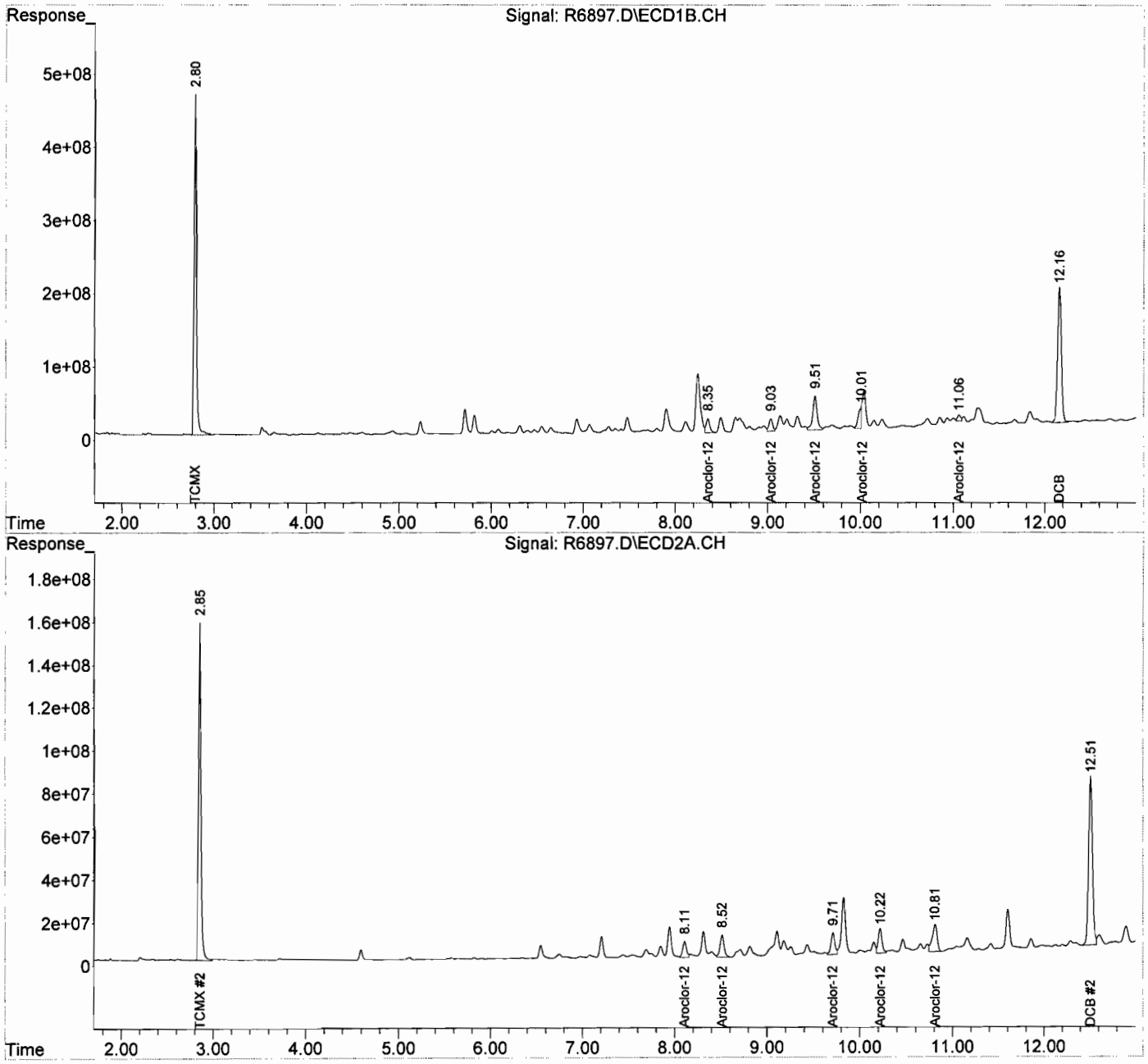
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6897.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 21:58
Operator : JS
Sample : E-66-0.5,E17-02179-011,S,5.19g,16.5,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:06:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6907.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:26
Operator : JS
Sample : E-66-2.0,E17-02179-012,S,5.75g,10.2,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.85	8560.5E6	2771.8E6	179.958	205.589
Spiked Amount 200.000			Recovery	=	89.98%	102.79%
2) S DCB	12.16	12.51	6102.8E6	2241.0E6	193.501m	220.686
Spiked Amount 200.000			Recovery	=	96.75%	110.34%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

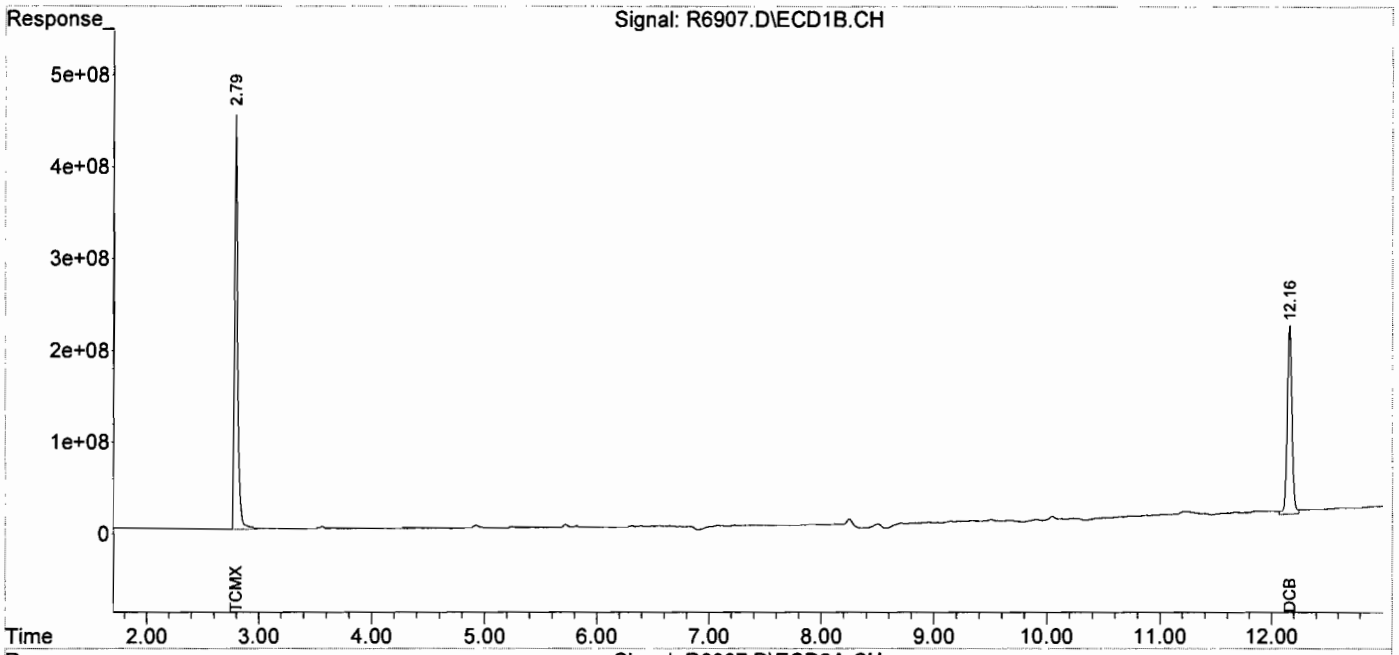
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

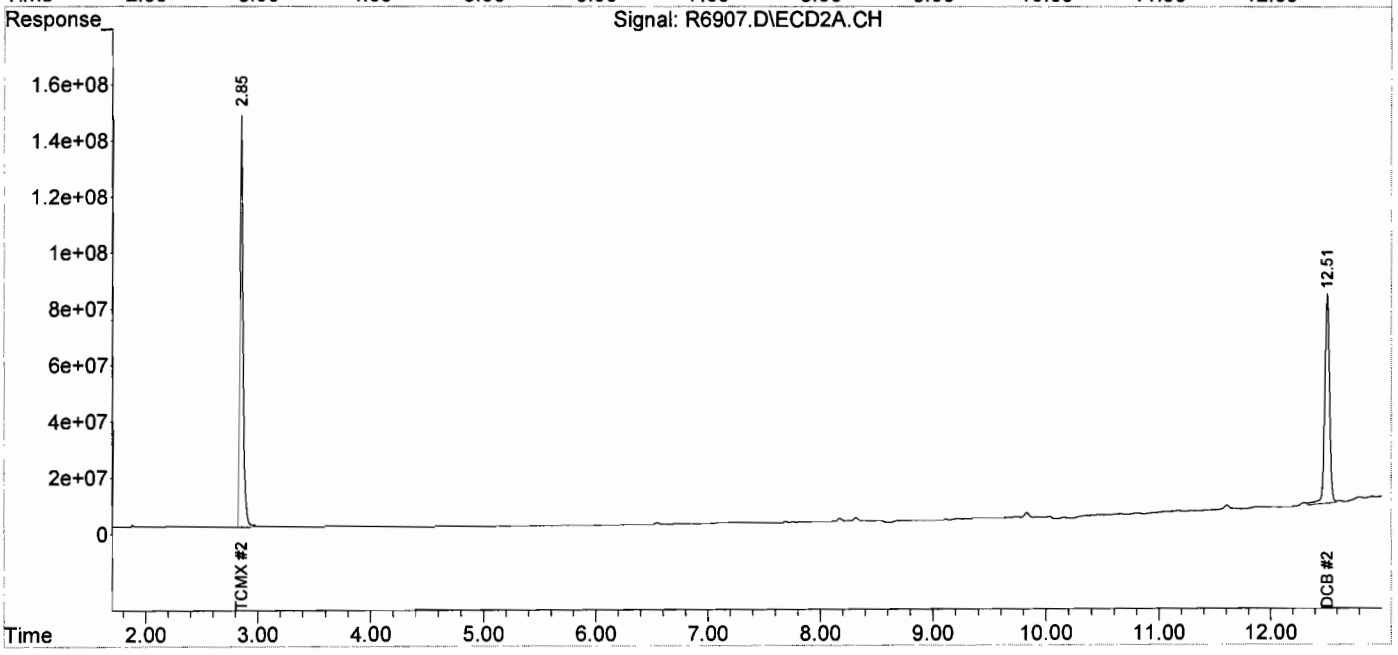
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6907.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:26
Operator : JS
Sample : E-66-2.0,E17-02179-012,S,5.75g,10.2,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6908.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:43
Operator : JS
Sample : E-67-0.5,E17-02179-013,S,5.76g,17.1,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:57 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	9087.5E6	2858.6E6	191.036	212.028
Spiked Amount 200.000			Recovery	=	95.52%	106.01%
2) S DCB	12.16	12.51	5946.9E6	2245.5E6	188.556	221.126
Spiked Amount 200.000			Recovery	=	94.28%	110.56%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

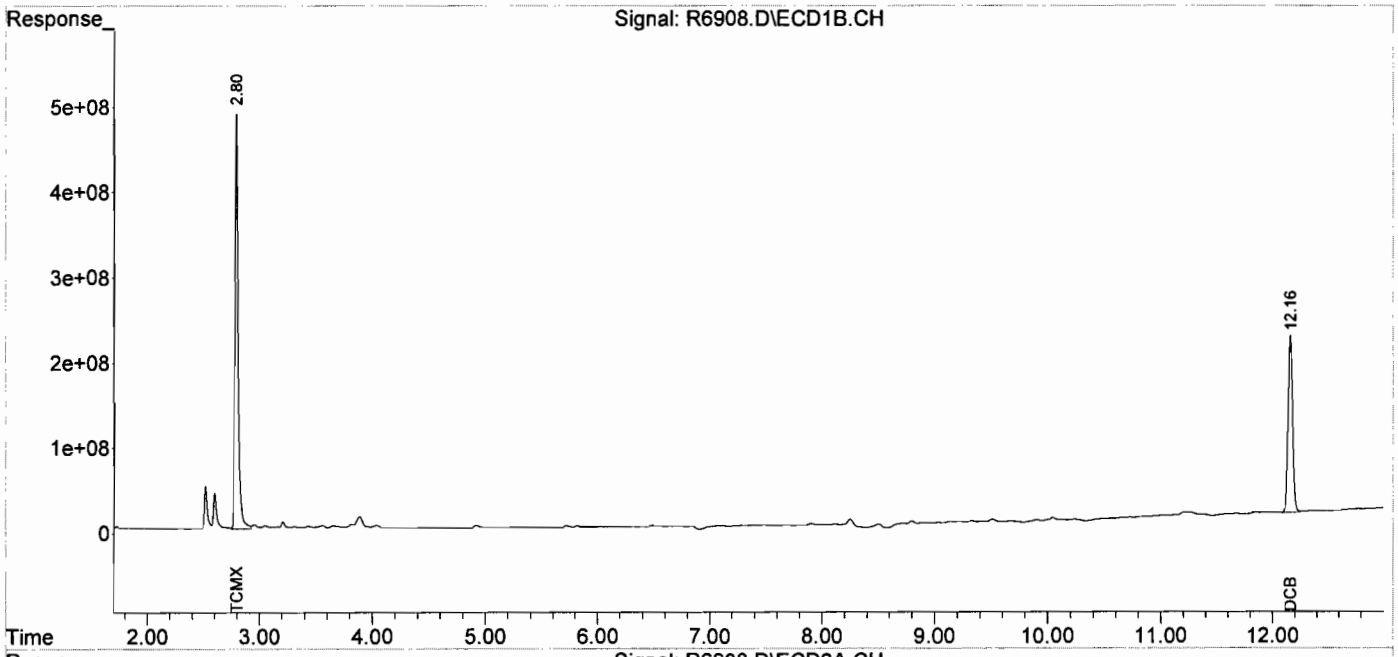
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-21\
Data File : R6908.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 1:43
Operator : JS
Sample : E-67-0.5,E17-02179-013,S,5.76g,17.1,20
Misc : 170320-14,03/20/17,03/17/17,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 09:12:57 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2663.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 10:32
Operator : JS
Sample : E-67-2.0,E17-02179-014,S,5.31g,12.8,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:52:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	7153.9E6	4922.9E6	193.110	193.943
Spiked Amount 200.000			Recovery	=	96.56%	96.97%
2) S DCB	12.16	12.50	6154.7E6	5023.5E6	181.628	203.967
Spiked Amount 200.000			Recovery	=	90.81%	101.98%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

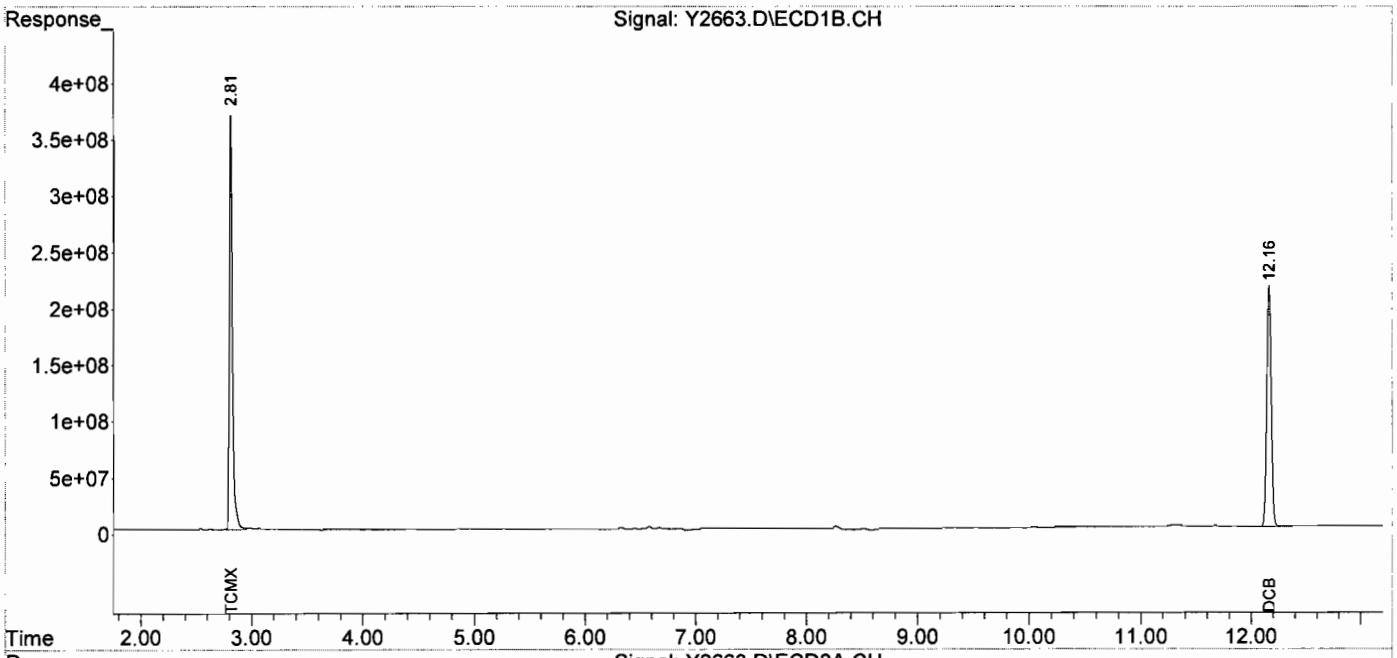
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

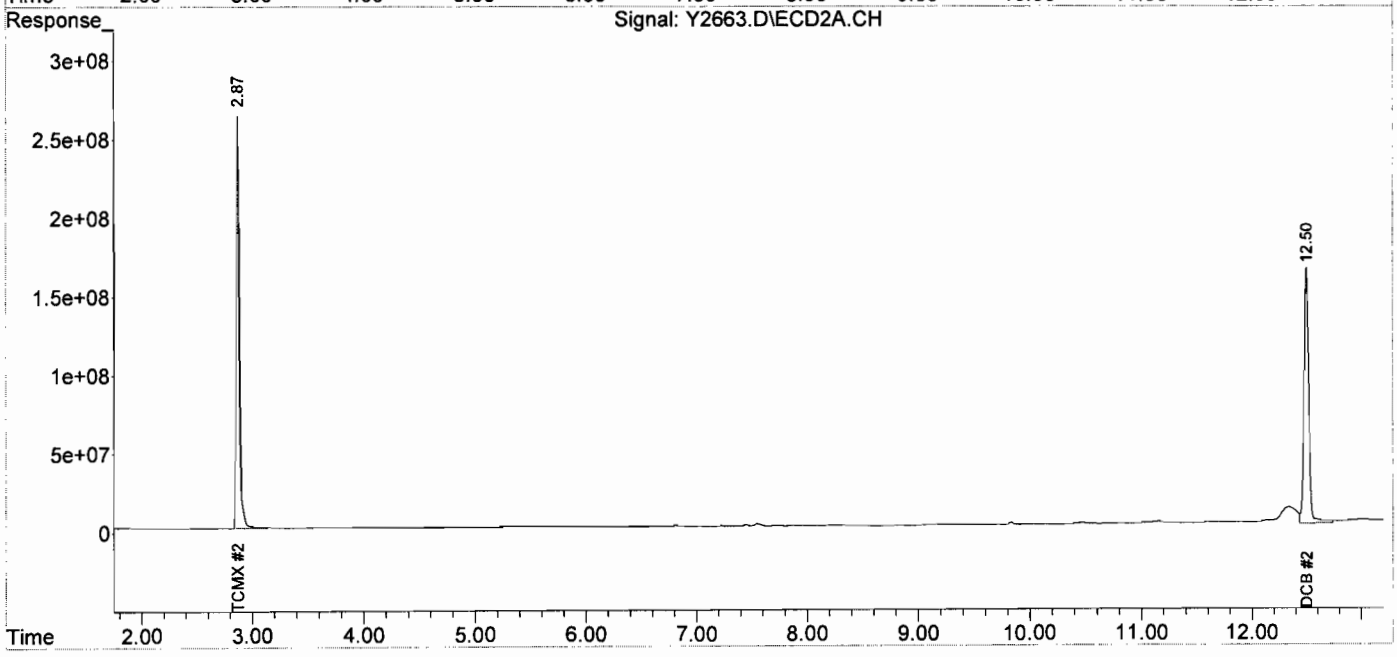
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2663.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 10:32
Operator : JS
Sample : E-67-2.0,E17-02179-014,S,5.31g,12.8,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:52:17 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2664.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 10:49
Operator : JS
Sample : E-68-0.5,E17-02179-015,S,5.39g,16.2,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:53:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6829.7E6	4782.3E6	184.360	188.402
Spiked Amount 200.000			Recovery	=	92.18%	94.20%
2) S DCB	12.16	12.50	5870.6E6	4710.8E6	173.241	191.273
Spiked Amount 200.000			Recovery	=	86.62%	95.64%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

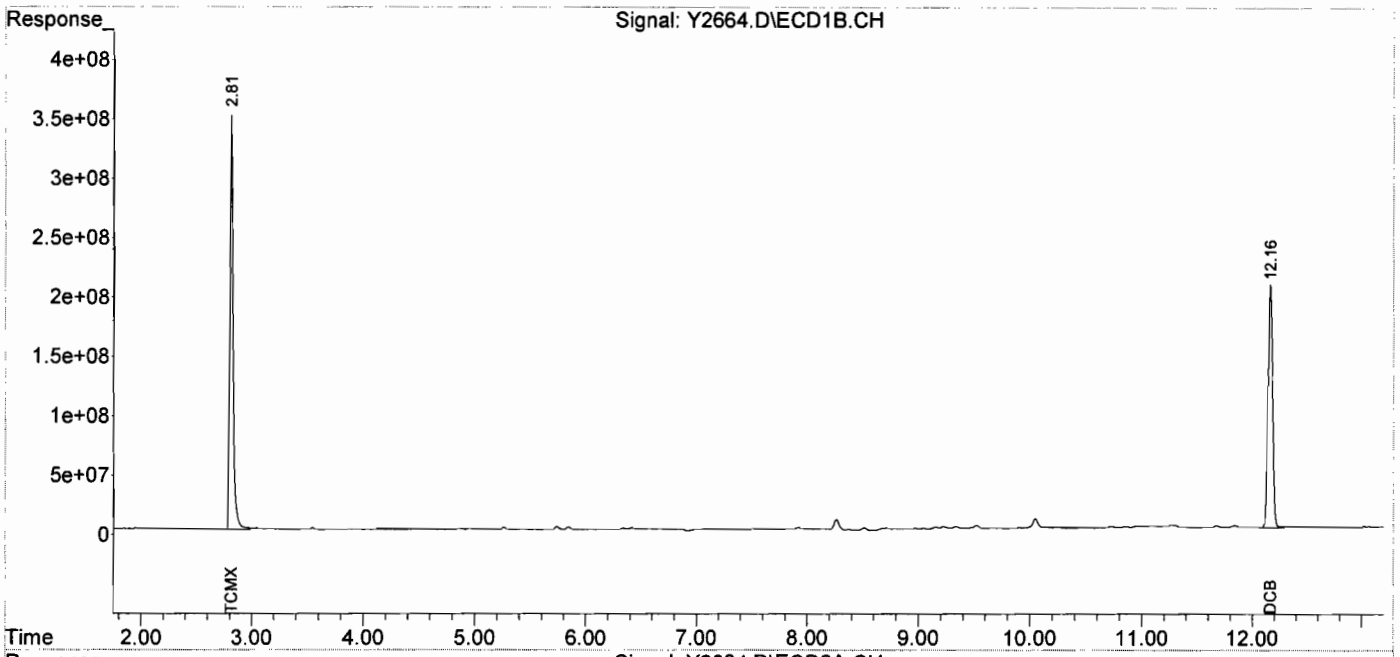
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

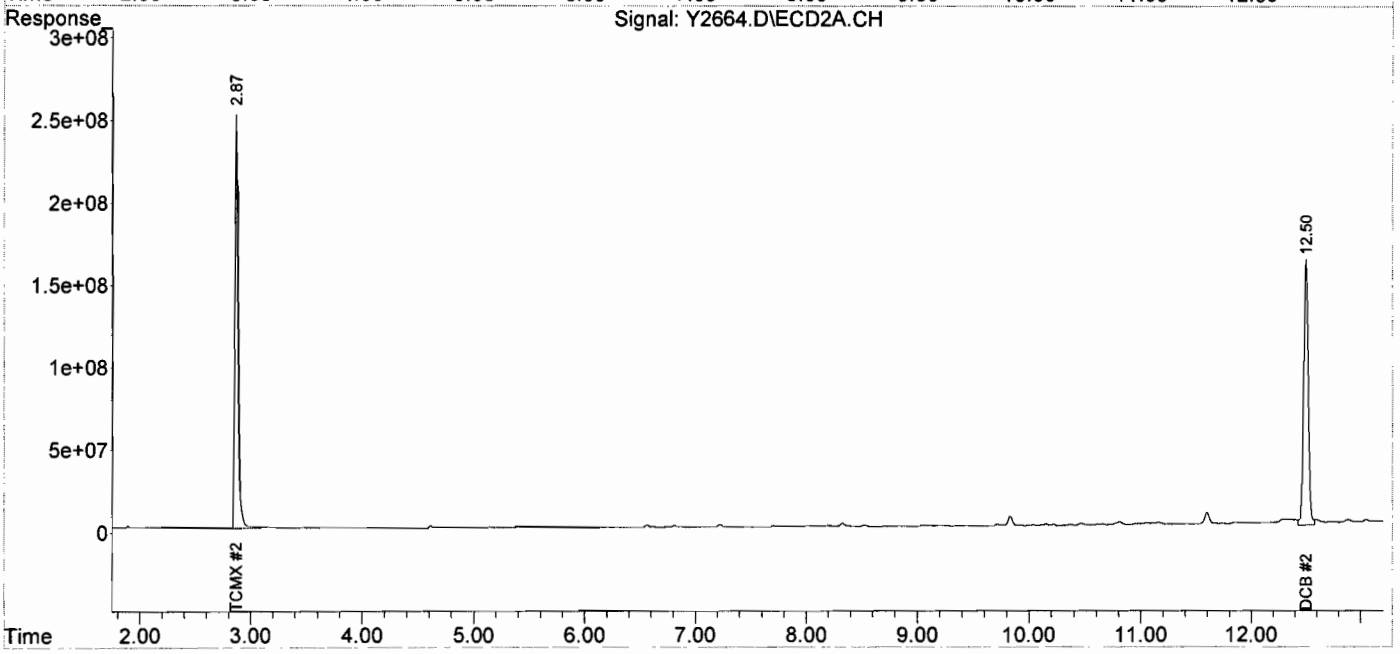
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2664.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 10:49
Operator : JS
Sample : E-68-0.5,E17-02179-015,S,5.39g,16.2,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:53:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2665.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:07
Operator : JS
Sample : E-68-2.0,E17-02179-016,S,5.13g,10.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:54:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6974.5E6	4833.4E6	188.267	190.417
Spiked Amount 200.000			Recovery	=	94.13%	95.21%
2) S DCB	12.16	12.50	5947.6E6	4690.8E6	175.516	190.458
Spiked Amount 200.000			Recovery	=	87.76%	95.23%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

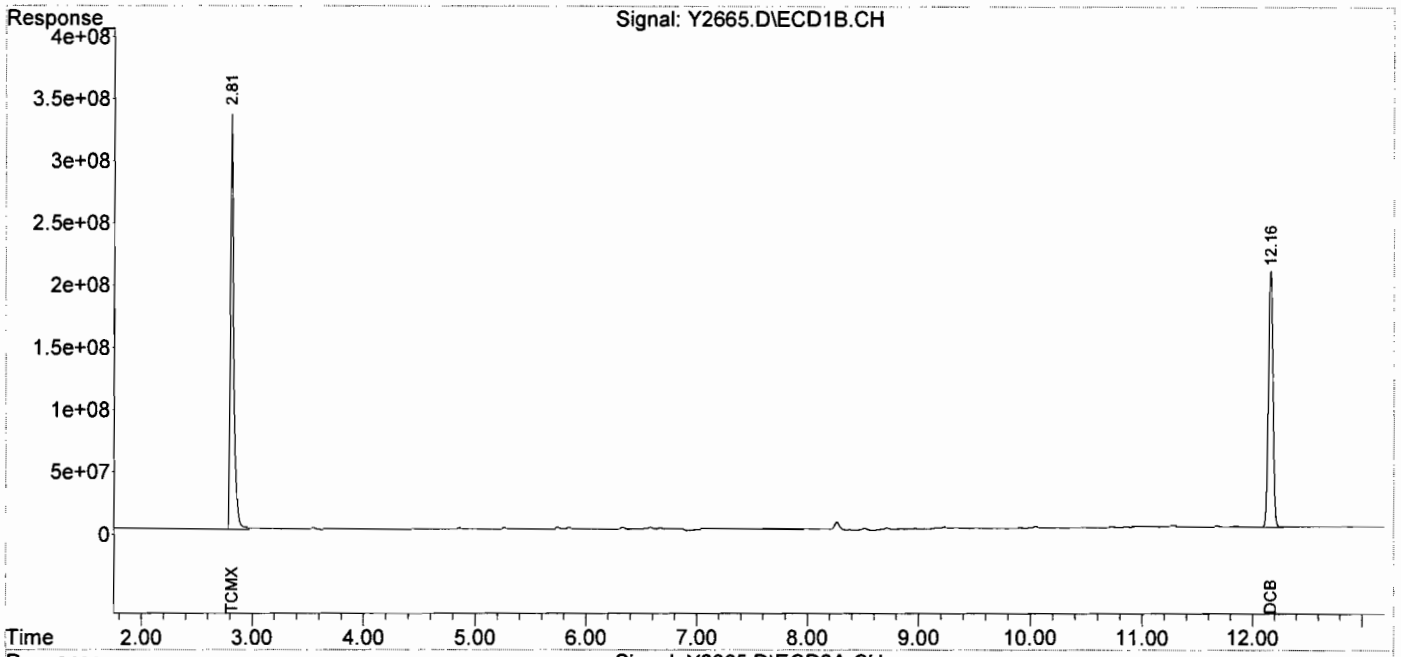
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

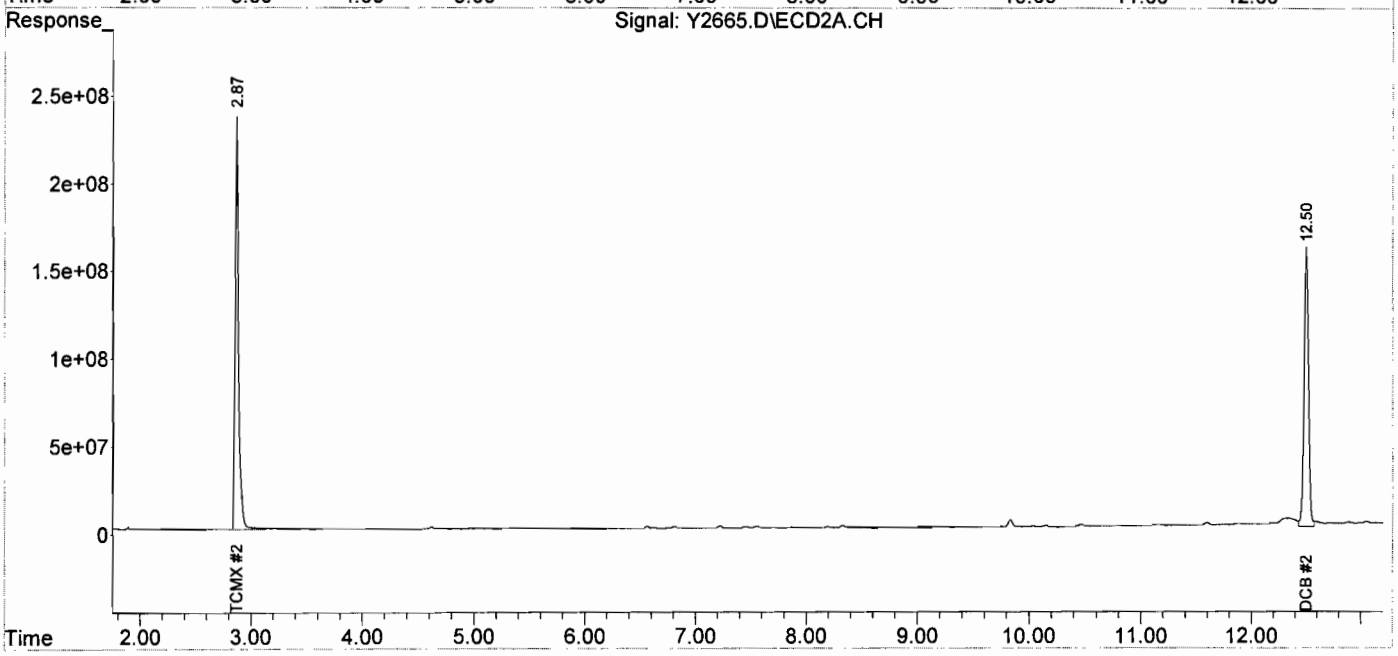
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2665.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 11:07
Operator : JS
Sample : E-68-2.0,E17-02179-016,S,5.13g,10.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:54:05 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2667.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:05
Operator : JS
Sample : X-1-0.5-,E17-02179-017,S,5.19g,17.8,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:54:59 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6916.5E6	4851.6E6	186.704	191.132
Spiked Amount 200.000			Recovery	=	93.35%	95.57%
2) S DCB	12.16	12.50	5969.8E6	4708.0E6	176.170	191.157
Spiked Amount 200.000			Recovery	=	88.08%	95.58%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

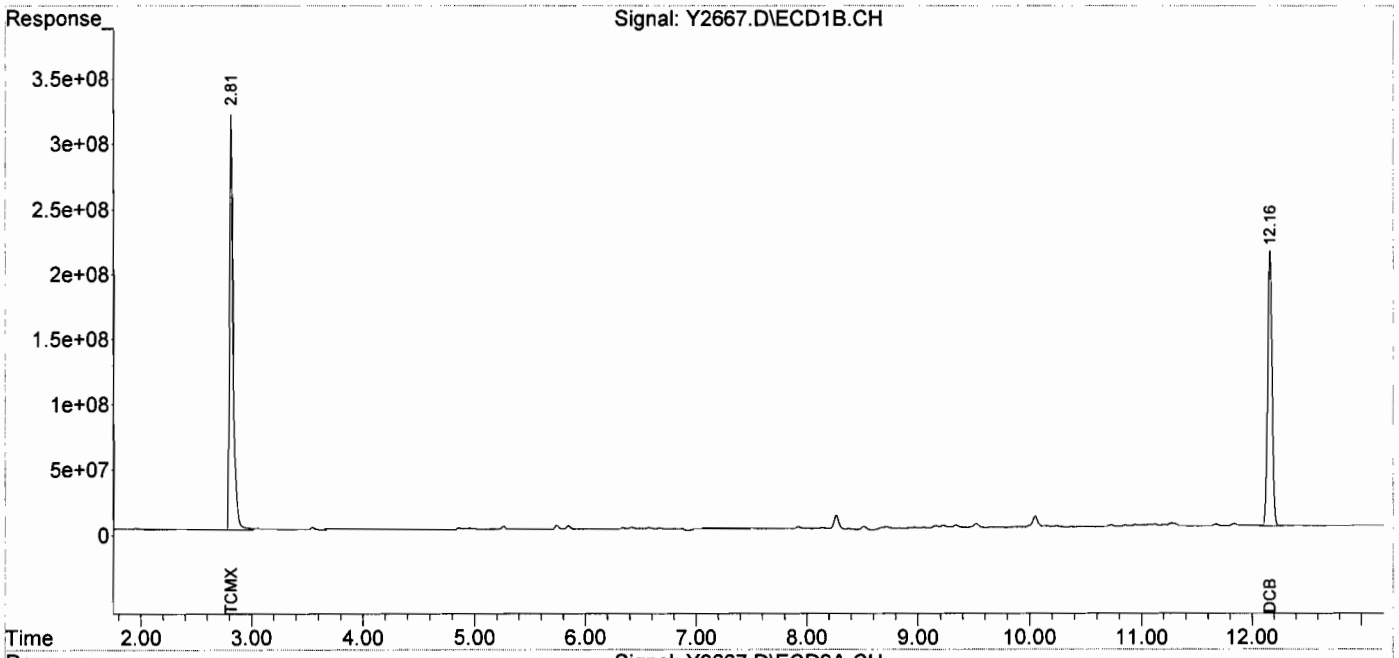
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

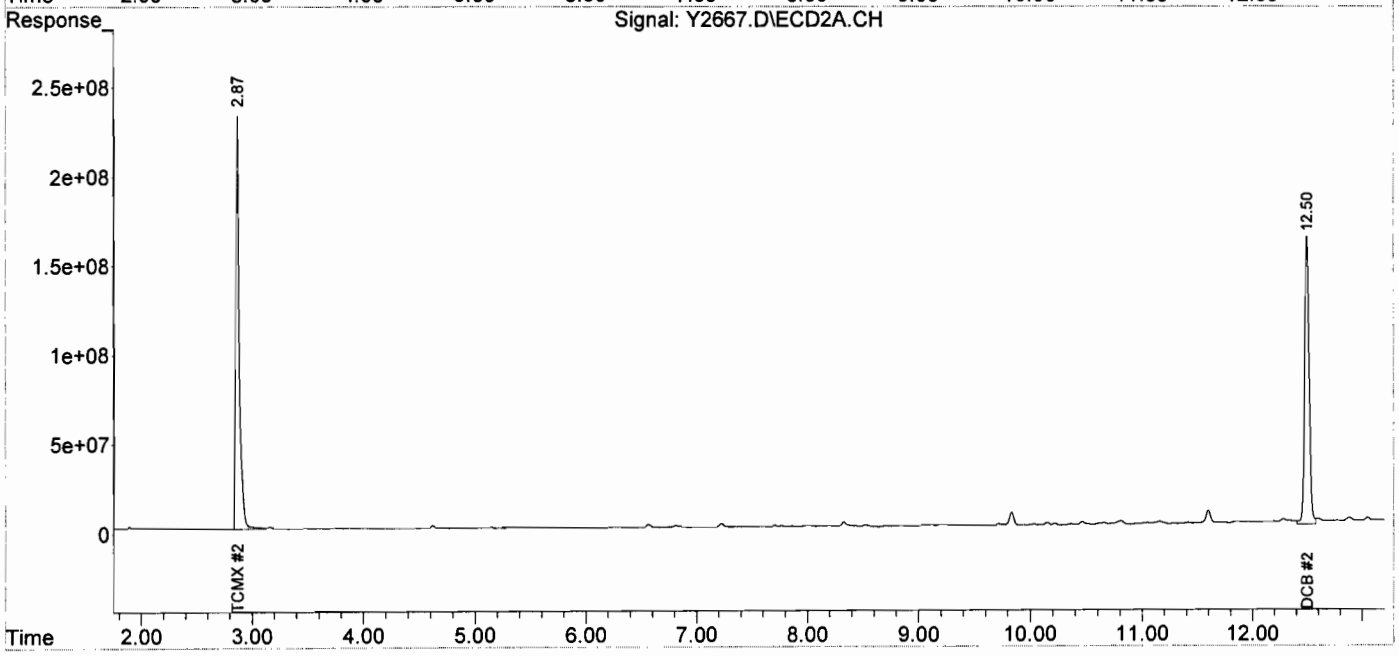
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2667.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:05
Operator : JS
Sample : X-1-0.5-,E17-02179-017,S,5.19g,17.8,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:54:59 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2668.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:22
Operator : JS
Sample : E-69-0.5,E17-02179-018,S,5.47g,16.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:55:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6920.8E6	4804.2E6	186.820	189.266
Spiked Amount 200.000			Recovery	=	93.41%	94.63%
2) S DCB	12.16	12.50	5998.5E6	4548.4E6	177.018	184.676
Spiked Amount 200.000			Recovery	=	88.51%	92.34%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

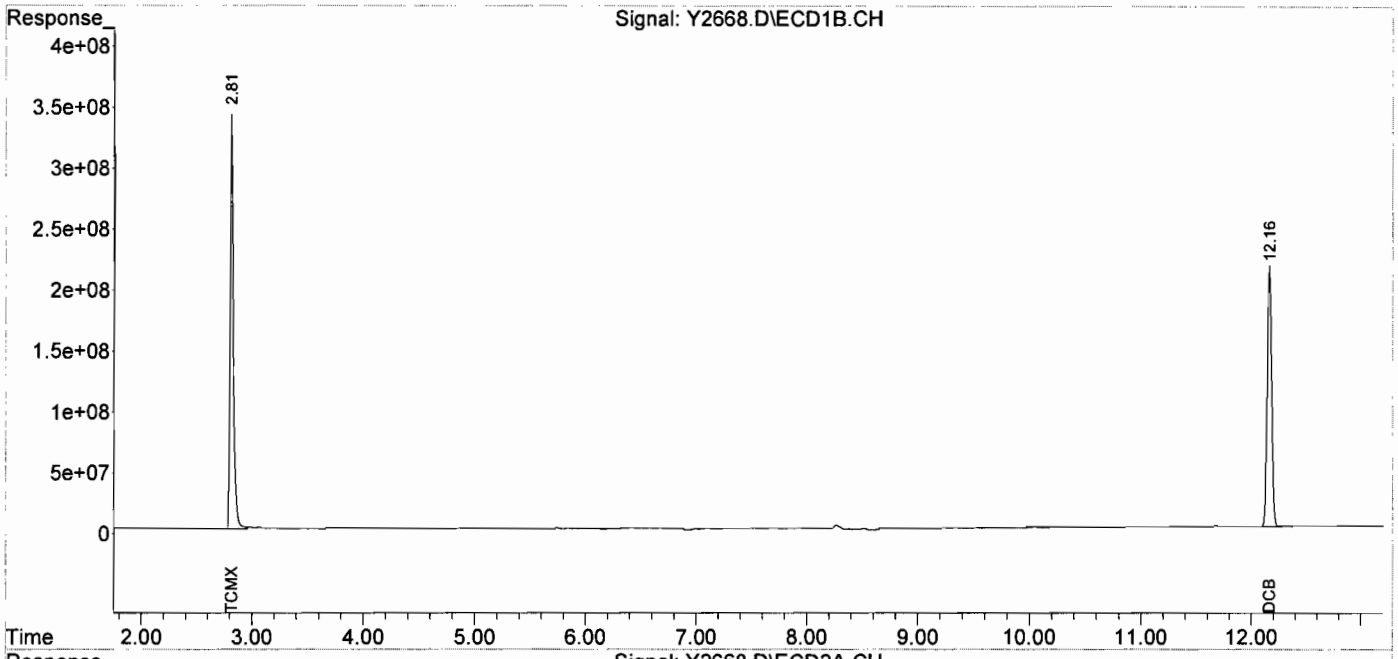
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

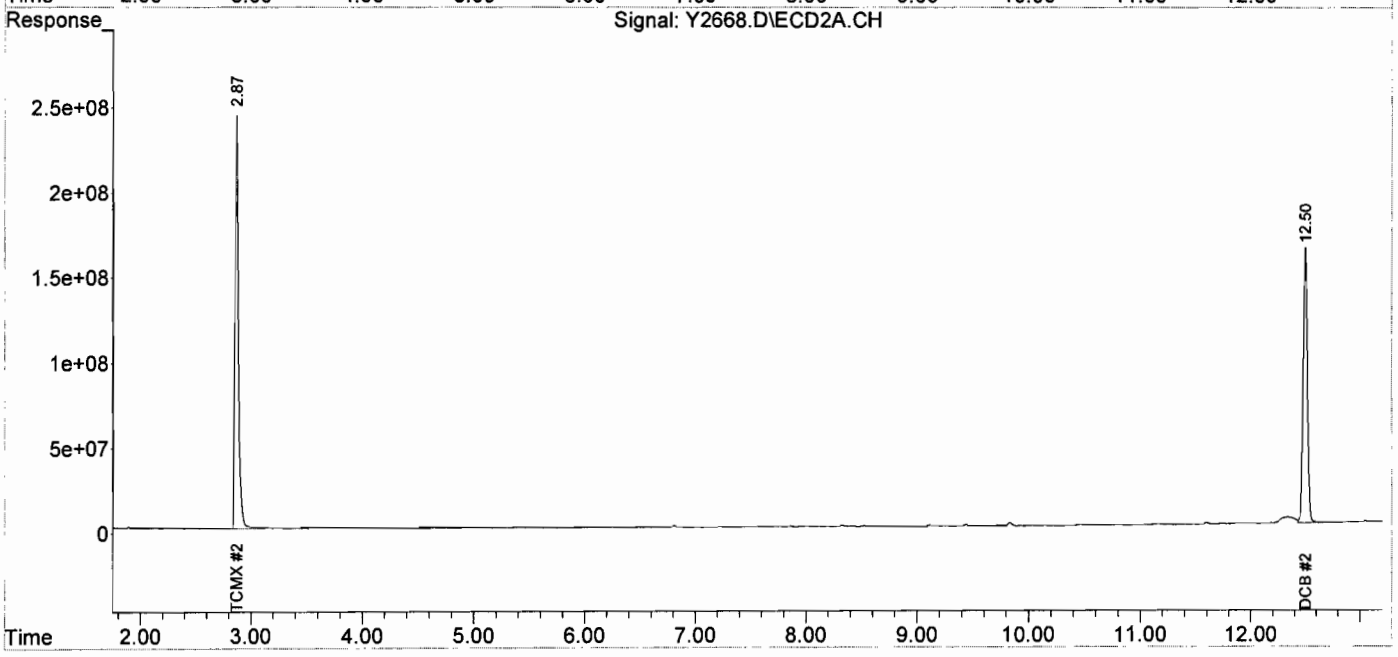
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2668.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:22
Operator : JS
Sample : E-69-0.5,E17-02179-018,S,5.47g,16.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:55:25 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2670.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:57
Operator : JS
Sample : E-70-0.5,E17-02179-020,S,5.40g,13.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:56:12 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6868.4E6	4750.3E6	185.403	187.141
Spiked Amount 200.000			Recovery =		92.70%	93.57%
2) S DCB	12.16	12.50	5766.6E6	4436.2E6	170.174	180.120
Spiked Amount 200.000			Recovery =		85.09%	90.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

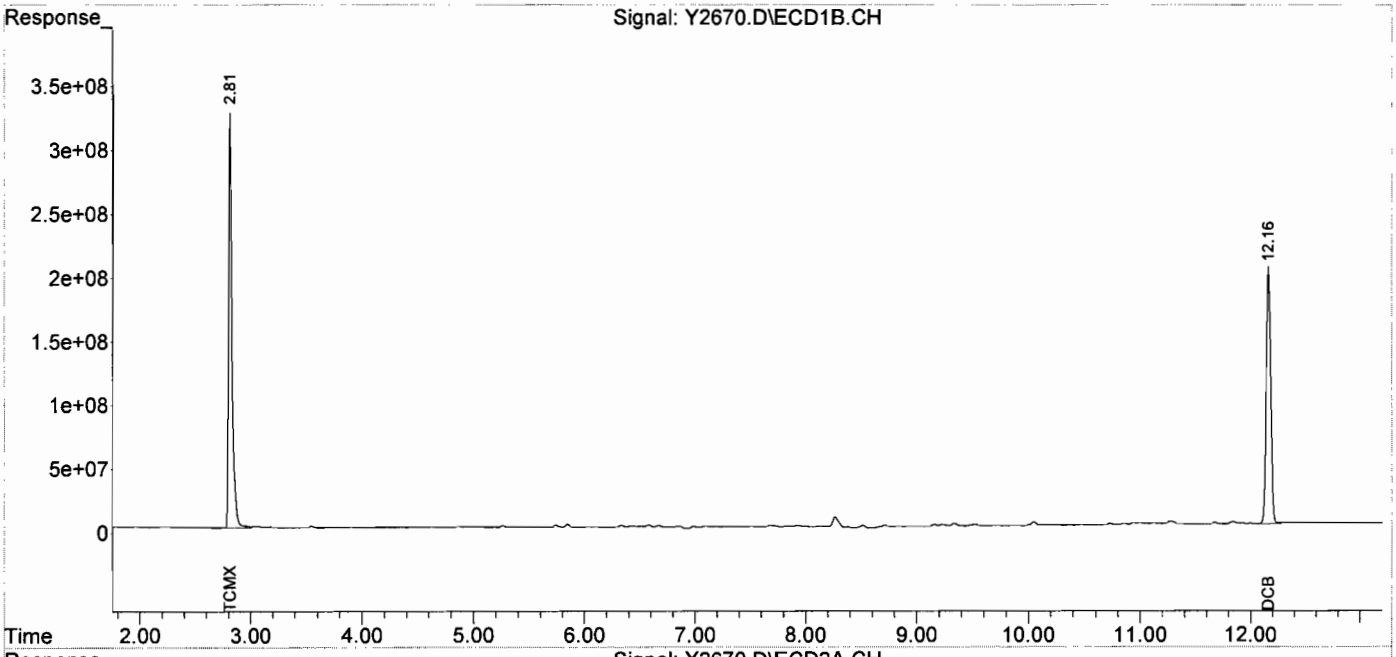
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

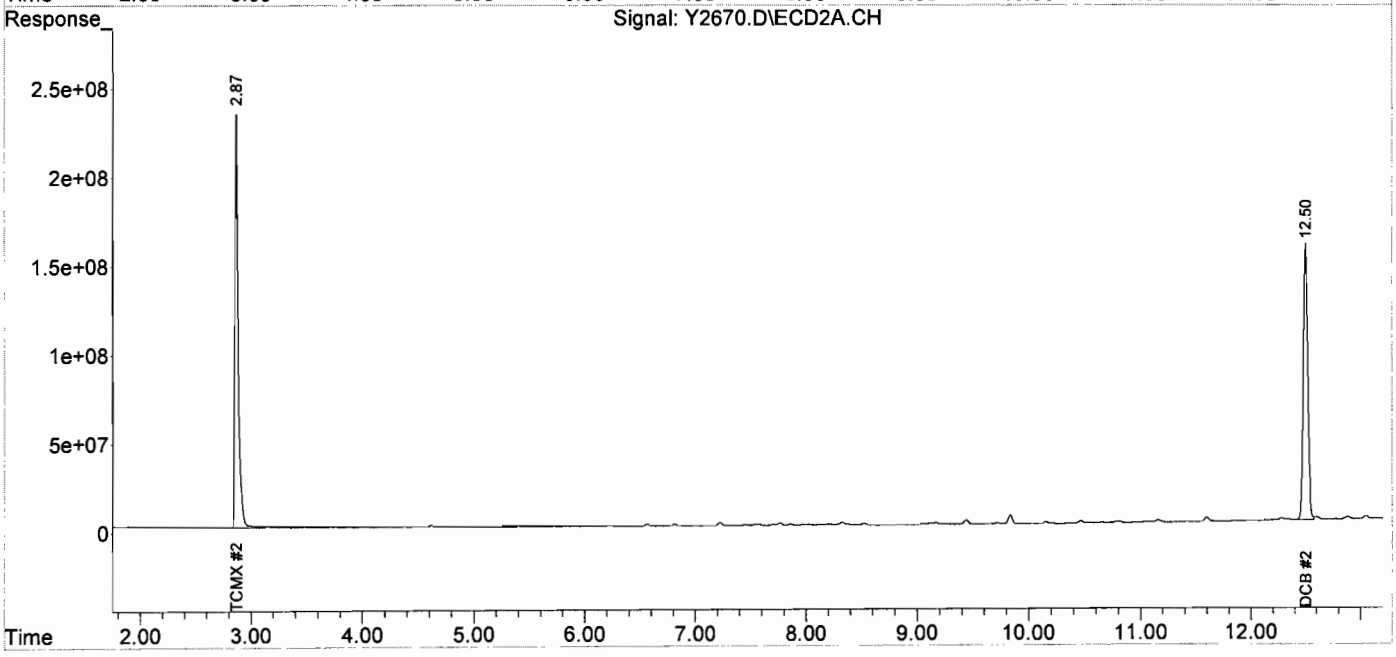
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2670.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 12:57
Operator : JS
Sample : E-70-0.5,E17-02179-020,S,5.40g,13.9,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:56:12 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2671.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:14
Operator : JS
Sample : E-70-2.0,E17-02179-021,S,5.10g,12.1,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:56:49 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6974.2E6	4809.9E6	188.260	189.491
Spiked Amount 200.000			Recovery	=	94.13%	94.75%
2) S DCB	12.16	12.50	5783.4E6	4698.1E6	170.669	190.756
Spiked Amount 200.000			Recovery	=	85.33%	95.38%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

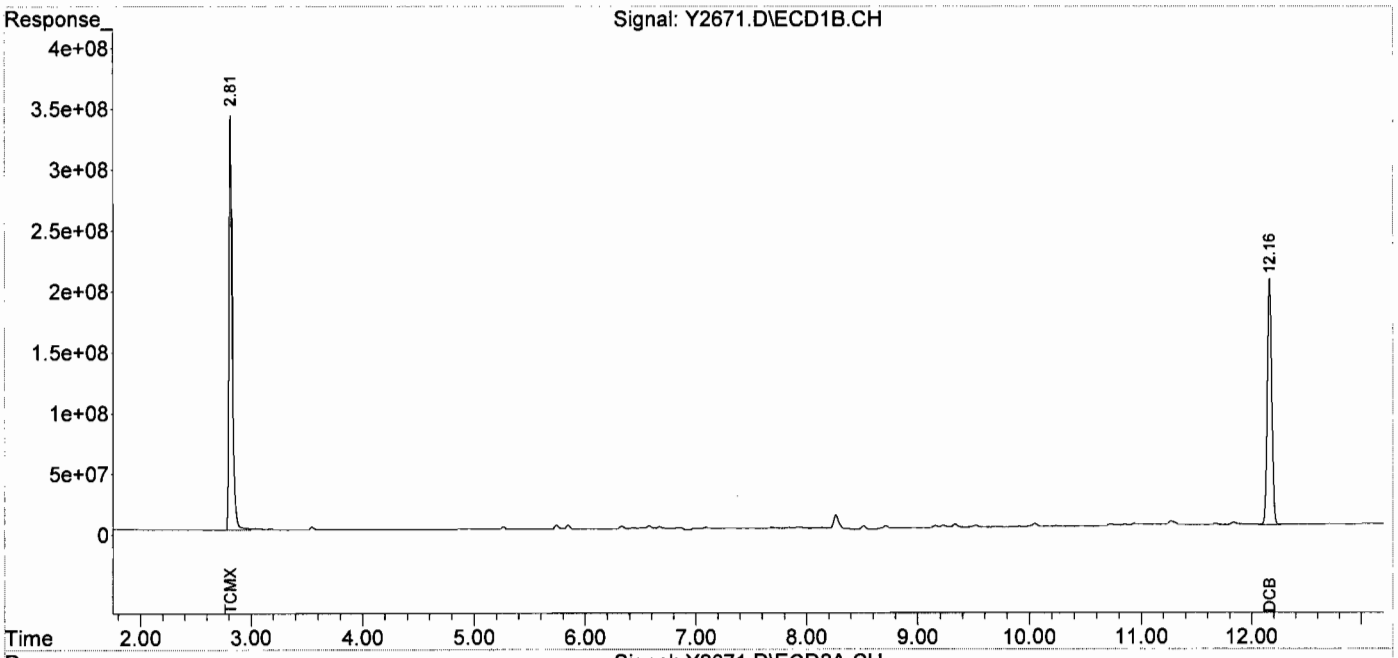
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

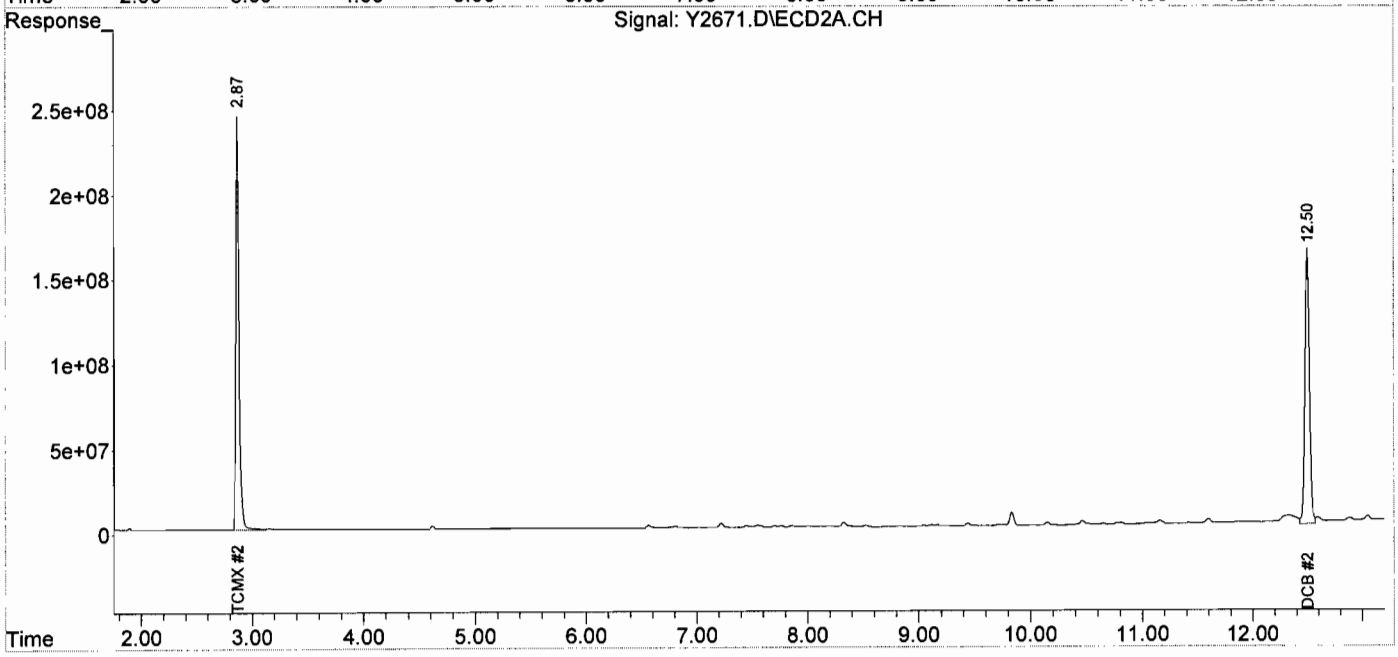
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2671.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:14
Operator : JS
Sample : E-70-2.0,E17-02179-021,S,5.10g,12.1,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:56:49 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2672.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:32
Operator : JS
Sample : E-71-0.5,E17-02179-022,S,5.28g,13.6,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:57:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	7033.0E6	4834.5E6	189.849	190.458
Spiked Amount 200.000			Recovery	=	94.92%	95.23%
2) S DCB	12.16	12.50	5898.6E6	4830.2E6	174.069	196.119
Spiked Amount 200.000			Recovery	=	87.03%	98.06%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

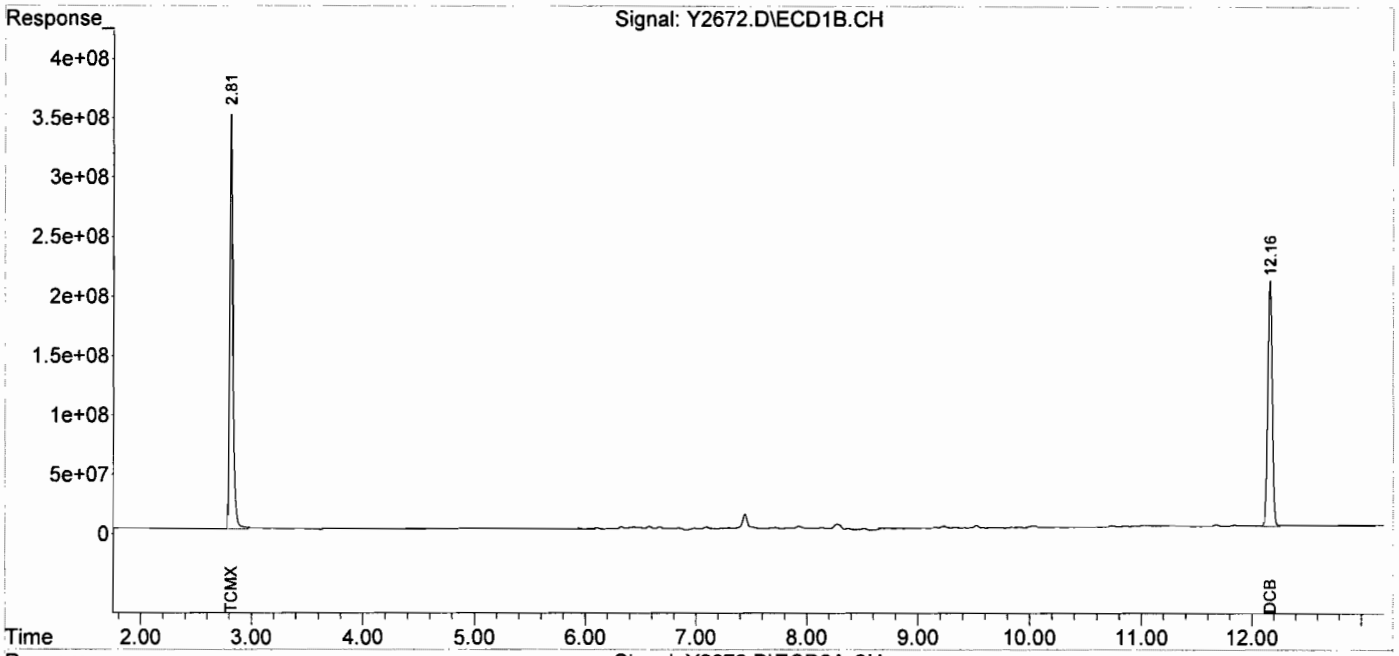
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

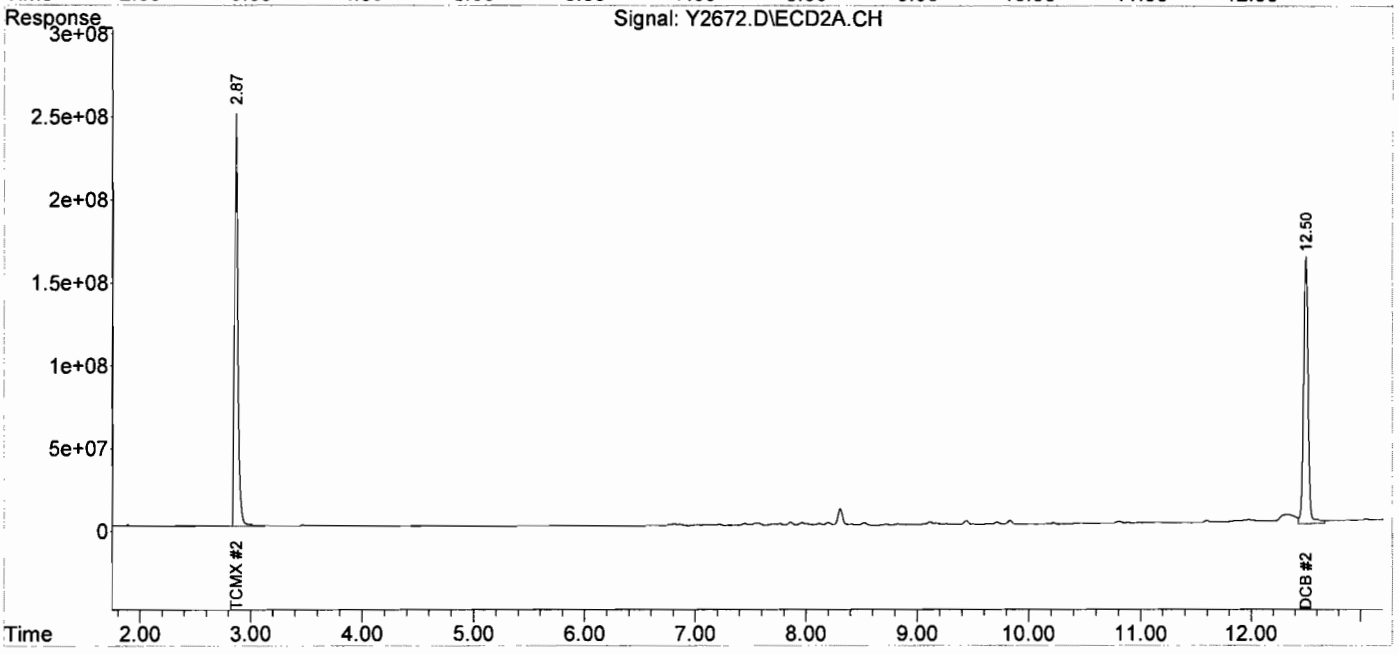
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2672.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:32
Operator : JS
Sample : E-71-0.5,E17-02179-022,S,5.28g,13.6,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:57:16 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2673.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:49
Operator : JS
Sample : X-2-0.5-,E17-02179-024,S,5.42g,13.3,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:50:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6847.5E6	4845.9E6	184.841	190.908
Spiked Amount 200.000			Recovery	=	92.42%	95.45%
2) S DCB	12.16	12.50	5434.3E6	4714.0E6	160.366	191.403
Spiked Amount 200.000			Recovery	=	80.18%	95.70%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.49	7.09	51845022	44061635	23.387m	27.298
29) L7 Aroclor-1254 {2}	0.00	7.70	0	55768928	N.D. d	44.266m#
30) L7 Aroclor-1254 {3}	7.09	8.12	132.9E6	51217696	49.946m	60.569m
31) L7 Aroclor-1254 {4}	7.50	8.32	90890481	53976118	30.476m	40.479m#
32) L7 Aroclor-1254 {5}	8.37	9.11	61294633	87796956	22.716m	47.953m#
Sum Aroclor-1254			336.9E6	292.8E6	126.525	220.565
Average Aroclor-1254					31.631	44.113
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

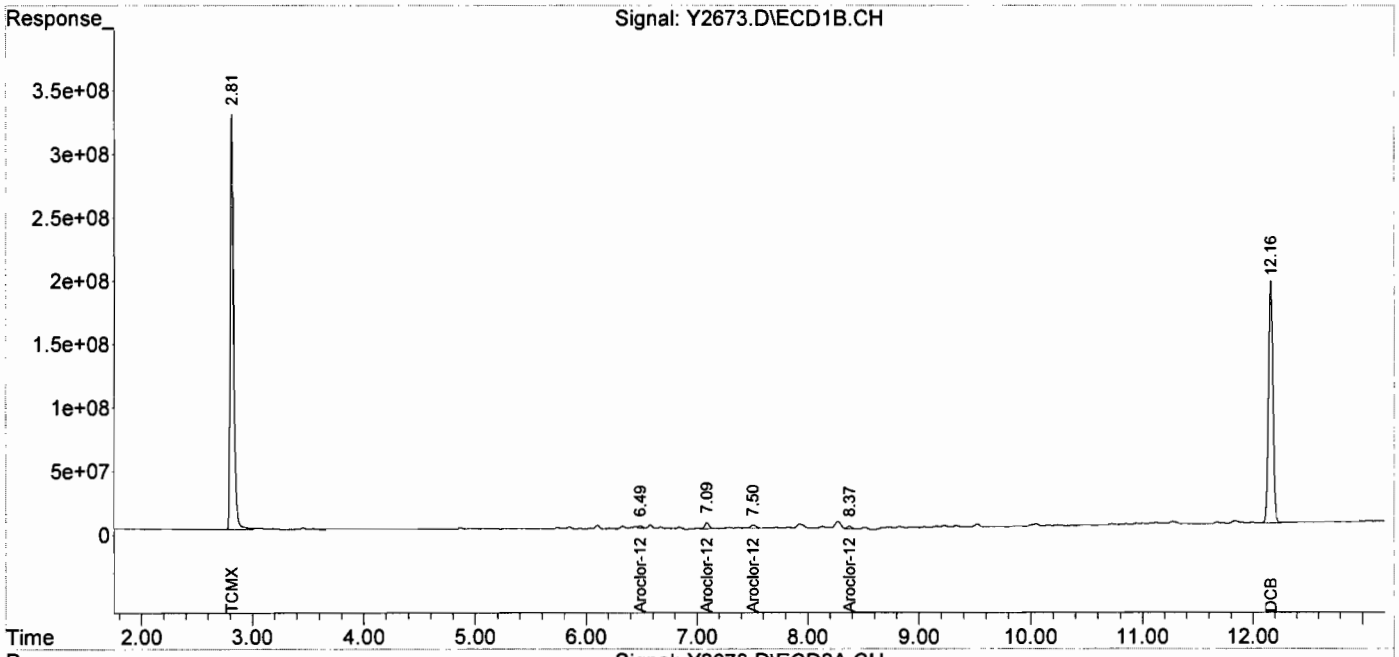
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

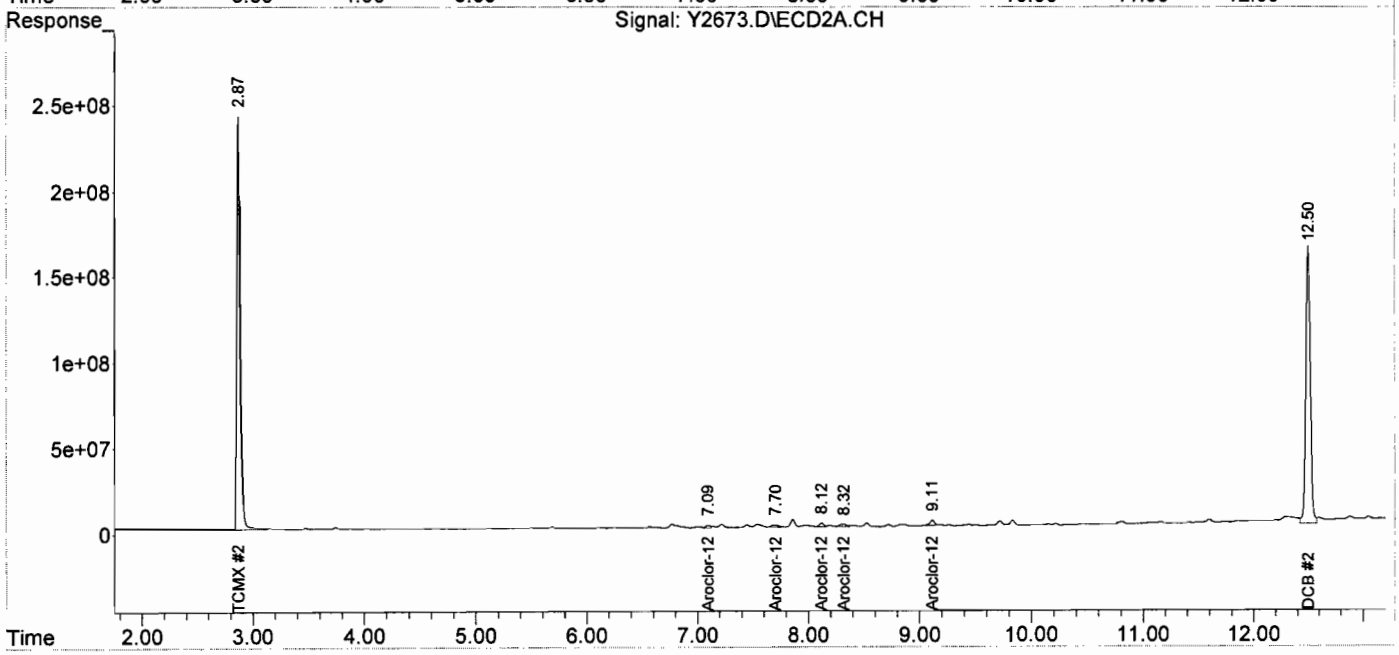
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2673.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 13:49
Operator : JS
Sample : X-2-0.5-,E17-02179-024,S,5.42g,13.3,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:50:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2674.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 14:06
Operator : JS
Sample : E-72-0.5,E17-02179-025,S,5.67g,13.0,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:52:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6844.7E6	4908.5E6	184.764	193.373
Spiked Amount 200.000			Recovery	=	92.38%	96.69%
2) S DCB	12.16	12.50	5455.1E6	4777.6E6	160.980	193.984
Spiked Amount 200.000			Recovery	=	80.49%	96.99%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.49	7.09	117.6E6	111.4E6	53.045m	69.013 #
29) L7 Aroclor-1254 {2}	0.00	7.70	0	108.9E6	N.D. d	86.407m#
30) L7 Aroclor-1254 {3}	7.09	8.12	207.0E6	92483055	77.773m	109.368m#
31) L7 Aroclor-1254 {4}	7.51	8.32	211.2E6	146.2E6	70.827m	109.618m#
32) L7 Aroclor-1254 {5}	8.37	9.11	151.4E6	247.6E6	56.111	135.254m#
Sum Aroclor-1254			687.2E6	706.5E6	257.756	509.660
Average Aroclor-1254					64.439	101.932
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

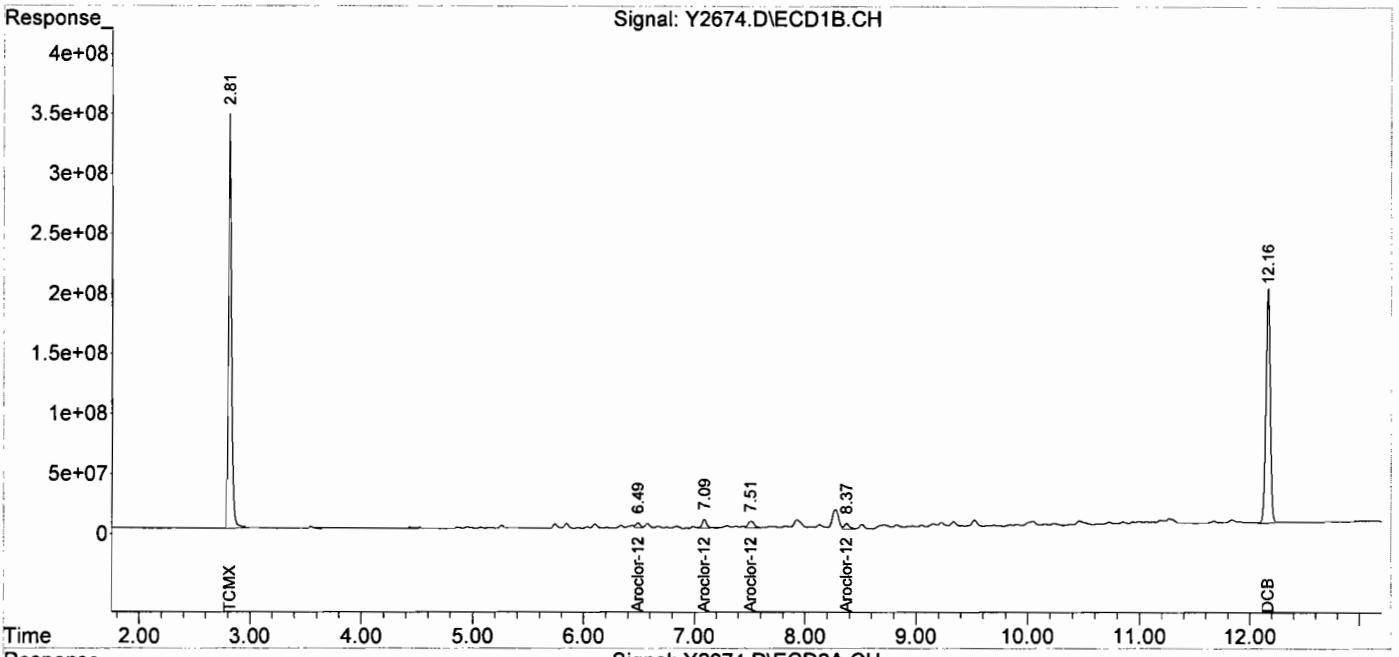
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

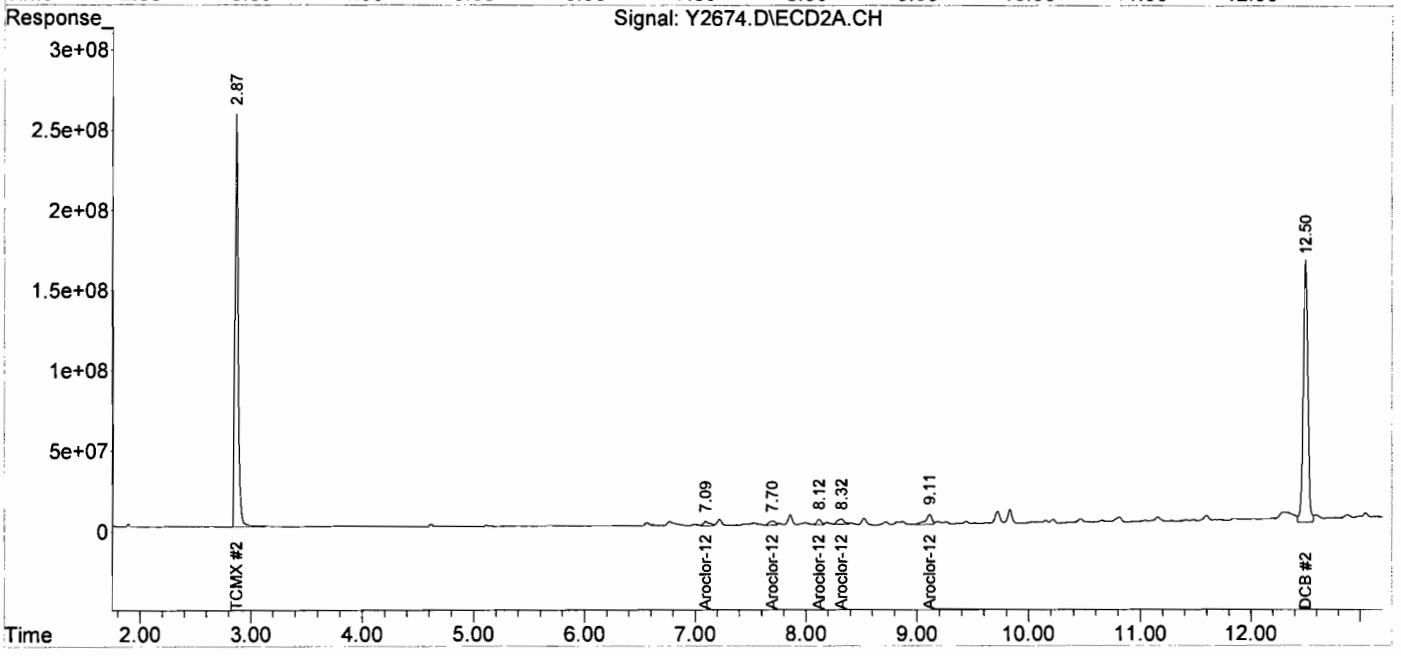
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2674.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 14:06
Operator : JS
Sample : E-72-0.5,E17-02179-025,S,5.67g,13.0,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:52:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2675.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 14:24
Operator : JS
Sample : E-72-2.0,E17-02179-026,S,5.87g,5.70,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:54:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.87	6683.6E6	4692.4E6	180.416	184.862
Spiked Amount 200.000			Recovery	=	90.21%	92.43%
2) S DCB	12.16	12.50	5433.0E6	4389.1E6	160.328	178.210
Spiked Amount 200.000			Recovery	=	80.16%	89.11%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
28) L7 Aroclor-1254	6.49	7.09	53349209	48766324	24.066m	30.213m#
29) L7 Aroclor-1254 {2}	6.92	7.68	3213803	40972099	2.202	32.521m#
30) L7 Aroclor-1254 {3}	7.09	8.12	87664058	39828143	32.941m	47.100m#
31) L7 Aroclor-1254 {4}	7.52	8.29	99863413	56139240	33.484m	42.102m#
32) L7 Aroclor-1254 {5}	8.37	9.11	52656146	91287388	19.514m	49.860m#
Sum Aroclor-1254			296.7E6	277.0E6	112.208	201.795
Average Aroclor-1254					22.442	40.359
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

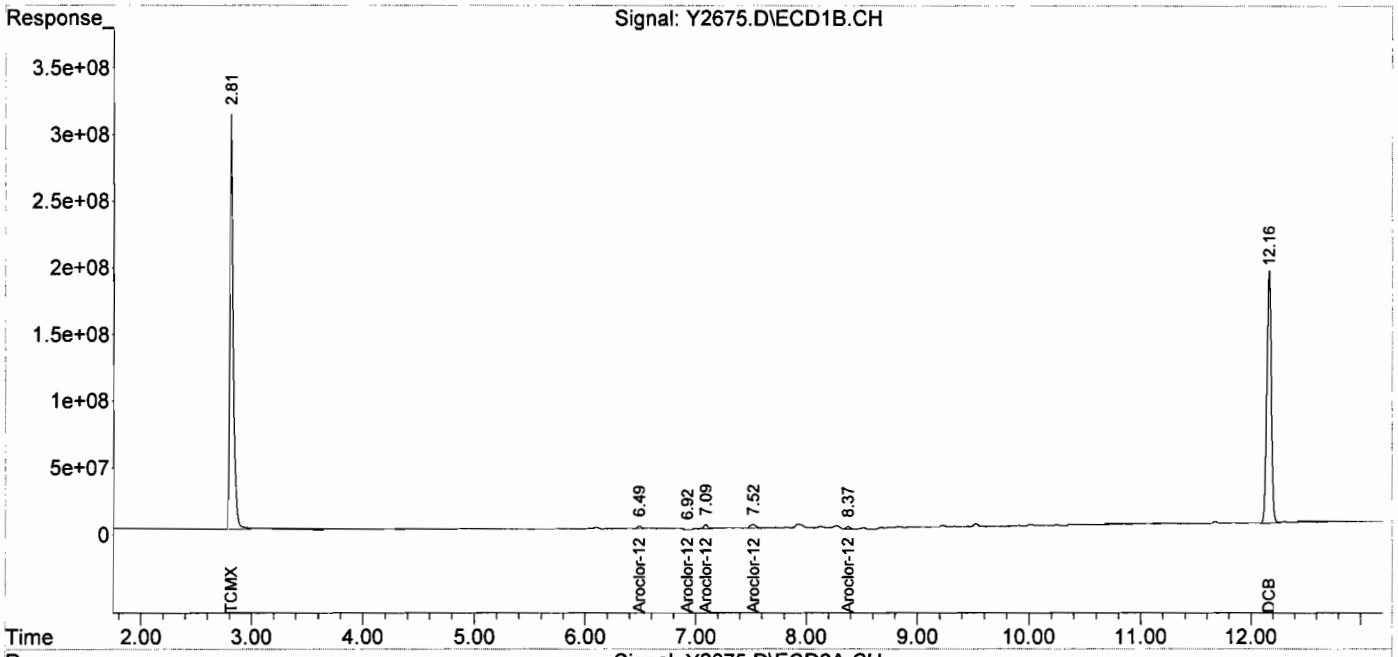
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

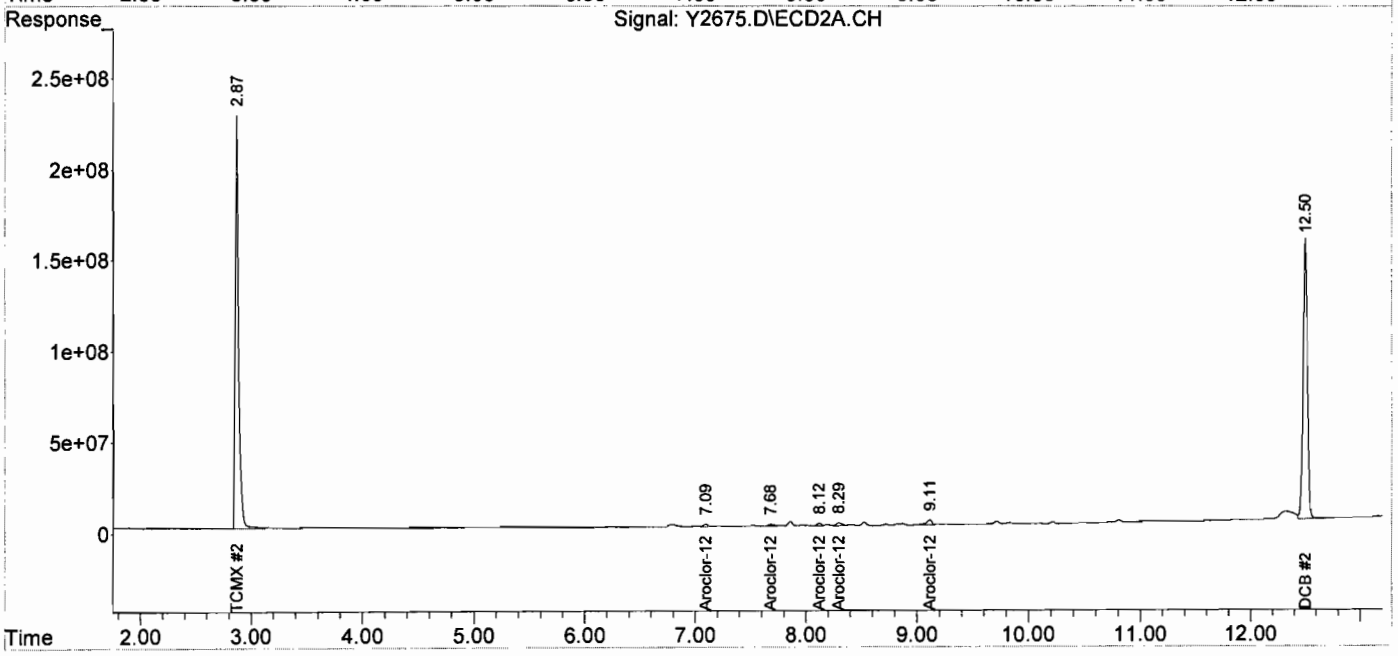
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2675.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 14:24
Operator : JS
Sample : E-72-2.0,E17-02179-026,S,5.87g,5.70,20
Misc : 170320-16,03/20/17,03/17/17,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 09:54:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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 : C:\MSDCHEM\1\DATA\17-03-23\
Data File : R6950.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Mar 2017 15:40
Operator : JS
Sample : EB-01-03,E17-02179-027,A,400ml,100,2
Misc : 170323-07,03/23/17,03/17/17,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 24 09:10:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.80	2.86	7190.0E6	2343.5E6	151.147	173.826
Spiked Amount 200.000			Recovery	=	75.57%	86.91%
2) S DCB	12.16	12.51	6148.6E6	2205.6E6	194.950	217.197
Spiked Amount 200.000			Recovery	=	97.47%	108.60%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

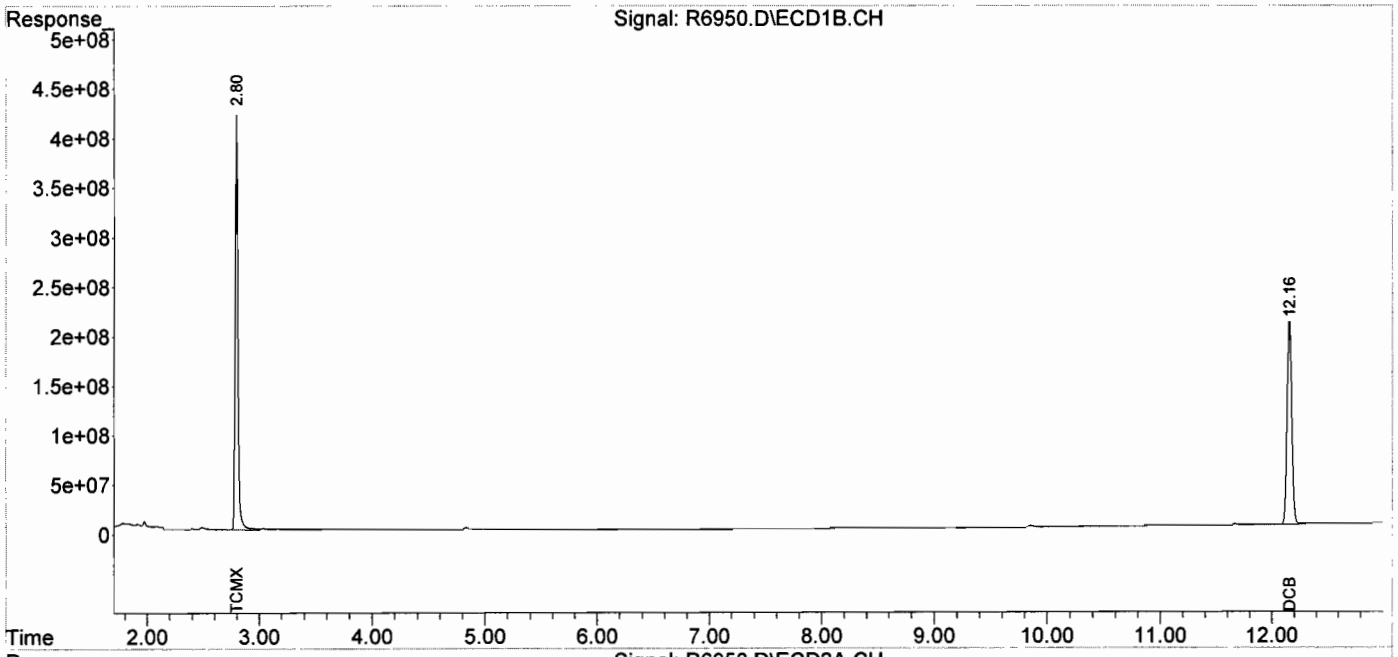
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

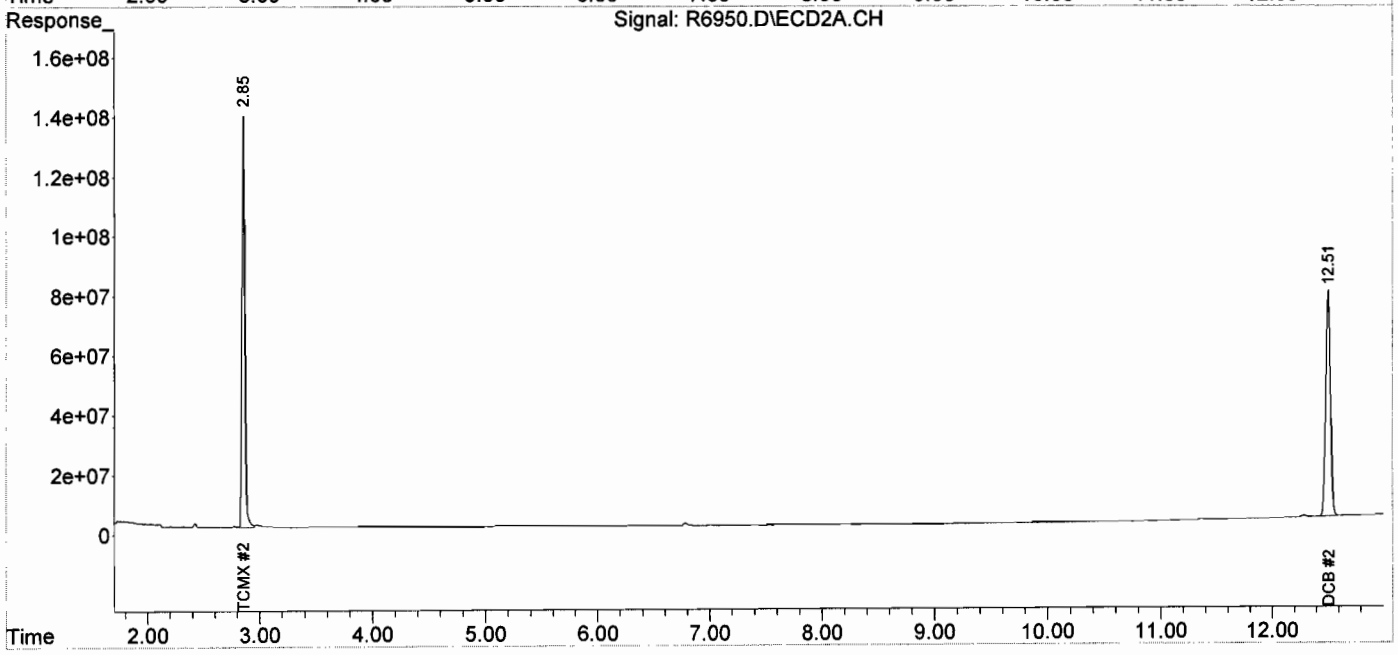
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-23\
Data File : R6950.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Mar 2017 15:40
Operator : JS
Sample : EB-01-03,E17-02179-027,A,400ml,100,2
Misc : 170323-07,03/23/17,03/17/17,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 24 09:10:42 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA170309-12
Client ID: PCB
Date Received: NA
Date Extracted: 03/09/2017
Date Analyzed: 03/10/2017
Data file: Y2506.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKA170323-07
Client ID: PCB
Date Received: NA
Date Extracted: 03/23/2017
Date Analyzed: 03/23/2017
Data file: R6948.D

GC Column: DB-5/DB1701P
Sample wt/vol: 1000ml
Matrix-Units: Aqueous-µg/L
Dilution Factor: 1
% Moisture: 100

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.050	0.020
Aroclor-1221	ND		0.050	0.020
Aroclor-1232	ND		0.050	0.020
Aroclor-1242	ND		0.050	0.020
Aroclor-1248	ND		0.050	0.020
Aroclor-1254	ND		0.050	0.020
Aroclor-1260	ND		0.050	0.020
Aroclor-1262	ND		0.050	0.020
Aroclor-1268	ND		0.050	0.020
PCBs	ND		0.050	0.020

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-23\
Data File : R6948.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Mar 2017 15:06
Operator : JS
Sample : PCB,BLKA170323-07,A,1000ml,100,5
Misc : 170323-07,03/23/17,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 15:29:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

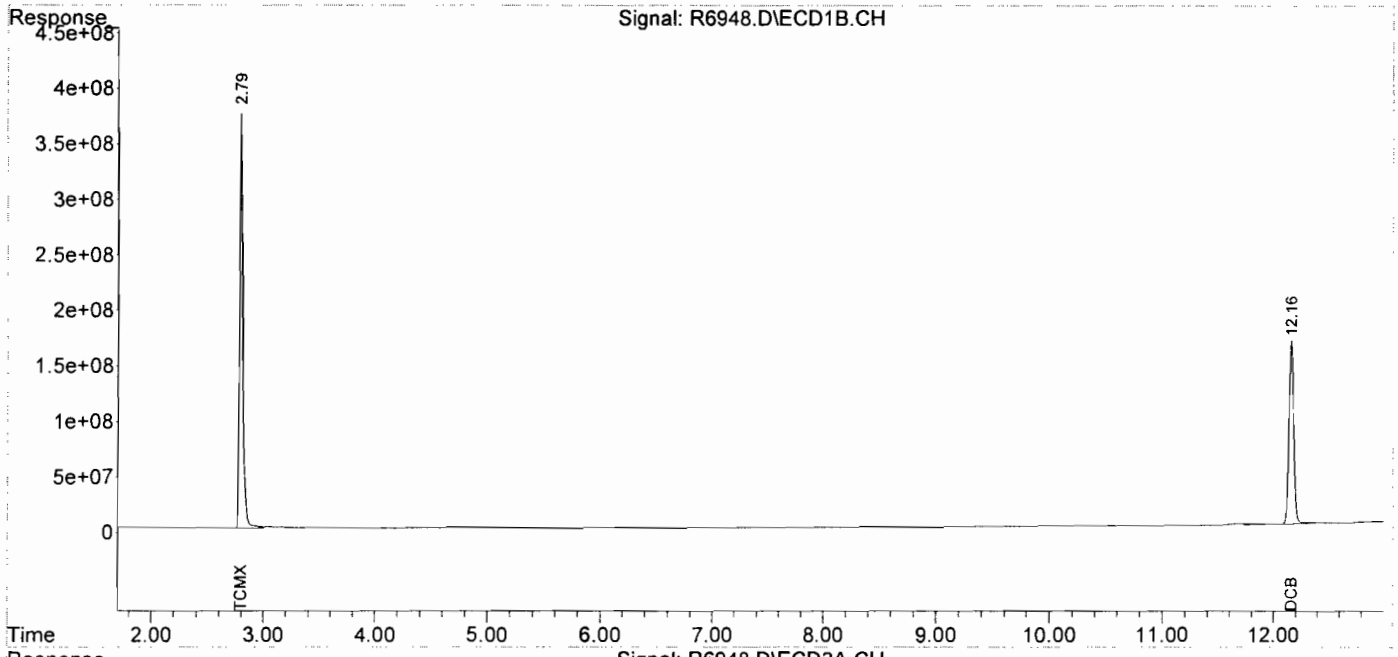
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.87	7170.1E6	2342.5E6	150.729	173.750
Spiked Amount 200.000			Recovery	=	75.36%	86.88%
2) S DCB	12.16	12.52	5155.1E6	1783.5E6	163.452	175.633
Spiked Amount 200.000			Recovery	=	81.73%	87.82%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

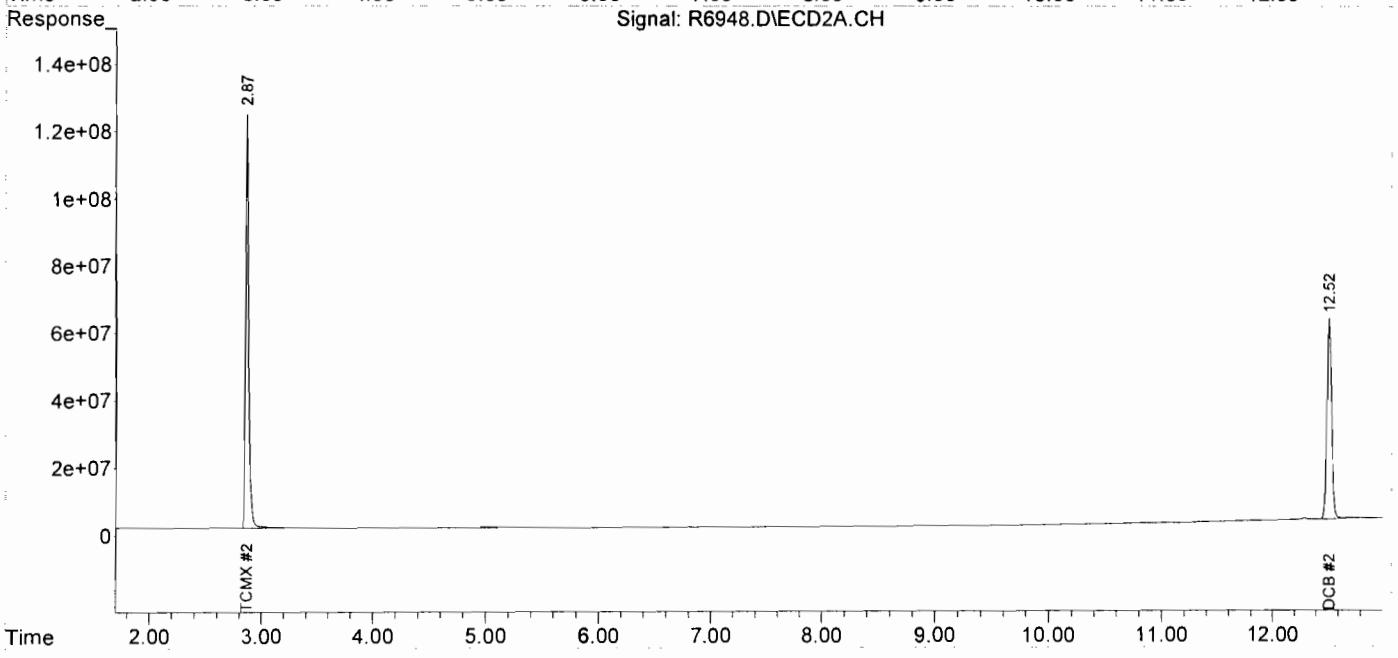
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDCHEM\1\DATA\17-03-23\
Data File : R6948.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 23 Mar 2017 15:06
Operator : JS
Sample : PCB,BLKA170323-07,A,1000ml,100,5
Misc : 170323-07,03/23/17,NA,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 23 15:29:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS170320-14
Client ID: PCB
Date Received: NA
Date Extracted: 03/20/2017
Date Analyzed: 03/21/2017
Data file: R6884.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\17-03-21\
Data File : R6884.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 15:56
Operator : JS
Sample : PCB,BLKS170320-14,S,5g,0,20
Misc : 170320-14,03/20/17,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 08:49:30 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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

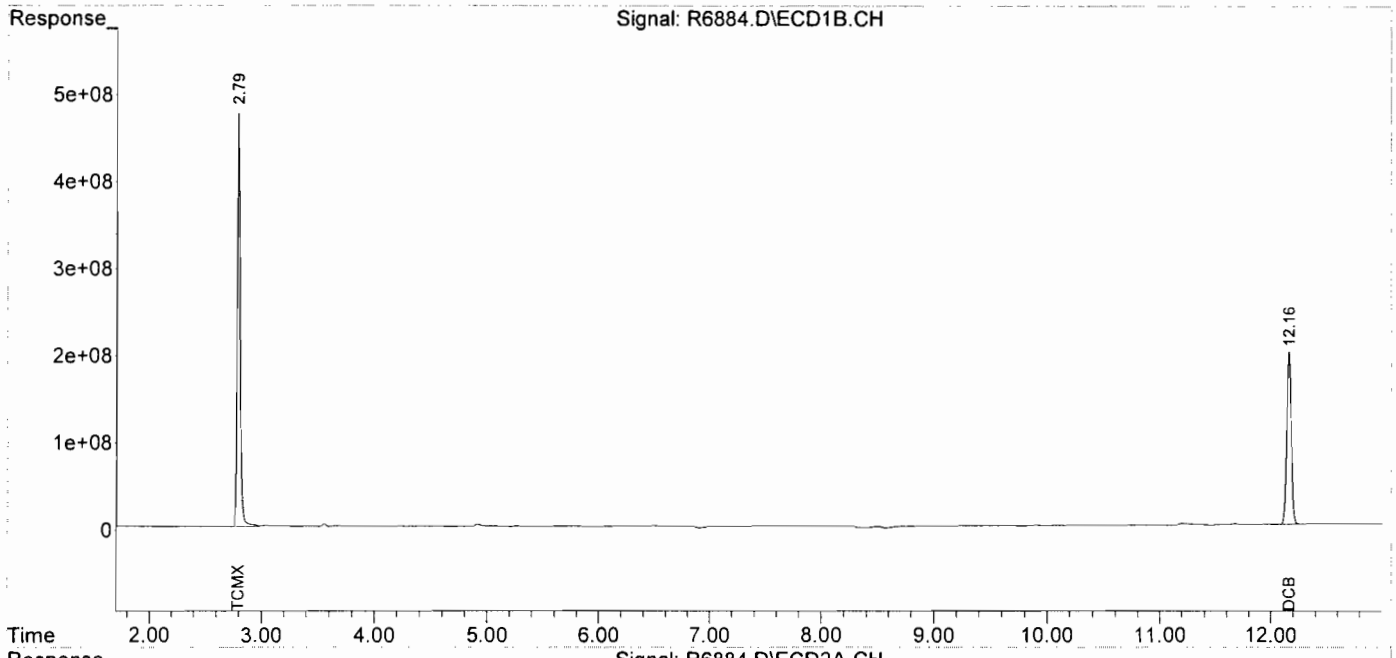
Compound	RT#1	RT#2	Resp#1	Resp#2	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.79	2.87	8441.6E6	2654.3E6	177.458	196.880
Spiked Amount 200.000			Recovery	=	88.73%	98.44%
2) S DCB	12.16	12.52	5635.7E6	1973.9E6	178.690	194.378
Spiked Amount 200.000			Recovery	=	89.34%	97.19%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

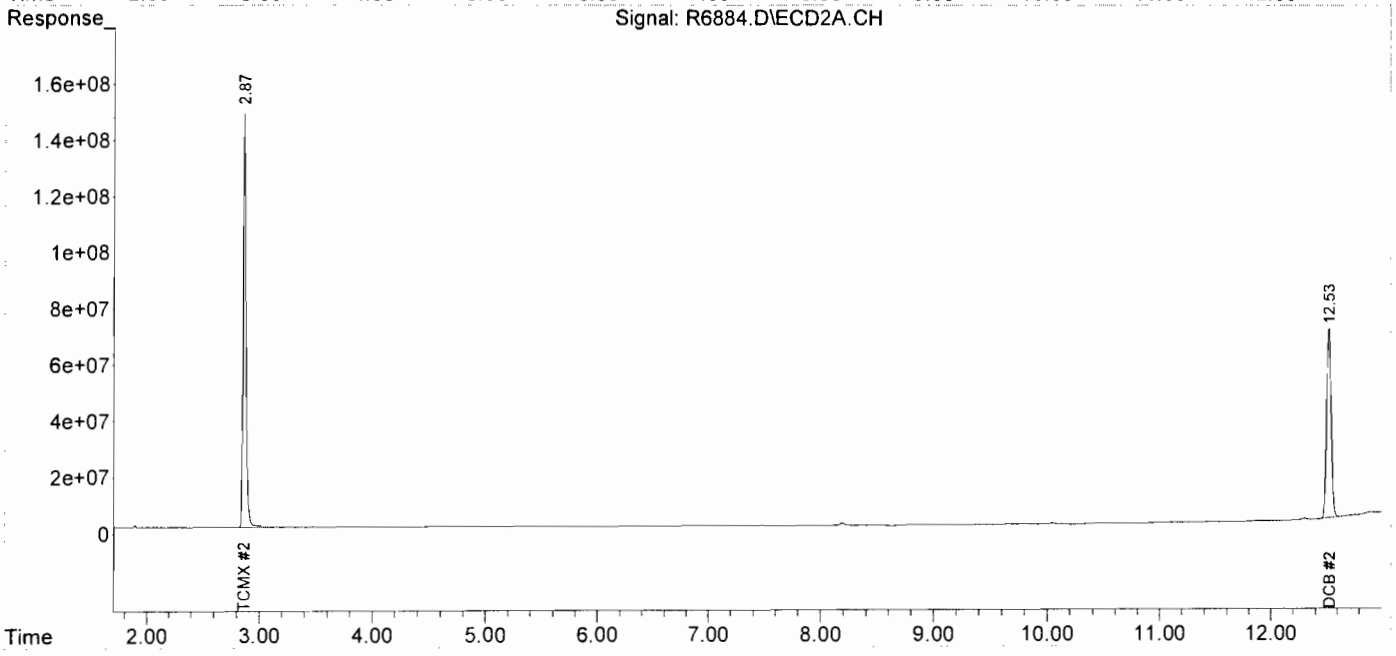
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\MSDChem\1\DATA\17-03-21\
Data File : R6884.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 21 Mar 2017 15:56
Operator : JS
Sample : PCB,BLKS170320-14,S,5g,0,20
Misc : 170320-14,03/20/17,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 08:49:30 2017
Quant Method : C:\MSDCHEM\1\METHODS\RPCB0315.M
Quant Title :
QLast Update : Wed Mar 15 13:22:00 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





INTEGRATED ANALYTICAL LABORATORIES

PCB's

Lab ID: BLKS170320-16
Client ID: PCB
Date Received: NA
Date Extracted: 03/20/2017
Date Analyzed: 03/22/2017
Data file: Y2659.D

GC Column: DB-5/DB1701P
Sample wt/vol: 5g
Matrix-Units: Soil-mg/Kg
Dilution Factor: 1
% Moisture: NA

Compound	Concentration	Q	RL	MDL
Aroclor-1016	ND		0.040	0.016
Aroclor-1221	ND		0.040	0.016
Aroclor-1232	ND		0.040	0.016
Aroclor-1242	ND		0.040	0.016
Aroclor-1248	ND		0.040	0.016
Aroclor-1254	ND		0.040	0.016
Aroclor-1260	ND		0.040	0.016
Aroclor-1262	ND		0.040	0.016
Aroclor-1268	ND		0.040	0.016
PCBs	ND		0.040	0.016

D --- Dilution Performed
J --- Value Less than RL & greater than MDL
E --- Exceeds upper level of Calibration curve

B --- Compound detected in Blank
C --- Common laboratory contamination

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2659.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 9:22
Operator : JS
Sample : PCB,BLKS170320-16,S,5g,0,20
Misc : 170320-16,03/20/17,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:48:04 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial 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	ng#1	ng#2
System Monitoring Compounds						
1) S TCMX	2.81	2.88	7139.9E6	4667.3E6	192.734	183.871
Spiked Amount 200.000			Recovery =		96.37%	91.94%
2) S DCB	12.16	12.51	6039.5E6	4285.5E6	178.228	174.003
Spiked Amount 200.000			Recovery =		89.11%	87.00%
Target Compounds						
Sum Aroclor-1016			0	0	N.D.	N.D.
Average Aroclor-1016					0.000	0.000
Sum Aroclor-1221			0	0	N.D.	N.D.
Average Aroclor-1221					0.000	0.000
Sum Aroclor-1232			0	0	N.D.	N.D.
Average Aroclor-1232					0.000	0.000
Sum Aroclor-1242			0	0	N.D.	N.D.
Average Aroclor-1242					0.000	0.000
Sum Aroclor-1248			0	0	N.D.	N.D.
Average Aroclor-1248					0.000	0.000
Sum Aroclor-1254			0	0	N.D.	N.D.
Average Aroclor-1254					0.000	0.000
Sum Aroclor-1260			0	0	N.D.	N.D.
Average Aroclor-1260					0.000	0.000
Sum Aroclor-1262			0	0	N.D.	N.D.
Average Aroclor-1262					0.000	0.000
Sum Aroclor-1268			0	0	N.D.	N.D.
Average Aroclor-1268					0.000	0.000

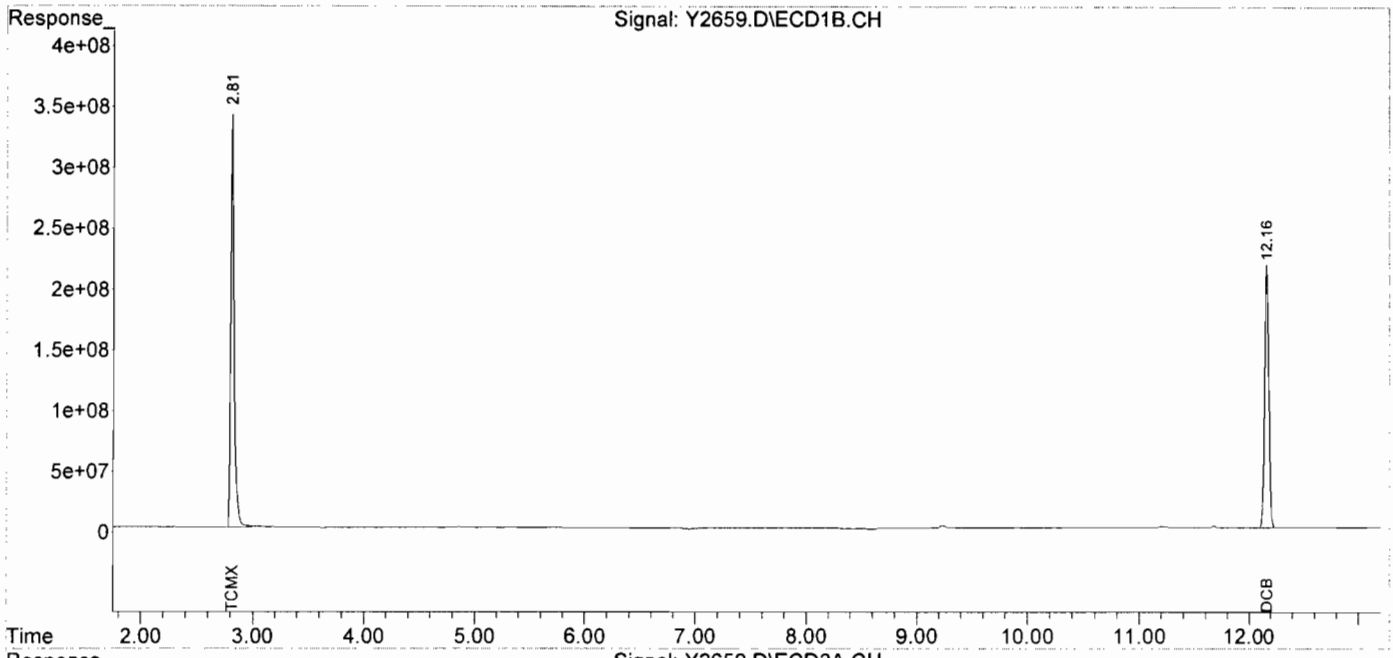
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

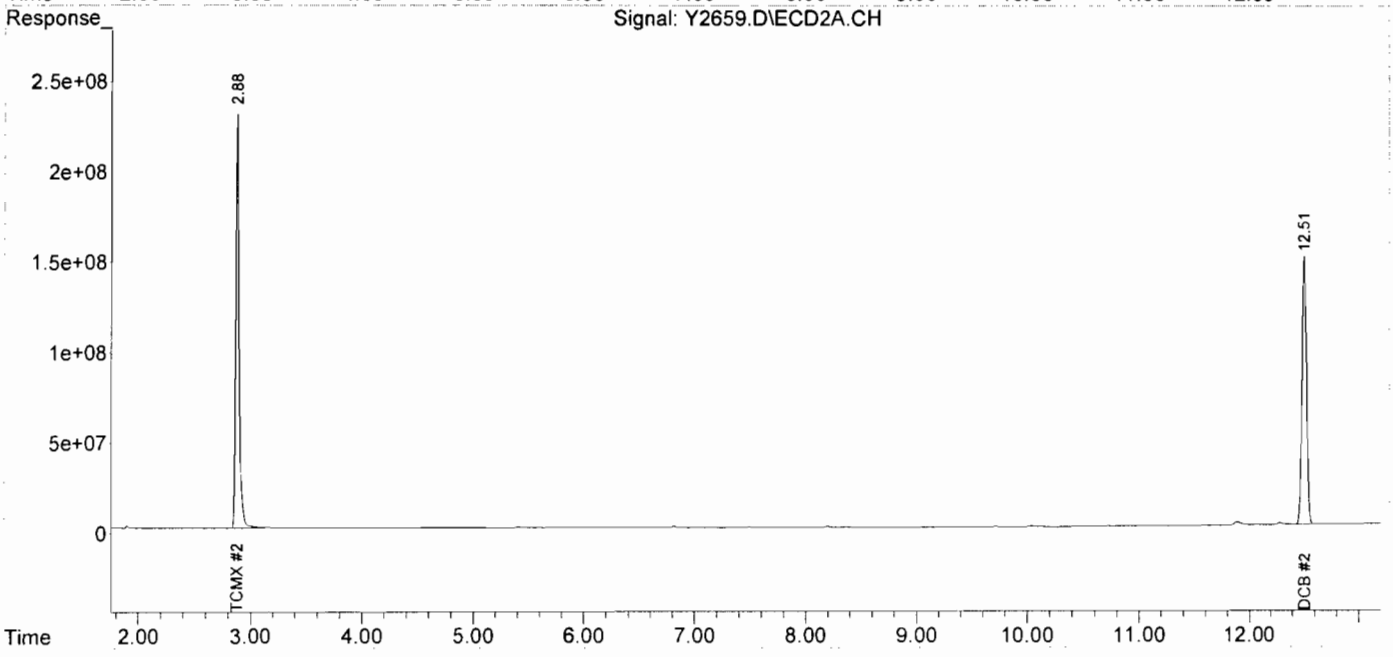
Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\17-03-22\
Data File : Y2659.D
Signal(s) : Signal #1: ECD1B.CH Signal #2: ECD2A.CH
Acq On : 22 Mar 2017 9:22
Operator : JS
Sample : PCB,BLKS170320-16,S,5g,0,20
Misc : 170320-16,03/20/17,NA,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: EVENTS.E
Integration File signal 2: EVENTS2.E
Quant Time: Mar 22 15:48:04 2017
Quant Method : C:\MSDCHEM\1\METHODS\YPCB0316.M
Quant Title :
QLast Update : Thu Mar 16 14:40:12 2017
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

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





SAMPLE TRACKING

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE, SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #: 732-302-9504
Project Manager: MARLENE LINDHARDT
EMAIL Address: MARLENE.LINDHARDT@AMECFW.COM
Project Name: AMTRAK - EAST BARRACKS
Project Location (State): NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF / SR

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)** 5 DAY
Hard Copy: Std 3 week Other - call for price

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2 ☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

SAMPLE INFORMATION

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	ANALYTICAL PARAMETERS (please note if contingent): PCB
E-61-0.5-1.0	0.5-1.0	3-16-17	1140	S	1	1	X
E-61-2.0-2.5	2.0-2.5	3-16-17	1145	S	1	2	X
E-62-0.5-1.0	0.5-1.0	3-16-17	1150	S	1	3	X
E-62-2.0-2.5	2.0-2.5	3-16-17	1155	S	1	4	X
E-63-0.5-1.0	0.5-1.0	3-16-17	1120	S	1	5	X
E-63-2.0-2.5	2.0-2.5	3-16-17	1130	S	1	6	X
E-64-0.5-1.0	0.5-1.0	3-16-17	1200	S	1	7	X
E-64-2.0-2.5	2.0-2.5	3-16-17	1205	S	1	8	X
					Preservative (use code)		1
					Container Type (use code)		A

Sample Specific Notes:

Known Hazard: YES / NO
Describe:

Preservative Code: 1 = None, 2 = HCl, 3 = HNO3, 4 = MeOH, 5 = NaOH, 6 = H2SO4, 7 = Other

Container Code: A = Amber Glass, B = Plastic, C = Vial, D = Glass, E = EnCore, T = Terracore

Special Instructions/QC Requirements & Comments:

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
RM	3/17/17	2:45		3/17/17	2:45

FOR LAB USE ONLY
SDG #: 2179
Cooler Temp: 2 °C

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

IAL
Integrated Analytical Laboratories LLC

Integrated Analytical Labs
273 Franklin Road
Randolph, NJ 07869

Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE Suite 405
SOMERSET NJ 08873
Telephone #:
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address:
Project Name: AMTRAK-EAST BARRACKS
Project Location (State): NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by: NDF ; SR

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA	NY
☐ Results Only	☐ ASP Category A
☐ Reduced	
☐ Regulatory/ Full*	☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (*only* if pre-approved)**
Hard Copy: Std 3 week — Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-65-0.5-1.0	0.5-1.0	3-16-17	1209	S	1	9	X	
E-65-2.0-2.5	2.0-2.5	3-16-17	1215	S	1	10	X	
E-66-0.5-1.0	0.5-1.0	3-16-17	1206	S	1	11	X	
E-66-2.0-2.5	2.0-2.5	3-16-17	1207	S	1	12	X	
E-67-0.5-1.0	0.5-1.0	3-16-17	1100	S	1	13	X	
E-67-2.0-2.5	2.0-2.5	3-16-17	1110	S	1	14	X	
E-68-0.5-1.0	0.5-1.0	3-16-17	1224	S	1	15	X	
E-68-2.0-2.5	2.0-2.5	3-16-17	1228	S	1	16	X	
Preservative (use code)							1	
Container Type (use code)							A	

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: 2179
Cooler Temp: 3 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
RJ	3/17/17	2:45	RJ	3/17/17	9:40 2:45

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 2 of 4

Integrated Analytical Labs
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Randolph, NJ 07869

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Telephone #:
Fax #:
Project Manager:
EMAIL Address:
Project Name:
Project Location (State):
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

**Rush TAT Charge

24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☐ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (*only* if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (if other than 2 weeks):

Regulatory Requirement

New Jersey	New York
☐ GWQS	☐ AWQS (TOGS Table 1)
☐ IGW	☐ GWEL (TOGS Table 5)
☐ SRS	☐ Part 375-6.8(a) - Unrestricted
☐ Ecological	☐ Part 375-6.8(b) - Restricted
☐ DW	☐ CP-51 Table 2 or 3 (selection required)
☐ SPLP	OTHER Reg. Req. (specify)

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB							Sample Specific Notes:
X-1-0.5-1.0	0.5-1.0	3-16-17	~~1235~~ NB	S	1	17	X							
E-69-0.5-1.0	0.5-1.0	3-16-17	1245	S	1	18	X							
E-69-2.0-2.5	2.0-2.5	3-16-17	1246	S	1	19	H							
E-70-0.5-1.0	0.5-1.0	3-16-17	1247	S	1	20	X							
E-70-2.0-2.5	2.0-2.5	3-16-17	1247	S	1	21	X							
E-71-0.5-1.0	0.5-1.0	3-16-17	1300	S	1	22	X							
E-71-2.0-2.5	2.0-2.5	3-16-17	1312	S	1	23	H							
X-2-0.5-1.0	0.5-1.0	3-16-17	NA	S	1	24	X							

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code): 1
Container Type (use code): A

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

FOR LAB USE ONLY
SDG #: L879
Cooler Temp: 5 °C

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
	3/17/17	2:45		3/17/17	1:40
					2:45

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

PAGE: 3 of 4

IAL
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Chain of Custody Record

Contact Us: 973-361-4252
Fax: 973-989-5288
Web: www.ialonline.com

Customer Information

Company: AMEC FOSTER WHEELER
Address: 285 DAVIDSON AVE, SUITE 405
SOMERSET NJ 08873
Telephone #: 732-302-9500
Fax #:
Project Manager: MARLENE LINDHARDT
EMAIL Address:
Project Name: AMTRAK - EAST BARRACKS
Project Location (State): NJ
Bottle Order #:
☐ "Report to"/"Invoice To" same as above
Sampled by:

Reporting Information

REPORT TO:
Address:
Attn:
FAX #
INVOICE TO:
Address:
Attn:
PO #
Quote #

Rush TAT Charge
24 hr - 100%...
48 hr - 75%....
72 hr - 50%....
96 hr - 35%....
5 day - 25%....
6-9 day - 10%

Deliverables

NJ, CT, PA
☐ Results Only
☐ Reduced
☐ Regulatory/ Full*

NY
☐ ASP Category A
☐ ASP Category B*

EDDs

☐ NJ SRP
☐ NYSDEC EQuIS
☐ lab approved custom EDD
☐ NO EDD REQ'D

Concentrations Expected:

Low Med High

These samples have been previously analyzed by IAL

☐ YES ☐ NO

Turn-Around Time (TAT)

Standard (10 business days) Verbal
Rush/date needed (only if pre-approved)**
Hard Copy: Std 3 week
Other - call for price

Regulatory Requirement

New Jersey
☐ GWQS
☐ IGW
☐ SRS
☐ Ecological
☐ DW
☐ SPLP

New York
☐ AWQS (TOGS Table 1)
☐ GWEL (TOGS Table 5)
☐ Part 375-6.8(a) - Unrestricted
☐ Part 375-6.8(b) - Restricted
☐ CP-51 Table 2 or 3 (selection required)
OTHER Reg. Req. (specify)

Petroleum Hydrocarbons - Selection is REQUIRED

☐ NJ EPH-DRO - Category 1
☐ NJ EPH-C40 - Category 2
☐ NJ EPH-Fractionated - Cat 2
☐ DRO-8015

TAT for PHC (If other than 2 weeks):

Sample Matrix

DW - Drinking Water
WW - Waste Water
GW - Groundwater
SW - Surface Water
LIQ - Liquid (Specify)
OI - Oil
S - Soil
SOL - Solid
SL - Sludge
W - Wipe
B - Biphasic

COMPLETED BY IAL:
____ Field Sampling ____ Equipment Rental

SAMPLE INFORMATION

ANALYTICAL PARAMETERS (please note if contingent)

Client ID	Depth (ft only)	Sampling Date	Sampling Time	Matrix	# containers	IAL #	PCB	Sample Specific Notes:
E-72-0.5-1.0	0.5-1.0	3-16-17	1257	S	1	75	X	
E-72-2.0-2.5	2.0-2.5	3-16-17	1300	S	1	76	X	
EB-01-031617	—	3-16-17	1416	QC	2	77	X	

Known Hazard: YES / NO
Describe:

Preservative Code:
1 = None
2 = HCl
3 = HNO3
4 = MeOH
5 = NaOH
6 = H2SO4
7 = Other

Container Code:
A = Amber Glass
B = Plastic
C = Vial
D = Glass
E = EnCore
T = Terracore

Preservative (use code): 1
Container Type (use code): A

Carrier (check one :
☐ IAL Courier
☐ Client Courier
☐ FedEx/UPS***
***Tracking #:

Special Instructions/QC Requirements & Comments:

Relinquished by (Signature and Company)	Date	Time	Received by (Signature and Company)	Date	Time
[signature]	3/17/17	2:45	[signature]	3/17/17	2:45

FOR LAB USE ONLY
SDG #: 2179
Cooler Temp: ____ °C

Please print legibly and fill out completely. Samples cannot be processed and the turnaround time (TAT) will not start until any ambiguities have been resolved. TAT starts the following day if samples rec'd at lab > 5PM. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY IAL'S TERMS & CONDITIONS (found on rear of pink copy).

IAL Rev 2/2014

LAB COPIES - WHITE & YELLOW; CLIENT COPY - PINK

Certification IDs: TNI (TNI01284); CT (PH-0699); NJ (14751); NY (11402); PA (68-00773).

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PROJECT INFORMATION

RUSH

E17-02179: AMTRAK - EAST BARRACKS

To: Marlene Lindhart
AMEC-SMRST
Fax: 1(732) 302-9504
EMail: marlene.lindhardt@amecfw.com

Report To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Bill To

AMEC-SMRST
285 Davidson Ave.
Somerset, NJ 08873
Attn: Marlene Lindhart

Report Format	P.O. #	Received At Lab	TPHC Due	Verbal Due	Hardcopy Due
Reduced		Mar 17, 2017 @ 14:45	NA	Mar 24, 2017	Apr 13, 2017 *

* Any ***Conditional or Hold*** status will delay final hardcopy report sent date.

Diskette Req. Not Required

**** QC Requirement (must meet):** NJ GWQS

Lab ID	Client Sample ID	Depth	Sampling Time	Matrix	Unit	Field pH/Temp
02179-001	E-61-0.5-1.0	0.5/1.0	03/16/17@11:40	Soil	mg/Kg (ppm)	
02179-002	E-61-2.0-2.5	2.0/2.5	03/16/17@11:45	Soil	mg/Kg (ppm)	
02179-003	E-62-0.5-1.0	0.5/1.0	03/16/17@11:50	Soil	mg/Kg (ppm)	
02179-004	E-62-2.0-2.5	2.0/2.5	03/16/17@11:55	Soil	mg/Kg (ppm)	
02179-005	E-63-0.5-1.0	0.5/1.0	03/16/17@11:20	Soil	mg/Kg (ppm)	
02179-006	E-63-2.0-2.5	2.0/2.5	03/16/17@11:30	Soil	mg/Kg (ppm)	
02179-007	E-64-0.5-1.0	0.5/1.0	03/16/17@12:00	Soil	mg/Kg (ppm)	
02179-008	E-64-2.0-2.5	2.0/2.5	03/16/17@12:05	Soil	mg/Kg (ppm)	
02179-009	E-65-0.5-1.0	0.5/1.0	03/16/17@12:09	Soil	mg/Kg (ppm)	
02179-010	E-65-2.0-2.5	2.0/2.5	03/16/17@12:15	Soil	mg/Kg (ppm)	
02179-011	E-66-0.5-1.0	.5/1.0	03/16/17@12:06	Soil	mg/Kg (ppm)	
02179-012	E-66-2.0-2.5	2/2.5	03/16/17@12:07	Soil	mg/Kg (ppm)	
02179-013	E-67-0.5-1.0	.5/1.0	03/16/17@11:00	Soil	mg/Kg (ppm)	
02179-014	E-67-2.0-2.5	2.0/2.5	03/16/17@11:10	Soil	mg/Kg (ppm)	
02179-015	E-68-0.5-1.0	0.5/1.0	03/16/17@12:24	Soil	mg/Kg (ppm)	
02179-016	E-68-2.0-2.5	2.0/2.5	03/16/17@12:28	Soil	mg/Kg (ppm)	
02179-017	X-1-0.5-1.0	0.5/1.0	03/16/17	Soil	mg/Kg (ppm)	
02179-018	E-69-0.5-1.0	05./1.0	03/16/17@12:33	Soil	mg/Kg (ppm)	
02179-019	E-69-2.0-2.5	2.0/2.5	03/16/17@12:40	Soil	mg/Kg (ppm)	
02179-020	E-70-0.5-1.0	.5/1.0	03/16/17@12:44	Soil	mg/Kg (ppm)	
02179-021	E-70-2.0-2.5	2.0/2.5	03/16/17@12:47	Soil	mg/Kg (ppm)	
02179-022	E-71-0.5-1.0	0.5/1.0	03/16/17@13:00	Soil	mg/Kg (ppm)	
02179-023	E-71-2.0-2.5	2.0/2.5	03/16/17@13:12	Soil	mg/Kg (ppm)	
02179-024	X-2-0.5-1.0	0.5/1.0	03/16/17	Soil	mg/Kg (ppm)	
02179-025	E-72-0.5-1.0	0.5/1.0	03/16/17@12:57	Soil	mg/Kg (ppm)	
02179-026	E-72-2.0-2.5	2.0/2.5	03/16/17@13:00	Soil	mg/Kg (ppm)	
02179-027	EB-01-031617	NA	03/16/17@14:16	Aqueous	mg/L (ppm)	

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PROJECT INFORMATION

RUSH

E17-02179: AMTRAK - EAST BARRACKS

Sample #	Test	Status	QA Method	TAT	Holding Time Expires
001	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
002	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
003	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
004	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
005	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
006	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
007	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
008	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
009	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
010	TCL PCB	Cancel	8082A	RUSH 1 WK	3/16/2018
011	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
012	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
013	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
014	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
015	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
016	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
017	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
018	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
019	TCL PCB	Cancel	8082A	RUSH 1 WK	3/16/2018
020	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
021	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
022	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
023	TCL PCB	Cancel	8082A	RUSH 1 WK	3/16/2018
024	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
025	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
026	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018
027	TCL PCB	Analyze	8082A	RUSH 1 WK	3/16/2018

Project Notes:

REV 1 taken by epacella on 04/06/2017 01:44
As per Marlene Lindhart, cancel TCL PCB for sample # 10,19,23

273 Franklin Road
Randolph, NJ 07869
Phone: 973 361 4252
Fax: 973 989 5288

INTEGRATED ANALYTICAL LABORATORIES, LLC

SAMPLE RECEIPT VERIFICATION

CASE NO: **E 17** **02179** CLIENT: Amec

COOLER TEMPERATURE: 2° - 6°C: ✓ (See Chain of Custody)

COC: (COMPLETE) / INCOMPLETE

Comments

KEY

✓ = YES/NA
✗ = NO

VOA received: ☐ Encore ☐ IGW - Methanol
(check one) ☐ Terra Core ☐ No Preservative

✓	Bottles Intact	
✓	no-Missing Bottles	
✓	no-Extra Bottles	
✓	Sufficient Sample Volume	
✓	no-headspace/bubbles in VOs	
✓	Labels intact/correct	
✓	pH Check (exclude VOs)[1]	
✓	Correct bottles/preservative	
✓	Sufficient Holding/Prep Time[1]	
☐	Multiphasic Sample	
☐	Sample to be Subcontracted	
✓	**Chain of Custody is Clear**	

[1] All samples with "Analyze Immediately" holding times will be analyzed by this laboratory past the holding time. This includes but is not limited to the following tests: pH, Temperature, Free Residual Chlorine, Total Residual Chlorine, Dissolved Oxygen, Sulfite.

ADDITIONAL COMMENTS:

SAMPLE(S) VERIFIED BY: INITIAL [signature] DATE 3/17/17

CORRECTIVE ACTION REQUIRED: **YES** ☐ (SEE BELOW) **NO** ✓

If COC is **NOT** clear, ***STOP*** until you get client to authorize/clarify work.

CLIENT NOTIFIED: YES ☐ Date/ Time: _____ NO ☐

PROJECT CONTACT:

SUBCONTRACTED LAB:

DATE SHIPPED:

ADDITIONAL COMMENTS:

VERIFIED/TAKEN BY: INITIAL [signature] DATE 3.20.17

Laboratory Custody Chronicle

IAL Case No.

E17-02179

Client AMEC-SMRST

Project AMTRAK - EAST BARRACKS

Received On 3/17/2017@14:45

Department: GC			***Prep. Date***	***Analyst***	***Analysis Date***	***Analyst***
TCL PCB	02179-001	Soil	3/20/17	Archimede	3/22/17	Justyna
"	-002	"	3/20/17	Archimede	3/22/17	Justyna
"	-003	"	3/20/17	Archimede	3/22/17	Justyna
"	-004	"	3/20/17	Archimede	3/22/17	Justyna
"	-005	"	3/20/17	Archimede	3/22/17	Justyna
"	-006	"	3/20/17	Archimede	3/22/17	Justyna
"	-007	"	3/20/17	Archimede	3/22/17	Justyna
"	-008	"	3/20/17	Archimede	3/22/17	Justyna
"	-009	"	3/20/17	Archimede	3/22/17	Justyna
"	-011	"	3/20/17	Archimede	3/22/17	Justyna
"	-012	"	3/20/17	Archimede	3/22/17	Justyna
"	-013	"	3/20/17	Archimede	3/22/17	Justyna
"	-014	"	3/20/17	Archimede	3/22/17	Justyna
"	-015	"	3/20/17	Archimede	3/22/17	Justyna
"	-016	"	3/20/17	Archimede	3/22/17	Justyna
"	-017	"	3/20/17	Archimede	3/22/17	Justyna
"	-018	"	3/20/17	Archimede	3/22/17	Justyna
"	-020	"	3/20/17	Archimede	3/22/17	Justyna
"	-021	"	3/20/17	Archimede	3/22/17	Justyna
"	-022	"	3/20/17	Archimede	3/22/17	Justyna
"	-024	"	3/20/17	Archimede	3/22/17	Justyna
"	-025	"	3/20/17	Archimede	3/22/17	Justyna
"	-026	"	3/20/17	Archimede	3/22/17	Justyna
"	-027	Aqueous	3/23/17	Archimede	3/23/17	Justyna

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